

Newsletter

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News From the Editor

Dr. HS Lam

It's the beginning of our new College year. Our Tenth Annual General Meeting was held on the 23rd of September 2002 at the Department of Radiology, Queen Mary Hospital. There were altogether 4 vacant posts and the elected officers are as follows:

<i>President</i>	<i>Dr. LEONG, Lilian</i>
<i>Warden</i>	<i>Dr. CHAN, Fu Luk</i>
<i>Honorary Secretary</i>	<i>Prof. SHAM, Jonathan</i>
<i>Council Member</i>	<i>Dr. FOO, William</i>

In addition Mr. Peter W.H. MARK was reappointed as our Honorary Legal Advisor and Mr. Charles CHAN as our Honorary Auditor.

This issue contains our position paper on Unconventional (Experimental) Cancer Therapies. The paper explains the various categories of cancer treatment and gives the views and recommendations of our College on Unconventional (Experimental) Therapies in the treatment of cancer patients. Also in this issue is an important announcement of our New Training Regulations ready for implementation from 1 October 2002. One can get the full document of the New Training Regulations in our Homepage.

A new Research Subcommittee has been established under the Education Committee with Dr. Peter Teo being elected as its Chairman. As its name implies, the committee will aim at promoting and coordinating clinical research. The terms of reference as well as its membership are listed in this article.

We have an article "International CT/MRI conference 2002 Gold coast, Australia" contributed by Dr. Jennifer Khoo. I must emphasize that we are in need of articles contribution by our members. Members who wish to express their views, share their ideas, initiate a discussion, are welcome.

Lastly, I think all of our Fellows must have received a letter from the Hong Kong Academy of Medicine announcing the setting up of the Membership & Learning Management System (MLMS). This network is established by Hong Kong Academy of Medicine with a goal of organizing, assessing, and accrediting postgraduate medical specialist training and continuing medical education efficiently. Our College is one of the Colleges selected for the pilot run. You can go to the homepage of the MLMS at <http://www.mlms.org.hk>.

Editorial Board

HS LAM
J CHAN
W FOO
J KHOO
TL KWAN
CY LUI
Y WONG

Position Paper on Unconventional (Experimental) Cancer Therapies

Hong Kong College of Radiologists

Position Paper on Unconventional (Experimental) Cancer Therapies

Following the letter from a group of Clinical Oncologists and Medical Oncologists in April 2002 expressing concerns that tumour vaccines were being offered to the Public in the private sector in Hong Kong as conventional (standard) therapy, the College Council issued this Position Paper after full deliberation in Council meeting on 27th August 2002.

This Position Paper only addresses the issue on unconventional (experimental) cancer therapies. Readers are reminded that the introduction of “new” therapies into clinical practice is a separate issue and is not discussed in this Position Paper.

Introduction

Cancer is one of the most dreaded diseases in modern society. The incidence of different types of cancer has been increasing throughout recent years in Hong Kong¹. Although a significant number of cancer patients can be cured, many cancer patients present with advanced disease whose likelihood of cure is negligible.

Treatment of cancer requires advance-skilled, high-tech and complex contemporary medicine while effectual management of the disease necessitates a holistic approach complementing the traditional “Art of Medicine”.

Patients with the diagnosis of cancer are often under the most stressful situation and often feel helpless. Many patients would utilize all available channels and resources to seek advice on treatment of their disease. It is at this time that they are most vulnerable to exploitation. We feel strongly therefore that all cancer patients should be offered expert professional advice.

Cancer Treatments

Cancer treatments can be divided into three major groups:

- a. Conventional (Standard) Therapies
- b. Unconventional (Experimental) Therapies
- c. Complimentary and Alternative Medicine

Conventional (standard) therapies are the treatment strategies with clinical proven efficacy. These therapies are regarded as standard treatments in the medical community and are frequently recommended by national agencies such the National Cancer Institute² of the USA and the Hospital Authority³ of Hong Kong. All conventional (standard) therapies have been tested under vigorous conditions often involving multi-national agencies and institutions. Examples of conventional (standard) therapies are the use of chemotherapy in breast and colon cancer, and radiotherapy in the treatment of nasopharyngeal carcinoma.

Unconventional (Experimental) therapies are treatment strategies that are currently under testing in various stages of clinical trials and laboratory tests. Examples of unconventional (experimental) therapies include anti cancer agents and biological therapies such as tumour (cancer) vaccines and gene therapies.

Complementary medicine is generally regarded as complementary when it is used in addition to conventional (standard) therapies while alternative medicine is used instead of conventional (standard) therapies. Some commonly used methods of complementary or alternative medicine include mind/body control interventions such as relaxation; manual healing, including acupuncture and massage; homeopathy; vitamins or herbal products; and acupuncture.

Recommendations

The Hong Kong College of Radiologists recognizes the need for cancer patients to gain access to appropriate cancer treatments. The College is actively aware of the existence of unconventional (experimental) therapies as well as the widespread use of complimentary and alternative medicine.

The College fully supports the use of conventional (standard) therapies in the treatment of cancers.

The College recommends that unconventional (experimental) therapies should only be used with the following criteria:

1. Unconventional (experimental) therapies should be conducted within the context of clinical trials in institutional settings where there are monitoring procedures and practices such as institution review board, ethical committee, data monitoring, data analysis and quality assurance.
2. Patients must be fully informed of choices of therapies *other than* the unconventional (experimental) therapies being offered.
3. Prior informed consent from the patients must be obtained.

The College urges all cancer patients to seek advice on cancer treatments carefully and to make informed treatment choices.

Appendix

Members of working group on unconventional (experimental) cancer therapies:

Dr. Tze Mun CHAN, Specialist in Clinical Oncology, Queen Elizabeth Hospital

Dr. William FOO, Consultant in Clinical Oncology, Queen Elizabeth Hospital

Dr. Daniel CHUA, Associate Professor, Department of Clinical Oncology, Queen Mary Hospital

Dr. Timothy YIP, Scientific Officer, Department of Clinical Oncology, Queen Elizabeth Hospital

References

1. Hong Kong Cancer Registry
2. National Cancer Institute of USA: <http://www.cancer.gov>
3. Hospital Authority of Hong Kong: Clinical Oncology Clinical Guidelines

Research Subcommittee

Our College has recently established a Research Subcommittee to work under the College Education Committee.

The terms of reference of the Subcommittee are listed below:

1. To promote and coordinate clinical research in clinical oncology (CO), radiology (DR) and nuclear medicine (NM) in Hong Kong especially with a view to organize multi-centre research activities.
2. To enable the Hong Kong College of Radiologists to liaise with other research groups both locally and overseas
3. To review and advise on the acceptability of research projects put forward by members of the College as chief investigators
4. To coordinate the support and funding of the research studies
5. To advise the Education Committee on and to oversee education in respect of research methodology
6. To report regularly to the Education Committee.

The membership of the Subcommittee consists of the following:

1. One or two fellows from each discipline of CO, DR and NM to be appointed by the Education Committee
2. The chairman of the Education Committee, or in his/her absence an appointed member of the Education Committee, will automatically be a member of the Research Subcommittee
3. One medical physicist
4. One statistician
5. The chairman will be elected amongst the members of the Subcommittee
6. The term of office of each member, other than the chairman of the Education Committee, shall be 2 College years, with re-election at the discretion of the Education Committee.

The Subcommittee will meet about once every 2 months. Individual ad-hoc work-groups on specific project will be formed as necessary and will report to the Research Subcommittee. The Subcommittee had its first meeting on 22 August 2002, and Dr. Peter Teo has been elected as its Chairman.

Report from the Education and Research Fund Subcommittee

- (a) In 2001, awards were granted to six young radiologists to attend the College's Annual Scientific Meeting: two each from Philippines, Thailand and Macao.
- (b) For the Annual Scientific Meeting of 2002, invitations for nomination of young radiologists were being sent to the professional organizations of China, Philippines, Vietnam and Macao.
- (c) Awards are approved to sponsor Drs Helen HL Chan and Jimmy HF Yuen to attend the Annual Meeting of the CIRSE in October 2002.

Examination & Results

Joint First Examination for the Fellowship

Clinical Radiology – September 2002

<i>Examiners:</i>	Prof. GILBERT, FJ	Dr. RANKIN, SC
	Dr TSO, WK	Dr WU, PM

<i>Successful Candidates:</i>	AU, Mei Yee	CHIU, Sau Hin Sonny
	HUI, Yai Yi Joyce	HWANG, Cheng Yang
	LI, On Chee Angela	PANG, Bik Yiu Clara

Exit Assessment of Training

An Exit Assessment was held on 11 July 2002 at Room 10, 2/F, Hong Kong Academy of Medicine Jockey Club Building. The Panel Chairman was Dr FL Chan. The assessors for Radiology included Prof. Anil Ahuja, Dr. KH Fung and Dr. Philip CH Kwok . Five candidates were successful in the assessment. The successful candidates were :

<i>HUI, Yee Hing</i>
<i>KWAN, Wing Ho</i>
<i>KWOK, Wing Kong</i>
<i>WANG, Ki</i>
<i>WONG, Yun Fong Mable</i>

New Training Regulations

The College's Training Regulations have recently been revised to incorporate the following:

- (1) Changes in format of Part I and Part IIA examinations.
- (2) Related necessary changes in logistics and syllabuses.
- (3) Additional Subcommittees or Boards working under the Education Committee.
- (4) Minor alterations in wording to clarify specific statements.

The revised Regulations have been endorsed by the Hong Kong Academy of Medicine at its Council meeting held on 19 September 2002, and are ready for implementation with effect from **1 October 2002**. Details of the document is available in our Home Page : <http://www.hkcr.org/> .

Comparison tables highlighting the changes in the new training regulations are listed below:

THE HONG KONG COLLEGE OF RADIOLOGISTS

Training of Radiologists

(General Training Regulations applicable to all Three Specialties)

<i>Existing Version</i>	<i>Revised Version</i>
<p>General Remarks</p> <p>Medical education is a continuous process. In coordination with the Council of the College, the Education Committee functions to monitor the specialist training of radiologists, and their continuing medical education.</p> <p>During the period of training, a doctor acquires increased but supervised responsibility for the patient, and develops the wide range of specialist skills needed for practice in Radiology, Clinical Oncology and Nuclear Medicine. On completion of training, a doctor should be ready to accept consultant (or equivalent) responsibilities with independent practice.</p>	<p>General Remarks</p> <p>Medical education is a continuous process. In coordination with the Council of the College, the Education Committee functions to monitor the specialist training of radiologists, and <u>to continue with their medical education and professional development throughout their careers.</u></p> <p>During the period of training, a doctor acquires increased but supervised responsibility for the patient, and develops the wide range of specialist skills needed for practice in Radiology, Clinical Oncology and Nuclear Medicine. On completion of training, a doctor should be ready to accept <u>specialist</u> responsibilities with independent practice.</p>
<p>EDUCATION COMMITTEE <i>Terms of Reference</i></p> <p>3. To advise the Council of the College on the development of subspecialties and matters pertaining to the continuing medical education of the three disciplines.</p> <p><i>[6. (e), (f) & (g) are not present in existing version.]</i></p> <p>8. To promote and support research.</p>	<p>EDUCATION COMMITTEE <i>Terms of Reference</i></p> <p>3. To advise the Council of the College on the development of subspecialties and matters pertaining to the <u>continuous professional development</u> of the three disciplines.</p> <p>6. (e) <u>Education and Research Fund Subcommittee to advise on and to monitor sponsorship of local and overseas related professionals in educational and research activities.</u></p> <p>(f) <u>Research Subcommittee to oversee and coordinate research projects and research education.</u></p> <p>(g) <u>Subspecialty Board(s) to oversee the development, training and assessment in approved subspecialty(ies) of the College.</u></p> <p>8. (Deleted)</p>

EXAMINATIONS IN RADIOLOGY, AND CLINICAL ONCOLOGY

3. A Board of Examiners shall be formed to conduct each examination. Examiners shall consist of overseas and local examiners.
- ◆ For Part I examination that is not currently conducted by the College, a pass at the First FRCR examination with satisfactory documentation shall be exempted from the corresponding part of fellowship examination of our College.
 - ◆ Trainees who have passed both parts of the College examination, and have completed not less than six years (including the required 1 year period of accredited clinical experience outside the mother discipline) of full-time specialist training at the accredited training centres, including not less than two years of higher training being spent at the accredited training centres after passing the Final Fellowship Examination, will be assessed for the award of Fellowship of the Hong Kong College of Radiologists (FHKCR).

The Joint Fellowship Examinations of the Hong Kong College of Radiologists and The Royal College of Radiologists are expected to be held once every year. At present the Joint First Fellowship Examination is held in September, and the Joint Final Fellowship Examination in October. For *Radiology* (or *Clinical Radiology*), the First Examination comprises written and film viewing examinations; while the Final Examination consists of Part A: written, and Part B: oral and reporting sessions. For *Clinical Oncology*, the First Examination consists of written papers on physics, medical statistics, pathology, cancer biology, clinical pharmacology and radiobiology; while the Final Examination comprises written, clinical and oral examinations.

EXAMINATIONS IN NUCLEAR MEDICINE

8. Trainees who have passed both parts of the College examination, and have completed not less than six years (including the period of clinical experience outside nuclear medicine) of full-time specialist training at the accredited training centres, including not less than two years of higher nuclear medicine training being spent at the accredited training centres after passing the Fellowship Examination, will be assessed for the award of Fellowship of the Hong Kong College of Radiologists.

EXAMINATIONS IN RADIOLOGY, AND CLINICAL ONCOLOGY

3. A Board of Examiners shall be formed to conduct the Joint Fellowship Examination. Examiners shall consist of overseas and local examiners.
7. For Part I examination that is not currently conducted by the College, a pass at the First Fellowship Examination of the Royal College of Radiologists, for which Hong Kong is an examination venue, with satisfactory documentation shall be exempted from the corresponding part of fellowship examination of the Hong Kong College of Radiologists. A candidate sitting the First Fellowship Examination of the Royal College of Radiologists must notify the Hong Kong College of Radiologists through the training head, and be responsible for notifying the examination result to the College using the special notification form.
10. Trainees who have passed both parts of the College examination, and have completed not less than six years (including the required 1 year period of accredited clinical experience outside the mother discipline) of full-time accredited training, including not less than two years of higher training being spent at accredited training centres, will be qualified to sit the Exit Assessment for the award of Fellowship of the Hong Kong College of Radiologists (FHKCR).

[This paragraph is deleted]

EXAMINATIONS IN NUCLEAR MEDICINE

8. Trainees who have passed both parts of the College examination, and have completed not less than six years (including the period of clinical experience outside nuclear medicine) of full-time accredited training, including not less than two years of higher nuclear medicine training being spent at accredited training centres after passing the Fellowship Examination, will be qualified to sit the Exit Assessment for the award of Fellowship of the Hong Kong College of Radiologists.

SPECIALTY TRAINING: RADIOLOGY

(Comparison Table)

<i>Existing Version</i>	<i>Revised Version</i>
<p style="text-align: center;"><u>TRAINING REQUIREMENTS</u></p> <p>(A) <u>Entry Requirement & Duration of Training</u></p> <p><i>[3 & 4 are items not present in existing version]</i></p>	<p style="text-align: center;"><u>TRAINING REQUIREMENTS</u></p> <p>(A) <u>Entry Requirement & Duration of Training</u></p> <p>3.0 Trainees in Radiology should have a regular on-call commitment for their specialty.</p> <p>4.0 Absence from training and full-time research work may affect the training period requirement. <i>(Please refer to General Training Regulation Section)</i></p>
<p>(B) <u>Basic Specialist Training (Part I)</u></p> <p>1.0 A minimum of eight months of radiology training, satisfactory attendance of the Part I Training Course organized by the College, plus at least one year of post-registration clinical experience outside radiology are required prior to the First Fellowship Examination.</p> <p>1.1 The post-registration clinical experience should appropriately be in disciplines with wide exposure to various clinical situations, e.g. Internal Medicine, General Surgery, Paediatrics, Emergency Medicine, Obstetrics & Gynaecology, Orthopaedics, etc. For the consideration of clinical experience outside radiology, service at General Outpatient Clinics and Health Services shall not count, whilst service at Anaesthesiology, Pathology and Psychiatry shall only count up to a maximum of six months.</p> <p><i>[Item 2.0 in revised version is not present in the existing version]</i></p>	<p>(B) <u>Basic Specialist Training (Part I & Part II)</u></p> <p>1.0 At least one year of post-registration clinical experience outside radiology is required.</p> <p>1.1 The post-registration clinical experience should appropriately be in disciplines with wide exposure to various clinical situations, e.g. Internal Medicine, General Surgery, Paediatrics, Emergency Medicine, Obstetrics & Gynaecology, Orthopaedics, etc. For the consideration of clinical experience outside radiology, service at General Outpatient Clinics and Health Services shall not count, whilst service at Anaesthesiology, Pathology, <u>Rehabilitative Medicine</u> and Psychiatry shall only count up to a maximum of six months.</p> <p>2.0 <u>Satisfactory attendance of the Part I Training Course organized by the College is required prior to the First Fellowship Examination.</u></p>
<p>3.0 The topics of training includes radiological anatomy, radiographic techniques and equipment, practical radiological procedures, radiation protection, radiation biology, contrast media, relevant aspects of radioisotopes, the physics of radiography, ultrasound, computed tomography, nuclear magnetic resonance, and the principles of digital systems as applied to radiology.</p>	<p>4.0 The topics of <u>basic training</u> includes radiological anatomy, radiographic techniques and equipment, practical radiological procedures, radiation protection, radiation biology, contrast media, relevant aspects of radioisotopes, the physics of radiography, ultrasound, computed tomography, nuclear magnetic resonance, and the principles of digital systems as applied to radiology.</p>
<p>(C) <u>Basic Specialist Training : Part II</u></p> <p>1.0 This will lead up to the Final Fellowship Examination of the College.</p> <p>2.0 A minimum of 2.5 years of training in radiology plus not less than 1 year of clinical experience outside radiology, and prior success at the First Fellowship Examination, are required for application to attempt Part A of the Final Fellowship Examination.</p> <p>2.1 A trainee can apply to attempt Part B of the Final Fellowship Examination not less than 6 months after passing the Part A examination.</p>	<p><i>[These irrelevant sections are deleted in the revised version]</i></p>

<p><i>[These items in the revised version are not present in the existing version]</i></p>	<p>7.0 <u>A trainee may enter any one of the 6 modules of Part A of the Final Fellowship Examination after 18 months of accredited training in Radiology, provided that he/she has passed the First Examination.</u></p> <p>8.0 A trainee who passes the First Examination before December 2002 can sit the Part B of Final Fellowship Examination after 3 years of accredited training in Radiology, provided that he/she has passed the Part A Examination. From 2006, a trainee sitting the Part B of the Final Fellowship Examination must have completed 3.5 years of accredited training in Radiology, provided that he/she has passed all modules of Part A of the Final Fellowship Examination.</p>
<p>(D) <u>Higher Specialist Training</u></p> <p>1.0 This stage of training comprises the last two years of the whole training period and is undertaken after the trainee has passed the Final Fellowship Examination.</p>	<p>(C) <u>Higher Specialist Training</u></p> <p>1.0 This stage of training comprises two years of training, <u>of which 18 months</u> must be undertaken after the trainee has passed the Final Fellowship Examination.</p>
<p>2.0 <i>Format of First (Part I) Fellowship Examination:</i></p> <p>2.1 One multiple choice question paper. One third of the paper will cover topics in <i>Physics</i>, whilst the rest will be devoted to questions on <i>Radiological Anatomy, Techniques, Radiography and Contrast Media</i>.</p> <p>2.2 One physics short question paper.</p> <p>2.3 One anatomy and techniques film viewing session.</p>	<p>2.0 <i>Format of First (Part I) Fellowship Examination:</i></p> <p>2.1 One multiple choice question paper.</p> <p>2.2 The examination shall test on the current ionising radiation legislation and practical elements of physic knowledge required to support clinical training and patient safety.</p> <p>2.3 Candidates will be restricted to a maximum of 3 attempts at the examination.</p>
<p>3.0 <i>Format of Final (Part II) Fellowship Examination:</i></p> <p>3.1 Part A examination consists of two multiple choice question papers.</p> <p>3.1.1 Questions will cover general radiology and all the major sub-specialties included in the syllabus.</p> <p>3.1.2 Questions will also be set on clinical subjects and pathology, within the general framework of Radiology.</p> <p>3.1.3 Relevant aspects of the radiological sciences, anatomy and techniques will be included in the context of clinico-radiological cases.</p>	<p>3.0 <i>Format of Final (Part II) Fellowship Examination:</i></p> <p>3.1 Part A examination is in modular format, comprising 6 clinical modules, with one multiple choice question paper for each module.</p> <p>3.1.1 Module 1: Chest and cardiovascular Module 2: Musculoskeletal, including trauma Module 3: Gastro-intestinal, including hepatobiliary Module 4: Genito-urinary, obstetrics & gynaecology and breast Module 5: Paediatrics Module 6: Neuroradiology including spine, head & neck including eyes, ENT and dental</p> <p>3.1.2 Questions will cover general radiology and special imaging or procedures in each clinical module. Questions will also be set on clinical subjects and pathology, within the general framework of Radiology.</p> <p>3.1.3 15-20% of the question parts in each module will address the basic sciences of physics, anatomy and techniques.</p> <p>3.1.4 Until 2.5 years of training in Radiology (excluding the year of clinical experience), a candidate will be restricted to a maximum of 3 modules at each sitting.</p> <p>3.1.5 There will be no limit on the number of attempts.</p>

SYLLABUS

1.0 PART I EXAMINATION

[This section is not present in the existing version]

SYLLABUS

1.0 PART I EXAMINATION

1.1 Fundamental Physics of Matter and Radiation

A. Basic Physics

Fundamental properties of matter and radiation decay
Interactions of ionising radiation with matter

The candidates shall be able to:

- i. describe the structure of the atom, the types of radiation and the modes of radioactive decay*
- ii. understand the concept of half life*
- iii. give a basic description of the important electron and photon interactions with matter and state how they vary with energy and properties of the material*
- iv. describe attenuation in terms of absorption, scatter, HVL, and understand the inverse square law*

B. Radiation Hazards and Dosimetry

Biological effects of radiations

Risks of radiation

Principles of radiation protection

(i) Justification (ii) Optimisation (iii) Limitation

Absorbed dose, equivalent dose, effective dose and their units

The candidates shall be able to:

- i. state the radiation quantities and units: activity, exposure, absorbed dose, equivalent dose, effective dose and the relationships between these quantities*
- ii. give a description of the biological effects of radiation on tissue*
- iii. understand and give examples of stochastic and deterministic effects of radiation*
- iv. demonstrate an awareness of the populations used to evaluate radiation risk, risk values and understand how factors such as age affect these values*
- v. communicate the concept of radiation risk from medical exposures to patients.*

1.2 Practical Radiation Protection

General radiation protection

Radiation protection of the patient including pregnancy, infants and children

(i) Medical and biomedical research

(ii) Health screening

Radiation protection of staff and members of public

Use of radiation protection devices.

The candidates shall be able to:

- i. communicate the concept of radiation risk from medical exposures to patients.*
- ii. understand the requirements and means for the protection of staff and members of the public arising from their use of radiation and the extent to which they are responsible for safety within the overall radiation protection framework*

1.3 Statutory Requirements and Non-Statutory Recommendations

A. Ionising Radiations Regulations 1999

Responsibility for radiation safety;
Local rules and procedures;
Role of radiation protection adviser and radiation protection supervisor;
Classified workers;
Restriction of exposure (through design, systems of work and ppe);
Dose limits;
Equipment used for medical exposures;
Notification of incidents;
Dose constraints for comforters and carers;
Routine inspection and testing of equipment;
Notification of incidents

The candidates shall be able to:

- i. demonstrate a thorough knowledge of the regulations governing the medical exposure of an individual and of their own and other people's responsibilities,*
- ii. understand their own responsibilities regarding the restriction of the environmental impact of their use of radiation*
- iii. describe the UK legislation affecting the use of ionising radiations in the medical environment.*

B. Ionising Radiation (Medical Exposure) Regulations 2000

Responsibilities of referrer, operator, practitioner, employer and medical physics expert; Patient identification and consent; Dose recording and diagnostic reference levels; Adequate training and local entitlement;
Employers procedures; Quality assurance programmes, clinical evaluation of exposure and clinical audit; Notification of incidents;
Research exposures, including ethics committees and dose constraints;
Health screening

The candidates shall be able to:

- i. To describe the UK legislation affecting the use of ionising radiations in the medical environment*
- ii. demonstrate a thorough knowledge of the regulations governing the medical exposure of an individual and of their own and other people's responsibilities,*
- iii. understand their own responsibilities regarding the restriction of the environmental impact of their use of radiation.*

C. Other relevant legislation

- i. Medicines (Administration of Radioactive Substances) Regulations 1978*
- ii. Radioactive Substances Act 1993*
- iii. Hong Kong legislation: Radiation Ordinance*

The candidates shall be able to describe the various UK and Hong Kong legislation affecting the use of ionising radiations in the medical environment.

1.4 Diagnostic Radiology and Radionuclide Radiology

A. Diagnostic Radiology

Production of X-rays: General tubes; Mammography
Radiological image

Factors affecting radiation dose and image quality

Quality assurance and quality control

Conventional film processing

The candidates shall be able to:

- i. understand the basic physics of the production of x-rays*
- ii. describe basic measures of image quality*
- iii. have an overview of radiography physics with particular reference to factors affecting image quality and dose.*
- iv. understand the principles of diagnostic x-ray equipment sufficient to be able to describe factors affecting image quality and patient dose, to recognise artefacts and to be able to use equipment correctly*

B. Fluoroscopy and Fluorography

Image intensification; Operator controlled variables

Measurement of image quality

Factors affecting radiation dose and image quality

The candidates shall be able to:

- i. describe basic measures of image quality*
- ii. have an overview of fluoroscopy physics with particular reference to factors affecting image quality and dose*
- iii. understand the principles of the equipment sufficient to be able to describe factors affecting image quality and patient dose, to recognise artefacts and to be able to use equipment correctly.*

C. Computed Tomography Scanning (Introduction)

Basic physics of CT

Factors affecting radiation dose and image quality

The candidates shall be able to:

- i. have an overview of the physics of CT scanners with particular reference to factors affecting image quality and dose*
- ii. describe basic measures of image quality*
- iii. understand the principles of CT equipment sufficient to be able to describe factors affecting image quality and patient dose, to recognise artefacts and to be able to use equipment correctly.*

D. Patient Dosimetry

Methods; Diagnostic reference levels (including high dose techniques);

Magnitude and measurements

The candidates shall be able to:

- i. describe the methods of output measurement*
- ii. describe the methods of patient dose measurement*
- iii. state the reference dose levels in different radiological examinations*
- iv. state the magnitude of patient doses in different radiographic, fluoroscopic, and CT examinations.*

	<p>E. Radionuclide Imaging (Introduction)</p> <p>Fundamentals of diagnostic use Properties of radiopharmaceuticals Factors affecting radiation dose and image quality Radiation protection requirements for</p> <ol style="list-style-type: none"> i. Conception, pregnancy and breastfeeding ii. Arrangements for radioactive patients iii. Keeping of radioactive substances iv. Disposal of radioactive waste <p><i>The candidates shall be able to:</i></p> <ol style="list-style-type: none"> i. have an overview of nuclear medicine physics with particular reference to factors affecting image quality and dose ii. state the magnitude of patient doses in different radionuclide imaging studies iii. understand the principles of radionuclide equipment sufficient to be able to describe factors affecting image quality and patient dose, to recognise artefacts and to be able to use equipment correctly.
<p>1.5 PHYSICS</p> <p><u>1.5.1 General Remarks</u></p> <p>(A) A basic knowledge of physics is assumed.</p> <p>(B) The whole of the syllabus should be covered in approximately 40 hours of formal teaching. The hours indicated in brackets for each section are a guide as to how these 40 hours might be divided, with reference to the approximate depth of knowledge expected in the topic.</p>	<p>2.5 PHYSICS</p> <p><u>2.5.1 General Remarks</u></p> <p>(A) A basic knowledge of physics is assumed.</p> <p>(B) The whole of the syllabus should be covered in approximately 20 hours of formal teaching. The hours indicated in brackets for each section are a guide as to how these <u>20 hours</u> might be divided, with reference to the approximate depth of knowledge expected in the topic.</p>
<p><u>1.5.2 Scope of the Syllabus</u></p> <p>(A) IONIZING RADIATION (5 hours)</p> <ol style="list-style-type: none"> (i) Structure of the atom. (ii) Radioactivity and radionuclides: basic definition of alpha, beta and gamma radiation; principles of exponential decay, half life, specific activity and units of activity. (iii) Electromagnetic spectrum. (iv) General properties of X and gamma rays: wavelength, energy, inverse square law. (v) Interaction of X and gamma rays with matter: coherent, Compton, photoelectric and pair production interactions; concepts of attenuation, absorption, scatter and their practical consequences. <p>(B) PRODUCTION OF X RAY (3 hours)</p> <ol style="list-style-type: none"> (i) The basic principles of a rotating anode X-ray tube. (ii) X ray output spectrum and characteristic radiation. (iii) Basic factors which influence X ray output from differing types of X ray machinery: anode material, kV, mA, focal spot size, tube rating, filtration, voltage waveform. <p>(C) RADIATION PROTECTION (7 hours)</p> <ol style="list-style-type: none"> (i) Statutory responsibilities: an appreciation of relevant legislation and Codes of Practice. (ii) The content of the “core of knowledge” as specified by the current Radiation Ordinance, the relevant ICRP and other international radiation protection standards and recommendations. (iii) Genetic and somatic effects of ionizing radiations. (iv) Relative risks of ionizing radiations. 	<p><u>2.5.2 Scope of the Syllabus</u></p>

<p>(v) The principles of radiation protection, including the various practical means of dose reduction to staff, patient and members of the public with special consideration of females and children.</p> <p>(vi) Staff and patient doses in diagnostic procedures: magnitude and methods of measurement.</p> <p>(vii) Comprehension of the practical measures required in a department of Radiology.</p>	
(D) THE X-RAY IMAGE (10 hours)	(A) THE X-RAY IMAGE (<u>6 hours</u>)
(G) RADIONUCLIDE IMAGING (5 hours)	(D) RADIONUCLIDE IMAING (<u>4 hours</u>)

SPECIALTY TRAINING: CLINICAL ONCOLOGY

(Comparison Table)

<i>Existing Version</i>	<i>Revised Version</i>
<p><u>OBJECTIVES OF TRAINING</u></p> <p>(A) <i>Basic Specialist Training</i></p> <p>4. To acquire a detailed knowledge on the principles and practice of radiotherapy, chemotherapy, hormonal therapy and biologic therapy of neoplastic disorders and other morbid conditions, and total patient care.</p> <p>5. To be conversant current literature on relevant subjects.</p> <p>(B) <i>Higher Specialist Training</i></p> <p>3. To develop special skills in various subspecialties of Clinical Oncology.</p>	<p><u>OBJECTIVES OF TRAINING</u></p> <p>(A) <i>Basic Specialist Training</i></p> <p>4. To acquire a detailed knowledge on the principles and practice of radiotherapy, chemotherapy, hormonal therapy and biologic therapy of neoplastic disorders and other morbid conditions.</p> <p>5. To be conversant <u>with the updated practice and current literature on relevant subjects.</u></p> <p>(B) <i>Higher Specialist Training</i></p> <p>3. <u>To practice evidence-based medicine with emphasis on total patient care.</u></p> <p>4. To develop special skills in various <u>fields and subspecialties of Clinical Oncology.</u></p> <p>5. <u>To be motivated towards continuous professional development.</u></p>
<p><u>TRAINING REQUIREMENTS</u></p> <p>(B) <i>Entry Requirement & Duration of Training</i></p> <p>1.0 The duration of training shall last for a minimum of 6 years.</p> <p>[3 is item not present in existing version]</p>	<p><u>TRAINING REQUIREMENTS</u></p> <p>(A) <i>Entry Requirement & Duration of Training</i></p> <p>2.0 The duration of training shall last for a minimum of 6 years, <u>with 4 years of basic specialist training and 2 years of higher specialist training.</u></p> <p>3.0 <u>Trainees in Clinical Oncology should have a regular on-call commitment for their specialty.</u></p>
<p>(C) <i>Higher Specialist Training</i></p> <p>2.0 Confidence and maturity would be cultivated, resulting in better clinical judgement and more effective problem solving. Special skills on the various subspecialties of Clinical Oncology may be developed.</p> <p>3.0 Communication and co-operation with colleagues of other disciplines would be an important feature. As member of a team of specialists in running combined clinics, contributions are made towards the multidisciplinary approach on the management of patient.</p>	<p>(C) <i>Higher Specialist Training</i></p> <p>2.0 Confidence and maturity would be cultivated, resulting in better clinical judgement and more effective problem solving <u>and decision making.</u> Special skills on <u>sub-specialty or site-specialist training would be developed.</u></p> <p>3.0 Team work would be emphasized, including organizing and running of combined clinics towards the multidisciplinary approach to cancer management.</p>

<p>4.0 Theoretic and practical knowledge on clinical research would be acquired. Opportunities would be provided for the trainee to experience the whole process of running clinical trials, performing statistical analyses and writing up treatment protocols.</p> <p>5.0 Involvement in teaching and training of junior colleagues would be required in the form of formal lectures, tutorials, organization of seminars, clinical pathological conferences and bedside teaching.</p> <p>6.0 Participation in conferences, seminars, or scientific meeting would be required, with presentations at local, regional or overseas conferences, and contribution to literature strongly encouraged.</p>	<p>4.0 Emphasis would be put on evidence-based practice. Sound knowledge on literature including cost-effectiveness of various treatment modalities and options would be required.</p> <p>5.0 Theoretic and practical knowledge on clinical research would be acquired. Opportunities would be provided for the trainee to experience the whole process of running clinical trials, performing statistical analyses and writing up treatment protocols.</p> <p>6.0 Involvement in teaching and training of junior colleagues would be required in the form of formal lectures, tutorials, organization of seminars, clinical pathological conferences and bedside teaching.</p> <p>7.0 Participation in local or overseas conferences, seminars, or scientific meeting would be required, and contribution to literature strongly encouraged. Active participation in the Annual Scientific Meeting of the Hong Kong College of Radiologists by means of oral or poster presentation is necessary.</p>
<p><u>EXAMINATION FORMAT</u></p> <p>1.0 The College examination will be in 2 parts.</p> <p>2.0 <i>Format of First (Part I) Examination:</i></p> <p>2.1 The examination consists of written papers of structured questions and multiple choice questions in the following 6 subjects:</p> <ul style="list-style-type: none"> ◆ Cancer Biology ◆ Clinical Pharmacology ◆ Medical Statistics ◆ Pathology ◆ Physics ◆ Radiobiology <p>2.3 The examination will be held twice a year in spring and autumn, usually in March and September.</p> <p>2.4 For each subject, there are two written papers. Candidates will be restricted to 4 consecutive attempts. Candidates may enter any number of subjects at a single attempt.</p>	<p><u>EXAMINATION FORMAT</u></p> <p>1.0 The College examination <u>for basic specialist training</u> will be in 2 parts.</p> <p>2.0 <i>Format of First (Part I) Examination:</i></p> <p>2.2 The examination consists of written papers of structured questions and multiple choice questions in the following <u>5</u> subjects:</p> <ul style="list-style-type: none"> ◆ Cancer Biology ◆ Clinical Pharmacology ◆ Medical Statistics ◆ <u>Medical Physics</u> ◆ Radiobiology <p>2.2 The examination will be held twice a year in spring and autumn, usually in March and September. <u>Candidates may enter the examination at any four consecutive sittings.</u></p> <p>2.3 <u>Candidates may enter any number of subjects at a single sitting. For each subject, there are two written papers - one of multiple choice questions and one of structured questions. Any candidate who does not attempt all components of the subject will be deemed to have failed that subject overall.</u></p> <p>2.4 <u>The total number of attempts is restricted to 4 in consecutive sittings.</u></p>
<p>3.0 <i>Format of Final (Part II) Examination:</i></p> <p>3.2 There is a clinical examination</p> <p>3.3 There is a structured oral examination.</p>	<p>3.0 <i>Format of Final (Part II) Examination:</i></p> <p>3.2 There is a clinical examination <u>and a structured oral examination examined by pairs of examiners, with one local and one overseas oncologist.</u></p> <p>3.3 <u>Any candidate who does not attempt all components of an examination will be deemed to have failed the examination overall.</u></p> <p>3.4 <u>Unsuccessful candidates will be required to resit the whole of the Final Examination for the Fellowship. There is no restriction to the number of attempts for the Final Examination.</u></p>

<p>4.0 <i>Review of Performance at Examinations</i></p> <p>4.2.2 After 3 unsuccessful attempts at the Final Examination, a candidate's performance will be reviewed by the Chairman of the Education Committee, one examiner of the examination together with the trainee and the respective supervisor, to advise on the required improvement areas and remedial actions.</p>	<p>4.0 <i>Review of Performance at Examinations</i></p> <p>4.2.2 After 3 unsuccessful attempts at the Final Examination, a candidate's performance will be reviewed by the Chairman of the Education Committee, one examiner of the examination together with the trainee and the respective supervisor, to advise on the required improvement areas and remedial actions. <u>Candidate who performs badly in the Final Examination as a whole may be referred for twelve months.</u></p>
<p><u>SYLLABUS</u></p> <p>1.1 <i>PATHOLOGY OF NEOPLASTIC DISORDERS</i> <u>General Remarks</u> Trainees are still required to obtain sufficient knowledge on the pathology of neoplasia, including etiology, taxonomy, natural history, prognosis, and the pathological features of individual tumours including staging, molecular biology and immunohistochemistry.</p> <p>2.0 <i>FINAL (PART II) EXAMINATION</i></p> <p>2.1.2 The pathology of neoplastic disorders.</p>	<p><u>SYLLABUS</u></p> <p>1.2 <i>PATHOLOGY OF NEOPLASTIC DISORDERS</i> <u>General Remarks</u> <u>Though this subject is no longer examined in Part I Examination,</u> trainees are still required to obtain sufficient knowledge on the pathology of neoplasia, including etiology, taxonomy, natural history, prognosis, and the pathological features of individual tumours including staging, molecular biology and immunohistochemistry.</p> <p>2.0 <i>FINAL (PART II) EXAMINATION</i></p> <p>2.1.3 The pathology of neoplastic disorders. <u>(please refer to section 1.6 above)</u></p>

Errata

In the last issue of our Newsletter (Summer 2002), there should be no footnote in the accreditation of basic training in Radiology of North District Hospital.

An assessment for North District Hospital will be made at the end of 2002. Further recommendation will then be given. The footnote 1 (accredited 15 months out of 3 years Basic Training) should only apply to Ruttonjee Hospital.

**INTERNATIONAL CT/MRI CONFERENCE 2002
GOLD COAST, AUSTRALIA
JULY 26-28, 2002**

The CT/MRI 2002 conference was held at the Conrad Jupiters Hotel at the Gold Coast, Queensland, Australia from 26-28 July 2002. Renowned international and national speakers presented CT and MRI lectures in a concurrent format. Lecture emphasis was on recent advances and practical applications in CT and MRI.



From Left to Right: Dr. KS Lam, Dr. OC Cheng, Dr. FL Chan, Dr. J Khoo and Dr. John Lo

The international faculty included Dr. Suresh Mukherji who is the Chief of Neuroradiology and Head and Neck Radiology at the University of Michigan and Dr. Patrick Rogalla from the Humbolt University in Berlin.

Dr. Murkerji is an Honorary Advisor of our college journal, and has previously delivered lectures in Hong Kong. At this conference, he presented five lectures in Head and Neck Radiology which were most informative and exciting. Dr. Patrick Rogalla delivered five lectures emphasizing the exciting capabilities of Multi-Slice Computed Tomography, especially with regards to the use of MSCT in the bowel.

Delegates from Hong Kong included our Warden Dr. FL Chan, Dr. John Lo, Dr. KF Ho, Dr. OC Cheng, and Dr. KS Lam. The conference was well organized and the venue was well chosen. The weather was splendid at the time of the conference, and delegates were able to relax in between the morning and afternoon sessions when lunch was served outdoors in the sunny garden area of the hotel.

It has truly been a stimulating experience.

Membership Status

Number of members as on 5 October 2002:

<i>Status</i>	<i>Number</i>
<i>Honorary Fellow</i>	8
<i>Fellow</i>	285
<i>Member</i>	58
<i>Trainee Member</i>	24
<i>Associate Member</i>	2
Total	377

List of Trainee Members admitted from 9 July 2002 till 5 October 2002:

<i>Admission date</i>	<i>Name</i>	<i>Specialty</i>	<i>Training Center</i>
27 August 2002	CHOI, Chi Yin	CO	PYNEH
27 August 2002	HO, Gi Sum Roanna	CO	TMH
27 August 2002	LEE, Yim Ping	DR	PWH
27 August 2002	LO, Shing Wai Sherwin	DR	PYNEH
27 August 2002	TSANG, Tsz Kan	DR	QEH
24 September 2002	CHIU, San Hin Sonny	DR	KWH
24 September 2002	HUI, Wai Yi Joyce	DR	NDH
24 September 2002	KEI, Shiu Kong	DR	TMH
24 September 2002	SIU, Yung Woon	DR	PWH
24 September 2002	YEUNG, Nga Yan	CO	QEH

List of Members admitted from 9 July 2002 till 5 October 2002:

<i>Admission date</i>	<i>Name</i>	<i>Specialty</i>	<i>Training Center</i>
24 September 2002	HO, Gi Sum Roanna	CO	TMH
24 September 2002	LIU, Shiu Fai	CO	TMH
24 September 2002	SOONG, Sung Inda	CO	PYNEH

List of Fellows admitted from 19 February 2002 till 5 October 2002:

<i>Admission date</i>	<i>Name</i>	<i>Specialty</i>	<i>Training Center</i>
30 July 2002	HUI, Yee Hing	DR	UCH
30 July 2002	KWAN, Wing Ho	DR	RH
30 July 2002	KWOK, Wing Kong	DR	RH
30 July 2002	WANG, Ki	DR	UCH
30 July 2002	WONG, Yun Fong Mable	DR	PMH

Conferences

Orthopaedic MRI Workshop 2002

Date: 15 December 2002
Organizers: Hong Kong Association of Private Orthopaedic Surgeons & Opus Magnetic Imaging Centre
Wanchai, Hong Kong
Venue: Conrad Hotel, Pacific Place, HKSAR
Enquiry: Secretariat
Head Office, Opus Magnetic Imaging Centre
Room 1802-3, Leighton Centre,
77 Leighton Road,
Causeway Bay, Hong Kong
Tel: 2200 9393
Fax: 2770 6770
E-mail: polyray@netvigator.com
Further enquiry: 8106 5688 (Allison Lew)

Hong Kong International Medical Informatics Conference 2003

Date: 23-25 January 2003
Venue: Hong Kong Academy of Medicine Jockey Club Building
Enquiry: Conference Secretariat (MIC 2003)
c/o HKAM Jockey Club Building,
99 Wong Chuk Hang Road,
Aberdeen, Hong Kong
Tel: (852) 2871 8787
Fax: (852) 2871 8898
E-mail: confdept@hkam.org.hk
Web: www.hksmi.org

UK Radiological Congress 2003

Date: 15-17 June 2003
Venue: International Conventional Centre,
National Indoor Arena, and Austin Court,
Birmingham, UK
Enquiry: UKRC 2003 Secretariat
PO Box 2895
London W1A 5RS, UK
Tel: +44 (0) 20 7307 1410 / 20
Fax: +44 (0) 20 7307 1414
E-mail: conference@ukrc.org.hk
Web: www.ukrc.org.uk

Controversies in Trauma Resuscitation

Date: 9 December 2002
Organizers: The Chinese University of Hong Kong Accident and Emergency Medicine Academic Unit
Venue: Shaw Auditorium
1/F., Postgraduate Education Centre,
Prince of Wales Hospital,
Shatin, New Territories,
Hong Kong
Enquiry: Ms. Ellen Chan
Tel: 2632 1033
E-mail: ellenchan@cuhk.edu.hk

The 23rd Annual Course in Computed Tomography and Magnetic Resonance Imaging

Date: 13-17 April 2003
Venue: The Gleneagles Hotel,
Auchterarder Perthshire Scotland
United Kingdom
Enquiry: London CT Course Ltd.
Secretariat Office
The British Institute of Radiology
36 Portland Place
London W1B 1AT
Tel: +44 (0) 20 7307 1411
Fax: +44 (0) 20 7307 1414
E-mail: enquires@ctmricourse.co.uk
Web: www.ctmricourse.co.uk

RANZCR 54th ASM, 2003

Date: 18-21 September 2003
Venue: Brisbane Exhibition & Convention Centre,
Queensland
Enquiry: Waldron Smith Management
61 Danks Street
Port Melbourne Vic 3207
www.ort.cuhk.edu.hk/lbrw-2002
Tel: 03 9645 6311
Fax: 03 9645 6322
E-mail: info@wsm.com.au

Hong Kong Sports Medicine Seminar

Date: 27th March 2003
Organizers: Department of Diagnostic Radiology
and Organ Imaging
Department of Orthopaedics and
Traumatology
The Chinese University of Hong Kong
Medical Imaging Australia
National Capital Diagnostic Imaging,
Australia
Venue: Orthopaedics Learning Center,
Prince of Wales Hospital, Shatin
Enquiry: Department of Diagnostic Radiology
and Organ Imaging, The Chinese
University of Hong Kong,
Prince of Wales Hospital, Shatin
Tel: (852) 2632 1167 / 2632 1036
Fax: (852) 2636 0012
E-mail: griffith@ruby.med.cuhk.edu.hk
gregantonio@ruby.med.cuhk.hk
Web:
www.droid.cuhk.edu.hk/events/sms.htm



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