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:

<table>
<thead>
<tr>
<th>Position</th>
<th>Name</th>
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</thead>
<tbody>
<tr>
<td>President</td>
<td>Dr. LEONG, Lilian</td>
</tr>
<tr>
<td>Warden</td>
<td>Dr. CHAN, Fu Luk</td>
</tr>
<tr>
<td>Honorary Secretary</td>
<td>Prof. SHAM, Jonathan</td>
</tr>
<tr>
<td>Council Member</td>
<td>Dr. FOO, William</td>
</tr>
</tbody>
</table>

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](http://www.mlms.org.hk).
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 Kong. 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 as the National Cancer Institute of the USA and the Hospital Authority 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 acupressure 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
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

Examiners:

<table>
<thead>
<tr>
<th></th>
<th>Prof. GILBERT, FJ</th>
<th>Dr. RANKIN, SC</th>
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<tbody>
<tr>
<td></td>
<td>Dr TSO, WK</td>
<td>Dr WU, PM</td>
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</table>

Successful Candidates:

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<thead>
<tr>
<th></th>
<th>AU, Mei Yee</th>
<th>CHIU, Sau Hin Sonny</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>HUI, Yai Yi Joyce</td>
<td>HWANG, Cheng Yang</td>
</tr>
<tr>
<td></td>
<td>LI, On Chee Angela</td>
<td>PANG, Bik Yiu Clara</td>
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</tbody>
</table>

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:

HUI, Yee Hing
KWAN, Wing Ho
KWOK, Wing Kong
WANG, Ki
WONG, Yun Fong Mable

New Training Regulations

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

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/](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)*

<table>
<thead>
<tr>
<th>Existing Version</th>
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<tbody>
<tr>
<td><strong>General Remarks</strong></td>
<td><strong>General Remarks</strong></td>
</tr>
<tr>
<td>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.</td>
<td>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 to continue with their medical education and professional development throughout their careers.</td>
</tr>
<tr>
<td>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.</td>
<td>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 specialist responsibilities with independent practice.</td>
</tr>
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</table>

**EDUCATION COMMITTEE**

**Terms of Reference**

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.

[6. (e), (f) & (g) are not present in existing version.]

8. To promote and support research.

6. (e) **Education and Research Fund Subcommittee** to advise on and to monitor sponsorship of local and overseas related professionals in educational and research activities.

(f) **Research Subcommittee** to oversee and coordinate research projects and research education.

(g) **Subspecialty Board(s)** to oversee the development, training and assessment in approved subspecialty(ies) of the College.

8. (Deleted)
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 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)*

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<tr>
<td><strong>(A) Entry Requirement &amp; Duration of Training</strong></td>
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</table>
| [3 & 4 are items not present in existing version] | 3.0 Trainees in Radiology should have a regular on-call commitment for their specialty.  
4.0 Absence from training and full-time research work may affect the training period requirement. *(Please refer to General Training Regulation Section)* |
| **(B) Basic Specialist Training (Part I)** | **(B) Basic Specialist Training (Part I & Part II)** |
| 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.  
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. *(Item 2.0 in revised version is not present in the existing version)* | 1.0 At least one year of post-registration clinical experience outside radiology is required.  
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, Rehabilitative Medicine and Psychiatry shall only count up to a maximum of six months.  
2.0 Satisfactory attendance of the Part I Training Course organized by the College is required prior to the First Fellowship Examination. |
| **(C) Basic Specialist Training - Part II** | **(C) Basic Specialist Training - Part II** |
| 1.0 This will lead up to the Final Fellowship Examination of the College.  
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.  
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. | [These irrelevant sections are deleted in the revised version]* |
| 7.0 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. |
| 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. |

(D) **Higher Specialist Training**

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.

(C) **Higher Specialist Training**

1.0 This stage of training comprises two years of training, of which 18 months must be undertaken after the trainee has passed the Final Fellowship Examination.

2.0 **Format of First (Part I) Fellowship Examination:**

2.1 One multiple choice question paper. One third of the paper will cover topics in Physics, whilst the rest will be devoted to questions on Radiological Anatomy, Techniques, Radiography and Contrast Media.

2.2 One physics short question paper.

2.3 One anatomy and techniques film viewing session.

2.0 **Format of First (Part I) Fellowship Examination:**

2.1 One multiple choice question paper.

2.2 The examination shall test on the current ionising radiation legislation and practical elements of physics knowledge required to support clinical training and patient safety.

2.3 Candidates will be restricted to a maximum of 3 attempts at the examination.

3.0 **Format of Final (Part II) Fellowship Examination:**

3.1 Part A examination consists of two multiple choice question papers.

3.1.1 Questions will cover general radiology and all the major sub-specialties included in the syllabus.

3.1.2 Questions will also be set on clinical subjects and pathology, within the general framework of Radiology.

3.1.3 Relevant aspects of the radiological sciences, anatomy and techniques will be included in the context of clinico-radiological cases.

3.0 **Format of Final (Part II) Fellowship Examination:**

3.1 Part A examination is in modular format, comprising 6 clinical modules, with one multiple choice question paper for each module.

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

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.

3.1.3 15-20% of the question parts in each module will address the basic sciences of physics, anatomy and techniques.

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.

3.1.5 There will be no limit on the number of attempts.
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. 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.
### E. Radionuclide Imaging (Introduction)

**Fundamentals of diagnostic use**
- Properties of radiopharmaceuticals
- Factors affecting radiation dose and image quality
- Radiation protection requirements for
  - i. Conception, pregnancy and breastfeeding
  - ii. Arrangements for radioactive patients
  - iii. Keeping of radioactive substances
  - iv. Disposal of radioactive waste

*The candidates shall be able to:*
- 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.

### 1.5 PHYSICS

#### 1.5.1 General Remarks

(A) A basic knowledge of physics is assumed.
(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.

#### 2.5 PHYSICS

#### 2.5.1 General Remarks

(A) A basic knowledge of physics is assumed.
(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 20 hours might be divided, with reference to the approximate depth of knowledge expected in the topic.

#### 1.5.2 Scope of the Syllabus

**A. IONIZING RADIATION** (5 hours)

(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.

**B. PRODUCTION OF X-RAY** (3 hours)

(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.

**C. RADIATION PROTECTION** (7 hours)

(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.
(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.
(vi) Staff and patient doses in diagnostic procedures: magnitude and methods of measurement.
(vii) Comprehension of the practical measures required in a department of Radiology.

<table>
<thead>
<tr>
<th>(D) THE X-RAY IMAGE (10 hours)</th>
<th>(A) THE X-RAY IMAGE (6 hours)</th>
</tr>
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<tbody>
<tr>
<td>(G) RADIONUCLIDE IMAGING (5 hours)</td>
<td>(D) RADIONUCLIDE IMAGING (4 hours)</td>
</tr>
</tbody>
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**SPECIALTY TRAINING: CLINICAL ONCOLOGY**

*(Comparison Table)*

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<thead>
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<th>Revised Version</th>
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<tr>
<td><strong>OBJECTIVES OF TRAINING</strong></td>
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</tr>
<tr>
<td><strong>(A) Basic Specialist Training</strong></td>
<td><strong>(A) Basic Specialist Training</strong></td>
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<tr>
<td>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.</td>
<td>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.</td>
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<tr>
<td>5. To be conversant current literature on relevant subjects.</td>
<td>5. To be conversant with the updated practice and current literature on relevant subjects.</td>
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<tr>
<td><strong>(B) Higher Specialist Training</strong></td>
<td><strong>(B) Higher Specialist Training</strong></td>
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<tr>
<td>3. To develop special skills in various subspecialties of Clinical Oncology.</td>
<td>3. To practice evidence-based medicine with emphasis on total patient care.</td>
</tr>
<tr>
<td></td>
<td>4. To develop special skills in various fields and subspecialties of Clinical Oncology.</td>
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<td>5. To be motivated towards continuous professional development.</td>
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<tr>
<td><strong>TRAINING REQUIREMENTS</strong></td>
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</tr>
<tr>
<td>1.0 The duration of training shall last for a minimum of 6 years.</td>
<td>2.0 The duration of training shall last for a minimum of 6 years, with 4 years of basic specialist training and 2 years of higher specialist training.</td>
</tr>
<tr>
<td>[3 is item not present in existing version]</td>
<td>3.0 Trainees in Clinical Oncology should have a regular on-call commitment for their specialty.</td>
</tr>
<tr>
<td><strong>(C) Higher Specialist Training</strong></td>
<td><strong>(C) Higher Specialist Training</strong></td>
</tr>
<tr>
<td>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.</td>
<td>2.0 Confidence and maturity would be cultivated, resulting in better clinical judgement and more effective problem solving and decision making. Special skills on sub-specialty or site-specialist training would be developed.</td>
</tr>
<tr>
<td>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.</td>
<td>3.0 Team work would be emphasized, including organizing and running of combined clinics towards the multidisciplinary approach to cancer management.</td>
</tr>
</tbody>
</table>
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.

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.

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.

EXAMINATION FORMAT

1.0 The College examination will be in 2 parts.

2.0 Format of First (Part I) Examination:

2.1 The examination consists of written papers of structured questions and multiple choice questions in the following 6 subjects:
- Cancer Biology
- Clinical Pharmacology
- Medical Statistics
- Pathology
- Physics
- Radiobiology

2.2 The examination will be held twice a year in spring and autumn, usually in March and September.

2.3 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.

3.0 Format of Final (Part II) Examination:

3.2 There is a clinical examination

3.3 There is a structured oral examination.

EXAMINATION FORMAT

1.0 The College examination for basic specialist training will be in 2 parts.

2.0 Format of First (Part I) Examination:

2.1 The examination consists of written papers of structured questions and multiple choice questions in the following 5 subjects:
- Cancer Biology
- Clinical Pharmacology
- Medical Statistics
- Medical Physics
- Radiobiology

2.2 The examination will be held twice a year in spring and autumn, usually in March and September. Candidates may enter the examination at any four consecutive sittings.

2.3 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 the subject overall.

2.4 The total number of attempts is restricted to 4 in consecutive sittings.

3.0 Format of Final (Part II) Examination:

3.2 There is a clinical examination and a structured oral examination examined by pairs of examiners, with one local and one overseas oncologist.

3.3 Any candidate who does not attempt all components of an examination will be deemed to have failed the examination overall.

3.4 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.
4.0 Review of Performance at Examinations
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.

SYLLABUS

1.1 PATHOLOGY OF NEOPLASTIC DISORDERS
   General Remarks
   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.

2.0 FINAL (PART II) EXAMINATION
2.1.2 The pathology of neoplastic disorders.

SYLLABUS

1.2 PATHOLOGY OF NEOPLASTIC DISORDERS
   General Remarks
   Though this subject is no longer examined in Part I Examination, 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.

2.0 FINAL (PART II) EXAMINATION
2.1.3 The pathology of neoplastic disorders. (please refer to section 1.6 above)

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.
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.

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:

<table>
<thead>
<tr>
<th>Status</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Honorary Fellow</td>
<td>8</td>
</tr>
<tr>
<td>Fellow</td>
<td>285</td>
</tr>
<tr>
<td>Member</td>
<td>58</td>
</tr>
<tr>
<td>Trainee Member</td>
<td>24</td>
</tr>
<tr>
<td>Associate Member</td>
<td>2</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>377</strong></td>
</tr>
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List of Trainee Members admitted from 9 July 2002 till 5 October 2002:

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

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

<table>
<thead>
<tr>
<th>Admission date</th>
<th>Name</th>
<th>Specialty</th>
<th>Training Center</th>
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</thead>
<tbody>
<tr>
<td>24 September 2002</td>
<td>HO, Gi Sum Roanna</td>
<td>CO</td>
<td>TMH</td>
</tr>
<tr>
<td>24 September 2002</td>
<td>LIU, Shiu Fai</td>
<td>CO</td>
<td>TMH</td>
</tr>
<tr>
<td>24 September 2002</td>
<td>SOONG, Sung Inda</td>
<td>CO</td>
<td>PYNEH</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Admission date</th>
<th>Name</th>
<th>Specialty</th>
<th>Training Center</th>
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</thead>
<tbody>
<tr>
<td>30 July 2002</td>
<td>HUI, Yee Hing</td>
<td>DR</td>
<td>UCH</td>
</tr>
<tr>
<td>30 July 2002</td>
<td>KWAN, Wing Ho</td>
<td>DR</td>
<td>RH</td>
</tr>
<tr>
<td>30 July 2002</td>
<td>KWOK, Wing Kong</td>
<td>DR</td>
<td>RH</td>
</tr>
<tr>
<td>30 July 2002</td>
<td>WANG, Ki</td>
<td>DR</td>
<td>UCH</td>
</tr>
<tr>
<td>30 July 2002</td>
<td>WONG, Yun Fong Mable</td>
<td>DR</td>
<td>PMH</td>
</tr>
</tbody>
</table>
### Conferences

<table>
<thead>
<tr>
<th>Conference</th>
<th>Date</th>
<th>Venue</th>
<th>Enquiry</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Orthopaedic MRI Workshop 2002</strong></td>
<td>15 December 2002</td>
<td>Wanchai, Hong Kong</td>
<td>Secretariat Head Office, Opus Magnetic Imaging Centre, Room 1802-3, Leighton Centre, 77 Leighton Road, Causeway Bay, Hong Kong</td>
</tr>
<tr>
<td><strong>The 23rd Annual Course in Computed Tomography and Magnetic Resonance Imaging</strong></td>
<td>13-17 April 2003</td>
<td>The Gleneagles Hotel, Auchterarder Perthshire Scotland</td>
<td>Secretariat Office The British Institute of Radiology 36 Portland Place London W1B 1AT</td>
</tr>
<tr>
<td><strong>Hong Kong International Medical Informatics Conference 2003</strong></td>
<td>23-25 January 2003</td>
<td>Hong Kong Academy of Medicine Jockey Club Building</td>
<td>Conference Secretariat (MIC 2003) c/o HKAM Jockey Club Building, 99 Wong Chuk Hang Road, Aberdeen, Hong Kong</td>
</tr>
<tr>
<td><strong>UK Radiological Congress 2003</strong></td>
<td>15-17 June 2003</td>
<td>International Conventional Centre, National Indoor Arena, and Austin Court, Birmingham, UK</td>
<td>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: <a href="mailto:conference@ukrc.org.uk">conference@ukrc.org.uk</a> Web: <a href="http://www.ukrc.org.uk">www.ukrc.org.uk</a></td>
</tr>
<tr>
<td><strong>Hong Kong Sports Medicine Seminar</strong></td>
<td>27th March 2003</td>
<td>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</td>
<td>Waldron Smith Management 61 Danks Street Port Melbourne Vic 3207 <a href="http://www.orl.cuhk.edu.hk/lbrw-2002">www.orl.cuhk.edu.hk/lbrw-2002</a> Tel: 03 9645 6311 Fax: 03 9645 6322 E-mail: <a href="mailto:info@wsn.com.au">info@wsn.com.au</a> Web: <a href="http://www.ukrc.org.uk">www.ukrc.org.uk</a></td>
</tr>
<tr>
<td><strong>Controversies in Trauma Resuscitation</strong></td>
<td>9 December 2002</td>
<td>Shaw Auditorium 1/F., Postgraduate Education Centre, Prince of Wales Hospital, Shatin, New Territories, Hong Kong</td>
<td>Ms. Ellen Chan Tel: 2632 1033 E-mail: <a href="mailto:ellenchan@cuhk.edu.hk">ellenchan@cuhk.edu.hk</a> Web: <a href="http://www.droid.cuhk.edu.hk/events/sms.htm">www.droid.cuhk.edu.hk/events/sms.htm</a></td>
</tr>
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Acknowledgement

We would like to thank Kodak Company in sponsoring the publication of this newsletter