POSTGRADUATE INSTITUTE OF MEDICINE
UNIVERSITY OF COLOMBO

Prospectus

Postgraduate Diploma in Tuberculosis & Chest Diseases

2016

Specialty Board in Respiratory Medicine
The Board of Study in Medicine

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Contents

This prospectus is made under the provisions of the Universities Act, the Postgraduate Institute of Medicine Ordinance, and the General By-Laws No. 1 of 2016 and By-Laws No. 4 of 2016 for Postgraduate Diplomas and Postgraduate Certificates

1. Introduction

The Board of Study in Medicine of the Postgraduate Institute of Medicine conducts a course leading to a Postgraduate Diploma in Tuberculosis and Chest Diseases (DTCD). The DTCD is a qualification recognized by the Ministry of Health of Sri Lanka for promotion of Medical Officers to Grade I in the Ministry of Health.

A revision of the prospectus was undertaken in 2015. The purpose of this revision is to enhance professional development of the future trainees and this is in conformity with the objectives of the Postgraduate Institute of Medicine. Furthermore, certain alterations have been made to the marking scheme of the final examination with special emphasis on assessing the clinical competencies of the trainee.

2. Duration

The duration of training for the DTCD course is one year.

3. Eligibility

The entry criteria for DTCD course are

a) A medical degree with full registration with the Sri Lanka medical council
b) Satisfactory completion of internship acceptable to the Sri Lanka Medical Council
c) Satisfactory completion of one year of post intern appointment in a University/ Public Sector Institution / Non-state in Sri Lanka acceptable to the PGIM as at the date of closure of applications.

4. Selection Examination

In order to become eligible for enrollment to the training program, the applicant should pass the selection examination.

The selection examination shall consist of a MCQ Paper. The content areas would comprise respiratory anatomy and physiology, and undergraduate knowledge of general clinical medicine. Special emphasis is given to assessing knowledge on tuberculosis.

Nomination of examiners for preparation of the MCQ paper shall be decided by the Subspecialty Board in Respiratory Medicine.

The selection examination would comprise of a one hour True/False-type MCQ paper, containing 20 stems with each question having 5 responses (a total of 100 questions/responses). Each correct response will earn 1 mark, each incorrect response -1 mark, and each non-response 0 mark. Within the 5 items of any given stem, negative marks will be taken into consideration in the marking, while there will be no carry-over of negative marks from one stem to the others; in other words, the possible mark range for any given 5-item stem will be from 0 to 5. This subcomponent carries a total of 100 marks.

Candidates who pass the selection examination by obtaining 50% or more from the MCQ paper shall be considered for enrollment to the course.

5. Number to be selected for training

The number to be admitted to the training program will depend on the training facilities available as determined by the Sub-specialty Board in Respiratory Medicine and approved by the Board of Study in Medicine and the PGIM Board of Management. The number to be admitted each year will be indicated in the circular/newspaper advertisement calling for applications. This number may vary from year to year.

In the event that the number of candidates who pass the selection examination exceeds the number of training slots available, selection will be according to the order of merit at the selection examination, in accordance with the current PGIM General Regulations.
Allocations will be made at an allocation meeting, held by a subcommittee comprising of trainers in respiratory medicine, appointed by the Specialty Board in Respiratory Medicine.

Each year only the scheduled selection examination in the approved examination calendar shall be held. **No repeat or additional examination will be held.**

A selected candidate is expected to register for the DTCD course in the same year. If this is not done, the next eligible candidate according to rank order will be selected. The candidate who refuses registration will not be permitted to register in the program in a subsequent year with the same results unless a valid medical certificate from a Consultant acceptable to the PGIM is submitted.
Please refer PGIM general guidelines on selection.

6. Expected Outcomes and Objectives of training program

The expected outcome of this program is to produce a medical officer with competencies in managing common respiratory diseases and to enable him/her to play a lead role in the identification, prevention and the management of (uncomplicated) tuberculosis patients within the community.

7. Content areas

See Annex 1

8. Structure of training program, trainers and training units

The trainee would be allocated to a training unit headed by a PGIM Board Certified Respiratory Physician for a period of twelve months.

During the 12-month period, presently every trainee will be rotated to the National Hospital for Respiratory Diseases (NHRD), Welisara, Surgical Thoracic Unit and the National TB Reference Laboratory(NTRL), Welisara for a total period of two weeks.

In addition, a modular training on Tuberculosis will be held over a period of one week by the National Program for Tuberculosis Control and Chest Diseases at Narahenpita.

9. Learning activities

Trainees are expected to learn while in service within their designated Respiratory Medicine units. In addition they would be introduced to the subject of thoracic surgery at National Hospital for Respiratory Diseases, Welisara.

There will be a modular training on tuberculosis by the National Program for Tuberculosis and the Chest Diseases. Special emphasis will be given to administrative and preventive activities within the tuberculosis control program.

They are encouraged to participate in continuous educational activities within and outside the training units.

Trainees are expected to maintain a log book according to the format which will be made available at the beginning of the training program. Trainees are expected to perform or observe procedures identified in the log book and to be certified by the respective trainers.

A series of lectures will be held over the weekend (Saturday) at the PGIM to enhance the trainees' theoretical and practical knowledge.

9.1 Study or an Audit

All trainees are required to carry out a study or an audit during this period of training. It should be clinical or epidemiological based and related to respiratory medicine.

The study or audit proposal should be submitted to the Subspecialty board in Respiratory Medicine within the first 3 months after commencing training. Generic guidance for writing a study proposal is provided in annexure 2.

The proposal shall be reviewed by two Consultant Respiratory Physicians appointed by the Subspecialty Board and a comment made available after two weeks. A guideline on reviewing a study proposal for the reviewer is provided in annexure 3.

The completed study or audit should be handed over to the subspecialty board 3 months prior to the final examination. A guideline on how the final assessment of the study will be done is provided in annexure 4 and the final assessment on the audit is provided in annexure 5.

10. Monitoring progress of training

Three in-course assessments will be held during the one year period to assess progress of trainees and provide feedback. They will be as follows:

- 1st assessment on tuberculosis
- 2nd assessment on respiratory diseases other than tuberculosis
- 3rd assessment on study or audit done during the period of training

The logbook has to be duly signed and brought at each of the assessments to be evaluated by the examiners.

During each assessment, two examiners would be examining each candidate for a total period of 15 minutes divided equally between the two.

At each assessment the candidate would be marked out of 100 marks.

The average mark (out of 100) from all three assessments will be taken forward to be included to the total marks at the final examination.

10.1 Case Book

Trainees are expected to write up a casebook, which should comprise of two cases.

1st case on Tuberculosis
2nd case on non-Tuberculosis respiratory disease

It is advisable to start on the casebook at the earliest possible opportunity. The casebook should be handed over to the PGIM three months prior to the final examination.

A generic guideline on preparation and assessment of a case book is provided in Annexure 6.

The 3rd and final in-course assessment would be held following the submission of the casebook. Two independent examiners, other than the candidate's trainers would be assessing the casebook. Each case would be marked by 100 marks and the percentage calculated for each case independently.

The casebook would be marked from a total of 100 marks. Trainees must obtain a mark of 50% or more for the case book in order to be eligible to sit for the final DTCD examination, but these marks would not be carried forward in to the final examination.

11. Final end-of-course assessment

11.1 Eligibility criteria to sit for final examination

In order to be eligible to sit for the Final DTCD examination, the trainee should have fulfilled the following eligibility criteria:

1. Obtained 50% or more for the case book
2. Obtained 150 / 300 (50%) or more as the aggregate mark from all three continuous assessments
3. Submitted the completed log book, duly signed by the supervisor
4. Obtain more than 80% attendance during the one year training program

11.2 Final assessment

The final examination would comprise of a written and clinical examination.

C1. Written examination

This will comprise of two papers.
C1.1 Data interpretation: 5 questions on data interpretation to be answered within one hour
C1.2 Case histories: 5 questions on case histories to be answered within one hour.

Each question would be marked out of 100 marks and would be assessed by two independent examiners.

A mean of the total added would be taken as the final mark in each component.

C2. Clinical examination

C2.1 OSCE

There would be 10 stations at the OSCE examination, based on relevant clinical material, investigations used in respiratory diseases, communication skills etc. Time allocated would be 5 minutes per station.

Each question would be marked out of 100 marks by two independent examiners.

The mean of the total added would be taken as the final mark.

C2.2 Long case

Each candidate would be allocated one long case (on respiratory disease) and would be given a period of 30 minutes for history taking and examination. An additional 15 minutes would be allocated for discussion.

There would be two examiners: one would be a consultant respiratory physician and the other would be either a consultant general physician or another consultant respiratory physician.

The case would be marked out of 100 by each of the examiner and the mean would be taken as the final mark.

C2.3 Short cases

There would be three panels of examiners. Each panel would consist of a consultant respiratory physician and a consultant general or respiratory physician.

Candidates would be sent to all three panels in rotation and at each panel they would be asked to examine 2 respiratory cases followed by a brief discussion.

Each panel would be given a total duration of 10 minutes with each candidate.

Each short case would be marked out of 100 marks by each examiner and the average taken.
Summative mark from the addition of all three panels would be converted to a base mark of 100

Summary of the marking scheme for the final examination

Assessment Component		Marked out of	Final mark allocation	Percentage mark allocation
C 1	Written component		200	
C1.1	Data interpretation	100 x 5		16.6%
C1.2	Case histories	100 x 5		16.6%
C2	Clinical component			
C2.1	OSCE	100 x 10	100	16.6%
C2.2	Long case	100 x 1	100	16.6%
C2.3	Short cases	100 x 6	100	16.6%
C3	Continuous assessments	100 x 3	100	16.6%
	Final overall mark		600	100%

11.3 Requirements to pass the final assessment

In order to pass the final assessment, a candidate is required to obtain.

- A final overall mark of 50% or more and
- A mark of 50% or more in the clinical component (long and short cases only)

11.4 Repeat examinations for failed candidates:

A failed candidate will have to repeat the entire examination. There is no limit placed on the number of attempts permitted.

12. Interpretation and amendments

On any other matter regarding this program/s or on a matter of interpretation of these regulations, the decision of the Board of Study in Medicine duly approved by the Board of Management of the Postgraduate Institute of Medicine shall be final.

The prospectus is subject to revision from time to time. Adequate notice will be given of such changes.

13. General regulations

Candidates are referred to the General Regulations Book in addition to this book which deals with regard to specific regulations in medicine and allied specialties.

Prospectus team
Specialty Board in Respiratory Medicine

ANNEXURE 1 (content area)

1. Recommended areas of importance during training period

Tuberculosis

- Epidemiology (Global / National / Regional)
- Microbiology (tools in diagnosis, molecular diagnostics, culture) Special situations (Multi/ extensively drug resistant tuberculosis, TB-HIV co-infections)
- Risk factors for developing TB
- Principals of chemotherapy, managing drug related side effects, chemotherapy in special situations (pregnancy , HIV co-infection, renal impairment , liver disease)

- National Guidelines on TB Control, Childhood TB Guidelines, TB-HIV Guidelines, Extra-pulmonary TB Guidelines
- Structure of the National program for tuberculosis control and chest diseases
- Administrative structure of chest clinics and DOTs center's (communication, management of lab and pharmacy, waste disposal etc)

Respiratory diseases other than Tuberculosis

Asthma

- Causes of asthma
- Investigation of asthma including performance and interpretation of spirometry, peak flow and reversibility testing
- Differential diagnosis of asthma
- Factors which may be associated with poor asthma control, including smoking, environmental factors, psychosocial factors, drugs, poor inhaler technique, poor compliance, chronic rhinosinusitis, ABPA, bronchiectasis and gastro-oesophageal reflux
- Treatment and management of patients with asthma
- Pharmacology of drugs used
- Relevant guidelines
- Patient education and self management

COPD (Chronic Obstructive Pulmonary Disease)

- Causes of COPD
- Investigation of COPD Performance and interpretation of spirometry and peak flow
- Treatment and management of patients with COPD Pulmonary rehabilitation
- Pharmacology of drugs used
- Complications of COPD
- Relevant guidelines

Bronchiectatsis

- Causes of bronchiectasis
- Microbiology
- Investigation of bronchiectasis
- Differential diagnosis of bronchiectasis
- Treatment and management of patients with bronchiectasis, including the role of physiotherapy
- Pharmacology of drugs used
- Complications
- Relevant guidelines

Respiratory tract infections

- Causes of pulmonary infections, common and less common
- Predisposing conditions
- Investigation of pulmonary infections including value and interpretation of ABST
- Management of patients with pulmonary infections, including oxygen therapy, intravenous fluids and other supportive care.
- Principles of selection of antibiotic therapy including, when appropriate, empirical therapy
- Pharmacology of drugs used
- Complications, including empyema, sepsis, ARDS and respiratory failure
- Infection control

Interstitial Lung Disease

- Knowledge of the common diseases included in this category ie: connective tissue diseases and ILD, Idiopathic pulmonary fibrosis, hypersensitive pneumonitis
- Diagnostic tools
- Overview on treatment modalities

Lung cancer

- Definition, classifications and etiology of thoracic tumors. (lung cancer, pleural, metastatic, mediastinal and chest wall tumors
- Overview on therapeutic modalities.

Pleural effusions

- Causes and differential diagnosis of pleural effusions,
- Pleural aspiration and investigation
- Know how to differentiate between transudates and exudates
- Know how to formulate a plan of management
- Have knowledge of treatments for pleural effusion
- Know when drainage of a pleural effusion is appropriate, including safety aspects of chest drain insertion
- Have knowledge of chest drain management

Management of respiratory emergencies

Radiology

Knowledge

- Normal chest radiograph, PA/ lateral, apical views.
- Radiological thoracic anatomy.
- Abnormal CXR interpretation
- Indications for particular imaging techniques (CT contrast , HRCT)
- Contra-indications for CT contrast , MRI

Skills development

Observe / assist in the following

- Performing of direct smears for AFB
- Performing of Mantoux test
- Pleural aspiration and biopsy
- Bronchoscopy
- Chest drain insertion
- Spirometry

Recommended reading
Kumar and Clark's Clinical Medicine
Davidson's Principles and Practice of Medicine

- National Guidelines on TB Control, Childhood TB Guidelines, TB-HIV Guidelines, Extra-pulmonary TB Guidelines
- WHO guidelines on Tuberculosis
- British Thoracic Society Guidelines
- Global Initiative for Chronic Obstructive Lung Disease (GOLD) guidelines on COPD
- Any standard Respiratory Journal

ANNEXURE 2

Format of Detailed Project Proposal – Postgraduate Diploma in Tuberculosis and Chest Diseases

Section 1

1. Name of trainee
2. Name(s) of supervisor(s)
3. Training centre

Section 2

1. Project title
2. Introduction
    a. Background and justification
    b. Literature Review
3. Objectives of study
4. Research plan
    a. Design
    b. Setting
    c. Method
    d. Sample size and sampling techniques
    e. Outcome measures
    f. Statistical analyses and plan of presentation of results
    g. Ethical considerations
    h. Work plan and time lines
5. References
6. Funding for study
7. Signature of trainee

Section 3

Recommendation of supervisor(s)

Signature of Supervisor 1
Date

Signature of Supervisor 2
Date

Section 4

Date of submission to PGIM

Date of approval by BOS

Signature of Secretary BOS

ANNEXURE 3

Postgraduate Diploma in Tuberculosis and Chest Diseases
Assessment of the Detailed Project Proposal by Reviewers (C4)

Name of Trainee :
Training Centre :
Supervisor :
Name of Reviewer :
Designation : Official Address:
Tel/Fax :
Email :

Title of Project:
……
……
……
……

The two reviewers appointed by the BOS shall use the following guideline and marking scheme to assess the project proposal of the candidate.

1. **Title and Introduction:** Rationale (Justification) – problem identified and quantified.
   Hypothesis and expected outcome, impact and relevance of the study.
   Comments:
   ……
   ……

2. **Literature Review:** Adequacy (evidence of a systematic search for related, similar, relevant studies)
   Comments:
   ……
   ……

3. **Objectives:** Clearly defined. Relevant and stated in measurable terms.
   Comments:
   ……
   ……

4. **Method:** Appropriate study design to address the objectives with clear detailed description of subjects, sampling technique and sample size, interventions, data collection and management. The study should be, internally valid and reproducible. Where specific details are available in the literature, reference should be made to the original papers, and comments kept to a minimum. If modifications have been made to the published techniques, these should be described in full. Appropriate statistical tests planned should be mentioned and ethical issues addressed.

   Comments:
   ……
   ……

5. **Ethical considerations/institution from where ethical approval will be / has been obtained:**
   Comments:
   ……
   ……

6. **References:** According to the Vancouver system and relevant to the study. Properly documented in the Bibliography and appropriately cited in the text.
   Comments:
   ……
   ……

Recommendation of reviewer

ANNEXURE 4

Guidelines for assessing study

Title of paper/ introduction / literature survey	10 marks
Objectives	15 marks
Methods	20 marks
Result	20 marks
Discussion	20 marks
Conclusions	10 marks
References	05 marks

Overall mark from

ANNEXURE 5

Guidelines for Assessment of Audit

Audit topic 20 marks	Choice of topic, importance to clinical care, aims clearly stated. potential for change taken into consideration
Target for performance 10 marks	Explicit measurable criteria that are evidence bases are stated to asses performance
Methods 15 marks	Ethical issues discussed and addressed, para-meters of audit specified, sampling and data collection specified
Results and Interventions 15 marks	Clearly presented appropriate conclusions drawn from results
Change in performance 20 marks	Barriers to implementation , constrains to implement change identified
Plan for evaluation 20 marks	Realistic methods of implementation and evaluation of change are discussed
Overall quality of audit	Overall judgment based on above
Marks out of 100	

ANNEXURE 6
Guidelines for the preparation of the Casebook

Introduction

1. The trainee must submit a Casebook consisting of 2 case histories, at the completion of 10 months of the training (i.e., case book must be submitted 3 months prior to final examination).The cases must be from institutions recognized by the Board of Study in Medicine to which the candidate was attached fort training. It is mandatory to have the case records corrected and certified by the relevant supervisor/trainer.

2. The case reports must be written out in the format prescribed below, duly corrected and approved by the relevant supervisor/trainer, and submitted along with the fulfillment of any other requirements outlined in the guidelines. In general, we recommend following the formatting and style for case reports prescribed in *Ceylon Medical Journal,* except for the limit on the word count.

3. A copy of the submitted Casebook should be retained by the candidate. The Casebook should either be handed over personally or sent under registered cover, to the Senior Assistant Registrar/ Examinations, on or before the stipulated date.

4. The procedure for the assessment of the Casebook, including correction and resubmission, is given below. The Casebook will be returned to the trainee for corrections, if any, after one month. The trainee is expected to re-submit the corrected Casebook at two weeks later for re-correction.

5. Assessment: The Board of Assessors will be nominated by the Specialty Board in Respiratory Medicine. If the assessors find that the case record book is not satisfactory and requires further modification, it will be sent back to the candidate for re-correction/modification. The revised case book must be submitted at least six weeks prior to the final examination. Resubmitted Casebooks will be assessed by all the assessors and a final decision taken. Their decision will be final, and the candidate will not be allowed to sit for the final examination if it is rejected again.

Assessment of the Casebook:

The case book would demonstrate the following abilities in the trainee:

1. Ability to write up a case record
2. Ability to read the literature on the topic
3. Ability to use knowledge gained from the literature to discuss problem areas,.

Format of the cases:

SUMMARY

CASE RECORD: 10 MARKS

should include Name of Hospital, Name of Consultant, Case No., Ward, BHT, Name, Age, Address, Date of Admission, Date of discharge/death, Presenting complaint, Subsidiary complaint, History of complaint, Relevant past medical history, family, social, history; Examination findings.

HISTORY & EXAMINATION: 15 MARKS

Enumerate problems in order of priority: Include initial diagnosis (clinical) with reasons and personal, social and other problems relevant to the patient, Investigations carried out, Diagnosis after investigations with reasons for investigation and explanation for any normal/abnormal findings.

DIFFERENTIAL DIAGNOSIS AND INVESTIGATIONS: 15 MARKS

MANAGEMENT: 15 MARKS

DISCUSSION: 25 MARKS

(a) Discuss critically clinical diagnosis giving reasons and other related problems you have identified and why this case was chosen.
(b) The value of various investigations giving reasons
(c) Management: Discuss aspects which need special emphasis,
(d) If there are new ideas on the management of this problem in the literature, mention it and quote source.

PRESENTATION, ORIGINALITY, STYLE OF WRITING: 20 MARKS

Use size A4 paper (one side only). Typewritten, double spaced with 1½ inch margins on either side. Illustrations (Photographs) are encouraged. The case books should preferably be bound. It should have a title page, table of contents at the beginning

Evaluation:
The candidate should obtain a 50% total for the case book. Those obtaining less than 50% will be asked to resubmit the case book with the modifications required. If the total mark obtained is less than 50% after resubmission, that candidate will be not allowed to sit the final examination.