"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. 2 of 2016 for Degree of Doctor of Medicine(MD) and Board Certification as a Specialist"





POSTGRADUATE INSTITUTE OF MEDICINE UNIVERSITY OF COLOMBO, SRI LANKA

PROSPECTUS

Doctor of Medicine (MD) and Board Certification in Otorhinolaryngology

(To be effective from the year 2016)

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1. Nomenclature

Doctor of Medicine and Board Certification in Otorhinolaryngology Abbreviated Title – MD (ORL)

2. Justification

This Training Program was established at the inception of the PGIM to train ENT specialists for the country.

3. Eligibility for entry into training programme

Eligibility Criteria in accordance with the General Regulations and Guidelines of the PGIM of University of Colombo 2015

- (a) A medical degree (MBBS or equivalent) registered 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 internship in Medical/ Clinical practice in a University /public/ private sector institutions in Sri Lanka acceptable to the PGIM.
- (d) The criteria prescribed in paragraphs (a) to (c) must have been satisfied by the applicants as at the date of closure of applications

Where a short-fall has occurred due to any reason including sick, maternity or other leave, the doctor concerned should complete such shortfall in order to become eligible to apply for the Selection Examination.

Notes

- 1. Foreign nationals who seek to apply to register for selection examination should possess a medical degree registrable with the Sri Lanka Medical Council. The decision of the Board of Management will be final in all such applications.
- 2. Candidates who possess CCST/CST/Equivalent may be admitted to a suitable point in the pre MD program. However they will have to sit for the MD examination and complete post MD training to be eligible for board certification. The Board of Study shall scrutinize such applications and make recommendations to the Board of Management for the final approval.

4. The Selection Examination

The success at the selection examination in MD Surgery. Please read the prospectus in General Surgery for the contents, Rules and Regulation of this examination.

5. Number to be selected for training

The available training opportunities for both state and non state sectors will be indicated by the PGIM in the public circular calling for applications for the MD Surgery selection examination. The number of training slots will be predetermined each year by the BOS ORL and approved by the Board of Management in consultation with the Ministry of Health. This predetermined number will be selected from among those who have passed the Selection Examination, in rank order of the final mark at the Selection Examination and in compliance with the general regulations of the PGIM and relevant examination circulars.

6. Outcomes, Competencies & Learning Objectives of the MD Otorhinolaryngology Programme

The competencies expected of a Board Certified Specialist in Otorhinolaryngology are as follows:

- Perform complete clinical evaluation of patients with Ear Nose & Throat (ENT) disorders in order to arrive at the diagnosis.
- Decide on appropriate investigations & to interpret the results.
- Plan & institute proper management including surgical procedures.
- Handle ENT Emergencies competently.
- Function as a team leader and a useful member of the multidisciplinary team.
- Apply the principles of clinical governance including reflective practice and maintain such standards.
- Conduct original research which will benefit the specialty.
- Teach the specialty of Otorhinolaryngology.

7. Course Content

Please see Annexure I.

8. Structure of training program leading to MD Otorhinolaryngology

The MD (Otorhinolaryngology) in-service training programme is of 36 months duration.

8.1. Appointments to be completed during the pre-MD training programme

The following appointments have to be completed during pre-MD training.

Otorhinolaryngology 24 months
General Surgery 6 months
Neurosurgery 2 months
Head and Neck Oncosurgery 4 months

(The appointment in Head and Neck Oncosurgery may be completed at the National Cancer Institute, Maharagama or any other cancer surgery Unit recognized by the Board of Study.)

Of the 24 months of prescribed Otorhinolaryngology training appointment, 12 months have to be done as a continuous appointment.. This period is considered as the maximum period a trainee can work under one trainer in the capacity of a registrar.

Pediatric Otorhino-laryngology should be included in this training programme. The trainee should work for a period of 3 months in the ENT Unit of the Lady Ridgeway Hospital for Children, Colombo or any other ENT Unit with adequate Pediatric ENT exposure approved by the Board of Study.

Learning activities of pre MD Training

During the period of in-service training, trainees are expected to engage in the following learning activities:

- Management of ENT Outpatients
- Management of ENT in ward Patients
- Management of ENT Emergencies
- Performing ENT Procedures in Clinic
- Performing & Assisting ENT Surgical procedures including their Pre & Post Operative Management
- Performing & observing basic Audiological procedures
- Attending the structured monthly ENT Registrar Day Program.
- Participating in Audit, CPD & Journal club meetings
- Participating in Multi disciplinary meetings
- Performing relevant cadaveric dissections including Temporal bones
- Maintaining a learning portfolio
- Preparation of case book

The trainee is expected to maintain a log book as evidence of different aspects of training he/ she has undergone.

Preparation of Case Book (See Annexure II)

The case book should contain 10 cases managed by the trainee during the training programme. Guidelines for the case book are given in Annex I

The Case Book should be submitted to the PGIM along with the application to sit the MD (Otorhinolaryngology) examination.

General rules laid down by the PGIM on submission of the case books will also apply in addition to above guidelines.

10. Trainers and Training units

Designated trainers are specialists with at least three years experience after Board Certification in the relevant specialty. Training Units should be accredited by PGIM The institutions currently approved for in-service training for Registrars and Senior Registrars include the following:

- The National Hospital of Sri Lanka
- Teaching Hospital Kandy
- Colombo North Teaching Hospital (Ragama)
- Colombo South Teaching Hospital (Kalubowila)
- Teaching Hospital, Karapitiya
- Teaching Hospital Jaffna
- Teaching Hospital Kurunagala.
- General Hospital, Matara
- Lady Ridgeway Hospital for Children

The following institutions are also currently approved for training for Registrars:

• Sri Jayawardanapura General Hospital

Allocation of Registrars to training units will be based on the merit order at the selection examination, and on the MD examination for Senior Registrars.

11. Monitoring Progress – Pre MD Training

11.1. Registrar evaluation forms

Registrars are expected to submit these evaluation forms at specified intervals (See Annex III)

11.2. Attendance at Registrar day Programs

Trainees are expected to attend at least 80% of Registrar Day Programs

12. MD (Otorhinolaryngology) examination. (Please see annexure IV)

12.1. Eligibility to register for the MD examination

To be eligible to register for the MD (Otorhinolaryngology) examination, a candidate should produce the following

- Certificates of satisfactory completion of training, signed by the appointed trainers
- Duly completed log book
- Duly completed Trainee Assessment Forms
- The Case Book prepared as indicated in Annexure II and approved by the Board of Study

Candidates residing abroad should submit the case book six months prior to date of closure of applications

Candidates, who possess foreign postgraduate qualifications in Otorhinolaryngology which are recognized by the Board of Study in terms of the notes under Eligibility Criteria and seeking exemptions for period/s of the training programme, may apply along with certified documents from the consultants as proof of having undergone training equivalent to that is expected in the local training programme.

To be considered for exemption, the said periods of training should have been done after the applicant has passed the examination which is equivalent to the Selection Examination. Period of exemption to be granted in the Otorhinolaryngology component of the training programme shall be limited to a maximum of nine months.

The Board of Study shall scrutinize such applications and make recommendations thereafter to the Board of Management whose decisions shall be final.

12.2. Components of the MD examination:

The examination shall consist of the following components

- (A) Theory papers
- (B) Clinicals
- (C) Orals

(A) THEORY PAPERS

Paper I (Otology, Audiology & Rhinology) -4 essay or structured essay questions to be answered in three hours.

Paper II (Laryngology, Head & Neck Surgery) -4 essay or structured essay questions to be answered in three hours.

Paper III (Principles of General Surgery) - 6 short essay questions to be answered in 3 hours.

Each paper is independently marked by two examiners according to a marking scheme.

(B) CLINICALS -

Otorhinolaryngology and Head & Neck Surgery

Long Case - History and examination - 30 minutes

Presentation and discussion - 30 minutes

Short Cases - 45 minutes (4 to 8 cases)

(C) ORALS -

Otolaryngology & Head & Neck Surgery - 30 minutes

Each candidate will be questioned by a panel of three examiners (10 minutes each) on clinical aspects of the speciality and the relevant aspects of Anatomy, Physiology, Pathology and the operative surgery of Otorhinolaryngology, Head and Neck Oral Surgery

Operative Otorhinolaryngology and Head & Neck Surgery -30 minutes

Each candidate will be questioned by a panel of three examiners (10 minutes with each) on common ENT operations techniques including Pre and Post operative care.

General Surgery - 30 minutes.

Each candidate will be questioned by a panel of two examiners (Two examiners will question for 15 minutes each) on the principles and practice of surgery with special emphasis on General Surgery in relation to Otorhinolaryngology. There will be two silent Examiners from the specialty of Otorhinolaryngology, to decide on the final mark

SCHEME OF MARKING

The examination shall consist of 7 components -

- 1. Theory paper I in Otology, Audiology & Rhinology
- 2. Theory paper II in Laryngology, Head & Neck Surgery
- 3. Theory paper III in principles of General Surgery
- 4. Clinical (Long Case) in Otorhinolaryngology
- 5. Clinical (Short Cases) in Otorhinolaryngology
- 6. Orals in Otorhinolaryngology and Operative Otorhinolaryngology
- 7. Orals in General Surgery

The pass mark in each component is 9, making a total of 63.

The Board of Examiners uses 5 categories of marking as follows:-

- indicates that a candidate has performed well above a pass
- indicates a clear pass
- 9 Indicates a pass by a bare margin
- 8 indicates failure to achieve a pass by a small margin
- 7 indicates clear failure,

A candidate who obtains a mark of 7 for any component of the examination will be deemed to have failed the whole examination, irrespective of the performance of the rest of the examination.

A candidate who has obtained a single mark of 8 (i.e. one 8) can pass the examination provided that the candidate has obtained at least one mark of 11 in any of the components of the examination. In this situation, the mark of 8 will be converted to 9 and the mark of 11 will be converted to 10 for the final mark sheet. A candidate who has obtained two or more marks of 8 will be deemed to have failed the examination.

Requirements to pass the MD examination

In order to pass the MD (Otorhinolaryngology) examination, a candidate must obtain

- A total mark of 63 or more from all 7 components of the examination, and
- Not more than one mark of 8 for any of the 7 components of the examination, and
- No marks of 7 in any of the 7 components of the examination

Failed candidates

Candidates who fail the MD exam will be counseled on their weaknesses and how to improve their standards.

A failed candidate must retake all 7 components of the examination at the subsequent attempt.

A failed candidate will be allowed a maximum of six attempts within eight years from the date of the first attempt at the MD examination

13. Post MD Training

Trainees who pass the MD (Otorhinolaryngology) examination are required to complete a further period of 36 months as Senior Registrars prior to Board Certification as a Specialist. This training period consists of two years of local training and one year of training in a overseas centre approved by BOS . . Out of two years of local training three months of training should be in an approved paediatric Otorhinolaryngology unit.

During the period of local training, trainees are expected to carry out a research project which needs to be approved by the Board of Study (See Annexure V) and to maintain a portfolio according to the Guidelines set out in Annexure VI

13.1. Local Training

Twenty four months as a senior registrar in an approved institution in Sri Lanka under a Board certified Consultant who is eligible to be a trainer.

At least twelve months of the local component of the training should be with one trainer.

13.1.1.

13.1.2. Evaluation of Senior Registrar Training

The evaluation is done in two ways.

- 1. Senior Registrar Evaluation Form (See annexure VII) submitted every three months. This form will be issued to the trainee at the beginning of post MD training, which will be completed and signed by the trainer who will submit it to the Board of Study.
- 2. Viva Voce examination (SR VIVA) held at end of Six & Eighteen months. This is conducted by a panel of 3 trainers nominated by the Board of Study. The supervisory trainer is requested to attend this viva for any clarification and planning of SR training. The duration is 60 minutes. The Senior Registrar is expected to bring his/her portfolio for inspection. The Examination will include all the aspects of knowledge and skills required to practice as a specialist. This broadly includes theoretical knowledge, surgical skills and knowledge of the surgical instruments, research, audit and attitudes. (15 minutes for each examiner and last 15 minutes for the trainee to discuss his/her training plan and portfolio results will be given as pass or fail. The failed candidate need to re-do the SR Viva after three months.

The certification of satisfactory training is the responsibility of the Board of Study on account of the following.

Recommendation by the Supervisory Trainer Results of the viva-voce examination.

13.2. Overseas Training

Twelve months of training in approved institutions abroad. The trainee should obtain the prior approval from the Board of study before the commencement of the overseas training. Overseas training can only be commenced after at least six months of local training.

- 13.2.1. The trainee while undergoing training overseas should keep the PGIM informed of any change of posts and the PGIM will request the supervising consultants to send regular confidential progress reports.
- 13.2.2. Candidates with foreign postgraduate qualifications & approved training of at least one year abroad, who were exempted from any period of training before the MD Part II Examination, shall undergo the full period of 24 months training in Sri Lanka. General PGIM regulations laid down in respect of such candidates shall also be applicable in addition to the above.

14. Eligibility for Pre Board Certification Assessment

- a. Completion of the required Post MD Training with satisfactory progress reports from all supervisors.
- b. Acceptance of research project
- c. Submission of completed Portfolio. (See Annexure III)
- d. Pre Board Certification assessment based on portfolio. (Annexure III)

15. Format of PBCA (See Annexure V)

16. Board Certification

- 16.1. Candidates will become eligible for board Certification by fulfilling the following requirements:
 - a. Satisfactory completion of the prescribed training
 - b. Pass obtained at the PBCA
- 16.2. The effective date of board certification will be three years from the date of passing the MD examination.
- 16.3. The effective date of Board of Certification could be delayed under the following circumstances. Please refer the latest General Rules and Regulations
 - a. Extension of Senior Registrar training period locally by the Board of Study due to unsatisfactory performances. The Board Certification is delayed by the corresponding period of such extension.
 - b. Receiving of Adverse report from the overseas supervisory Consultant pertaining to overseas training. The Board of Study, on consideration of such adverse reports would recommend a period of further training to be imposed locally or abroad.

- The effective date of Board Certification would be delayed by the corresponding period.
- c. In case a candidate refuses to accept a placement in an overseas hospital being offered by the Board of Study or if the candidate concerned would be unable to commence his/ her overseas training within a period of one year after completion of local training, the effective date of Board Certification will be delayed. The period of delay would be calculated from the date of one year after the completion of local training and the date of commencement of overseas training by the trainee.
- d. Failure to pass the portfolio based PBCA within three months of the first attempt.
- 16.4. These stipulations could be amended by the Board of Study as and when the Board of Study deems such amendments are necessary. On matters pertaining to training programme, not mentioned herein, or on a matter of interpretation of the stipulations, the decision of the Board of Study subject to approval of the Board of Management shall be final.

17. Recommended Reading

<u>Journals</u>

- 1. North American Clinics in otolaryngology
- 2. Clinical Otolaryngology
- 3. Journal of otology and laryngology
- 4. Surgery International
- 5. Archives of Otolaryngology & Head and neck Surgery

Textbooks

Latest version of the following textbooks are recommended.

- Scott-Brown's Otorhinolaryngology: Head and Neck Surgery (3 volume set) by Michael J Gleeson (Editor), Ray C Clarke (Editor)
- 2. <u>Cummings Otolaryngology Head and Neck Surgery, 3-Volume Set:</u> Expert Consultby Paul W. Flint MD (Author), Bruce H. HaugheyMBChB MS FACS FRACS (Author)
- 3. Essential Otolaryngology: Head and Neck Surgery, by K. J. Lee (Author)
- 4. <u>Bailey's Head and Neck Surgery: Otolaryngology (2 volume set</u>) by Jonas Johnson MD (Author]
- 5. <u>Stell&Maran's Textbook of Head and Neck Surgery and Oncology</u>, by John Watkinson (Author), Ralph W Gilbert (Author
- 6. <u>Glasscock-Shambaugh's Surgery of the Ear</u>by A. JuliannaGulya (Author), Lloyd B. Minor (Author), Dennis S. Poe (Author)
- 7. <u>Jatin Shah's Head and Neck Surgery and Oncology</u>: Expert Consult, by Jatin P. Shah MD MS (Surg) PhD (Hon) FACS Hon. FRCS (Edin) Hon. FRACS Hon. FDSRCS (Lond) (Author), & 2 more
- 8. <u>Endoscopic Sinus Surgery: Anatomy, Three-Dimensional Reconstruction, and Surgical Technique</u> by Peter-John Wormald (Author)

- Atlas of Endoscopic Sinus and Skull Base Surgery: Expert Consult by James N. Palmer MD (Author), Alexander G. Chiu MD (Author)
- 10. Operative Otolaryngology: Head and Neck Surgery: Expert Consult, 2-Volume Set, by Eugene N. Myers MD (Author
- 11. Otolaryngology Board Review: Pearls of Wisdom, Third Edition Paperback by Mary Bowden (Author)
- 12. <u>Handbook of Otolaryngology: Head and Neck</u>by David Goldenberg (Author), Bradley J. Goldstein (Author)
- 13. Imaging for Otolaryngologists by Erwin A. Dunnebier (Author)
- 14. <u>Bluestone and Stool's: Pediatric Otolaryngology, 5th Edition (2 volume set) by Charles D. Bluestone, Jeffrey P. Simons and Gerald B. Healy</u>
- 15. Otolaryngology Cases: The University of Cincinnati Clinical Portfolio –by Myles L. Pensak (Editor)
- 16. Logan Turner's Diseases of the Nose, Throat and Ear: Head and Neck Surgery, by MusheerHussain (Author)
- 17 Bullet Points in ENT: by Carl Philpott, Peter Tassone
- 18. <u>Differential Diagnosis in Otolaryngology: Head and Neck Surgery</u> by Michael G. Stewart and Samuel H. Selesnick (Oct 4, 2010)
- 19. <u>Diagnosis and Treatment of Voice Disorders</u> by John Rubin, Robert T. Sataloff and <u>Gwen Korovin</u>
- 20. <u>Viva Training in ENT: Preparation for the FRCS (ORL-HNS) (Oxford Higher Specialty Training)</u> by Declan Costello and Stuart C. Winter (Sep 15, 2013

Principles of Surgery

- 1. Bailey & Love's Short Practice of Surgery Published by Hodder Anorld
- 2. Essential Surgery: problems Diagnosis and Management Published by Elsevier Health sciences
- 3. Essential Surgical Practice for Higher Surgical Training in General Surgery Published by Hodder Arnold

18. Contributors

- Dr. R.P. Dayasena (Chairman)
- Dr. A.D.K.S.N. Yasawardene (Secretary)
- Dr. M.R.R. Fernando (Board Member)
- Dr. C Jayasuriya (Board Member)
- Dr. Asoka Jayasena (Board Member)
- Dr. Senaka Welandawe (Board Member)
- Dr. D.S.C Perera (Board Member)
- Dr. Malkanthi Jayasinghe (Board Member)
- Dr. A.M.M. Sheriff (Board Member)
- Dr. K D R A . Kirihena (Board Member)
- Dr. B Thirumaran (Board Member)

ANNEXURE I – Course Content

THE COURSE CONTENT OF MD (OTORHINOLARYNGOLOGY) TRAINING PROGRAMME

The course content comprises of the under mentioned three broad categories.

- 1. Principles of general surgical management
- 2. Diagnosis, assessment and management of common general surgical disorders
- 3. Detailed knowledge of diseases in the Otorhinolaryngological and the head and neck region.

1. Principles of general Surgical management

- 1.1. Ability to obtain a proper history and elicit clinical signs, knowledge about methods of investigation and their relevance, assessment of the severity and extent of the patient's illness and other concomitant disorders.
- 1.2. Principles of management of the injured; including assessment, diagnosis, transportation and initial emergency treatments.
- 1.3. Pre-operative preparation of patient with relevance to the surgical disorder and other concomitant diseases.
- 1.4. Principles of asepsis, antisepsis, and prevention of cross infection, special precautions needed for HIV, Hepatitis B etc.
- 1.5. Principles of general and local anesthesia and management of pain.
- 1.6. Factors affecting wound healing, effects of incision and other surgical wounds, methods of wound closure.
- 1.7. Materials used in surgical procedures and their selection. e.g.: instruments, sutures, drains, prosthesis etc.
- 1.8. Effects of blood and fluid loss and correction
- 1.9. Life saving procedures eg: CPR, tracheotomy, chest drains, intubation for ventilation, control of bleeding, burr holes etc.
- 1.10. Principles of management of post-operative complications e.g.: Respiratory infection, deep vein thrombosis, pulmonary embolism, fluid imbalance, shock, myocardial infarction and cardiac arrest, Retention of urine, Renal failure, infection and septicaemia, wound dehiscence
- 1.11. Principles of management of concomitant disease eg. Diabetes.
- 1.12. Clinical pharmacology of commonly used drugs
- 1.13. Principles of fluid balance and nutrition
- Non surgical treatment of malignant disease
 Basic knowledge of methods used, their value and complications
- 1.15. Evaluation of surgical practice and Evidence based medicine, Audit, Designing of clinical trials, Evaluation of data.
- 1.16. Clinical Governance, Medical ethics, Medico-legal issues, Communication with patients

2. Management of common general surgical disorders

- 2.1. The candidate's ability to apply his/her knowledge of basic sciences to the diagnosis, investigations and treatment of diseases affecting the following areas.
 - 1. Lumps/ swellings/ conditions of the skin and subcutaneous tissues
 - 2. External herniae of all varieties
 - 3. Common scrotal lumps
 - 4. Lesions/ lumps of head neck region
 - 5. Lumps/lesions of the breast
 - 6. Common surgical problems affecting the following systems Hepato-biliary/ pancreatic Oesophago-gastric/small bowel Colo-rectal/ Urological including kidney, bladder, prostate
 - 7. Common conditions of the vascular system with special emphasis on lesions of upper limbs and neck.
- 2.2. The extent of the knowledge should enable the candidate to recognize, differentiate, assess, advice/counsel patient and refer appropriately if indicated
- 2.3. The candidate should be aware of the broad outline of operative surgery although details of operative procedures need not be known.

3. Otorhinolaryngology/ Head and neck Surgery

- 3.1. Anatomy and Embryology
 - Detailed anatomy of the region, embryology related to developmental abnormalities and other diseases.
- 3.2. Physiology of nose, paranasal sinuses, oral cavity, pharynx, larynx, tracheo-bronchial system, oesophagus, salivary glands, thyroid, parathyroid, cranial nerves, Hearing and balance.
- 3.3. Pathology
 - Pathological basis of diseases in the region including effects of trauma, congenital abnormalities, inflammations, neoplasms, autoimmune and degenerative disorders.
- 3.4. Methods of examination
 - Examination of the region and other relevant general systems. Correct use of instruments and interpretation of findings.
- 3.5. Investigations
 - Different type of investigations available and their relevance to individual patient. Basic interpretation of various radiological tests. Facial nerve function tests, endoscopic techniques, audiological investigations, tests of vestibular function and interpretation of such investigations.
- 3.6. Treatment
 - 3.6.1. Assessment and planning of management with available information Pre-operative counseling of patients pertaining to method of treatment. Pre- operative preparation.
 - Surgical procedures and management of their complications.

Post-operative management.

Assessment of results of treatment.

3.7 Management of hearing Impaired.

Basic principles of hearing aids and other devices, their value and limitations.

Management of a Deaf child.

Forensic Audiology

- 3.8 Medico-Legal aspects of otorhinolaryngology
- 4. Knowledge in the usage and maintenance of equipment. i.e. Operating table, diathermy machine, operating microscope, powered instruments, Audiometric equipments, laser, endoscopes, micro instruments etc.

ANNEXURE II - Guidelines for the preparation and submission of the case book

- 1. Ten (10) case records should be submitted and of which, at least, six cases should have been totally managed by the trainee inclusive of surgical procedures, if any. Out of the ten cases minimum of seven patients should have been from the Otorhinolaryngology units and a minimum of three cases should be related to ear diseases.
- 2. These cases should be derived from the training units of the Institutions which are recognized by the Board of Study.
 - a. A training unit of a Teaching Hospital in Sri Lanka manned by a Board certified Consultant or consultant eligible for the privileges of Board Certification and recognized by the Board of Study for training purposes.
 - b. Institutions recognized by the Colleges of Surgeons in UK, Ireland and Australia for postgraduate training in Otorhinolaryngology. The candidate should produce proof of such recognition.
 - Any other institution approved by the Board of Study at individual requests.
 All the cases should have been managed after the candidate has entered the MD training program.
- 3. The case records should be approved and certified by the supervisory consultants.
- 4. A minimum of 2 case discussions which are deemed to be incorporated in the case book shall be submitted to the Board of Study for approval at six months intervals. The perfected case book in the form of loose leaf bound and approved by the Board of Study should be submitted along with the application for the MD (Otorhinoaryngology) examination. Prospective candidates who are residing abroad should submit their completed case books six months prior to the date of closure of application of the MD (Otorhinolaryngolory) examination. The book should be loose leaf bound.
- Case records being considered unsatisfactory and are returned to the candidates should be re-submitted within a period of two weeks. In case the case book is rejected or not submitted in time; the candidates will not be allowed to sit MD examination.
- 6. Two assessors will be nominated by the Board of Study.

7. In case of candidates who are unsuccessful the Case Books accepted for previous MD examinations, will still be valid for future attempts of the MD examination.

Format of case records

Case No : Title :

Name of the Hospital : Name of the Patient : Ward : BHT :

Address : Age : Sex :

Date of admission : Date of discharge :

Consultant :

History

Presenting Complaint

History of presenting complaint, subsidiary complaints, relevant past history, family

history, social history.

Examination findings

Initial clinical diagnosis with differential diagnosis :

Investigations :

Diagnosis after investigations (with reasons)

Plan of management:

Treatment carried out and outcome,

Management of any complications,

Plan for follow up and rehabilitation.

The operating surgeons' names should be mentioned in all operative procedures.

Candidates are encouraged to include relevant illustrations, photographs and copies of investigations.

Discussion

Should be based on the following.

- 1. Clinical diagnosis.
- 2. Value of Investigations (available and not available in the institution)
- 3. Reasons for pre operative work-up and any available alternate methods.
- 4. Operative technique any alternate methods and why they were not used.
- 5. Postoperative management including complications
- 6. Plan for rehabilitation (ideal and practical)
- 7. New modes on the management.
- 8. Brief account of the pathology, including aetiology, relevant anatomy and physiology
- 9. References should be mentioned quoting the sources in the standard format (as in Ceylon Medical Journal.)

The case book should be submitted in English with the text typesetting and double spaced.

ANNEXURE - III Registrar Evaluation Form

This is an official document used to monitor the progress of a trainee. The trainee should be
informed and explained about this form at the beginning of the appointment. It is the
responsibility of the trainer to handover this document after completion to the PGIM.

TRAINEE: POST: TRAINER: COMPONENT: FROM: TO:

FROM:	TO	:	
CRITERIA OF ASSESSMENT	POOR	SATISFACTORY	GOOD
(A) CLINICAL ABILITY			
(a) History & Physical Examination			
(b) Investigations & Diagnosis			
(c) Record keeping			
(d) Judgment			
(e) Operative skills			
(f) After care			
(B) KNOWLEDGE			
(a) Basic Sciences			
(b) Clinical			
(C) POSTGRADUATE ACTIVITIES			
(a) Teaching			
(b) Case Presentations			
(c) Audit			
(D) DISCIPLINE & PROBITY			
(a) Punctuality			
(b) Responsibility			
(c) Communication Skills			
(d) Rapport with Patients			
(e) Relationship with Colleagues/			
Staff			
(f) Attitudes			
(g) Care of equipment &			
Instruments			
I am aware of the above assessment.			

(f) Attitudes				
(g) Care of equipment &				
Instruments				
I am aware of the above assessment.				
Signature of the trainee		Date		
Trainer's Comments :				

Trainer's recommendations to the Board of Study (delete inappropriate clause).

(1) Satisfactory - can proceed with training

(2) Unsatisfactory - (State reasons)

I have communicated my recommendations to the trainee

Signature of trainee	Signature of trainer	Date
tranice	tramer	
Signature of Chairma	an	Signature of Secretary
BOS in Otolaryngolog	gy	BOS in Otolaryngology

Period of Assessment

- (1) One for each short appointment
- (2) Two for the General Surgery appointment at 3 monthly intervals
- (3) Every 3 months during the 1 ½ years of ENT

ANNEXURE IV- Format of the Examination and Scheme of Marking

POSTGRADUATE INSTITUTE OF MEDICINE UNIVERSITY OF COLOMBO MD (OTORHINOLARYNGOLOGY) EXAMINATION FORMAT OF THE EXAMINATION & SCHEME OF MARKING

The examination shall consist of the following:-

- (A) Theory papers
- (B) Clinicals
- (C) Orals

(A) THEORY PAPERS -

Paper I (Otology, Audiology & Rhinology) -4 questions of three hour duration and all to be answered.

Paper II (Laryngology, Head & Neck Surgery) -4 questions of three hour duration and all to be answered.

Paper III (Principles of General Surgery) - 6 questions of 3 hours duration and all to be answered.

(B) CLINICALS -

Otorhinolaryngology and Head & Neck Surgery

Long Case - History and examination - 30 minutes

Presentation and discussion - 30 minutes

Short Cases - 45 minutes

(C) ORALS -

Otolaryngology &Head & Neck Surgery - 30 minutes.

(Panel of three examiners 10 minutes with each)

Operative Otorhinolaryngology and Head & Neck Surgery -30 minutes

(Panel of three examiners and 10 minutes with each)

General Surgery - 30 minutes.

(Panel of two examiners 15 minutes with each & Two silent examiners)

SCHEME OF MARKING

The examination shall consist of 7 parts -

- 1. Theory paper I in Otology, Audiology & Rhinology
- 1. Theory paper II in Laryngology, Head & Neck Surgery
- 2. Theory paper III in principles of General Surgery
- 4. Clinical (Long Case) in Otorhinolaryngology
- 5. Clinical (Short Cases) in Otorhinolaryngology
- 6. Orals in Otorhinolaryngology and Operative Otorhinolaryngology
- 7. Orals in General Surgery

The pass mark in each section is 9, making a total of 63.

The Board of Examiners uses 6 categories of marking as follows:-

- indicates that a candidate has performed well above a pass
- indicates a clear pass
- 9 Indicates a pass by a bare margin
- 8 indicates failure to achieve a pass by a small margin
- 7 indicates clear failure,

If a Candidate obtains 7 or less for any components of the Examination he/ she will fail the whole Examination irrespective of the performance of the rest of the Examination.

If a candidate has obtained a single 8 (ie. One 8) he/ she can pass the Examination provided that he/ she has obtained at least one 11 in any of the components of the Examination. In this situation the 8 will be converted to 9 and 11 will be converted to 10 for the final mark sheet. If a candidate has obtained two or more 8 s he/she will fail the examination.

ANNEXURE V - Research Project

The Research project should be carried out and submitted to board of study for assessment during the period of local training.

By carrying out a research project a trainee is expected to

- (a) Recognize a problem and clearly outline a project in the field related to the practice of Otorhinolaryngology relevant to Sri Lanka.
- (b) Critically evaluate the literature relevant to the problem
- (c) Develop a rational plan to work on the project
- (d) Carry out the research project under the supervision of the consultant and defend such report at viva-voce examination.

A suitable research project should

- (a) Be aimed at filling a gap in the scientific knowledge
- (b) Have a methodology appropriate to the project
- (c) Be feasible in the allocated period of local training.
- (d) Have facilities and funds to carry out the plan.

The following procedure is recommended

- The trainee is advised to initiate the project at the beginning of local training before
 the MD examination by way of identifying the project and arranging funding and
 supervision.
- 2. Nomination of a supervisor and obtaining approval from the relevant ethical committee and Board of Study.
- 3. Submission of the project proposal for the approval of the Board of Study with the recommendation of the supervisory Consultant/s. (Please see below the format for writing a research proposal). If the proposal is unsatisfactory, the reviewers may recommend modification of the proposal or submission of a different proposal. In the case of clinical trials registration with the Clinical trials Registry must be obtained. The trainee should commence the study only after obtaining approval of the BOS and ethical clearance.
- 4. Carrying out the work on the project under regular guidance by the supervisory Consultant.
- **5.** Submission of the completed project report to Board of Study for approval **before the end of post MD local training**. (Please see below the **format for project reports**)

Acceptance of the research project by the BOS may be based on fulfillment of either of the following:

Publication of the research findings as an original full paper (not case reports) in a
peer-reviewed journal (preferably indexed) with the trainee as first author. No
further evaluation is required on the premise that a paper which is already peerreviewed. (The board of study will decide whether the said journal is appropriately
peer - reviewed.)

- 2. Submission of a detailed project report to the BOS. A generic format for such project reports is shown below. This should be evaluated by 2 assessors nominated by the BOS, and marked as either satisfactory, or unsatisfactory.
 - a. If the project is considered unsatisfactory by both assessors, the trainee will be requested to revise and resubmit, with written feedback on the required revisions. If the project report is still unsatisfactory, the trainee may, at the discretion of the BOS, be asked to extend the same research project or undertake a new research project which will have to go through the same procedure of approval as the initial project.
 - b. If there is disagreement between the two assessors, with only one assessor's decision being 'unsatisfactory', the project report should be sent to a third assessor for a final decision.

Once the research report is accepted by the BOS, the trainee is advised to submit the research findings to a suitable conference or journal, if not already done.

Format for writing a Research Proposal

The aim of the research component is to plan and complete a scientific research project, with due appreciation of the need for scientific validity and ethical principles, within organizational and financial constraints. The choice of the research project will be primarily that of the trainee, but this should be discussed with and approved by the supervisor. The trainee should prepare a research proposal which will be submitted to the BoS for approval prior to commencement of the study.

Format:

In general, the research proposal should be limited to 3000 words. The following structure is suggested:

- Title of the study
- List of investigators
- Collaborating institutions
- Background/introduction: this should include an overview of the subject related to the research project, with a relevant review of the literature.
- Justification: This section should provide a brief justification of the importance and relevance of the study proposed, including the feasibility of the study.
- Objectives: general and specific objectives of the study should be clearly defined.
- Methods: The methodology to be adopted to achieve the listed objectives should be given in detail; the following sub-sections are suggested as a guide:
 - Study design
 - Study period
 - Study population
 - o Sample size calculation
 - Sampling technique
 - Study instruments

- o Data collection
- o Proposed statistically analysis
- o Ethic clearance and consent, and confidentiality of data
- o Proposed methods for dissemination of findings
- Annexes: the following annexes should be provided:
 - Data proforma/s
 - o Consent forms, where relevant in all three languages
 - o Other relevant supporting documents

The trainees are advised to use Microsoft Word® for formatting documents. The software Endnote®, Reference Manager® or Mendelay® should be used, if possible, for citations. The reference format should follow the Vancouver® Style.

Both soft and hard copies of the documents should be submitted to the BoS.

Format for Project Reports

The following format should be adopted for project reports or dissertations. **Both soft and hard copies of the documents should be submitted to the BoS.**

The preliminaries should precede the text. They should comprise the following:

1. Title page

Title of Research
Author's name
MD (Otolaryngology)
Post Graduate Institute of Medicine
University of Colombo
Date of submission

- 2. <u>Statement of originality</u>: This is a declaration that the work presented in the dissertation is the candidate's own, and that no part of the dissertation has been submitted earlier or concurrently for any other degree. The statement should be signed by the author, and countersigned by the supervisor.
- 3. <u>Abstract</u>: This should consist of a brief summary of not more than 350 words describing the objectives of the work, the materials and methods used, the results obtained, and the conclusions drawn. This may be in a structured format if helpful.
- 4. <u>Table of contents</u>: The table of contents immediately follows the abstract and lists in sequence, with page numbers, all relevant divisions of the dissertation, including the preliminary pages.

- 5. <u>List of tables</u>: This lists the tables in the order in which they occur in the text, with the page numbers.
- 6. <u>List of figures</u>: This lists all illustrative material (maps, figures, graphs, photographs etc) in the order in which they occur in the text, with the page numbers.

7. Acknowledgments

Text

The dissertation should be divided into clearly defined sections. Sections may be subdivided.

<u>Introduction</u>: The aim of this section is to state briefly the current position and the reasons for carrying out the present work. Generally, only a few references should be cited here.

<u>Literature Review</u>: This section should be reasonably comprehensive, and most of the references to be quoted normally occur here. The relevant references dealing with the general problems should be reviewed first and this is followed by a detailed review of the specific problem. The review is in many cases approached as a historical record of the development of knowledge of the subject. This chapter should conclude with a brief statement of what you propose to find out.

<u>Materials and Methods</u>: These should be described so that a reader could repeat all the experiments. 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.

ANNEXURE VI - Pre Board Certification Assessment

- 1. An assessment portfolio should be maintained after passing the MD Otorhinolaryngology Examination (i.e. during post MD training)
- 2. Essential components of portfolio
 - 1. Subject expertise
 - a. Certificate of local training
 - b. Certificate of foreign training
 - c. Certified log book by the supervising consultant
 - d. Results of being successful in SR's viva at 6 /12, 18 /12
 - 2. Teaching
 - a. undergraduates
 - b. postgraduates
 - c. ancillary health staff
 - 3. Research and Audit
 - a. Completed research project report. (See annexure ii)
 - b. Approved case Book

- 4. Ethics and Medico-legal Issues
 - a. SR evaluation forms Satisfactory completion reports at every three months (see annexure viii)
- 5. Information Technology
 - a. Participation in training programs / workshops
 - b. Evidence of searching for information and application of findings in practice
- 6. Life-long learning
 - a. Evidence of CME workshops and conferences attended. At least one certificate should be submitted.
- 7. Reflective practice
 - a. Reflective essay on foreign training component. (500-600 words)
- 8. Declaration by the candidate (please see the draft declaration below)

3. Assessment method for items 1c, 3a, 7a

A rating scale is used

- 1-3 Unsatisfactory
- 4-6 Satisfactory

Items 1a, 1b, 1d, 3b, 4a, 5a, 5b, 6a, should be checked and verified by the Board of Study

For items 3a and 7a the Board of Study will appoint examiners for assessment prior to the Pre Board Certification viva.

4. Pre Board Certification viva

Once all the essential components are fulfilled the candidate has to present himself/herself for a 60 minutes viva with a panel of four examiners (One Examiner will be from a related specialty). The 60 minutes are subdivided into the following segments.

- a) Defending the research project 20 min (05 min to the each Examiner)
- b) Questions based on log book 20 min (05 min to the each Examiner)
- c) Reflective essay 20 min (05 min to the each Examiner)

5. Results – All examiners have to discuses and decide on the final results which will only be one of the following

- a) Pass recommend Board Certification
- b) Fail cannot recommend Board Certification. The reasons for failure should be clearly documented and the remedial action should be recommended. The trainee should then re-submit the portfolio within period of 3 months, and face another oral examination based on the resubmitted portfolio. If the trainee is successful at this 2nd oral examination, the date of Board

Certification should be backdated as done routinely. If unsuccessful again, the date of Board Certification will be the date of passing the subsequent PBCA following further training for a minimum period of six months in a unit selected by the Board of Study.

Declaration by the candidate			
I certify that all above documents provided by me are true knowledge.	to best of my		
Candidates full name:	Signature:		
Date:			

Annexure VII - SENIOR REGISTRAR EVALUATION FORM

This form will be completed at the end of every three (3) months of Senior Registrar training. It is the responsibility of the trainer to submit this from to the Board of Study after the completion.

Trainer :

Starting date of Senior Registrar training :

Trainer : Institution :

Period of assessment : From : To :

CRITERIA	POOR	SATISFACTORY	GOOD
A. CLINICAL ABILITY			
- Clinical judgment			
- Surgical skills			
- Postoperative responsibility and			
care			
B. KNOWLEDGE			
POSTGRADUATE ACTIVITIES			
- Teaching			
 Case Presentation 			
- Audit			
C. GENERAL			
- Punctuality			
- Equipment care			
- Attitudes			

I am aware of the above criteria of assessment.

Signature trainee Date

Trainer's comments:				
Trainers recommend	ations : Overall performance			
(1) Satisfactory — Can proceeded with training				
(2) Unsatisfactor	y – Recommended - extension of training.			
I have communicated my recommendations to the trainee.				
Signature of	Signature of	Date		
trainee	trainer			
