DEPARTMENT OF CLINICAL SURGICAL SCIENCES

PROGRAMMES

DM ANAESTHETICS
The Department offers a postgraduate degree course for a registered medical practitioner in an approved residency programme leading to the Doctorate in Medicine (Anaesthetics).

The course is intended to prepare candidates for consultant anaesthetic responsibilities including teaching and research. The four-year training required can be carried out at all Clinical Campuses of the University of the West Indies; or at one or more approved centres. The details of the examination regulations can be obtained from the Head of the Department.

In addition to the preparation for examination, the Department has a varied and interesting service commitment, including cardiac and neurosurgical anaesthesia, and is developing wider interests such as post-operative pain management and has the responsibility for the Intensive Care Unit at the Eric Williams Medical Sciences Complex. Research in progress involves the utilisation of micro-computers for:

- Data Storage and Retrieval
- Myo-neural Blocking Agents
- Transcutaneous Nerve Stimulation
- Paediatric Anaesthesia
- Resuscitation Procedures

Requirements for:
DM Part I (MEDC 6605) Must include at least 3 months in each of the following specialties – Paediatrics, Obstetrics & Gynaecology during the latter half of the 1st year.
DM Part II (MEDC 6615) Not available in Nassau, Bahamas
DM Part III (MEDC 6625) Must include no less than 6 months additional months in each of the aforementioned specialties as in Part I as well as Cardiac & Thoracic Anaesthesia, Intensive Care and Neurosurgery and Pain Management

1. QUALIFICATIONS FOR ENTRY
1.1. The applicant should be:
   a) a graduate in Medicine of a University or Medical School recognised by The University of the West Indies.
   b) registrable in the territory or territories in which training will take place or registered with the General Medical Council (UK).

1.2. Normally candidates will be eligible for entry after completing their internship.

2. DATE OF ENTRY
2.1. The date of entry will normally be determined by the date when the candidate begins to work in a recognised anaesthetic post in an accredited hospital. A candidate may apply to enter the programme before securing a post. The candidate may then receive from the School for Graduate Studies and Research on the recommendation of the relevant Faculty Committee provisional acceptance for entry to the programme contingent on his obtaining an accredited post. After the candidate has secured an accredited post the School will approve the date of entry for Graduate Studies and Research.

2.2. The applicant will be informed of the date of entry by the relevant Campus Registrar.

2.3. For purposes of the above two paragraphs, a candidate must furnish evidence of being in a recognised post, and certification from his supervisor of satisfactory performance.

3. COURSE OF STUDY
3.1. The period of training will be a minimum of four years (see Exemptions) from the date of entry. At least three years of the course must be spent in the Commonwealth Caribbean. Throughout the course candidates must hold recognised posts in accredited hospitals or be on an “elective” approved by the Faculty Committee for Graduate Studies.

3.2. The program consists of three parts:
   a. DM Part I - (MEDC 6605) is of one year's duration ending in an examination at the end of this period. The first year must be spent in an accredited hospital and in those hospitals where only adults are treated, candidates must spend no less than three months in Anaesthesia in an accredited paediatric hospital. Conversely, for candidates working in a hospital dealing with only paediatric patients no less than six months must be spent in Anaesthesia in an accredited adult or multidisciplinary hospital. Admission to the second part depends on a satisfactory performance in the Part I.
   b. DM Part II - (MEDC 6615) of one year's duration. At the end of this year the Part II Examination will be held and entry to the third part of the course will depend on a satisfactory performance in this examination.
c. DM Part III - (MEDC 6625) is of two years duration. At least two years of this must be spent in an accredited hospital. This part of the program may include a period not exceeding on year spent as an elective, providing that approval has been obtained from the Faculty Committee for Graduate Studies and Board for Graduate Studies and Research beforehand. The elective year may be spent in a hospital which can provide the candidate with experience not readily available in the hospital to which he/she is employed.

3.3. At least six monthly assessments will be made on a candidate’s performance in the course. Unsatisfactory performance will be reported to the Faculty Committee for Graduate Studies, which may advise the Committee for Graduate Studies and Research to extend the course of study beyond the normal time. Assessments will be made by the candidate’s supervisor on prescribed “assessment forms” by the end of June or December each year.

3.4. All periods of satisfactory employment in a recognised post are cumulative towards the course requirements. Candidates not in a recognised post must apply to the Committee of Graduate Studies and Research to obtain Leave of Absence and must keep the Committee for Graduate Studies informed of their situation. Leave of Absence must be approved by the Campus Committee for Graduate Studies on the recommendation of the Faculty Committee for Graduate Studies.

4. EXEMPTIONS

4.1. Candidates who have completed periods of study or work experience in recognised hospitals or institutions in non-Commonwealth Caribbean (abroad) may apply to the Committee for Graduate Studies for exemption from an appropriate part of the course.

Exemptions in the programme can be recommended only after a period of review and assessment of the candidate performance within the programme. Candidates must have achieved the level at which proposed exemptions will put them.

4.2. Candidates who have spent up to three (3) months in Anaesthesia during the second internship year in an accredited hospital may at the discretion of the Faculty Committee for Graduate Studies, have all or part of this period applied towards their first year of training in the DM. However, this provision will no longer be applicable from the year 2005.

4.3. Candidates holding a qualification from an institution recognised by the UWI may apply and be granted exemption from the Part I examination.

4.4. Exemptions from Part II may be allowed to those who hold the Primary FFARCS/FRCA, Primary FFARCSI, Primary FFARACS or equivalent. Candidates who hold The Fellowship in Anaesthetics of the Irish, Australasian, or the certificate of the American Board of Anaesthesiology or the Fellowship in Anaesthesia of the Royal College of Physicians in Canada or such other degrees or diplomas as the University (the Faculty Committee of the for Graduate Studies) may from time to time accept, may be exempted from both the Parts I and II of the DM.

4.5. However, in order for such candidates to sit the Part III of the DM however, they will have to provide an acceptable case book/project report within six months of registration and acceptance for the course. The award of the DM (Anaesthetics) degree will be contingent on the acceptability of the casebook/project report and their passing the DM Part III examinations. For these candidates the process should normally be completed in one year.

4.6. All requests for exemptions should be made in writing by the candidate to the University Registrar through the Chairman of the Faculty sub-committee of the Board for Graduate Studies. This request will then be forwarded to the Board for Graduate Studies.

5. CASE BOOK/PROJECT REPORT

5.1. All candidates must submit to the Faculty Committee for Graduate Studies, or Director of the Postgraduate program at least six months before the final (Part III) examination, either:

a) A casebook of twenty cases. These cases should illustrate the range of problems encountered in the practice of Anaesthesia and Intensive Care. At least one of them must reach the standard required.

OR

b) A project report must have been previously agreed on by the Sub-Committee for Graduate Studies and the work carried out under the guidance of a Supervisor recommended by the Board.
5.2. The format of the casebook must conform to university regulations dealing with the preparation of projects or dissertations. The cases must be typewritten and printed on one side only of good quality white bond paper (usually of 20 lb weight), 8" x 11" (Standard Letter Size), with a left hand margin of 2". The top, bottom and right hand margins should not be less than 1". The same grade of paper should be used throughout the thesis. Candidates are advised to discuss the preparation of case records with their Consultant or Supervisor while the book is in preparation and should not be delayed until it is completed. These cases offer the candidates the opportunity to study in detail conditions of their own choice and to express views based on personal investigation and on a review of the literature. These case reports could provide the opportunity for the candidate to put his clinical experience in the form of a research project which could be later developed for publication. From these records the examiners will assess the critical faculties, powers of observation and the level of evaluation of various techniques used in anaesthesia/intensive care, of the candidates.

5.3. The format of the project report must conform to University Regulations dealing with the preparation of projects or dissertations. The cases must be typewritten and printed on one side only of good quality white bond paper (usually of 20lb weight), 8" x 11" (Standard Letter Size), with a left hand margin of 2": The top, bottom and right hand margins should not be less than 1": The same grade of paper should be used throughout the thesis.

5.4. Following the submission of the work the examiners may:

a) accept the work and the candidate proceed to the examination

OR

b) reject the work. They must then make the necessary recommendations as to the changes necessary to make the project acceptable. A date for resubmitting the work must also be given.

5.5. The case book, thesis or project report should be submitted for assessment at least six months before the date of the final examination. If the work is found to be unsatisfactory and requires major changes, the candidate will not be allowed to sit the final examination.

6. SYLLABUS

6.1. A detailed syllabus for the course is available from the Faculty Office or the respective UWI Anaesthetic and Intensive Care Departments/Units.

7. EXAMINATIONS

7.1. Examinations are in three parts, Part I, Part II and Part III (Anaesthetics). They are normally held twice per year in May/June and November/December at any one of the three university campuses. The hosting of the clinical and oral examination are done in turn by each campus.

7.2. The Part I examination is held at the end of the first year and comprises:

a) A written paper and a multiple choice paper.

b) An oral examination.

On successful completion of Part I the candidate must sit the Part II examination within two (2) years. Candidates will be invited to an oral examination at the discretion of the examiners. Candidates who fail the multiple-choice exams will not normally be invited for the oral examination.

7.3. The Part II examination is held at the end of the fourth year and comprises:

a) Two written papers

b) A clinical examination

c) An oral examination

7.4. The Part III examination is held at the end of the fourth year and comprises:

a) Two written papers

b) A clinical examination

c) An oral examination

7.5. Candidates are normally expected to present themselves for the first examination being held following completion of their course. In exceptional circumstances (such as ill-health) a candidate may request permission from the Committee for Graduate Studies and Research to defer the date of the first sitting. Candidates must register for the examination at the appropriate time.

7.6. Should any candidate fail the Part II examination at the first attempt, completion of this must be within one calendar year of the first attempt.

7.7. No candidate will be allowed more than two attempts at any one examination.
7.8. Candidates must conform to the University’s Regulations on Examinations for Higher Degrees.

7.9. The entire Part III must be completed within three years of successful completion of Part II.

7.10. The third year is an elective year during which the candidate may consider travel abroad. A casebook or research project is done during this time in preparation for the final fourth year. This time in preparation for final fourth year. This will be a pre-requisite to sitting the Part III examination at the end of the fourth year.

**LIST OF ACCREDITED HOSPITALS**

**BARBADOS**

- Queen Elizabeth Hospital (QEH)

**JAMAICA**

- University Hospital of The West Indies (UHWI)
- Kingston Regional Hospital (KRH)

(Residents employed at this hospital must spend three months at Bustamante Hospital for Children (BHC) in the 1st year and six (6) months at UHWI in the 2nd or 4th years)
- Bustamante Hospital for Children (Residents employed to this hospital must spend six (6) months at UHWI or KRH during the 1st year, and a further six (6) months at UHWI in the 2nd or 4th years)
- Cornwall Regional Hospital (CRH) (accredited for six months during first year only).

**TRINIDAD/*BAHAMAS**

- Port of Spain General Hospital
- San Fernando General Hospital
- Eric Williams Medical Sciences Complex
- Mount Hope Women’s Hospital
- Princess Margaret Hospital – Nassau

* Bahamas is an affiliate of Trinidad & Tobago

**DM OBSTETRICS AND GYNAECOLOGY**

This course of training extends over four (4) years and the Doctorate Degree makes the doctor eligible for consultant status in the sociality of Obstetrics and Gynaecology. The course requirements are similar to those for membership in the Royal College Obstetricians and Gynaecologist. Clinical work in the Department covers a wide range of operative procedures, medical and surgical disorders and obstetric abnormalities. There are organised ward rounds, tutorials, lectures and pathology and perinatal mortality conferences.

1. **EXAMINATION**
   The examination consists of:

   - Part I (MEDC6630) Examination in the Basic Sciences of Physiology, Anatomy, Pathology, Embryology, etc.
   - Part II (MEDC6635) Written papers in Obstetrics and Gynaecology, Clinical and Oral Examinations and the presentation of a book case records and commentaries.

   Further details on this programme are available from the Department of Clinical Surgical Sciences.

**DM (ORTHOPAEDICS)**

The course is intended to prepare a candidate to work as an Orthopaedic consultant with adequate ability to impart teaching and conduct/guide independent research. The programme lasts for four and a half years and is divided into two parts:

- **Part I (MEDC6607)** Eighteen (18) months devoted to various Pre-clinical subjects concerning Orthopaedics, Traumatology and General Principles of Surgery.
- **Part II (MEDC6619)** Is devoted to various aspects of Orthopaedics, Traumatology and related subjects like Sports Medicine, Physiotherapy, Rehabilitation, Orthotics and Prosthetics. Students are required to write a casebook or thesis on any particular topic concerning Orthopaedics or Traumatology as part of their final assessment.

1. **EXEMPTION**
   Exemption from Part I may be granted to the candidates depending upon their qualifications and experience.

2. **EXAMINATION**
   Both parts of the DM (Orthopaedics) programme have separate examinations.

   Further details on this programme are available from the Department of Clinical Surgical Sciences.
DM SURGERY

AIM
The programme aims to produce, for the territories served by The University of the West Indies, individuals with sufficient knowledge, skill and experience to fill Consultant posts in the appropriate disciplines. Trainees are eligible to take the examinations leading to the relevant DM degree in the discipline after satisfactorily completing the training programme. The postgraduate degree is awarded on satisfactory completion of the training programme and passing of the necessary examinations.

2. QUALIFICATIONS FOR ENTRY
   2.1. The applicant should be:
   a) a graduate in Medicine of a University or Medical School recognised by The University of the West Indies.
   b) fully registered in the territory or territories in which training will take place.

   2.2. Candidates applying for entry to the DM programme in Surgery must, in addition to the requirements set out in paragraph 2.1 have completed six months in an approved post, in Casualty or a similar Department, Surgery or Community Health, in an approved hospital.

   Date of Entry - July 1 or January 1
   The date of entry will normally be determined by the date when the candidate begins to work in a recognised post in an accredited hospital. A candidate may apply to enter the programme before (s)he secures such a post. (S)he may then receive from the School of Graduate Studies and Research provisional acceptance for entry to the programme contingent upon his/her obtaining an accredited post. After the candidate has secured such a post, the date of entry will be determined by the School of Graduate Studies and Research.

   2.3. After the application has been processed by the University, the applicant will be officially informed of the date of entry by the Campus Registrar.

3. COURSE OF STUDY
   3.1. The programme consists of two parts: The first part of the programme normally occupies two years. The Part I examination is taken at the end of this time, provided there have been satisfactory in-course assessments.

   3.2. During the first part of the course, a maximum of six months may be spent in the Department of Preclinical Sciences (Unit of Anatomy, Biochemistry, or Physiology), in the Unit of Pathology, Department of Paraclinical Sciences, or in an approved research project, provided that prior approval has been obtained from the School of Graduate Studies and Research.

   3.3. During the second part of the programme the trainee must submit one of the following at least six (6) months before the final (Part II) examination, either:
   a) a research project report; or
   b) a case book of twenty (20) cases with commentaries.

   3.4. The alternative chosen must have been previously agreed to by the School of Graduate Studies and Research and the work carried out under the guidance of a supervisor approved by the Board. Following the submission of the work the examiners may:
   a) accept the work, and allow the candidate to proceed to examination or
   b) reject the work, and outline what additional or new work is required and when the work should be re-submitted.

   3.5. Candidates must have reached a satisfactory standard during the in-course assessments before being allowed to enter for the Part II examination.

   3.6. Before being admitted to the Part II examination, all trainees are required to submit a tabulation of all operations performed by them and certified by their supervisor during the period of training.

   3.7. The period of training for the DM General Surgery will be a minimum of five (5) years following full registration, but a maximum of six months exemption during the first two years of these courses may be obtained following experience in an approved Casualty Department or similar hospital emergency facility.

   3.8. During the first two (2) years of the programme in General Surgery the trainee will rotate through the following specialties:
   - General Surgery – six (6) months
   - Orthopaedics/A & E Surgery – six (6) months
   - Neurological Surgery – three (3) months
   - Cardiothoracic Surgery – three (3) months
   - Paediatric Surgery – three (3) months
   An elective period of three (3) months may be spent repeating a weak rotation, or in a further period in General Surgery.
3.9 Training will normally take place at the Eric Williams Medical Sciences Complex or at the Port of Spain or San Fernando General Hospitals, or at institutions in the region recognised by the University for this purpose. However, an elective period of up to one (1) year may be spent at institutions within or without the Caribbean approved by the School for Graduate Studies and Research, provided that prior approval has been obtained from the Board. This elective period is limited to the penultimate year for trainees in General Surgery. Institutions may be recognised for part or all of the training programme. The Specialty Board in Surgery will keep a list of approved institutions and appointments for the guidance of candidates. This list will be updated from time to time as necessary.

3.10 Each DM candidate can have a total of six (6) weeks leave per annum three (3) weeks in every six (6) months.

3.11 Details of the programmes may be obtained from the Chairman of the Specialty Board or the School of Graduate Studies and Research.

4. EXEMPTIONS

4.1. Candidates who have completed periods of study in recognised hospitals or institutions may apply to the School of Graduate Studies and Research for exemption from the appropriate section of the programme.

4.2. For trainees in the General Surgery programme, this will be in addition to any exemptions granted on the basis of experience in an approved Casualty Department or other hospital emergency facility (see paragraph 3.7).

4.3. Candidates who have been successful in the Fellowship or Membership examinations (Part I & II) of one of the Royal Colleges of Surgery and who have had experience acceptable to the School of Graduate Studies and Research may apply for exemption from part or all of the Part I DM examination. All the other training requirements must be fulfilled prior to being granted entry into Part II of the programme.

5. ASSESSMENT

5.1. Trainees will be assessed at least semi-annually. Those with unsatisfactory records will be encouraged to improve; but if poor performance persists they will be asked to withdraw from the programme.

DM UROLOGY

This course of training extends over five (5) year programme and provides structured training in the surgical sub-specialty that deals with the diagnosis and treatment of diseases and disorders affecting the male genitourinary system and female urinary tract. The training of a urological surgeon is aimed at producing a graduate who can perform and use appropriately the current techniques in general urology. Knowledge of available treatment options in more specialised areas such as urologic oncology, urogynaecology, andrology, renal transplantation and vascular access, reconstructive urology, paediatric urology and endourology/laparoscopy is also required. Further training in one or more of these is available by obtaining a fellowship at the end of general urological training.

QUALIFICATIONS FOR ENTRY

Applications are invited for entry in September of each academic year from suitably qualified persons. Applicants should have:

(i) at least one (1) year post internship with a registrable undergraduate degree.
(ii) an interest in Urological Surgery including Endoscopic Urology.
(iii) at least one (10 year’s experience in General Surgery after internship.

All applicants must hold Medical Degrees registerable with the Medical Board of Trinidad and Tobago. Candidates with the Part I DM in Surgery or the F.R.C.S. Part II will be exempt from the Basic Medical Sciences Examination.

COURSE OF STUDY

This programme spans five (5) years. The first two (2) years are the same as those for the DM General Surgery. The curriculum covers the following examinable areas:

Benign Prostatic Hyperplasia
Andrology
Bladder Dysfunction
Trauma
Female Urology
Reconstructive Urology
Oncological Urology
Paediatric Urology
Stones and Endourology
Urinary Tract Infection
Nephrology and Transplantation
Applied Patho-Physiology, Nephrology, Transplantation and Principles of Urology
Investigative & Technical Aspects
PROGRAMMES IN EMERGENCY MEDICINE

IMPORTANT NOTE: The department offers three postgraduate programmes in Emergency Medicine, a Diploma, an MSc and a DM. New regulations governing the lengths and entry criteria for these programmes were pending approval at the time this booklet was prepared. Candidates should therefore contact the Department of Clinical Surgical Sciences for the most up to date information.

DIPLOMA IN EMERGENCY MEDICINE
This programme is aimed at primary care physicians and others with a significant Emergency workload, but who are not planning a career as full time Emergency Medicine consultants.

1. AIMS
   1.1. This option is primarily aimed at specialists in other fields who are likely to have a substantial responsibility in Emergency Care (for example, District Medical Officers who have regular sessions in the peripheral Emergency Departments, or Paediatricians with fixed sessions in the Paediatric Emergency Department of the Children's Hospital.

2. ADMISSION CRITERIA
   2.1. Graduates of Medical Schools approved by the Medical Board of Trinidad and Tobago.
   2.2. Candidates must have completed at least 1 year in Emergency Medicine at an approved Department, and at least 12 months in acute specialties other than Emergency Medicine.

3. PROGRAMME STRUCTURE
   The Diploma in Emergency Medicine consists of the first eight (8) modules of the part-time MSc programme. These core modules include:
   - Principles of Emergency Medicine & Life Support 90 hours/ 6 credits
   - Toxicological and Environmental Emergencies 30 hours/2 credits
   - Paediatric Emergencies 60 hours/ 4 credits
   - Adult Medical Emergencies 60 hours/ 4 credits
   - Trauma Management 60 hours/ 4 credits
   - Behavioural and Psychiatric Emergencies 30 hours/ 2 credits
   - Management of the Acute Surgical Patient 30 hours/ 2 credits
   - Research Methodology and Critical Appraisal 30 hours/ 2 credits

MSC IN EMERGENCY MEDICINE
This 3-year part-time programme is aimed primarily at more senior doctors who already have a clinical commitment to Emergency Medicine, and have significant prior experience in the specialty. It consists of 14 modules, which will be covered over a 3-year period, including all important areas in Emergency Medicine.

1. AIMS
   1.1. The aim of the MSc in Emergency Medicine is to equip senior doctors in Emergency Medicine with relevant training in the clinical and non-clinical aspects of Emergency Medicine. This would allow them to provide leadership, management and supervision for staff in their Departments and clinical care for acutely ill patients.

2. ADMISSION CRITERIA
   2.1. Graduates of Medical Schools approved by the Medical Board of Trinidad and Tobago.
   2.2. Candidates must have completed at least 1 year in Emergency Medicine at an approved Department, and at least 12 months in acute specialties other than Emergency Medicine.

3. PROGRAMME STRUCTURE
   The Emergency Medicine programme has a total of 14 Courses. Approximately two (2) Courses will be offered each semester.
   - Introductory Module 15 hours/ 0 credits
   - Principles of Emergency Medicine & Life Support 90 hours/ 6 credits
   - Toxicological and Environmental Emergencies 30 hours/2 credits
   - Paediatric Emergencies 60 hours/ 4 credits
   - Adult Medical Emergencies 60 hours/ 4 credits
   - Trauma Management 60 hours/ 4 credits
   - Neurological, Ophthalmic and ENT Emergencies 30 hours/ 2 credits
   - Behavioural and Psychiatric Emergencies 30 hours/ 2 credits
   - Obstetric and Gynaecological Emergencies 30 hours/2 credits
   - Infectious, Immune and Haematological Emergencies 30 hours/2 credits
   - Research Methodology and Critical Appraisal 30 hours/2 credits
   - Educational Issues in Emergency Medicine 30 hours/ 2 credits
   - Management Issues in Emergency Medicine 30 hours/ 2 credits
   - Management of the acute surgical patient 30 hours/ 2 credits
DM EMERGENCY MEDICINE
This is a full-time residency programme in Emergency Medicine lasting 4 years, offered to junior doctors who wish to specialise in Emergency Medicine, but have little or no prior clinical experience. Candidates must be working in a hospital in Trinidad recognised for graduate training.

1. AIMS
1.1. The aim of the DM in Emergency Medicine is to train doctors in the specialty of Emergency Medicine to a level that allows them to provide clinical support and administrative leadership to their Emergency Departments. Successful DM candidates will practice at the level of consultants and Emergency Medicine. The DM programme will accept candidates with minimal experience in Emergency Medicine and achieve the above goal within the four-year training period.

2. ADMISSION CRITERIA
2.1. Graduates of Medical Schools approved by the Medical Board of Trinidad and Tobago.
2.2. Candidates must have successfully completed their internship and are fully registered with the Medical Board of Trinidad and Tobago.

3. PROGRAMME STRUCTURE
3.1. The DM in Emergency Medicine is a full time residency programme, based on a comprehensive curriculum. Candidates will spend approximately half their time in Emergency Medicine, and will be expected to rotate through the following specialties during the programme:
   • Anaesthesia (3 months)
   • Surgery (3 months)
   • Adult Medicine (3 months)
   • Orthopaedics (3 months)
   • Paediatrics (3 months)
   • Obstetrics & Gynaecology / Psych (3 months)
   • Family Medicine (3 months)

4. TEACHING METHODS
4.1. DM candidates will be expected to cover their curriculum through a variety of educational opportunities. These would include:
   • Clinical supervision: The majority of clinical training in the DM programme will be facilitated through direct clinical supervision during normal work. Supervisors will include consultants in Emergency Medicine as well as those consultants in charge of candidates during their secondments to other specialties.
   • Weekly tutorials: All DM candidates will be expected to meet weekly for tutorials in Emergency Medicine, which would aim to cover the core curriculum over the first three years.
   • Monthly tutorials: DM candidates will be required to attend monthly teaching sessions with candidates from the MSc programme. These tutorials will provide a systems-based approach to topics in Emergency Medicine and utilise a variety of educational tools including problem based learning, formal tutorials and skills labs.
   • Other educational activities: Candidates will be expected to attend other educational activities during their course, including departmental teaching (both in Emergency Medicine and during secondments).
   • Short Courses: DM candidates will be offered the opportunity to attend relevant short courses in emergency care, including the Advanced Life Support Courses (Cardiac, Paediatric and Trauma).

5. CURRICULUM
5.1. While the majority of teaching in the DM will be related to direct clinical supervision, the programme follows a fixed curriculum, which is the same as the DM programmes in Barbados and Jamaica.
5.2. The DM curriculum covers the following topics on a four-year rolling
   • teaching cycle:
   • Principles of Emergency Care
   • Major and Soft Tissue Trauma
   • Otolaryngologic Disorders
   • Ophthalmologic Disorders
   • Cardiovascular Disorders
   • Thoracic/Respiratory Disorders
   • Abdominal & Gastrointestinal Disorders
   • Urogenital Disorders
   • Obstetrics and Gynaecological Disorders
   • Infectious Diseases
   • Paediatric Disorders
   • Musculoskeletal Disorders
   • Toxicologic Emergencies
   • Neurologic Disorders
   • Environmental Emergencies
   • Immune System Disorders
   • Metabolic and Hormonal Disorders
   • Haematological Disorders
   • Dermatological Disorders
   • Psycho behavioural Disorders
   • Administration and Management
   • Emergency Medical Services
   • Physician Interpersonal Skills
   • Manipulative Skill
DM OPHTHALMOLOGY

AIMS

• To provide a programme that facilitates the acquisition of knowledge, understanding, skills and attitudes to a level appropriate to an ophthalmic specialist, who has been fully prepared to begin his/her career as an independent ophthalmologist.

• To promote the appreciation of audit and research

COURSE OF STUDY

The six year programme is divided into 3 parts (Part I, Part II, Part III):

**Part 1 (2 years)**

This involves the basic sciences, including:

- anatomy of the eye, adnexae, visual pathways and associated aspects of head and neck and neuroanatomy. It will also include embryology

- physiology of the eye, adnexae and CNS, including general physiology (laws and phenomena). It will include organisation, function, mechanism of action, regulation and adaptations of structures and their components tissues relevant to the clinical methods of assessment (eg. acuity, visual fields, electrodiagnostics, intraocular pressure)

- medicine in association with ocular disease (Diabetes, Hypertension, Collagen Vascular disease, Rheumatology, Thyroid, Sickle cell Anaemia, etc)

- basic principles of Pathology (with emphasis on Ocular pathology), Microbiology, Biochemistry

Part 1 will be examined at the end of 2 years. Candidates will have to achieve an adequate standard of performance before they can proceed to the second part of the programme.

**Part II (1 year)**

This part covers:

- the optics, theory and practice of refraction (including contact lens),

- application of physical and physiological optics to clinical management,

- principles of instrumentation such as the direct and indirect ophthalmoscope, keratometers, focimeters, microscope.

During this period the candidate will continue to gain clinical and surgical ophthalmology skills.

Part 2 will be examined after 1 year. Candidates will have to achieve an adequate standard of performance before they can proceed to the final part of the programme.

**Part III (3 years)**

This final part consists of 3 years, at least 2 of which must be spent locally and an elective one year period which must be spent overseas. The candidate will be expected to cover all aspects of the medicine, therapeutics and surgery for the eye, adnexae and visual pathways. For specific diseases processes, they should be enhancing and consolidating their knowledge with respect to aetiology, pathogenesis, genetics, clinical manifestations, differential diagnosis, investigations and treatment options (medical and surgical). Enhancing surgical skills, audit and research will be emphasised. The candidate will be examined at the end of the three years.

EXAMINATIONS

**Part I**

This exam will be undertaken after 2 years in the programme.

Section A: Principles of Ophthalmic Surgery

Section B: Anatomy of Head and Neck (including Embryology and Neuro anatomy)

Basic Pathology, Microbiology, Biochemistry

Physiology of eye, adnexae, CNS including related general physiology

General Medicine in association with Ocular pathology

Candidates must pass Section A and pass at least 4 parts of Section B to qualify for entry into the second part of the programme.

Candidates who have not completed the Part 1 exam within one calendar year of the first sitting of the examination will normally be required to withdraw from the programme.

**Part II**

This exam will be undertaken at the end of the 3rd year in the programme.

Section A: Basic Optics (Principles of Instrumentation) & Theory of Refraction

Section B: Practical Refraction exam & OCSE

**Part III**

This exam will be undertaken at the end of the fellowship. This will consist of 2 parts:

a. Papers: MCQs/ Essay

b. Oral Examination

No candidate will be allowed more than 2 attempts at any one examination. The final Part III examination must be taken within one year of submission of the project or case book (20 cases).

**Log Book:**

All candidates must maintain a surgical logbook, which will be assessed annually.
Casebook:
Each candidate must collect 20 cases for the case book. These cases must cover the breadth of Ophthalmology including at least one case from each subspeciality:

1. Cataract and Refractive Surgery
2. Cornea
3. Glaucoma
4. Paediatrics
5. Uveitis
6. Orbit, Oculoplastic, Adnexal and Lacrimal
7. Neuro ophthalmology
8. Ocular motility/ Strabismus
9. Medical Retina
10. Surgical Retina

SCHOOL OF PHARMACY
The University of West Indies has started BSc (Pharmacy) programme in 1995 to produce qualified Pharmacy graduates to practice Pharmacy in the Caribbean region. After considerable amount of service and experience, the department of Pharmacy is recently upgraded to an independent School. The school is currently in the process of developing MPhil and PhD degrees in Pharmaceutical Sciences and other postgraduate programmes. Although no graduate programmes are currently on offer, staff are involved in the supervision of students enrolled in MPhil and PhD programmes in Pharmacology.

SCHOOL OF DENTISTRY
The School of Dentistry is well equipped with state-of-the-art dental equipment and has ample clinical teaching space; a computer assisted learning facility, lecture rooms and a student recreation room. Although the school does not currently offer any graduate programmes, staff are involved in research some of which is in collaboration with other departments and schools with graduate research programmes. Current research areas in the School of Dentistry include tooth wear in Caribbean populations, dental education, dental materials science, oral health needs in young children, childrenís emergency dental care, dental health education, oral health promotion and dental health of people with special needs.

In addition to its teaching function, the Dental Hospital provides emergency dental facilities, radiology and diagnostic examinations, the treatment of trauma, deformities and malignancies by means of oral and maxillo-facial surgery and extensive restorative dentistry. Specialised attention is given to childrenís dental problems with particular emphasis on orthodontics, preventive dentistry and community dental health education.

SCHOOL OF VETERINARY SCIENCES
POSTGRADUATE PROGRAMMES
The School of Veterinary Medicine offers postgraduate studies leading to MPhil and PhD degrees of Veterinary Anatomy, Veterinary Physiology, Veterinary Microbiology, Veterinary Pharmacology & Toxicology, Veterinary Public Health, Veterinary Pathology, Veterinary Parasitology and Veterinary Clinical Medicine. The degree programmes are primarily by research and guided studies with limited course work requirements where necessary. Current research interests include:

VETERINARY ANATOMY
• Neuropathological evaluation of swayback disease as compared with Alzheimerís disease
• Rabbits as an animal model for Alzheimerís disease
• Anatomical studies in the agouti.
• Distribution and types of congenital abnormalities in animals
• Gross anatomical studies of rare species of animals

VETERINARY MICROBIOLOGY
• Development of a nested-PCR method and the detection of Bartonella spp in blood
• Molecular diagnostics for Newcastle disease
• Enhancement of food safety programs in CARICOM through PCR- based diagnostics
• Isolation, characterisation and local production of novel Bacillus thuringiensis (BT) isolates with pesticidal properties
• Development of an in vivo system to monitor bacterial growth and colonisation

VETERINARY PARASITOLOGY
• Investigations into the phytoacarcidal action of Neem oil in Boophilus microplus

VETERINARY PATHOLOGY
• Hematological values in copper deficient sheep
• Studies on skeletal pathology of wildlife
• The role of pathology in forensic veterinary medicine
• The development and evaluation of health monitoring protocols for use in birds and reptiles
• Refinement of the use of field kits for use in the tropics