

2016/2017

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# POSTGRADUATE REGULATIONS & SYLLABUSES 2016 - 2017 THE FACULTY OF MEDICAL SCIENCES

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## **HOW TO USE THIS HANDBOOK**

The Faculty handbooks (also known as Faculty Booklets) are available on the Campus website in PDF format at <a href="http://sta.uwi.edu/faculty-booklet-archive">http://sta.uwi.edu/faculty-booklet-archive</a> . The handbooks include:

- Relevant Faculty Regulations eg. Admission Criteria, Exemptions, Progression, GPA, Leave of Absence, etc.
- Relevant University Regulations including the Plagiarism Regulations and Declaration Forms
- Other Information on Co-Curricular courses, Language courses and Support for Students with physical and other disabilities or impairments.
- Programme Descriptions and Course Listings which include the list of courses to be pursued in each programme
  (degrees, diplomas and certificates), sorted by level and semester; course credits and credits to be completed for
  each programme majors, minors and specials.
- Course Descriptions which may include details such as prerequisites and methods of assessment.

Students should note the following:

The Regulations and Syllabuses issued in the Faculty Handbooks should be read in conjunction with the following University Regulations:

- The Undergraduate Regulations and Syllabuses should be read in conjunction with the University regulations contained in the <u>Undergraduate Handbook</u>
- The Postgraduate Regulations and Syllabuses should be read in conjunction with the University regulations contained
  in the <u>Postgraduate Handbook</u> and the <u>Board for Graduate Studies and Research Regulations for Graduate Diplomas
  and Degrees (with effect from August 2014)</u>

Progress through a programme of study at the University is governed by Faculty Regulations *and* University Regulations. Should there be a conflict between Faculty Regulations and University Regulations, **University Regulations shall prevail**.

Notwithstanding the contents of the Faculty Handbooks, the University reserves the right to modify, add or altogether remove from a Programme, certain aspects of any course offered by the University, as described in either the Handbooks, Course outlines or any other Course materials provided.

# **ACADEMIC CALENDAR 2016-2017**

ACTIVITY	SEMESTER 1 AUGUST - DECEMBER 2016	SEMESTER 2 JANUARY - MAY 2017	SUMMER MAY - JULY 2017
Semester <b>BEGINS</b>	August 28, 2016	January 15, 2017	May 28, 2017
Registration	August 22 – September 16, 2016	January 09 – February 03, 2017	May 22 – June 17, 2017
Teaching <b>BEGINS</b>	September 05, 2016	January 16, 2017	May 29, 2017
Orientation and Ice Breaker (UWILIFE)	September 02, 2016		
Late registration / Late Payment Fee of TT\$200.00 APPLIES	September 12 -16, 2016	January 30 – February 03, 2017	June 12 - 17, 2017
Application to Carry forward Coursework ENDS Change in Registration (ADD/DROP) ENDS Application for Leave of Absence ENDS Application for Credit and Exemptions ENDS	September 09, 2016	February 03, 2017	June 17, 2017
Faculty Overrides (submission of overrides and deadline for entry in Banner)	August 22 – September 13, 2016	January 09 – 31, 2017	May 22 – June 14, 2017
Teaching <b>ENDS</b>	December 02, 2016	April 13, 2017	July 08, 2017
Exacminations <b>BEGIN</b> and <b>END</b>	December 05 – 21, 2016	April 28 – May 19, 2017	July 11 – 21, 2017
Semester ENDS	December 21, 2016	May 19, 2017	July 21, 2017
Semester II Break	April 18 – 23, 2017		
<b>ELPT TEST</b> : Scheduled for the following dates	August 22, 2016 and October 13, 2016	February 16, 2017	-
SPECIALLY-ADMITTED 2016/2017	SEMESTER I	SEMESTER 2	ENTIRE ACADEMIC YEAR
Application for Specially Admitted OPENS	November 16, 2015	November 16, 2015	November 16, 2015
Application for Specially Admitted ENDS	June 30, 2016	December 16, 2016	June 30, 2016
	CEREMONIES		
Matriculation Ceremony	September 15, 2016		
Graduation Dates	October 08, 2016 (Open Campus) October 20 - 22, 2016 (St. Augustine)		

Revised June 22, 2016. This calendar is subject to change by the appropriate authorities. For the full and most up-to-date calendar, visit <a href="https://sta.uwi.edu/registration/academiccalendar.asp">https://sta.uwi.edu/registration/academiccalendar.asp</a>

# MESSAGE FROM THE DEAN

Every new academic year it is the pleasure of the Office of the Dean to welcome new and returning postgraduate students to another exciting year of learning.

Postgraduate education within the Faculty of Medical Sciences can be done through any of our schools: the Dental School, Medical School, Nursing School, Pharmacy School and The School of Veterinary Medicine.

Postgraduate education is about being at the forefront of knowledge. There is a need for initiative and original thinking - this only comes from doing research. This is how you will take your field forward and we heartily encourage you to do so!

However, as you go through your postgraduate training with us please take time to achieve something that is truly meaningful to you.

We want you to acquire a good quality degree but we also want to help you to become a better person.

Professor Terence Seemungal DEAN



# ABOUT THE FACULTY OF MEDICAL SCIENCES – ST. AUGUSTINE

Welcome to the Faculty of Medical Sciences at St. Augustine, Trinidad & Tobago. We are situated at the Eric Williams Medical Sciences Complex, with offices at the Port of Spain, San Fernando and Sangre Grande General Hospitals. The Faculty comprises the Schools of Medicine, Dentistry, Veterinary Medicine, Pharmacy and Nursing. Ours is the only Caribbean, medical school that offers the problem-based learning system. This modality of learning requires student interaction in small groups, supplemented by didactic lectures. The Faculty of Medical Sciences offers a choice of research-based, postgraduate degrees in the Schools of Medicine, Veterinary Medicine and Nursing, which will allow interested graduates to pursue research work in areas of interest such as anatomy, biochemistry, physiology, pharmacology, veterinary public health and epidemiology and advanced nursing. We also offer the MD by thesis in clinical disciplines, as well as professional training in anaesthetics, obstetrics and gynaecology, radiology, psychiatry, orthopaedics, child health, internal medicine and surgery.

The Faculty of Medical Sciences is committed to the development of excellence in dental, medical and veterinary health research. While our research priorities are determined by local and regional needs, our perspective will remain international through the development of productive, research collaborations with renowned research institutions across the world. In so doing, the Faculty of Medical Sciences will bring developed, world technology to solve regional, health problems, as defined by regional governments and agencies.

Over the last two decades, the dramatic changes, which have taken place in healthcare systems, have created many new and exciting roles for healthcare providers. The Faculty is well equipped with modern teaching and research laboratories, which facilitate practical classes and on-going research programmes. Computer-assisted, learning facilities have also been established. A well-stocked Medical Sciences Library is on site with a Students' Computer Laboratory providing access to internet and literature search facilities. Students of the Faculty also have access to the Veterinary, Dental and Medical Hospitals, which are maintained by the North Central Regional Health Authority.

The Republic of Trinidad and Tobago is the most southerly of the Caribbean islands and benefits from a strong, petroleum-based economy. We see a vast range of diseases common both developed and developing countries. Our Faculty members are of the highest calibre, and ably guide the students through the understanding of health and disease.

You will find that Trinidad and Tobago is a truly cosmopolitan nation, with great, cultural diversity. We are proud to boast that all races and creeds live in harmony here, so that one's professional training is complemented by exposure to a unique nation and its peoples.

## **MISSION STATEMENT**

To train health professionals to meet the needs and improve the care of those whom they serve. To strive for professional excellence while contributing to the social, economic, and cultural development of the Caribbean and inculcating in graduates an attitude of lifelong learning, ethical conduct, and excellence in service and research.

#### THE FACULTY OF MEDICAL SCIENCES

# STUDENT LIFE AND DEVELOPMENT DEPARTMENT (SLDD)

The Department is the first and most important stop for high quality academic support for the diverse populations of students throughout The University including full-time, part – time and evening and mature students, international and regional students, student athletes and students with special needs (disabilities).

The Department now provides the following services:

- Disability Support
- Academic Support
- International and Regional Student Support
- Postgraduate and Mature Student Support
- Counselling and Psychological Services (CAPS)

#### Support Services for STUDENTS WITH SPECIAL NEEDS (Temporary and Permanent)

- Provision of Aids and Devices such as laptops, USB drives, tape recorders and special software.
- Special Accommodations for Examinations
- Classroom Accommodations
- Liaison with Faculties and Departments, Deans, HODs, Lecturers

Students with special needs should make contact before or during registration. Every effort will be made to facilitate your on – campus requirements in terms of mobility, accommodation, coursework, examination, and other areas. No student of The UWI will be discriminated against on the basis of having special needs. Sharing your needs before registration will enable us to serve you better as a part of the Campus Community.

#### **Academic Support Services for ALL STUDENTS**

- Educational Assessment LADS (Dyslexia) LASSI (Study Skills)
- Time Management
- Examinations Strategies
- Workload Management
- Career Planning
- Study Skills
- Peer Tutoring
- Peer-Pairing
- Counselling Services (CAPS)

#### How do I register at SLDD?

- Visit SLDD to make an appointment to meet with the Manager.
- Complete the required Registration Form.
- Students with disabilities must submit a medical report from a qualified medical professional.
- An assessment of the students' needs will be conducted.
- The required assistance will be provided.

All Students experiencing academic challenges should communicate with Ms Jacqueline Huggins, Manager, Student Life and Development Department (SLDD), Heart Ease Building, Heart Ease Carpark, St. Augustine Campus

Tel: 662-2002 extension 83866, 83921, 83923 and 84254

Hours: Mondays to Fridays: 8:30 am to 4:30 pm

Email: sldd.office@sta.uwi.edu

Registration forms are available at the office or from the website at www.sta.uwi.edu/sldd

## **CAMPUS ETHICS COMMITTEE**

Students completing theses and research projects may have to submit their research protocols to the Campus Ethics Committee for review. Students and supervisors are asked to note the following:

- 1. Researchers should familiarize themselves with the document entitled "Policies and Procedures on Research Ethics" before completing the application which is available on the website.
- 2. The applications, consent forms, policies, guidelines and other documents are available on the following website: <a href="http://sta.uwi.edu/fms/research/ethics.asp">http://sta.uwi.edu/fms/research/ethics.asp</a>.
- 3. Staff and students conducting research are reminded of the following:

#### Research requiring ethical approval

- a) Ethical approval must be obtained for research involving humans (as group or single case) which samples of organs or other bodily material is being taken and where their health data is being taken or accessed (this includes film and audio tapings).
- b) Research involving live animals.

#### Research for which exemption can be requested

- a) Exemption can be requested for audits and online surveys (where personal and sensitive data is not being collected).
- b) Observational single case studies can be exempted. However, the UWI informed consent form must be used.
- c) Research involving deceased person or dead animals.
- 4. Documents for ethical review must be submitted electronically at least three (3) months prior to the commencement of the project. It should be noted that ethical approval must be sought before the project begins. The Committee will not retroactively approve any research which has started without ethical approval.
- 5. The submission process is now electronic and paper applications will not be accepted.
- 6. Applications submitted by students must list their supervisor as the Principal Investigator.
- 7. The signatures (including electronic signatures) of the Principal Investigator and lead Co-Investigator are required.
- 8. Only the following documents are to be submitted:
  - a) Application Form
  - b) Consent Form(s) (if required)
  - c) Data Collection Instrument(s) (if required) this is limited to a maximum of three (3) attachments.
- 9. All students would be required to be properly informed on research ethics methodologies, before applications for research are submitted.
- 10. It is necessary that the Principal Investigator(s) is qualified to undertake the proposed research in the area being researched and their qualifications and experience must be indicated on the application form in the relevant sections.
- 11. If a question is not applicable, the answer should state "Not Applicable".
- 12. The Consent Form must be completed for research involving experimental and invasive procedures and for collection of personal sensitive data from research subjects. It is generally not required for research involving simple surveys.
- 13. For research that involves children, that is subjects under the age of eighteen (18) years, the Parental-Guardian Consent Form must be used.
- 14. The Consent Form must be signed by the person conducting the informed consent process at the time of the interview and not before.
- 15. The Ethics Application forms must be completed in accordance with the guidelines provided.

You can contact the following staff for further assistance:

Chairman: Professor Shivananda Nayak

Tel: 225-4673 Ext. 4642

Senior Administrative Assistant: Ms Evelyn Ferreira

Tel: 225-4673 Ext. 5021 or 645-8604 Email: campusethics@sta.uwi.edu

Website: http://sta.uwi.edu/fms/research/ethics.asp

## **STAFF LISTING**

#### OFFICE OF THE DEAN

DEAN

Professor Terence Seemungal

Tel: 225-4673 ext. 5025

Fax: 663-9836

Email: deanfms@sta.uwi.edu

DEPUTY DEAN - GRADUATE STUDIES & RESEARCH

**Dr Kenneth Charles** 

Email: <a href="mailto:fms-gradstudies-research@sta.uwi.edu">fms-gradstudies-research@sta.uwi.edu</a>
Website: <a href="mailto:www.sta.uwi.edu/fms/research">www.sta.uwi.edu/fms/research</a>

DEPUTY DEAN - CLINICAL MEDICAL SCIENCES
Dr Sandra Reid

Tel: 225-4673 Ext. 5020/5019 Email: sandra.reid@sta.uwi.edu

**ADMINISTRATIVE ASSISTANTS** 

Administrative Officer

Ms Simone Roberts

Tel: 225-4673 Ext. 5023

Email: simone.roberts@sta.uwi.edu

Senior Administrative Assistant - Graduate Studies &

Research

Ms Evelyn R. Ferreira

Tel: 225-4673 Ext. 5021; 645-8604 Email: fMsgradstudies2@sta.uwi.edu

Administrative Assistant - Examinations

Ms Heather Woodroffe Tel: 225-4673 Ext. 5232

Email: heather.woodroffe@sta.uwi.edu

Clerical Assistant - Postgraduate Matters

Miss Sulicia Adams
Tel: 225-4673 Ext. 5010

Email: fMsgradstudies2@sta.uwi.edu

LIST OF POSTGRADUATE COORDINATORS

**DEPARTMENT OF CLINICAL SURGICAL SCIENCES** 

DIPG/DM Emergency Medicine

Dr Joanne F. Paul

Tel: 645-3232 Ext. 2960 or 2964 or 2862 (EWMSC)

Email: joanne.paul@sta.uwi.edu

DM Anaesthesia and Intensive Care **Professor Hariharan Seetharaman** Tel: 645 3232 Ext. 2360 (EWMSC)

Email: <a href="mailto:hariharan.seetharaman@sta.uwi.edu">hariharan.seetharaman@sta.uwi.edu</a>

Tel: 645 3232 Ext. 2360

DM Obstetrics and Gynaecology

Professor Bharat Bassaw

Tel: 662-6418 (MHWH)

Email: bharat.bassaw@sta.uwi.edu

DM Orthopaedics

Dr Marlon Mencia

Tel: 623-7870 (POSGH) Email: marlon.mencia@sta.uwi.edu

DM Ophthalmology

Dr Desiree Murray

Tel: 645 3232 Ext. 2960/ 2961 Email: desiree.murray@sta.uwi.edu

DM Otorhinolaryngology

Dr Solaiman Juman

Tel: 645 3232 Ext. 2960/ 2961 Email: solaiman.juman@sta.uwi.edu

DM Urology

Dr Lester Goetz

Tel: 657-2910 (SFGH)

Email: lester.goetz@sta.uwi.edu

DM General Surgery

*Dr Ravi Maharaj* (EWMSC) Tel: 645 3232 Ext. 2960/ 2961 Email: ravi.maharaj@sta.uwi.edu

Dr Yardesh Sinah

Tel: 657-2910 (SFGH)

Email: yardesh.singh@sta.uwi.edu

Dr Shamir Cawich

Tel: 623-7870 (POSGH)

Email: shamir.cawich@sta.uwi.edu

**DEPARTMENT OF CLINICAL MEDICAL SCIENCES** 

Postgraduate Diploma in the Management of HIV

Infections

Professor Zulaika Ali

Tel: 225-4673 Ext. 3909 Email: zulaika.ali@sta.uwi.edu

MSc Clinical Psychology

Dr Katija Khan

Tel: 225-4673 Ext. 2914

Email: psychology@sta.uwi.edu

MSc Palliative Care Medicine

Dr Nelleen Baboolal

Tel: 225-4673 Ext. 2926

Email: nelleen.baboolal@sta.uwi.edu

## POSTGRADUATE REGULATIONS & SYLLABUSES 2016 - 2017 THE FACULTY OF MEDICAL SCIENCES

DM Internal Medicine

Dr Ronan Ali

Tel: 225-4673 Ext. 2926 Email: ronan.ali@sta.uwi.edu

DM Paediatrics
Dr Sherman Soman
Tel: 225-4673 Ext. 3909

Email: <a href="mailto:sherman.soman@sta.uwi.edu">sherman.soman@sta.uwi.edu</a>

DM Psychiatry

**Professor Gerard Hutchinson** Tel: 225-4673 Ext. 2915 Email: psychiatry@sta.uwi.edu

DM Radiology

**Dr Paramanand Maharaj** Tel: 225-4673 Ext. 2170

Email: paramanand.maharaj@sta.uwi.edu

DM Medical Oncology

Dr Ronan Ali

Tel: 663-4332

Email: ronan.ali@sta.uwi.edu

Fellowship in Cardiovascular Medicine

**Dr Ronal Ali** Tel: 663-4332

Email: ronan.ali@sta.uwi.edu

**DEPARTMENT OF PRECLINICAL SCIENCES** 

MPhil/PhD Biochemistry
Professor Shivananda Nayak

Tel: 225-4673 Ext. 4642

Email: shivananda.nayak@sta.uwi.edu

MPhil/PhD Human Anatomy

Dr Suresh Rao

Tel: 225-4673 Ext. 4627 Email: Suresh.Rao@sta.uwi.edu

MPhil/PhD Human Physiology

Dr Farid Youssef Tel: 225-4673 Ext. 4618

Email: Farid.Youssef@sta.uwi.edu

MPhil/PhD Molecular Genetics **Professor Christine Carrington** 

Tel: 225-4673 Ext. 4643

Email: <a href="mailto:christine.carrington@sta.uwi.edu">christine.carrington@sta.uwi.edu</a>

MPhil/PhD Neuroscience

**Dr Farid Youssef** Tel: 225-4673 Ext. 4622

Email: <a href="mailto:farid.youssef@sta.uwi.edu">farid.youssef@sta.uwi.edu</a>

**DEPARTMENT OF PARACLINICAL SCIENCES** 

MPH – Masters in Public Health **Dr Robert Jeffrey Edwards** 

Tel: 645-6741/645-3232 Ext: 2837 Email: robert.edwards@sta.uwi.edu

Diploma /DM Family Medicine

*Dr Rohan Maharaj* Tel: 645-3232 Ext. 2838

Email: rohan.maharaj@sta.uwi.edu

Dr Kameel Mungrue

Tel: 645-3232 Ext. 2882/2883

Email: kameel.mungrue@sta.uwi.edu

MSc/MPhil/PhD Medical Microbiology

Professor Patrick Akpaka
Tel: 225-4673 Ext. 2253/2323
Email: patrick.akpaka@sta.uwi.edu

MPhil/PhD Pharmacology

Dr Yuri Clement

Tel: 225-4673 Ext. 4605

Email: yuri.clement@sta.uwi.edu

MPhil/PhD Pathology (Sub-disciplines)

Tel: 225-4673 Ext. 2323

Email: head.paraclinical@sta.uwi.edu

SCHOOL OF VETERINARY MEDICINE

Director

Professor Bhakthavatsalam Murali Manohar

Tel: 225-4673 Ext. 4213/4215 Email: vetdirsec@sta.uwi.edu

THE UWI SCHOOL OF NURSING

*Dr Oscar Ocho* Tel: 225-1026

Director

Fax: 225-1885

Email: sane@sta.uwi.edu

#### THE FACULTY OF MEDICAL SCIENCES

# CENTRE FOR MEDICAL SCIENCES EDUCATION (CMSE)

The Centre for Medical Sciences Education (CMSE) is a physical and conceptual centre for harnessing and maximising the efficient and effective use of teaching, learning, technology, and educational research resources in the Faculty of Medical Sciences. The mission of the Centre is to provide academic, professional and technical resources towards promoting continuous improvement in curriculum planning, and the delivery of medical education programmes involving staff and students in the Faculty of Medical Sciences.

CMSE provides the five Schools of the Faculty with the following services: print and copy, videotaping, photography, medical illustration, graphic design and desktop publishing, technical assistance, website design, curriculum design, review and development, staff development workshops, assessments and evaluation, communication skills teaching, co-ordination of the Problem-Based Learning (PBL) and internal audit, monitoring and review.

**Ag. Coordinator/** Senior Lecturer, Measurement & Evaluation

**Dr Bidyadhar Sa**Tel: 225-4673 Ext. 5230

Email: bidyadhar.sa@sta.uwi.edu

Secretary: Ms Lindy Vidale-Plaza

Tel: 225-4673 Ext. 5210 Email: <a href="mailto:lindy.plaza@sta.uwi.edu">lindy.plaza@sta.uwi.edu</a>

Mrs Stella Williams

Lecturer, Communication Skills Tel: 225-4673 Ext. 5212

Email: stella.williams@sta.uwi.edu

Dr Pradeep Kumar Sahu

Lecturer, Curriculum Development

Tel: 225-4673 Ext. 5229

Email: pradeep.sahu@sta.uwi.edu

#### **MEDICAL SCIENCES LIBRARY**

Founded in 1989, the Medical Sciences Library comprises, five professional and twenty-seven support staff. The Library provides services such as reference and circulation, print, electronic and multimedia resources, internet access; document delivery; inter-library loans; photocopying, printing and scanning as well as information literacy instruction.

The Library offers a collection of over 38,000 items, ranging from books and bound serial volumes to multimedia items. Apart from hard copy items, the library also provides access to 49 health research databases. These databases include BioMed Central, ELSEVIER Science Direct, International Pharmaceutical Abstracts, Medline, UpToDate, MICROMEDEX® Healthcare Series and are supplemented by a wide range of health science e-journals and e-books. Special facilities include four seminar rooms, a multimedia-equipped Group Viewing room, a Student Computer Lab and 24/7 Study facility.

Library hours during the Semester are:-8:00 a.m. – 8:00 p.m. Monday to Friday 8:30 a.m. – 5:00 p.m. on Saturday.

Library hours during the Vacation are:-8:30 a.m. – 5:00 p.m. Monday to Friday 8:30 a.m. – 12:30 p.m. on Saturday.

**HEAD:** Mrs Ernesta Greenidge Secretary: Mrs Bernell Bushell-Ray

Tel: 645-3232 Ext. 5206

Fax: 662-1392

Email: medlib@sta.uwi.edu

Webpage: http://www.mainlib.uwi.tt/msl

#### **LIBRARIANS**

Mrs Marilyn Drayton-Andrews

Tel: 645-3232 Ext. 5218

Fax: 662-1392

Email: Marilyn.Drayton-Andrews@sta.uwi.edu

#### Mrs Niala Dwarika-Bhagat

Tel: 645-3232 Ext. 5247

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Miss Marilyn Lewis

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E-Mail: Marilyn.Lewis@sta.uwi.edu

#### THE FACULTY OF MEDICAL SCIENCES

#### DEPARTMENT OF PRE-CLINICAL SCIENCES

**HEAD: Professor Shivananda Nayak (M)** 

Administrative Assistant: Mrs Monique Dare-Assing

Telephone: 1(868) 225-4673 Ext. 2776

Fax: 1(868) 662-1873

Email: head.preclinical@sta.wi.edu

Anatomy Unit Co-ordinator:

Dr Suresh R Rao (M)

Unit Secretary: Mrs Candice Charles Tel: 1(868) 225-4673 Ext. 4627

Fax: 1(868) 662-9148

Biochemistry Unit Co-ordinator: **Professor Shivananda Nayak (M)** 

Unit Secretary: Mrs Stephanie Oliver-Caesar Tel: 1(868) 225-4673 Ext. 4642 /4643

Fax: 1(868) 662-1873

Physiology Unit Co-ordinator: **Dr Youssef, Farid (M)** 

Tel: 225-4673 Ext. 4622 /4621

ANATOMY UNIT

Dr Odekunle, Abayomi (M)

MB BS (Benin), PhD (Sheff)

Senior Lecturer

**Research Interest**: Neurogastroenterology; Organization of vagal brainstemnuclei of the Agouti; Morphology of the

skull and brain of the Agouti

Dr Suresh R. Rao (M)

MSc, PhD (Manipal)

Senior Lecturer & Unit Coordinator

Research Interest: Anatomical malformations in adults and

children

Dr Vincent Rodrigues (M)

MSc, PhD (Manipal) Senior Lecturer

**Research Interest**: Stress and its effects on central nervous system, Anatomical malformations

Dr Ramesh Rao (M)

MSc, PhD (Manipal) Senior Lecturer

Research Interest: Anatomical malformations in adults and

children

Dr Ovchinnikov, Nikolai A. (M)

MD, PhD (Perm Med Inst), USSR

Senior Lecturer

Research Interest: Anatomical malformations in adults and

children

**BIOCHEMISTRY UNIT** 

Professor Nayak, Shivananda (M)

 $\mathsf{MSc}, \mathsf{PhD}, \mathsf{FAGE}, \mathsf{(Manipal)}, \mathsf{NRCC}\text{-}\mathsf{CC}, \mathsf{FACB}\,\mathsf{(USA)}, \mathsf{FABM},$ 

FISBT (India)

Professor & & Unit Coordinator

Chairman, Campus Ethics Committee,

**Research Interest**: Type 2 diabetes (Association of Biochemical parameters and risk of diabetes and

cardiovascular diseases).

Wound healing (Evaluation of wound healing activity of

medicinal plant extract). Hypoglycaemic activity of

Medicinal plants.

Professor Carrington, Christine (F)

BSc, PhD (Lond)

Professor

**Research Interest**: Molecular Genetics and Virology (virus evolution, phylogenetics, emerging infectious disease (esp.

mosquito-borne viruses, rabies virus and other RNA

viruses))

Dr Alleyne, Trevor (M)

BSc, MSc, PhD (Essex)

Senior Lecturer

Research Interest: Enzymology, Protein modelling,

evaluation of antihypertensive and anticancer properties

of plant extracts

Dr Foster, Jerome (M)

BSc, PhD (UWI)

Lecturer

Research Interest: Virus microevolution, phylogenetics,

emerging infectious diseases and chronic non-

communicable diseases.

Dr Melford , John (M)

BSc, PhD (London)

Senior Lecturer

**Research Interest**: Bioinformatics; changes in the mutation

profiles of cancer clones as they develop and respond to

treatment.

PHYSIOLOGY UNIT

Dr Youssef, Farid (M)

MB BS, PhD UWI

Senior Lecturer & Unit Coordinator

**Research Interest**: Endocannabinoids and novel neuroprotective mechanisms; Neural Mechanisms involved in Decision Making; Knowledge, Attitudes and

 $Perceptions \ Mental \ IIIness; \ Ethics \ \& \ Professionalism.$ 

#### THE FACULTY OF MEDICAL SCIENCES

#### Professor Addae, Jonas I. (M)

MB ChB Legon, PhD Lond

Professor

**Research Interest**: Intrinsic neuro-protective mechanisms in the brain. Caribbean natural products with neuro-active properties.

#### Dr Davis, E. Monica (F)

MB BS UWI, MPhil (Physiology),

Dip (Fertility Management & Reproductive Health) John Hopkins Dip (Primary Health Care) GPATT Lecturer

**Research Interest**: Respiratory Physiology - Effect of Pollutants on respiratory function; Wellness and Health Promotion; Medical Education

#### Dr Kurhade, Geeta A. (F)

BSc, MBBS, MD, Diploma in Gynaecology and Obstetrics Senior Lecturer

Research Interest: Immunological status in Exercise

#### Dr Mohan, Junette (F)

BSc (Tor); MPhil (UWI); PhD (UWI)

Lecturer

**Research Interest**: vascular endothelial dysfunction in diabetes, sickle cell disease, and eye disease. Role of inflammation in vascular endothelial dysfunction; Medical Education

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MB BCh, DTM&H, MPH, FFPH (UK), CCST Public Health

Medicine), UK

Unit Coordinator & Lecturer

**Research Interest**: Communicable diseases, emergency preparedness, health systems, quality in health care.

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#### Dr Chattu, Vijay Kumar (M)

MB BS, MD, MPH, MPhil, Fellow in Epidemiology (USA &

France) Lecturer

Research Interest: Chronic diseases, Global Health Governance, MCH & HIV/AIDS, Health Systems

Strengthening

#### Dr Edwards, Robert Jeffrey (M)

MB BS, MSc (UK), MPH (UK), Dip GUM, DrPH (UWI) Lecturer

**Research Interest**: Communicable Diseases, HIV, STIs, HTLV-1

#### Dr Haqq, Edison (M)

MB BS (UWI), MPH

Lecturer & Unit Coordinator

#### Dr Maharaj, Rohan G (M)

BSc, MB BS, MHSc, DM, FCCFP

Senior Lecturer, Family Medicine

**Research Interest**: Psychosocial Issues and NCDs in Primary Care; NCDs in Primary Care; Alcohol and alcohol policy.

#### Dr Motilal, Mohanchan Shastri (M)

MB BS Hons (UWI) DM Family Med (UWI) m-CCFP Lecturer, Family Medicine

#### Dr Mungrue, Kameel (M)

MB BS, CIH, MPH FRIPH Eng, MBA Senior Lecturer

#### PATHOLOGY AND MICROBIOLOGY UNIT

#### Dr Davis, Gershwin (M)

BSc (Hons), MB BS, (UWI), PhD, DABCC, SC (ASCP), MRO

(AAMRO), FACB, FCACB

Senior Lecturer (Chemical Pathology)

**Research Interest**: Alzheimer's disease, biomarker risk

factors, epidemiology

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#### MICROBIOLOGY

#### Professor Akpaka, Patrick (M)

MB BS (UNN), DM (UWI)
Professor (Microbiology)

**Research Interest**: Molecular characterization, diagnostics and epidemiology of multi-drug resistant pathogens; Antimicrobial resistance and nosocomial Infections; and control of infections of public health importance.

#### Dr Kurhade , Arvind (M)

MBBS, MD Microbiology (India)

Lecturer (Microbiology)

Research Interest: Diagnostic clinical bacteriology,

Mycology

#### THE FACULTY OF MEDICAL SCIENCES

#### Dr Unakal, Chandrashekar (M)

MSc. (KUD, India), PhD. (KUD, India)

Lecturer (Microbiology)

**Research Interest**: Antimicrobial Resistance, Molecular characterization of MDR pathogens, Medicinal Plants

#### ANATOMICAL PATHOLOGY

#### Dr Chalapathi Rao, A.V. (M)

DCP (Mysore), MD (Manipal)

Senior Lecturer (Anatomical Pathology)

**Research Interest**: breast cancer, renal disease, wound

healing and STI

#### Dr Mohammed, Wayne (M)

MB BS (UWI), MRCPath

Senior Lecturer (Anatomical Pathology) & Unit Coordinator *Research Interest*: Prostate, cervical, colonic and breast

cancer.

#### Dr Akhilesh, Meenakshi (F)

MB BS (Bangalore) MD (Manipal), IFCAP, PG Cert Meded

(UK)

Senior Lecturer (Anatomical Pathology)

**Research Interest:** Breast, Obstetric and Paediatric pathology, Neuropathology, Medical Education

#### Dr Srikanth, Umakanthan (M)

MB BS, MD (Manipal University)

Lecturer (Anatomical Pathology)

Research Interest: Renal, Lung and Central Nervous

System tumors

#### **HAEMATOLOGY**

#### Charles, Kenneth (M)

MB.BS (UWI), FRCP, FRCPath. CCST (Haem.) (UK)

Senior Lecturer (Haematology)

#### Dr Vuma, Sehlule (F)

Lecturer (Haematology)

Research Interest: Haematologic malignancies in Trinidad

and Tobago and Antiphospholipid syndrome.

#### Dr Nordet-Carrera, Ileana (F) DM Havana, PhD (Havana)

Lecturer (Haematology)

Research Interest: Sickle cells disease and blood

transfusion

#### CHEMICAL PATHOLOGY

#### Dr Davis, Gershwin (M)

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Senior Lecturer (Chemical Pathology)

Research Interest: Alzheimer's disease, biomarker risk

factors, epidemiology

#### Professor Ezenwaka, Chidum (M)

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Professor (Chemical Pathology)

**Research Interest**: diabetes and metabolism and biochemical risk factors for diabetic complications.

#### **IMMUNOLOGY**

#### Dr Labastide, Wayne (M)

PhD

Lecturer (Immunology)

Research Interest: Immunophenotyping and cell cycle

analysis by Flow Cytometry.

#### Dr Vaillant, Angel (M)

MD (Cuba) PhD (UWI)

Lecturer (Immunology)

Research Interests: Development of Vaccines, Applied

Microbiology, Avian immunoglobulins, Immunodeficiency

and autoimmune disorders

#### PHARMACOLOGY UNIT

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Research Interest: (i) Education (ii) Obstructive lung

disease

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Hospice and Palliative Medicine)

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Lecturer

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Professor

Research interest: Metabolic Disease

CHILD HEALTH UNIT

Dr Balkaran, Beni Naraine (M)

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Unit Coordinator & Senior Lecturer

Research interests: (i) HIV (ii) Nephrology (iii) Childhood

Obesity

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Professor

Research interests: (i) HIV/AIDS (ii) Foetal growth and

maternal lipid metabolism (iii) Foetal basis of adult

diseases

(iv) Neurodevelopmental studies (v) Morbidities in the

Neonatal period

Dr Bodkyn, Curt (M)

MB BS (UWI), MRCPI (UK)

Senior Lecturer

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Professor

Research interests: (i) Nutrition (ii) Ambulatory Paediatrics

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Research Interests: Suicide, Psychosis, ADHD

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Senior Lecturer

Research interests: Alzheimer's & other Dementias, Medical Education, Cognitive Impairment in Diabetes,

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Lecturer

**Research interests**: Neuropsychological and cross-cultural

assessment, Dementia, Cognitive Stimulation, Mental

Toughness

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MBBS, DM (UWI), MPH (John Hopkins)

Senior Lecturer

Research Interests: Gender, Sexuality and HIV: Public

health consequences of addiction; Alcohol harm reduction

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MBBS, DM (Psych) (UWI)

Lecturer

Research interests: Services for child and adolescent

mental health

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Research Interests: Application and validation of 'prognostic models' for evaluating risk-adjusted outcome in ICU and other health care units, Innovative models adapting tools from the 'project management' arena, for performance appraisal as well as quality improvement of health care units, cost evaluation/cost-effectiveness analysis, and Clinical Critical Care, Clinical Anaesthesia,

Medical Ethics, General Surgery and Medical Education.

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**OBSTETRICS & GYNAECOLOGY UNIT** 

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MB BS, DGO, FRCOG, M.Phil, MMEd, FACOG

Professor & Unit Coordinator

Research interest: Diabetes/Hypertension in pregnancy/

Fibroids/Medical Disorders of Pregnancy

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Research interest: Vascular and General Surgery

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Lecturer (Otorhinolaryngology)

Research interest: Paediatric ENT, Epidemiology of ENT

Disease In Trinidad & Tobago

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Research Interests: Surgical Oncology/

Hepatopancreatobiliary Surgery

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Lecturer (Ophthalmology)

Research Interest: Ophthalmologic Conditions

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Research Interest: Paediatric Neurosurgery

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Research Interest: Minimally Invasive Spinal Surgery,

**Spinal Cord Injuries** 

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**EMERGENCY MEDICINE** 

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Coordinator, Emergency Medicine Programme

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D.Sc (Clinical Pharmacology, OIUCM), PhD (UPTU, Lucknow, India), M.Pharm Pharmaceutical Chemistry (RGUHS, Bangalore, India), B.Pharm (Gulbarga University, Karnataka, India), FAPP, FICCE.

Senior Lecturer in Pharmaceutical Chemistry

**Research Interests:** Synthesis and biological evaluation of complex natural cyclooligopeptides by solution-phase technique; Preparation and pharmacological screening of amino acid and peptide derivatives of heterocyclic and other aromatic compounds; Design and synthesis of amino acid/peptide-based prodrugs etc.

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#### Dr Dhingra, Sameer (M)

PhD (GJUST, India), M.Pharm. Pharmacy Practice (RGUHS, Bangalore, India), B.Pharm. (The Tamilnadu Dr MGR Medical University, Chennai, India), RPh Lecturer in Pharmacy Practice

**Research Interests:** Medication safety; rational use of medicines; drug Information services; clinical guidelines; psychiatric disorders.

#### Dr Extavour, Rian Marie (F)

RPh, BSc Pharm, MSc ClinPharm, PgCert UnivT&L, MSc PharmacovigPharmacoepid , PhD ClinAdminPharm Lecturer

**Research Interests:** Pharmacy Education, Medication Safety, Pharmacy Administration, and Medicines Utilization (Pharmacoepidemiology).

#### ProfessorGadad Andanappa (M)

B. Pharm., M. Pharm., Ph. D Professor, Pharmaceutical Chemistry **Research interests:** Anti-bacterial, anti-tubercular, anticancer and antihypertensive drug therapy and prodrug/formulation development.

#### Dr Gouripur, Veerappa (M)

MB BS, MD (Pharmacol) (India) Lecturer

#### Dr Gupta, Madan Mohan (M)

B.Pharm, M.Pharm, PhD (Pharmaceutics), MBA (HRM), FICS, FIAPST, FABSc,

Senior Lecturer in Pharmaceutics

Research Interests: Formulation Design and Development of Solid Dosage form (conventional and sustained Release), Formulation Design and Development of Novel Drug Delivery System, Enhancement of Flowability of Poorly Flowable Drugs using Spherical Crystallization Techniques, Solubility Enhancement of Poorly soluble Drugs using Different Techniques, Taste Masking of Bitter Drugs

#### Dr Ignacio, Diane N. (F)

PharmD (Washington, DC) Lecturer in Pharmacy Practice

**Research Interests:** Prostate Cancer: characterization of the biological effects of natural products using in vitro models to target novel molecular products.

#### Dr Maharaj, Sandeep (M)

BSc Pharmacy, MBA (UWI), Entrepreurship & Innovation (UWI) D.B.A.

Lecturer

**Research Interests:** Pharmacoeconomics, Drug Counterfeiting, Pharmacy Management and Marketing.

#### Professor Pandey, Sureshwar (M)

Senior Lecturer, Pharmaceutics.

Research Interest: Dosage Form Design and

Pharmacovigilance

#### Dr Sealy, Patricia (F)

BSc (Pharm), PharmD PhD (USA) Lecturer in Pharmacy Practice

Research Interests: Anti microbial surveillance/ resistance patterns in Trinidad and the Wider Caribbean from an epidemiologic perspective, in-vivo/in-vitro release of antifungal agents from biodegradable bone cements in animal model, and evaluative research on pharmacist managed chronic disease states.

#### THE FACULTY OF MEDICAL SCIENCES

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**Polyclinic Coordinator** 

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Lecturer (Veterinary Pathology)

#### Professor Adesiyun, Abiodun (M)

DVM (A. Bello), MPH, PhD

Professor (Veterinary Public Health)

#### Professor Basu, Asoke (M)

BVSc, MVSc, PhD

Professor (Parasitology)

#### Dr Charles, Roxanne (F)

DVM, MSc, PGCert.UTL

Lecturer (Veterinary Parasitology)

#### Dr Georges, Karla (F)

BSc, DVM (UWI), MSc, PhD

Senior Lecturer (Public Health/Epidemiology)

#### Dr Mutani, Alex (M)

BSc, MSc, PhD

Lecturer (Veterinary Parasitology)

#### Dr Offiah, Veronica (F)

BSc, MSc (Ibadan), PhD (Nigeria)

Senior Lecturer (Vet Pharmacology and Therapeutics)

#### Professor Oura, Christopher (M)

BVetMed, MSc, PhD, MRCVS Professor (Veterinary Virology)

#### Dr Pargass, Indira (F)

DVM (UWI), MSc, DACVP Lecturer (Clinical Pathology)

#### Dr Simmons, Verrol (M)

MSc (Lough), MSc (Strath), PhD, CChem, MRSC

Senior Lecturer UWI (Toxicology-Vet)

#### Dr Suepaul, Rod (M)

DVM (UWI), MVS, DACVP

Lecturer (Pathology)

#### Dr Suepaul, Sharianne (F)

DVM (UWI), PhD, PGCert.UTL

Temporary Lecturer (Veterinary Bacteriology)

#### **DEPARTMENT OF CLINICAL VETERINARY SCIENCES**

#### Head: Dr Lee Koma (M)

BVM, MPhil, PhD

Senior Lecturer (Soft Animal Surgery-Soft Tissue)

#### Ag. Secretary: Ms Patricia Allen

Tel: 225-4673 Ext. 4226

Large Animals

#### Dr Diptee, Michael (M)

BSc, DVM, MPhil

Lecturer (Large Animal Surgery)

#### Dr Harewood, Winthrop (M)

BSc, BVSc MRCVS UK, PhD, Queensland, Sydney

UWI, Senior Lecturer

#### Dr Morris, Michael (M)

DVM (UWI), MSc., PhD, MRCVS, Dip ECAR

Lecturer (Theriogenology)

#### Dr Corradini, Ignacio (M)

DVM, MSc (Vet Res), MSc (Equine Medicine), DipECEIM

Lecturer (Equine Medicine)

#### Dr Hosein, Ansarah (F)

DVM, MVSc

Assistant Lecturer (Small Animal Medicine/Surgery)

#### THE FACULTY OF MEDICAL SCIENCES

#### Dr White, Jonathan (M)

BVMS, MVM, CertES(Orth), MRCVS Lecturer (Equine Surgery)

#### **Companion Animals**

#### Dr Ayyappan, Subburamanujam (M)

BVSc, PhD (Small Animal Orthopaedics) Lecturer

#### Dr Bridglalsingh, Siobhan (F)

DVM (UWI) CQ (NEB, Canada)

Assistant Lecturer (Small Animal Surgery)

#### Dr Koma, Lee (M)

BVM, MPhil, PhD

Senior Lecturer (Small Animal Surgery)

#### Dr Nagarajan, Lakshmanan (M)

BVSc, PhD

Senior Lecturer (Anaesthesiology)

#### Dr Thomas, Sabrina (F)

DVM, MS

Assistant Lecturer (Small Animal Medicine)

#### Avian/Exotics

#### Dr Brown, Gabriel (M)

BSc, DVM, University of Guelph, Canada Lecturer (Avian Medicine)

#### Dr Johnson, Jenelle (F)

DVM, MS

Assistant Lecturer (Lab Animals)

#### Dr Phillips, Carla Ayanna (F)

DVM (Hons), MPhil, PhD

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#### THE UWI SCHOOL OF NURSING

#### Dr Oscar Noel Ocho

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 $\label{lem:communicable} \textbf{Communicable diseases, NCDs in Primary Care, nursing}$ 

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THE FACULTY OF MEDICAL SCIENCES

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## **POSTGRADUATE PROGRAMMES**

Offered by the Faculty of Medical Sciences - 2016/2017 Academic Year

SCHOOL/	DEPARTMENT	PROGRAMMES OFFERED

SCHOOL OF MEDICINE -**Department of Preclinical** Sciences

MPhil/PhD Biochemistry MPhil/PhD Human Anatomy MPhil/PhD Human Physiology PhD Molecular Genetics MPhil/PhD Neuroscience

SCHOOL OF MEDICINE -**Department of Paraclinical Sciences** 

**DM Family Medicine** MPhil Community Health MPhil/PhD Medical Microbiology

MPhil/PhD Pharmacology

MPhil/PhD Pathology (with sub-disciplines in: Chemical Pathology; Anatomical Pathology;

Haematology; Immunology) MSc Medical Microbiology MSc Public Health (MPH) Dip. Family Medicine

SCHOOL OF MEDICINE -**Department of Clinical Medical** 

**Sciences** 

DM General Internal Medicine **DM Medical Oncology** 

**DM Paediatrics DM Psychiatry DM Radiology** 

Fellowship in Cardiovascular Medicine

MSc Clinical Psychology

Dip. Management of HIV Infections

DM Anaesthesia and Intensive Care

SCHOOL OF MEDICINE -

**Department of Clinical Surgical Sciences** 

**DM Emergency Medicine** 

**DM General Surgery** 

**DM Obstetrics & Gynaecology** 

**DM Ophthalmology DM Orthopaedics** 

DM Otorhinolaryngology (ORL)

**DM Urology** 

Dip. Emergency Medicine

SCHOOL OF DENTISTRY

Part 1 MFDS -Diploma of Membership of the Faculty of Dental Surgery, Royal College of

Surgeons, Edinburgh (Exam Only)

MPhil/PhD Veterinary Anatomy

Advanced Education in General Dentistry (AEGD) Residency Programme

SCHOOL OF VETERINARY

**MEDICINE** 

MPhil/PhD Veterinary Clinical Medicine MPhil/PhD Veterinary Microbiology

MPhil/PhD Veterinary Parasitology MPhil/PhD Veterinary Pathology MPhil/PhD Veterinary Pharmacology MPhil/PhD Veterinary Physiology

MPhil/PhD Veterinary Public Health and Epidemiology

MPhil/PhD Veterinary Toxicology MPhil/PhD Veterinary Virology

SCHOOL OF PHARMACY

**UWI SCHOOL OF NURSING BSC OPTOMETRY PROGRAMME** 

Advanced Nursing (MSN)

## **FACULTY REGULATIONS**

These regulations are to be read in conjunction with <u>Regulations for Postgraduate Degrees</u>, <u>The Manual of Procedures for Graduate Diplomas and Degrees</u>, the <u>Graduate Studies Guide for Students and Supervisors</u> and the <u>Thesis Guide</u>.

(For further information, please visit: <a href="http://sta.uwi.edu/admissions/postgrad/downloads.asp">http://sta.uwi.edu/admissions/postgrad/downloads.asp</a>

In areas where the Faculty regulations are silent, the rules and regulations of the University in the aforementioned documents must be followed.

# Additional Requirements for Admission QUALIFYING EXAMINATIONS

When an applicant's undergraduate qualifications are weak the Board may require the candidate to pursue qualifying courses and write Qualifying Examinations.

Heads of Departments should set out the qualifying courses recommended on the application form, which must be approved by the Campus Committee.

Qualifying courses must be extensive enough to remedy weaknesses in an applicant's academic record and to prepare the applicant for research work in the discipline.

The qualifying courses and the assessment procedure must be provided to the Campus Registrar. The Campus Registrar will supply this information to the applicant in the letter of admission.

A candidate for a Qualifying Examination will be registered as a qualifying student and for the individual courses. Such candidates may not register for a degree until such examinations have been passed.

The administration of the examination is the responsibility of the Campus Registrar.

Heads of Departments must ensure that the signed mark sheets are sent to the Chairman of the Campus Committee.

The results of all Qualifying Examinations shall be communicated to the candidate in writing.

# Requirements for Completion of Degrees DEPARTMENTAL EXAMINATIONS

Candidates deemed acceptable for admission to graduate diploma and degree programmes but deficient in the knowledge of some aspects of the field to be pursued or in statistics and research methodology, may be required to pursue courses from the undergraduate or graduate programmes or to follow a reading programme. MPhil and PhD candidates in the Departments of Preclinical Sciences and Paraclinical Sciences, and the School for Veterinary Medicine are also required to take a course in Scientific Presentation and Critique which is also recommended for all research degree candidates. Candidates must pass the appropriate examinations before being allowed to write examinations for the degree or to submit any thesis, research paper, short dissertation or project report.

The procedures for the Departmental Examinations shall be the same as for Qualifying Examinations.

#### MPhil / PhD

Candidates shall register for the MPhil degree in the first instance, but a candidate may have his/her registration upgraded to a PhD degree, if in the opinion of the supervisor/s and of the Faculty Sub-Committee for Higher Degrees his/her MPhil thesis research work qualifies the candidate for a PhD registration.

In addition to completing departmental examination prescribed, MPhil candidates are expected to give two seminars, one in the middle of the course and the other at the end of the course before final submission of his thesis to the University. PhD candidates are expected to give three such seminars. These seminars will be judged by a panel of at least two examiners drawn from the same Faculty.

Candidates are advised that acceptance into MPhil and PhD programmes is dependent on the availability of suitable supervisors, research projects and available facilities at the time of application considerations.

#### THE FACULTY OF MEDICAL SCIENCES

# **Doctor of Medicine (MD) QUALIFICATION FOR ADMISSION**

The following candidates are eligible to apply for registration for the MD degree.

Graduates in Medicine of this University or of a University or Medical School approved by the University of the West Indies of at least five (5) years standing, and who are fully registered as medical practitioners in the territory or territories in which the research project will be carried out.

A candidate who is not a graduate of the University of the West Indies must hold or have held an academic post in the Faculty of Medical Sciences of the University of the West Indies, or must have engaged in:

- i) scientific work directly relevant to his profession or
- ii) in the practice of Medicine in Institutions or Teaching Hospitals approved by The University of the West Indies

#### **COURSE OF STUDY**

The MD degree shall be awarded on the basis of examination by thesis.

The candidate will be required to discuss the scope of his research project with the senior member of the Faculty appointed as his Supervisor. It is expected that this should occur at an early stage and preferably before embarking on the project.

The thesis must embody a critical account of the results of personal observation or original research in any branch of knowledge related to the curriculum for the degrees of Bachelor of Medicine and Bachelor of Surgery, and should normally be submitted within five (5) years but not less than three (3) years of approval of the research proposal.

The thesis may include work previously published by the candidate but such work must be clearly identified in the thesis in accordance with the Regulations of the University of the West Indies.

Submission of the thesis to the University must be as prescribed by the Regulations of the University of the West Indies for Doctoral Theses and must be accompanied by a declaration that the work has been carried out solely, or in the cases where the candidate has been a member of a research group, predominately by the candidate. In the latter instance, work which has not been carried out by the candidate must be identified in the thesis.

#### **EXAMINATIONS**

The examinations by thesis shall be as prescribed by the appropriate Regulations of the University of the West Indies for Doctoral Theses.

The thesis will be examined by at least three examiners, at least one of whom is an External Examiner appointed for this purpose, by the Board for Graduate Studies acting on behalf of Senate.

The candidate will be required to present himself/herself for Oral examination on the subject matter of the thesis at such place as the University may direct, upon such day or days as shall be notified to him/her by the Registrar in writing.

The candidate may also be required to present himself/ herself for Clinical examination.

#### Doctor of Medicine (DM) Specialist Degree

Applicants to the Doctor of Medicine (DM) programmes are required to hold a medical degree with eligibility for registration in the country of study. The University's Regulations for Graduate Diplomas and Degrees apply to DM students, but there are also specific regulations governing the DM programme in each Speciality, e.g. All applicants must have a posting at a recognised hospital in the country of study.

#### Taught Graduate Courses for MPhil and PhD Students

According to University regulations, candidates who are accepted into the MPhil programme will be required to register for taught graduate courses amounting to a minimum of 6 credits. Candidates gaining direct entry into the PhD programme are required to register for a minimum of 9 credits. Such candidates must pass all taught graduate courses before proceeding to their research project. In the Faculty of Medical Sciences these courses will normally include Biostatistics and Data Analysis for Health Sciences (MEDC 6925), Research Methods for Health Sciences (MEDC 6924) and Scientific Presentation and Critique (MEDC 7041 for MPhil candidates and MEDC 8041 for candidates pursuing a PhD Degree).

#### THE FACULTY OF MEDICAL SCIENCES

Students, who enter either the MPhil or PhD degree, holding a taught Masters degree or Postgraduate Diploma, may be granted exemption from the course requirements of the research degree. However, such students may be asked, by the Department in which they are registering and with the approval of the Campus Committee, to take additional course credits, if such courses provide a specific knowledge-base or skill required for the proposed research degree.

Students who upgrade from the MPhil to the PhD, will be allowed to have their course credits added to the course requirements of the PhD.

#### Supervision

#### **SUPERVISOR**

On the acceptance of an MPhil, PhD or MD candidate, the Department will nominate a supervisor and where necessary joint or co-supervisors for appointment by the Campus Committee.

The Chief Supervisor must hold a graduate degree of the same or higher level as the degree being supervised.

The designation 'Joint Supervisor' should be used in cases where University staff members are considered equally responsible to the Board for the supervision of the candidate, while the designation 'Co-Supervisor' should be applied to persons from outside the University who are assisting in the supervision of the candidate.

A topic which crosses the boundaries of Departments or Faculties will require the appointment of more than one Supervisor and consultation with those competent to jointly supervise such a topic should take place before the topic and the names of Supervisors are sent to the Board.

In the event of a candidate wishing to do a research degree which is not readily identifiable with a particular Faculty or Department, the application of that candidate will be referred by the Campus Office for Graduate Studies & Research to the Dean of the School for Graduate Studies & Research, who, in consultation with the Campus Coordinator, will seek to ascertain whether it is feasible to empanel a Committee of Supervisors and whether there are adequate facilities available to support the proposed research, in order to determine whether the application should be approved. If it is determined that the application should be approved, the Dean will then return the application to the Campus Office for Graduate Studies & Research.

Advisory Committee and Responsibilities of the Advisory Committee

By the end of the first semester of registration an Advisory Committee will be assigned to each student reading for an MPhil, PhD or MD degrees. The committee will be composed of three persons including the Supervisor. The Committee may include no more than one person from outside the University.

#### **General Examination Regulations**

All examinations, whether by thesis or by written papers, are conducted on behalf of the Campus Registrar, who is responsible for setting and publishing the dates for each examination in consultation with Departments concerned, and for informing candidates of such dates.

Examination timetables should be published at least one month before the series of examinations begin. Notification of oral defence of a thesis should be provided at least two weeks before the examinations.

Candidates must submit theses, research papers and project reports for examination to the Campus Office for Graduate Studies and Research.

The transmission of theses and other examination papers to and from examiners is the responsibility of the Campus Registrar.

It is essential that graduate research students and their Supervisors have a shared set of expectations about all aspects of supervision, time frame for project execution, important milestones and the overall manner in which the research will be executed. The ground rules must be set early and the mutually agreed expectations made explicit. Graduate students must seek clarity from their Supervisors early on with respect to: -

- Supervisor availability, both for routine and non-routine contact
- The provision of feedback and advice
- The timelines for such advice

#### THE FACULTY OF MEDICAL SCIENCES

Similarly, Supervisors must be explicit with their students about: -

- The need for regular meetings
- The benefits of graduate level courses
- The need for mastery of methodological, writing and speaking skills
- The benefits of seminar and conference presentations
- The importance of publication
- The necessity for completion within the time limits

Supervisors, the Advisory Committee and research students must be very clear about:

- The objectives and scope of the research project
- The financial, physical, human and intellectual resources available for executing the research project

The above are frequently the most difficult areas for the Supervisor and student to agree upon, but must be achieved through dialogue and reason early in the student's registration period in the University.

Graduate research students must be aware that there is no substitute to consistent, carefully planned, intelligent work in the pursuit of research excellence. Graduate students must show a commitment to the agreed objectives being pursued and must be supported at every step by their Supervisor. Graduate students must also be encouraged by their Supervisors to show independence of thought and action and to develop into first-rate professionals themselves. They should be familiar with the rules and regulations of the University, work within deadlines and communicate regularly with their Supervisor and Advisory Committee members.

The main responsibilities of the Graduate Research Student are to:

- 1. Keep the schedule of meetings agreed to with the Supervisor(s) and/or Advisory Committee.
- 2. Take the initiative in raising with the Supervisor, problems or difficulties, however, elementary they may seem.
- 3. Seek guidance and comment on the research programme.
- 4. Accept and act on advice given by the Supervisor, unless the student, after careful consideration and discussion with the Supervisor, and for good reasons, decides otherwise.
- 5. Maintain good progress in one's research in accordance with the schedule agreed to with the Supervisor.
- 6. Assist the Supervisor and the Advisory Committee in the completion of the semester's progress report.
- 7. Pass creditably and at the first attempt any Departmental or Qualifying courses which may have been prescribed.
- 8. Give, and participate in, Graduate Research Seminars and other scholarly activities.
- 9. Make representation to the Head of Department if an effective working relationship is not established with the Supervisor or any member of the Advisory Committee or if, for reasons beyond the student's control, the work is not proceeding satisfactory. If the Supervisor is also the Head of Department, making such representation to the Dean of the Faculty and then to the Chairman of the Campus Committee, or with any member of the Campus Committee for Graduate Studies and Research.
- 10. Present written material as required by the Supervisor in sufficient time to allow for comments and discussion before proceeding to the next stage; for example, in the preparation of a thesis or project report.
- 11. Take responsibility for the final presentation of the thesis or project report in terms of writing, style, grammar, spelling, references, end/footnotes, and bibliography.
- 12. Submit a thesis, project report or dissertation within the time limits set by the University.
- 13. Familiarise himself/herself with the rules and regulations of the University, particularly the 'General Regulations for Postgraduate Degrees' and it's 'Policy on Research Ethics' for example.

## **DOCTOR IN MEDICINE (DM) PROGRAMMES**

#### **DM Anaesthesia and Intensive Care**

**Department of Clinical Surgical Sciences** 

#### **Qualifications for Entry**

The applicant should be:

- a) A graduate in Medicine of a University or Medical School recognized by The University of the West Indies.
- b) Fully registered in the territory or territories in which training will take place.
- c) Normally, candidates will be eligible for entry after gaining experience for one (1) year in a recognised post of the specialty.

#### Aims and Objectives of Programme

The DM (Anaesthesia and Intensive Care) programme is a four year graduate course which aims to provide the graduate with the knowledge and skills to function as a Consultant Anaesthetist and Intensivist equipped for independent practice in hospital-based and stand-alone facilities. The course is intended to prepare candidates for a Consultant level Anaesthesia and Intensive Care responsibilities including teaching and research.

#### **Programme Structure and Curriculum**

The DM Anaesthesia and Intensive Care is a 4 year part time programme covering the following courses for which students must register:

Course Code	Course Title	Year Offered	Semester Offered	Prerequisite
MEDC 6671	DM Part I Anaesthesia & Intensive Care	All years	Semester I & II	<ul><li>Job in any approved RHA</li><li>MBBS Degree</li><li>Full registration with MBTT</li></ul>
MEDC 6672	DM Part II Anaesthesia & Intensive Care	All years	Semester I & II	<ul><li>Job in any approved RHA</li><li>Pass in MEDC 6671</li></ul>

#### Part I (MEDC 6671)

- a. The Part I is two (2) years in duration. This part focuses on the essentials and basic sciences that underpin the practice of anaesthesia and intensive care. It includes basic and applied physiology, relevant anatomy, basic and clinical pharmacology, basic physics and clinical measurements, equipment and monitoring as well as perioperative assessment and management.
- b. The course content will be covered in modules. The candidate is expected to attend and participate in the postgraduate seminars. There will be regular assessments covering the material of the modules that have been covered in the postgraduate seminars. It will be the discretion of the supervisor and programme coordinator to allow candidates to continue in the programme if they fail more than two assessments.
- c. At the end of the first year, the candidate will have to appear for the common internal examination held across the campuses. This internal examination will determine whether the candidate will be allowed to continue in the programme. A satisfactory performance in this assessment is required before the student is allowed to advance to the second year of the programme.
- d. If a candidate fails this internal Examination, depending on the degree of failure, he/she may be required to
  - i. undergo remedial study and repeat the examination in 6 months
  - ii. repeat the entire first year and then resit the examination
- e. If the candidate is unsuccessful in the internal examination at the second attempt, then he/she will not proceed to the second year of the programme and will be required to withdraw from the programme.
- f. During the second year, the assessments of the candidate will include course content as well as clinical skills/competency assessments. It will be the discretion of the supervisor and programme coordinator to approve that the assessments were satisfactory. At the end of the second year, normally one year after satisfactory performance at the internal examination, the candidate will be allowed to take the Part I examination. The scope of the MEDC 6671 examination will encompass the first two years of the curriculum.
- g. During the first year of the programme, the candidates must be exposed to anaesthesia for adult, paediatric and obstetric patients as well as intensive care management. There are some accredited hospitals where only adult patients or only

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paediatric patients are treated. However, the candidates must spend no less than six (6) months in an accredited multidisciplinary adult hospital and no less than three (3) months in an accredited paediatric hospital. The candidate must also have a minimum of three (3) months exposure to obstetric anaesthesia and should get exposure to intensive care.

- h. A candidate must successfully pass the DM Part I examination (MEDC 6671) before he/she is allowed to advance to the second part of the programme.
- i. If a candidate fails the DM Part I examination (MEDC 6671), he/she may be allowed no more than one more attempt, and in accordance with the recommendation of the Speciality Board of Examiners, the candidate may resit the examination:
  - i. in six (6) months
  - ii. in one (1) year
- j. If the candidate is unsuccessful at the second attempt, then he/she will be required to withdraw from the DM programme.

#### Part II (MEDC 6672)

- a) The Part II is two (2) years in duration. The Part II (MEDC 6672) examination must be completed within three (3) years of successful completion of the Part I (MEDC6671).
- b) The Part II consists of two years (Years Three and Four) of clinical rotations in accredited hospitals.
- c) The first year is considered an optional 'elective' year. During this period, the candidate has the option of working in a hospital abroad to gain clinical experience/expertise in a special subject area unavailable in the hospital where he/she is currently employed. If a candidate chooses to utilize this 'elective' period, prior approval must be obtained from the Board of Graduate Studies & Research. Such approval must be obtained at least six months prior to the commencement of the elective period.
- d) During this elective year, a maximum of three (3) months may be spent in a course of study in an affiliated area e.g., research methodology, epidemiology, teaching methods, medical administration etc. provided that prior approval has been obtained from the Specialty Board in Anaesthesia and Intensive Care.
- e) During Part II, clinical rotations through all anaesthesia subspecialties must be undertaken. These include, but are not limited to, anaesthesia for General, Orthopaedic, Cardiothoracic, Faciomaxillary and Paediatric surgery, Urology, Otorhinolaryngology, Obstetrics and Gynaecology, Neurosurgery and Ambulatory surgery. Rotations through the Intensive Care Unit, Preanaesthetic Outpatient services, Acute and Chronic Pain Services are also a requirement. A steady progression of specialty skills, judgment, professional and ethical responsibility and clinical independence is expected over the four years of training.
- f) Candidates are required to undertake an original **research project** during the period of the Part II clinical rotations. The candidate is required to complete a project report/thesis to be submitted in partial fulfilment of the requirements for the Degree of Doctorate in Anaesthesia and Intensive Care of the University of the West Indies. This is the pre-requisite which must be submitted no later than six (6) months prior to sitting the Part II (MEDC 6672) examination. The Part II examination is normally attempted at the end of the fourth year in the programme.

#### **Research Project Report**

- 1. All students must submit a research project to the Campus Committee for Graduate Studies through the Unit Coordinator of the Postgraduate programme, at least six months before the final Part II examination (MEDC 6672)
- 2. This should form a distinct contribution to the knowledge of the subject presented. It must be of satisfactory literary standard and should attain standards suitable for publication in a peer reviewed journal. It should not exceed 20,000 words but must not be less than 8,000 words and must follow the University's Guide for the Preparation of Theses, Research Papers and Project Reports.
- 3. The review of the literature should not be more than 25% of the project report.
- 4. The research project must have been previously agreed on by the Specialty Board and must be carried out under the guidance of a supervisor appointed by the Campus Committee for Graduate Studies on the recommendation of the Specialty Board.
- 5. The reference style used will follow the West Indian Medical Journal (WIMJ) guidelines available under Instructions for Authors on the WIMJ website. This entails quoting the references in the text as Arabic numerals within plain brackets (no square brackets or superscripts).
- 6. The research project report must be typewritten and printed on one side only of good quality white bond paper (usually of 20 lb. weight) 8½"x 11" (Standard Letter Size), with 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 report.
- 7. Students are advised to discuss the preparation of the research project report with their supervisor(s) while it is in preparation and should not wait until it is completed. This project offers the students the opportunity to study in detail, conditions of their own choice and to express views based on personal investigation and on review of the literature. From these project reports, the examiners will assess the critical faculties, powers of observation and the level of evaluation of various techniques used in the area of anaesthesia &/or intensive care chosen by the students.

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The submission dates for the research project are as follows:

- o For DM students sitting the May/June examinations- December 15
- For DM students sitting the November/December examination- June 15
- 8. Following the submission of the work, the examiners may:
  - o accept the work and the student may proceed to the examinations
  - o accept the work with modification, which must be carried out in the time specified and resubmitted
  - o reject the work with recommendations regarding changes, additions, or revisions necessary for acceptance. A date for resubmission will be determined by the Speciality Board in Anaesthesia and Intensive Care.
- 10. The research project report should be submitted for assessment at least six months before the date of the final examination. Acceptance of the project report is a prerequisite to proceed to the final examinations. If the work is found to be unsatisfactory and requires major changes, the student will not be allowed to sit the final examination and will be deferred until the next sitting provided that the resubmission is accepted. The Part II (MEDC 6672) examination must be attempted for the first time within one year of the acceptance of the research project report.

#### Case log & minimal competencies

- a) Students are required to keep a record of all anaesthesia and intensive care procedures performed. In addition they are required to complete a predetermined list of minimal competency in cognitive and procedural skills felt to be fundamental to the training of specialists in anaesthesia and intensive care.
- b) The following three (3) requirements must be completed before the Part II examination:
  - i. A satisfactory standard of in-course assessments
  - ii. Case log & minimal competencies
  - iii. Research Project report
- g) If a candidate fails the DM Part II examination (MEDC 6672), he/she may be allowed no more than one more attempt and, in accordance with the recommendation of the Speciality Board of Examiners, the candidate may resit the examination
  - i. in six (6) months
  - ii. in one (1) year

If the candidate is unsuccessful at the second attempt, then he/she will be required to withdraw from the DM programme.

#### **Teaching Methods**

The programme will be a minimum of four years from the date of entry. At least three years of the programme must be spent in the Commonwealth Caribbean. Throughout the programme, candidates must hold recognized posts in accredited hospitals or be on an 'elective' approved by the Board for Graduate Studies and Research through the Faculty Committee for Graduate Studies or "equivalent bodies". A minimum of three (3) months in the first two (2) and three months in the last two (2) years must be spent at the University-affiliated hospital of the campus territories. The remaining time may be spent in accredited hospitals.

The course will be administered under the general supervision of the Unit Coordinator, nominated by the Head of the Department and appointed by the Campus Committee for Graduate Studies and Research. The Unit Coordinator will normally be the Chair of the Specialty Board in Anaesthesia and Intensive Care. Each student will be assigned to a supervisor, who is a member of the Specialty Board in Anaesthesia and Intensive Care. The supervisor will provide academic guidance as to the choice or assignment of rotations, the elective period and direction in the conduct of their research and all other relevant matters.

The candidate is supervised during their clinical work and training is imparted in the various clinical skills of Anaesthesia and Intensive care. Postgraduate seminars are held weekly with assigned topics for the candidates to present and ensuing discussions will be part of enhancing the theoretical knowledge.

The Specialty Board in Anaesthesia and Intensive Care is overall in-charge of the programme. The sole and final authority on all matters concerning the programme is the Campus Board for Graduate Studies and the University Senate.

Teaching and training in teaching methods and research methodology are integral components of the programme. All trainees should appreciate the need for ongoing research in the field and are encouraged to cooperate with research efforts of department/unit members.

A list of accredited hospitals is given below and also may be obtained from the Graduate Studies Section of the Dean's Office. Some are accredited only for the first part of the course; others are accredited to provide training in the second part of the

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course for a specified time. To gain credit for such a period the candidate must submit a satisfactory assessment report from their supervisor.

#### **TRINIDAD**

- 1) Port of Spain General Hospital
- 2) San Fernando General Hospital
- 3) Eric Williams Medical Sciences Complex
- 4) Mount Hope Women's Hospital (approved only Part I 3 months, Part II 6 months)
- 5) Scarborough General Hospital (approved for Part I in some programs only)
- 6) Sangre Grande Hospital (approved for Part I in some programs only)

#### **JAMAICA**

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

#### **BARBADOS**

1) Queen Elizabeth Hospital (QEH)

#### **Continuous Assessment**

- a) Continuous assessment of the candidate's performance is carried out by his/her supervisor and recorded every six (6) months. The supervisor will be a member of the Specialty Board in Anaesthesia and Intensive Care. The attributes assessed and scored are: Practical skill abilities, Confidence level, Willingness to learn, Punctuality and Attendance, Aptitude & Professionalism.
- b) If the assessments are found to be unsatisfactory, the Specialty Board may recommend one or more of the following:
  - i. Counselling/academic warning in writing
  - ii. Remedial work
  - iii. Repeating the unsatisfactory rotations
  - iv. Withdrawal from the programme, if poor performance persists

#### **Examinations**

- a) On acceptance to the programme, during the first one (1) year period, the candidate's performance will be assessed continuously at regular intervals. At the end of one year, there will be an in-house examination. Any candidate, who fails the overall assessment during this period, will be required to withdraw from the programme.
- b) Students are normally expected to present themselves for the first examination being held following completion of the various Parts. In exceptional circumstances (such as ill health), a student may request permission from the Board for Graduate Studies and Research to defer the date of the first sitting.
- c) Students who have deferred sitting of an examination must sit the examination within one year of the deferral being approved.
- d) Candidates must register for the examination at the appropriate time.
- e) Before admission to any examination, candidates must be certified by their supervisors as having completed the relevant parts of the programme.
- f) Should any candidate fail the examination of any Part at the first attempt, completion of this part must be within one calendar year of the first attempt.
- g) No student will be allowed more than two attempts at any one examination. A candidate who fails the second attempt will be required to withdraw from the programme. Re-admission of candidates will be in accordance with the University regulations for Graduate Diplomas and Degrees.
- h) Examinations are normally held twice per year in May/June and November/December. The hosting of the clinical component and the oral examinations is rotated amongst the three University campuses.
- i) The DM (Anaesthesia & Intensive Care) programme will normally last four years. During the four years after enrolling in the DM programme, a successful candidate will normally take the common cross-campus internal examination at the end of the Year ONE. At the end of Year TWO, one year after successful completion of internal exam, the successful candidate will normally take the Part I (MEDC 6671) examination. At the end of Year FOUR, two years after successful completion of the Part I exam, the successful candidate will normally take the Part II (MEDC 6672) examination. The candidate must fill the other requirements as set out by the Speciality Board in order to be allowed to take the examinations.

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#### j) Internal examination

- The internal examination will normally be attempted at the end of Year ONE.
- The internal examination will be held in all the three Campuses on the same day.
- If the candidate fails this examination, he/she will be allowed no more than one more attempt/ resit of the examination in six (6) months but no later than one (1) year after failing the internal examination.
- A candidate who fails the internal examination for a second time will be required to withdraw from the programme. There will be no more attempts allowed for this examination.

#### k) The Part I (MEDC 6671) examination

- The Part I examination will normally be attempted at the end of Year TWO.
- The Part I examination comprises of a written paper and a multiple choice (MCQ) paper and an oral examination.
- Candidates will be invited to the oral examination depending on their performance in the MCQ paper. Candidates receiving a mark of less than 45% in the MCQ paper will not be invited for the orals as this represents an irretrievable situation.
- Continuation of a candidate in the training programme will be dependent on the recommendation of the Specialty Board, based on his/her continuous assessments and the results of the Part I examination.
- If the candidate fails the Part I examination, he/she may be allowed, no more than one more attempt/ resit of the examination, in accordance with the recommendation of the Speciality Board, in six (6) months or one (1) year after failing the examination.
- If the candidate is unsuccessful at the second attempt of the Part I examination, then he/she will be required to withdraw from the DM programme.

#### I) The Part II (MEDC 6672) examination

- The Part II examination will normally be attempted at the end of Year FOUR.
- The research project report must be submitted no later than six (6) months prior to the Part II examination. The project report must be accepted before the candidate can proceed to the Part II examination.
- The Part II (MEDC 6672) examination comprises of two written papers, a clinical and an OSCE type examination and an oral examination.
- The candidate must sit the Part II examination within one (1) year of acceptance of the research project report. The candidate must sit the Part II examinations within 3 years of passing the Part I examination.
- Candidates MUST pass ALL papers/ components of the examination to be deemed an overall pass, regardless of the cumulative score.
- If the candidate fails the clinical examination, the candidate CANNOT PASS the Part II (MEDC 6672) examination, even if he/she has passed the other components of the examination.
- If the candidate fails the Part II examination, he/she may be allowed, no more than one more attempt/resit of the examination, in accordance with the recommendation of the Speciality Board, in six (6) months or one (1) year after failing the examination.
- If the candidate is unsuccessful at the second attempt of the Part II examination, then he/she will be required to withdraw from the DM programme.
- m) Candidates must conform to the University Regulations on Examinations for Higher Degrees. Any further examination details can be obtained from the UWI Anaesthesia and Intensive Care Unit.

#### Criteria for Award of Degree

Students will be considered as having successfully completed the programme when the following FOUR requirements have been met:

- 1) Satisfactory performance of all rotations
- 2) Acceptance of their certified case log/minimal competencies
- 3) Acceptance of the Research Project
- 4) Satisfactory performance in Part I (MEDC 6671) and II (MEDC 6672) examinations

Once a candidate completes the requirements – Pass ALL components of MEDC 6671 and 6672 and satisfactory acceptance of Research Project this information will be sent as a grid to Office of Graduate Studies and Research with a recommendation to award DM Degree.

Please contact the following person(s) responsible for distribution of packages and orientation (once accepted into the programme):

#### Professor Hariharan Seetharaman

Building 5, First Floor, EWMSC Telephone: 225-4673 - Extension 2360 Email: hariharan.seetharaman@sta.uwi.edu

# POSTGRADUATE REGULATIONS & SYLLABUSES 2016 - 2017 THE FACULTY OF MEDICAL SCIENCES

### **DM Emergency Medicine**

**Department of Clinical Surgical Sciences** 

#### **Qualifications for Entry**

MBBS from accredited medical school, full medical board registration, at least 1 year experience in an Emergency Department, presently working in an Emergency Department in one of the main hospitals; previous resuscitation courses recommended (ACLS, APLS, ATLS).

#### Aims and Objectives of Programme

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.

#### **Programme Structure and Curriculum**

The DM Emergency Medicine is a 4-6 year part time programme commencing in January (Semester II) each year. Courses for which students must register are provided below:

<b>Course Code</b>	Course Title	Year Offered	Semester Offered	Prerequisite
MEDC 6657	DM Emergency Medicine Part I: Year 1	Year 1	I & II	-
MEDC 6658	DM Emergency Medicine Part I: Year 2	Year 2	I & II	-
MEDC 6637	DM Emergency Medicine Part I Examination	Year 2	I & II	5 completed cases in the Casebook
MEDC 6659	DM Emergency Medicine Part II: Year 3	Year 3	I & II	MEDC 6637 Part I Examination
MEDC 6660	DM Emergency Medicine Part II: Year 4	Year 4	I & II	-
MEDC 6647	DM Emergency Medicine Part II Examination	Year 4	I & II	All 10 cases and Research component of Casebook must be completed and passed.

**Rotations:** Students are expected to complete six months per year in emergency room rotations. The other six months are spent rotating through relevant subspecialty areas including: Anaesthetics and ICU, Paediatric Emergency (6 months), Internal Medicine, Surgery/Radiology, Orthopaedics, Community, Obstetrics and Gynaecology and Psychiatry, Elective. Each rotation will be 3 months.

#### **Teaching Methods**

Clinical supervision, weekly tutorials, bed side teaching, grand rounds, pod casts, short courses for practical skills, journal reviews, scenario practise, mini conferences, weekly department clinical teachings, Resuscitation courses.

The majority of 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.

**For 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.

Candidates will be expected to attend other educational activities during their course, including departmental teaching (both in Emergency Medicine and during secondments) and monthly Emergency Medicine Grand Rounds.

#### **Continuous Assessment**

Feedback from supervisors and feedback from residents on modules, mock exams, short exams, regular appraisals every 3 to 6 months within rotations and out of rotations.

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#### **Final Examinations**

Written exam, OSCE and orals. 5 accepted cases of casebook required before eligible for DM part 1 exam. Completion and acceptance of casebook required before eligible for DM part 2 exam.

### Criteria for Award of Degree

Students must pass all components of the exam before the degree is awarded.

Please contact the following person(s) responsible for distribution of packages and orientation (once accepted into the programme):

### Ms Oli-Ann Atkinson / Ms Melrose Yearwood

Building 14, 3<sup>rd</sup> Floor, Room 302/Building 14, 2<sup>nd</sup> Floor, Room 205

Telephone: 645-3232: Extension 2862/2864

Email: oliann.atkinson@sta.uwi.edu; melrose.yearwood@sta.uwi.edu

## **DM Family Medicine**

**Department of Paraclinical Sciences** 

### **Qualifications for Entry**

Candidates must have completed the Diploma in Family Medicine (or equivalent from a recognized university) in order to apply for the DM programme. It is mandatory that all applicants be fully registered for practice and be actively engaged in primary care work at the time of application.

### Aims and Objectives of Programme

- 1. To create the specialist Family Physician.
- To train postgraduate students of medicine in a wide range of knowledge, skills and attitudes appropriate to the practice of Family Medicine in the community;
- 3. To impart and enhance knowledge in the personal, family and social aspects of health, illness and disease;
- 4. To enhance professional competence, values and behaviours that are inherent to the discipline of Family Medicine;
- To enhance the skills of critical reflection and assessment of professional activities, enabling them to meet the changing health needs of patients, families, and their communities, and the changing demands of health care in modern societies.
- 6. To promote skills in effective, continuing medical education, to revise past knowledge, and to keep abreast of advances in medical science and technology appropriate to Family Medicine;
- 7. To enhance knowledge and skills in health promotion, disease prevention and risk management;
- 8. To develop the research skills to create new knowledge pertinent to Family Medicine in the West Indies.

### **Programme Structure and Curriculum**

This 2-year part-time programme covers the following course:

<b>Course Code</b>	Course Title	Year Offered	Semester Offered	Prerequisite
MEDC6310	Research Methodology	1	1	Students will not be allowed to
MEDC6120	Statistics	1	1	register for the DM in Family
MEDC6802	Evidence Based Med (MSc)	1	2	Medicine without first
MEDC6600	Counselling for Primary Care Physician	1	2	satisfactorily completing the 2- year Diploma in Family Medicine
To be advised	Presentation of the Research Proposal	1	2	programme.
MEDC6641	Research Proposal/Short Project	1	2	
MEDC6642	MSc Family Medicine Paper I & II	1	2	
MEDC6650	DM Family Medicine	2	2	

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### **Teaching Methods**

Teaching is primarily through face-to-face sessions led by lecturer and seminars led by students.

Adult learning principles are employed to identify gaps in knowledge and practice and opportunities identified to address these gaps.

#### **Continuous Assessment**

#### Year 1 (DM)

Students are expected to register for the following core courses:

- Research Methodology (MEDC 6310)
- Statistics (MEDC 6120)

Optional Courses (students must do two of the following depending on availability)

- 1. Counselling Skills for Primary Care Physicians (MEDC 6600)
- 2. Procedural Skills for Primary Care Physicians minor surgical skills
- 3. Management Skills for the Primary Care Physician
- 4. Evidence-Based Medicine Part II (MEDC 6802) an extension on the 6-week programme offered during the Diploma focusing on individual learning and advanced tools.

#### Final Examinations

Students who have achieved pass marks for the above 4 required courses will be allowed to undertake the final examination. Student assessment for year 1 will consist of:

- Presentation of Research Proposal 40% of the final mark
- Coursework 20% of the final mark
- Written papers (MEDC 6641 and MEDC 6642) 40% of the final mark

#### Year 2 (DM)

This year is dedicated to completion of the research proposal submitted in year 1. Although clinical work is a required part of the DM year, the major task is the actual data collection, data analysis and submission of an in-depth report. University requirements also allow for an in-depth case book of at least 12 cases to be presented for the DM.

### Criteria for Award of Degree

- Year 1: To be successful candidates are required to achieve a passing grade in all components of the assessment above.
- Year 2: Defence of the report will be the major assessment for year 2 of the DM (MEDC 6650).

Please contact the following person(s) responsible for distribution of packages and orientation (once accepted into the programme):

### Dr Rohan Maharaj

Bldg 25, First Floor (Family Medicine office)

Telephone: 770 6953 or 645 6741 Email: rohan.maharaj@sta.uwi.edu

### **DM General Internal Medicine**

**Department of Clinical Medical Sciences** 

### **Qualifications for Entry**

Graduates of Medical Schools approved by the Medical Board of Trinidad and Tobago. Candidates **mus**t have successfully completed their internship and be fully registered with the Medical Board of Trinidad and Tobago.

Date of Entry: The date of entry will normally be January or July and as determined by the date when the candidate begins to work in a recognised post in an accredited hospital. Application to enter the programme may be made before securing such a post. The applicant may then receive from the School of Graduate Studies and Research, on the recommendation of the Faculty Committee for Graduate Studies, provisional acceptance for entry to the programme contingent on the obtaining of an accredited post. After the successful applicant has secured an accredited post, the date of entry will be fixed by the School of Graduate Studies and Research. te of entry will be fixed by the School of Graduate Studies and Research. sed post. For the purposes of the above two paragraphs, the successful applicant must furnish evidence of being in a recognised post.

**Exemptions:** Candidates who have completed all or part of another graduate course in Internal Medicine or who have gained relevant experience at this level in a recognised institution may apply for exemption from that part of the D.M. programme. The specialty Board in Internal Medicine will consider such applications. Applications would be considered on an individual basis.

### Aims and Objectives of Programme

The aim of the D.M. in Internal Medicine is to train doctors in the specialty of Internal Medicine to a level that allows them to provide clinical support and administrative leadership to their Medicine Departments. Successful D.M. candidates will practice at the level of consultants in (General) Medicine. The D.M. programme will accept candidates at House Officer level with minimal experience in Internal Medicine and achieve the above goal within the four-year training period.

- To ensure that participants have an appreciation of personnel management, adult learning techniques, disaster management, financial management and quality assurance (including clinical and non-clinical audit).
- To promote a culture of continuing professional development among Internists. This would include the use of Evidence
  Based Medicine, the production and maintenance of personal portfolios and fostering reflective learning in clinical
  practice.
- To create a cadre of appropriately trained and certified Internists in Trinidad and Tobago, to fulfil local and regional needs.
- To define, regulate and monitor standards related to the certification of individuals involved in the provision of medical care in Trinidad and Tobago and the region.
- To encourage participants to develop a specialty interest.

### **Programme Structure and Curriculum**

The four-year D.M. programme is a full-time residency programme, of which approximately two thirds of this time is spent in Internal Medicine under the direct supervision of Internal Medicine consultants. The rest of the programme consists of rotations through acute specialties relevant to Internal Medicine

Course Code	Course Title	Year Offered	Semester Offered	Prerequisite
Part 1				MBBS
MEDC 6680	DM (General Internal Medicine) Pt. 1 Paper 1 – MCQ	Year Long	I & II	-
MEDC 6681	DM (General Internal Medicine) Pt. 1 Paper 2 - Long Answer	Year Long	I & II	-
MEDC6682	DM (General Internal Medicine) Pt. 1 Paper 3 - Clinical	Year Long	1 & 11	-
MEDC 6683	DM (General Internal Medicine) – Dissertation	Year Long	1&11	-
Part 2				DM GIM Part 1
MEDC 6684	DM (General Internal Medicine) Pt. 2 Paper 1- MCQ	Year Long	I & II	-
MEDC 6685	DM (General Internal Medicine) Pt. 2 Paper 2 - Long Answer	Year Long	I & II	-
MEDC 6686	DM (General Internal Medicine) Pt. 2 Paper 3 - Clinical	Year Long	I & II	-
MEDC 6687	DM (General Internal Medicine) Pt. 2 Paper 4 – Oral	Year Long	1&11	-

### **Teaching Methods**

Candidates are expected to rotate through the following sub-specialties:

#### Year I: Emphasis on General Internal Medicine

General Internal Medicine (3-6 months)

### Year II: Emphasis on subspecialty care (10 weeks each) - will involve rotation through several hospitals

- CNS/Neurology
- Cardiology
- ICU
- Gerontology
- Haematology / Geintourinary Medicine (choose any 1)
- Gastroenterology
- Primary Adult Care 24 months (concurrent)
- Vacation leave (2 weeks every 6 months (concurrent)
- Pulmonology
- Gastroenterology

Formulate a research proposal under supervision While on secondment to the above specialties candidates will be under the direct supervision of the consultant in the specialty. Supervising consultants need not be a full- time academic staff member of UWI. They will, however, maintain their links with Internal Medicine through attendance at regular tutorials and training sessions for all D.M. candidates.

**Year III:** During third year, candidates will have the opportunity to spend 12 months in an elective specialty of their choice for research in Trinidad or abroad. Any research project (MEDC6683) undertaken MUST be under full supervision of Full Time UWI Staff of the Adult Medicine Unit. Research leading to peer-reviewed publications is highly recommended.

The research project will be assessed on the basis of a research report which must be submitted in the form of a journal paper written according to the Vancouver style and following the guidelines for articles requested by the West Indian Medical Journal. The paper must be written on research work initiated during a candidates period of registration for the DM Internal Medicine programme and will be marked according the regulations 3.11 and 3.12 in section I of the "Regulations for Graduate Diplomas and Degrees (with effect from August 2014)".

Year IV The final year of training may be deferred by I year if the resident engages in a recognised research programme leading to a postgraduate academic degree in Medicine (MSc, MPhil, PhD). During the fourth year (final year) the resident returns to the University Hospital for further intensive training in General Internal Medicine.

### **Clinical Training Guidelines**

A trainee must have the following:

- On call duties 1:4 to 1:6 per month.
- Post call ward rounds during which they present their admissions to the consultant whose patients they are.
- Experience the consultant making decisions.
- Role modeling opportunities with Consultants.
- Procedures which must initially be supervised and are to be evaluated in the professional assessment form.

If in the opinion of the supervising consultant there are unusually frequent complications of procedures then these should be reported to the Program Director in addition to invoking whatever procedures that are locally applicable.

- Procedures should be recorded as: Procedure Name / Performed by whom/ witnessed / consent / method / observations / plan.
- At clinic the opportunity to see a wide selection of cases and be able to discuss these with the consultant.
- The assessment form for each rotation must be completed by the resident as well as an assessment with feedback by each supervising consultant.

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- Communication skills training. This is extremely important and cannot be overemphasized.
- Medical record keeping skills which are extremely important and should be supervised.

#### Student Presentations

- A roster will be created with weekly class meetings where residents will be expected to present Topics under the supervision of a medical specialist.
- Residents will meet once monthly for Journal Club meetings with Faculty where they will have the opportunity to critically
  appraise current medical journal articles

### **Continuous Assessment**

### A Six Monthly Formative Evaluation of Residents

Each resident in the DM (Medicine) programme will undergo formal assessment by Faculty every 6 months. Assessment will take the form of criterion-referenced clinical and oral examinations alternately and residents will not be allowed to progress in the programme unless performances are satisfactory. After each assessment the Programme Director or Head meets with each resident to provide feedback, identify weaknesses and suggest remedial action. Numeric, categorical and narrative assessment records will be recorded. In addition to the above the residents will be assessed by clinical consultants with whom they rotate using standardised qualitative instruments and would be included in progress reports.

#### **OSCE Clinical Examinations**

· Residents will have at least twice yearly clinical examinations where clinical skills will be assessed by faculty.

#### **Final Examinations**

#### Promotion from Year to Year within the Programme

This is not an automatic process. Students are required to show proficiency at the level required for promotion and this also requires competence as demonstrated at the periodic semester examinations. Promotion to Year 4 requires completion of the research project.

#### DM Part I Examination (MEDC6680, MEDC6681, MEDC6682)

Once the residents have progressed satisfactorily through the first 2 years of the training programme (including satisfactory evaluations) they will be allowed to take the Part I DM examination. This consists of a written examination (essay MEDC6681 and multiple choice questions MEDC6680) and an objective structured clinical examination (OSCE) MEDC6682. The candidate is required to pass both parts of this examination at the same sitting in order to progress to Part II.

### DM Part II Examination (MEDC6684, MEDC6685, MEDC6686, MEDC6687)

Years 3 and 4 will be assessed as per the protocols of the first 2 years. Only candidates who have obtained satisfactory reports at the end of the 4th year will be eligible to sit the Part II examination. The Part II examination consists of two written papers (one essay MEDC6684 and one multiple choice MEDC6685), a clinical examination (OSCE) MEDC6686 and an oral examination MEDC6687. This examination is an "exit examination" with emphasis on a high level of competence in clinical skills, communications, problem solving as well as aptitude, attitude and knowledge so that to be successful the candidate must be capable of functioning at consultant level in the Caribbean context. Each candidate is required to pass each part of the clinical examination individually in order to obtain a passing grade.

### Criteria for Award of Degree

#### Distinctions

These will be awarded using accepted UWI standard according to the Regulations for Graduate Diplomas and Degrees. Please contact the following person(s) responsible for distribution of packages and orientation (once accepted into the programme):

### Dr Ronan Ali

Department of Medicine, 2nd Floor, Building 67, EWMSC

Telephone: 663-4332

Email: Ronan.Ali@sta.uwi.edu

## **DM General Surgery**

**Department of Clinical Surgical Sciences** 

### **Qualifications for Entry**

- 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. Date of Entry 1st January or 1st July
  - a) 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. The date of entry will be determined by the School of Graduate Studies and Research after the candidate has secured such a post.
- 3. The candidate who has been shortlisted after successful completion of an interview will be offered a provisional place in the programme. After the application has been processed by the University, the applicant will be officially informed of the date of entry by the Campus Registrar.

### Aims and Objectives of Programme

The programme's aim is 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.

### **Programme Structure and Curriculum**

1. The DM General Surgery is a 5-year part time programme covering the following courses:

<b>Course Code</b>	Course Title	Year Offered	Semester Offered	Prerequisite
MEDC 6620	DM Part I - Surgery	1, 2	I and II	
MEDC 6621	DM Part II - Surgery	3, 4, 5	I and II	MEDC 6620
MEDC 6649	DM Surgery - Part III	5	I and II	MEDC 6620

- 2. The programme consists of two parts:
  - a. The first part of the programme normally occupies four (4) semester or two (2) years. The Part I examination is taken at the end of the fourth semester (two years) but no later than three (3) years after entry into the programme. Residents must complete the DM Part I after three (3) years of the commencement of the programme.
  - b. The second part of the programme, normally of three (3) years duration, is spent exclusively in the speciality. A maximum of one year may be spent in an approved training programme at another institution (regionally or internationally) provided there have been satisfactory in-course assessments.
  - c. Candidates will be eligible to sit the Part II examination at the end of the three years in Part II (i.e. at the end of year V), but not greater than four years (at the end of year VI) after successful completion of the Part I examination.
- 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 case book of twenty (20) cases. These cases should cover the range of pathology seen in the practice of general surgery. Five of the cases submitted may be rare cases of unique clinical relevance that may have important educational content suitable for journal publication. The book should not exceed 300 pages or
  - b. A clinical research project report or research thesis. This option should have been previously agreed on at the commencement of the Part II programme by the Speciality Board and the project carried out under the guidance of a supervisor appointed by the Campus Committee for Graduate Studies and Research on the recommendation of the Speciality Board in Surgery or
  - c. A casebook of ten cases and a clinical research project e.g. a pilot project not exceeding 8,000 words. The latter could provide the basis to conduct a Clinical Research Project on clinical material to be later developed into a publication. The students' research project or their book of twenty cases or their book of ten cases and clinical research project

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MUST be submitted through TURNITIN or some plagiarism software. The report must be included in the submission. Three (3) copies on CD have to be submitted.

- 4. The option 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. accept the work, with minor changes. The student can proceed to the exam and submit the corrected version three (3) months from the date of the examination
  - reject the work and the candidate has six (6) months to make the corrections and resubmit for assessment. He/
     She cannot proceed to exam.
- 5. Candidates must have reached a satisfactory standard during the in-course assessments before being allowed to enter for the Part II examination.
- Before being admitted to the Part II examination, all trainees are required to submit a tabulation of all operations performed/ assisted by them and certified by their supervisor during the period of training.
- 7. During the first two (2) years of the programme in General Surgery the trainee will rotate through any six to eight (6-8) of the following specialties for a period of THREE (3) months EACH
  - General Surgery (six (6) months mandatory)
  - Orthopaedics
  - Pathology (highly recommended)
  - Neurological Surgery
  - Cardiothoracic Surgery
  - Paediatric Surgery

- Plastic Surgery
- Urology
- Otolaryngology
- Anaesthetics/ICU (highly recommended)
- Elective period of three (3) months
- 8. 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 the entire 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.
- 9. Each DM candidate can have a maximum of forty-two (42) calendar days or six (6) weeks leave per annum. A candidate in the DM part I; is allowed a maximum of two (2) weeks or fourteen (14) calendar days in every three (3) month rotation up to six (6) weeks per year. A candidate in the DM Part II is allowed a maximum of three (3) weeks in every six (6) months).
- 10. Each DM candidate is expected to fully participate in journal presentations, oncology and radiology multidisciplinary team meetings and morbidity and mortality meetings, grand rounds, research activities and tutoring of the undergraduates.
- 11. Details of the programmes may be obtained from the Chairman of the Specialty Board or the School of Graduate Studies and Research.
- 12. The clinical responsibilities of the candidate will be defined by the Head of Department/Consultant of the institution of employment.

### **Exemptions**

 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.

### **Deferral and Leave of Absence**

(Refer to the **University Regulations**)

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### **Teaching Methods**

Each DM candidate is expected to fully participate in classroom sessions, journal presentations, oncology and radiology multidisciplinary team meetings and morbidity and mortality meetings, grand rounds, research activities and tutoring of the undergraduates.

#### **Continuous Assessment**

Trainees will be assessed at the end of each rotation and annually by the department. Those with unsatisfactory records will be encouraged to improve; but if poor performance persists they will be asked to withdraw from the programme.

### **Final Examinations**

#### PART I

The Part I examination will consist of a Written or MCQ and Oral component of the following:

- a. Section A Principles of Surgery
- b. Section B Anatomy, Basic Pathology, Physiology (Including Biochemistry)

The students must pass Section A, and at least two (2) parts of Section B to qualify for entry into the second part of the programme.

#### MEDC 6620 PART I

The Part I examination will consist of a Written and Oral component. Students must sit the Part I Examination no later than three (3) years after entering the programme.

Candidates **MUST** successfully complete Anatomy, Pathology, Physiology, and Principles of Surgery, to proceed to the DM Part II General Surgery. It is stipulated that each candidate has **TWO (2) attempts** of the Part I examination. A candidate who has his first attempt at the exam and is not successful at this first setting will have to re-sit the exam as follows:

- a. A candidate who successfully completes three components, one of which is Principles of Surgery will re-sit the failed exam six (6) months from the date of the last sitting i.e. if the exam was written in May/June the re-sit will be in November/December and vice versa. This candidate will be allowed to proceed to the DM Part II pending the re-sit.
- b. A candidate who successfully completes three components at the exam, not including Principles of Surgery, will re-sit six (6) months from the date of the last sitting i.e. if the exam was written in May/June the re-sit will be in November/December and vice versa. This candidate will NOT be allowed to proceed to the DM Part II pending the re-sit.
- c. A candidate who successfully completes two components, one of which must be Principles of Surgery at the exam and the examiners, at their meeting have deemed that this candidate requires only minor remediation, that candidate will re-sit the two failed components in six (6) months from the date of the last sitting i.e. if the exam was written in May/June the re-sit will be in November/December and vice versa. This candidate will NOT be allowed to proceed to the DM Part II pending the re-sit.
- d. A candidate who successfully completes two components at the exam not including Principles of Surgery will resit the two components in **one (1) year** from the date of the last sitting i.e. if the exam was written in May/June the re-sit will be in May/June of the subsequent year.
- e. A candidate who successfully completes only one component of the exam will re-sit the three failed components one (1) year from the date of the last sitting i.e. if the exam was written in May/June the re-sit will be in May/June of the subsequent year.
- f. A candidate who fails all four components at the first sitting will have to re-sit all components **one (1) year** from the date of the last sitting i.e. if the exam was written in May/June the re-sit will be in May/June of the subsequent year. If the candidate performed extremely badly, he/she may be given an opportunity to exit the program.
- g. The examination MUST be completed within ONE Calendar Year of the First Attempt.

### MEDC 6621 PART II

- 1. The Part II examination has three (3) components:
  - a) Research project/casebook (Twenty Cases)
  - b) Written Exam
  - c) Oral Exam

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- 2. The candidate must have submitted the research project or casebook to qualify to sit the exam in accordance with the guidelines in the programme and structure and curriculum point 3. He or she must also be deemed fit to sit the exam by the Specialty Board.
- Candidates must have completed the following three (3) requirements before being allowed to sit the Part II examination:
  - i. Satisfactory continuous in-course assessment
  - ii. Satisfactory completion of the Part I assessment
  - iii. Accepted Clinical Research
- 4. The written exam consists of two (2) papers both of which must be passed.
- 5. The oral exam is conducted by the External and Regional Examiners. The logbook of cases should be presented at this exam.

Candidates **MUST** successfully complete all components of the exam to be awarded the Doctor of Medicine General Surgery. If the candidate fails, the exam he/she will be given the opportunity to re-sit in one (1) year. There are only **TWO** (2) attempts for this exam. Students who do not pass Part II within five (5) years of completion of Part I will normally be required to withdraw from the programme. Failure at the second attempt will necessitate withdrawal from the programme. The student may not reapply to the programme after withdrawal.

### Criteria for Award of Degree

- 1. A candidate is deemed to complete the programme if they have met the following requirements:
  - a. Year 1 Satisfactory performance in the Part I Year I Examination
  - b. Year 2 Pass ALL parts of the Part I Year 2 Examination in the same sitting
  - c. Clinical Research project acceptance and submission of the corrected project
  - Part II Pass each written paper, pass the clinical examination and pass the oral examination in the same sitting.
- 2. Students who do not pass Part II within four (4) years of completion of Part I will normally be required to withdraw from the programme.
- **3.** Failure at the second attempt will necessitate withdrawal from the programme.

Please contact the following person(s) responsible for distribution of packages and orientation (once accepted into the programme):

**Dr Maharaj, Ravi** - Lecturer (Surgery); Coordinator DM General Surgery

Building 68/Third Floor Telephone: 663-4319

Email: ravi.maharaj@sta.uwi.edu

Melrose Yearwood (Orientation)

14/ Second Floor/Room 205 Telephone: 645 3232 ext 2864

Email: melrose.yearwood@sta.uwi.edu

# **DM Medical Oncology**

**Department of Clinical Medical Sciences** 

### **Qualifications for Entry**

Candidates must have successfully completed DM Part I (General Internal Medicine) (Two Years)

Date of Entry: The date of entry will normally be January or July and as determined by the date when the candidate begins to work in a recognised post in an accredited hospital. Application to enter the programme may be made before securing such a post. The applicant may then receive from the School of Graduate Studies and Research, on the recommendation of the Faculty Committee for Graduate Studies, provisional acceptance for entry to the programme contingent on the obtaining of an accredited post. After the successful applicant has secured an accredited post, the date of entry will be fixed by the School of Graduate Studies and Research. The applicant will be informed of the date of entry by the relevant Campus Registrar. For the purposes of the above two paragraphs, the successful applicant must furnish evidence of being in a recognised post.

Exemptions: Candidates who have completed all or part of another graduate course in Internal Medicine or who have gained relevant experience at this level in a recognised institution may apply for exemption from that part of the D.M. programme. The

### Aims and Objectives of Programme

A trainee who has completed the DM programme in Medical Oncology must achieve competence in the practice of Medical Oncology at specialist level, including a working knowledge of:

specialty Board in Internal Medicine will consider such applications. Applications would be considered on an individual basis.

- relevant scientific and clinical principles,
- research methods,
- sites and types of cancer,
- · evaluation and assessment methods, and
- multidisciplinary treatment.

The candidate's clinical competencies at specialist level are to include clinical assessment, multidisciplinary treatment planning, treatment of cancer with medical therapies (chemotherapy, hormonal therapy, and molecular targeted therapies), management of complications and emergencies, response assessment, supportive care and end-of-life care, bioethics, communication and professionalism, management and leadership skills, and competence in relevant practical procedures, in keeping with the ASCO/ESMO recommendations for a global core curriculum in Medical Oncology.

The candidate is to achieve knowledge and competence in areas as follows:

- Theoretical knowledge and practical skills for the competent, safe, ethical and compassionate practice of medical oncology at the level for which they have been trained.
- A capability to manage cancer patients comprehensively, including:
  - the complications associated with malignant disease and its treatment;
  - · rehabilitation and palliative care;
  - psychosocial aspects
- Knowledge of the epidemiology, aetiology, pathology and natural history of human neoplasia.
- Familiarity and skills in the choice of all necessary and available diagnostic aids in the diagnosis and management of cancer.
- Expertise in medical oncology at the required level based on the available resources and knowledge of the whole scope of medical oncology.
- Familiarity with the role of surgery, radiation oncology and other medical disciplines involved in the management of neoplastic diseases.
- Capacity to interpret current advances in cancer care and research (clinical, laboratory or basic).
- A basic knowledge of the different statistical methods used in the interpretation of data related to cancer (with special emphasis on planning and interpretation of clinical trials).
- Sufficient interest, knowledge and skills to contribute to future developments of medical oncology.

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### **Programme Structure and Curriculum**

The four-year D.M. programme is a full-time residency programme, of which approximately two thirds of this time is spent in Internal Medicine under the direct supervision of Internal Medicine consultants. The rest of the programme consists of rotations through acute specialties relevant to Internal Medicine.

Course Code	Course Title	Year Offered	Semester Offered	Prerequisite
Year I				DM GIM Part 1
To be advised	Medical Oncology - Introduction	I	I & II	
To be advised	Radiation Oncology	I	1&11	
To be advised	Haematology	I	I & II	
Year II				
To be advised	Medical Oncology Intermediate	II	1&11	
To be advised	Urologic / Gynaecologic Oncology	II	1&11	
To be advised	Palliative Care	II	I & II	
To be advised	Elective	II	1&11	
Year III				
To be advised	Advanced Medical Oncology I	III	1&11	
To be advised	Advanced Medical Oncology II	III	I & II	

### **Teaching Methods**

The DM programme in Medical Oncology is intended to produce graduates who are competent to practice as specialists in Medical Oncology. The DM in Medical Oncology degree is awarded upon satisfactory completion of the programme in accordance with the requirements of the Specialty Board, including passing the exit examination (Part 2).

#### Linkage to ASCO/ESMO Global Curriculum

The ASCO/ESMO Global Curriculum for Training in Medical Oncology is the primary source material for this syllabus and will guide the content of the DM programme; any updates to the ASCO/ESMO curriculum are applicable to the programme. The ASCO/ESMO Curriculum Log Book will be used to document trainee progress through the competencies outlined by the curriculum.

### Syllabus (Programme Content)

- i. Scientific Principles of Oncology
  - Cancer biology and genetics including normal cell biology including genomics and cell cycle regulation, principles of carcinogenesis including inherited and acquired genetic anomalies and environmental, chemical and physical factors, tumour immunology, and cancer epidemiology including cancer statistics, staging systems, and epidemiologic methods.

### ii. Principles of Cancer Diagnosis and Management

- Multidisciplinary approach to cancer treatment, clinical assessment, response assessment including RECIST criteria and quality of life, and knowledge of the effects of age and co morbidity on treatment.
- Role of the pathologist and of histopathologic, cytologic, immunological and molecular methods in the diagnosis of cancer.
- Imaging methods used in the diagnosis, staging and follow-up of cancer
- Principles of surgical oncology
- Principles of radiation biology, physics, external beam radiation, brachytherapy, and the management of patients receiving radiation or chemoradiation therapy.
- All aspects of chemotherapy including indications, goals, pharmacology, dose, schedule, drug development, resistance, and toxicity, and practical aspects of the administration of chemotherapy and the management of patients receiving it.
- Hormonal therapies including relevant endocrinology and pharmacology, indications, and clinical applications.
- Basic science and clinical use of targeted molecular therapies.

#### iii. Clinical Research

- Principles of Phase I, II, III trials including protocol development and implementation, data collection, statistical analysis, and ethical and regulatory issues
- Tumour assessment, measurement, imaging and surrogate end points

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#### iv. Cancer types and sites

- Epidemiology, pathogenesis, pathology, tumour biology and genetics, familial syndromes (where applicable), prevention and screening(where applicable), diagnosis, staging, prognostic and predictive factors, stage-specific management, complications, response assessment, follow-up, survivorship, rehabilitation/reconstruction, supportive and palliative care, and all relevant special issues with regard to each type and site of malignant or premalignant neoplasm, including the following:
  - Acute leukaemia and myelodysplasia
  - AIDS-related malignancies
  - Anal cancer
  - Biliary cancer
  - Bladder and other urothelial cancer (ureter, renal, pelvis)
  - Bone sarcomas
  - Breast cancer
  - Central nervous system malignancies
  - Cervical cancer
  - Chronic leukaemia
  - Colorectal cancer
  - Oesophageal cancer
  - Gallbladder cancer

- Gastric cancer
- Germ cell tumours
- Hairy cell leukaemia
- Head and neck cancers including all subsites
- Hepatocellular cancer
- Hodgkin's lymphoma
- Lung cancer
- Melanoma
- Mesothelioma
- Myeloma
- Neuroendocrine tumours including carcinoid tumours
- Non-Hodgkin's lymphomas

- Ovarian cancer
- Pancreatic cancer
- Penile cancer
- Prostate cancer
- Renal cell cancerSalivary gland tumours
- Soft tissue sarcomas
- Thymomas and thymic cancer
- Thyroid cancer
- Unknown primary
- Uterine cancer
- Vaginal and vulvar cancer

#### v. Emergencies and complications

- CNS complications- brain metastases, spinal cord compression
- Cardiovascular complications- pericardial tamponade, cardiomyopathy, others
- Airway and pulmonary complications
- Gastro-intestinal complications
- Management of malignant effusions
- Local therapy of metastases
- Paraneoplastic syndromes
- Infections, neutropenic sepsis
- Infertility/sexual dysfunction
- Other complications of therapy: adrenal insufficiency, alopecia, bleeding, drug extravasation, fatigue, hypersensitivity, hyperthyroidism, lymphedema, nephrotoxicity, nausea and vomiting, oral complications (mucositis, xerostomia), pulmonary toxicity, neurotoxicity, skin toxicity
- Second malignancies

### vi. Geriatric oncology and related issues

#### vii. Supportive care

- Pain assessment and management
- Treatment of symptoms and complications including anorexia, cachexia, coagulation disorders, constipation, delirium, depression, diarrhoea, dysphagia, dyspnoea, fatigue, nausea, vomiting, malignant bowel obstruction
- Antiemetic therapy
- Growth factors including evidence-based use
- Transfusion therapy and apheresis
- Nutritional support
- Fertility and sexual issues
- Complementary therapies
- End of life care
- viii. Survivorship and follow-up including surveillance, second cancers, psychosocial and economic issues

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- ix. Psychosocial aspects of cancer including psychosocial support, cultural and spiritual issues, coping mechanisms, and integration of care including family members, pastoral care, nursing support, counselling, social work, mental health professionals, hospice, and cancer support groups.
- x. Bioethical, legal and economic issues including informed consent, research ethics, end-of-life and life-support legal issues, cost effectiveness, conflict of interest, and professionalism.
- xi. Issues affecting fertility and sexuality including risks of infertility or sterility, prevention and treatment strategies, indications for referral to specialist fertility services, physical and psychological impact of cancer and its therapy on sexuality, ability to counsel patients regarding these issues.
- xii. Communication skills including communication of prognosis, options, goals of care, delivery of bad news.
- xiii. *Practical procedures* including chemotherapy administration, use of vascular access devices, bone marrow aspiration and biopsy, lumbar puncture and Ommaya reservoir, tumour assessment, thoracentesis and paracentesis.
- xiv. Use of information systems including electronic medical records, patient resources, health care professional resources.

#### Readina List

The trainee is expected to read comprehensively on the subjects outlined in the syllabus, as well as new and emerging developments and issues in Internal Medicine and Medical Oncology, from relevant sources which include (but are not limited to) the following:

- Core journals in Medical Oncology and Internal Medicine: Journal of Clinical Oncology, Annals of Oncology, Lancet, Lancet Oncology, Cancer, British Journal of Cancer, New England Journal of Medicine
- Other relevant international journals as appropriate, in Medical Oncology, Internal Medicine, Radiation Oncology, and Haematology: e.g. Blood, International, Journal of Radiation Oncology, Biology and Physics, British Journal of Haematology
- Relevant local and regional sources including oncology-related articles in regional journals, local Cancer Registry data.
- Proceedings of major annual conferences: ASCO and ESMO annual meetings
- A major textbook of Medical Oncology e.g., Principles and Practice of Oncology by Devita, Hellman and Rosenberg or Clinical Oncology by Abeloff
- A short oncology textbook e.g. Specialist Training in Oncology by Ajithkumar, Cancer and its Management by Tobias (or alternatively a longer manual e.g. Manual of Clinical Oncology by Casciato or the Bethesda Handbook of Clinical Oncology)
- An oncology/chemotherapy drug manual: e.g. de Vita, Lexi-Comp, Skeel, or Boyiazdis
- A radiation oncology manual e.g. Hansen & Roach
- x.A current Internal Medicine text e.g. CMDT, Harrison, Oxford, Davidson, Kumar or Cecil.
- Current evidence-based guidelines (NCCN, ASCO, ESMO)
- An oncology handbook or manual e.g. Oxford Handbook of Oncology by Cassidy, Manual of Clinical Oncology by Casciato, Bethesda Handbook of Clinical Oncology by Abraham.
- Postgraduate Haematology by Hoffbrand and Lewis
- Oxford Handbook of Clinical Haematology by Provan.
- Essential Haematology by Hoffbrand and Pettit
- Oxford Handbook of Palliative Care.
- Handbook for Principles and Practice of Gynaecologic Oncology by Levine.

#### Research Project

The candidate is expected to complete an original research project or audit in an area relevant to cancer and/or its treatment in Trinidad, Tobago or the Caribbean. A minimum length of 2000 words is required, and the project is to be suitable for publication in a local or international peer-reviewed journal. This project is to be completed by the beginning of year 4. A supervisor is to be appointed, and must be a faculty member. The project topic and supervisor are to be approved by the programme director.

### **CLINICAL ATTACHMENTS**

All rotations must be undertaken at facilities affiliated to UWI or designated and approved by the Programme Coordinator, which have been deemed to have adequate standards of clinical practice. The primary sites must have adequate pathology services, modern diagnostic radiology services, access to nuclear imaging, blood banking and blood therapy facilities, facilities

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for clinical pharmacology and tumour immunology, access to surgical and radiotherapy services, and multidisciplinary tumour conferences.

#### Year 1 (Resident)

Medical Oncology - Introduction (6 months) – This course will have the equivalent length of ONE semester of academic time (6 credits)

Radiation Oncology- Introduction (3 months) – This course will have the equivalent length of 1/2 semester of academic time (3 credits)

Haematology- Introduction (3 months) – This course will have the equivalent length of 1/2 semester of academic time (3 credits)

### Year 2 (Senior Resident)

Medical Oncology- Intermediate (3 months) – This course will have the equivalent length of 1/2 semester of academic time (3 credits)

Urologic / Gynaecologic Oncology (3 months) – This course will have the equivalent length of 1/2 semester of academic time (3 credits)

Palliative Care (3 months) - This course will have the equivalent length of 1/2 semester of academic time (3 credits)

Elective (3 months) (Overseas elective preferred if funding available) – This course will have the equivalent length of 1/2 semester of academic time (3 credits)

### Year 3 (Resident)

Advanced Medical Oncology I (6 months) -

This course will have the equivalent length of 1/2 semester of academic time (6 credits)

Advanced Medical Oncology II (6 months) -

This course will have the equivalent length of 1/2 semester of academic time (6 credits)

Pre-requisites	The Candidate should have passed the DM Medicine Part 1 exam.
	The prerequisite courses are:
	MEDC 6680
	MEDC 6681
	MEDC 6682
Course load/semester; part-time/full	All courses are full time.
time (Credits):	Year 1 courses
	MEDC XXXX Introductory Medical Oncology (6)
	MEDC XXXX Radiation Oncology-Introductory (3)
	MEDC XXXX Clinical Haematology-Introductory (3)
	Year 2 courses
	MEDC XXXX Intermediate Medical Oncology (3)
	MEDC XXXX Urologic /Gynaecologic oncology (3)
	MEDC XXXX Palliative Care rotation (3)
	Elective period (3)
	Year 3 courses
	MEDC XXXX Advanced Medical Oncology I (6)
	MEDC XXXX Advanced Medical Oncology II (6)
Number of failures per semester:	In accordance with regulations for postgraduate degrees.
Re-sit Examinations:	Re-sit exams will be held at the next regular exam sitting.

Assessment procedures for courses, coursework, fieldwork, internships, or other:	Medical Oncology: Introductory Coursework evaluation (pass/fail)  Radiation Oncology: Introductory Coursework evaluation (pass/fail)  Clinical Haematology-Introductory Coursework evaluation (pass/fail)  Medical oncology: Intermediate Coursework, viva voce examination (pass/fail)  Gynaecologic oncology rotation
	Coursework evaluation (pass/fail)  Urologic Oncology rotation Coursework evaluation (pass/fail)
	Palliative Care rotation Coursework evaluation (pass/fail)  Elective
	Confirmation of completion from host institution (pass/fail)  Medical oncology: Advanced I & II  Coursework evaluation viva voce examination (pass/fail)
	Final DM examination in Medical Oncology: Paper 1: MCQ Paper 2: Viva voce Paper 3: Clinical examination
	Each paper will be scored out of 100 with a pass mark at 50%. A pass in the final examination will be awarded if the student passes in each of papers 1 to 3.
Assessment procedures for Research Project (as appropriate):	This will consist of a dissertation that in the opinion of the Programme Director is at postgraduate standard and should lead to publication in a peer-reviewed journal. The paper will be scored in accordance with the requirements for MSc Dissertations and a final mark will be awarded for this paper (4).
Time limits for completion:	The candidate must complete the programme within 6 years of start date.

## Criteria for Award of Degree

### Distinctions

These will be awarded using accepted UWI standard according to the Regulations for Graduate Diplomas and Degrees.

Please contact the following person(s) responsible for distribution of packages and orientation (once accepted into the programme):

### Dr Ronan Ali

Department of Clinical Medical Sciences, 2nd Floor, Building 67, EWMSC

Telephone: 663-4332

Email: Ronan.Ali@sta.uwi.edu

## **DM Obstetrics & Gynaecology**

**Department of Clinical Surgical Sciences** 

### **Qualifications for Entry**

The applicant should be:

- a well-rounded medical graduate of The University of the West Indies or a University or Medical School recognized by The University of the West Indies.
- fully registered in the territory or territories in which training will take place.
- employed by the respective Ministry of Health or Regional Health Authority in territories where there is no The University of the West Indies teaching hospital.
- working in the Department of Obstetrics and Gynaecology at recognized teaching institutions of The University of the West Indies
- must have worked for at least one year after internship in a related field of Medicine such as General Surgery or Paediatrics.

### Aims and Objectives of Programme

The aim of the Doctor of Medicine is to train doctors in the specialty of Obstetrics and Gynaecology to a level that allows them to provide clinical support and administrative leadership to Obstetrics and Gynaecology. Successful DM candidates will practice at the level of consultants in Obstetrics and Gynaecology.

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

### **Programme Structure and Curriculum**

This 4-year part-time programme consists of the following course:

Course Code	Course Title	Year Offered	Semester Offered	Prerequisite
MEDC 6630	DM Part I Obstetrics and Gynaecology	Year 1	I & II	-
MEDC 6635	DM Part II Obstetrics and Gynaecology	Year 2	I & II	MEDC 6630

### **Teaching Methods**

#### **Programme Structure**

- Spread over four years' post-internship
- Using a modular (or block) approach
- Vertical strands linking the various modules or blocks from Year 1-4

### Components

- 1) Core curriculum- 'need to know'
- 2) Intergrated, concurrent or sequential elective(s)

### **Core Curriculum**

- Building on prior learning (constructivist approach)
- Integration of the required competencies, skills, knowledge and attitudes required of a generalist obstetrician and gynaecologist with essential Basic Sciences.
- Assessment using a multi-modal approach; application of instruments that are valid, defensible, reliable and practical.

#### Electives

This may be in the form of a Block (sequential) in the Year 3 or it may be a concurrent or integrated elective.

#### **Rationale for Electives**

- To create an opportunity for further study in an area of interest.
- To spend time abroad whether in the region or elsewhere to broaden ones' experience
- To participate or collaborate in research or audit
- To provide a foundation for sub-specialty training post DM.
- To pursue another degree or course, for example, MBA or Medical Education.
- To 'make-up' or 'catch-up' in areas of weaknesses in core.

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#### Continuous Assessment

Students will be assessed throughout the DM Programme based on the following course components:

Year 1:

Foundation: General Overview of Obstetrics and Gynaecology and Relevant Basic Sciences

Year 2:

2A Development of Investigative and Surgical Skills 1. 2B Obstetrics 1: Common Obstetrical ProbleMs 2C Gynaecology: Common Gynaecological ProbleMs Year 3:

3A Reproductive Endocrinology 3B Advanced Investigative and Surgical Skills 2 3C Project/ Electives

Year 4:

4A Obstetrics 2: Advanced Obstetrics 4B Gynaecologoical Oncology 4C Urogynaecology

Yearly appraisals will be done to determine the student's performance. Having satisfactorily performed throughout the year, Residents will be given the approval to proceed in the programme and on to the final Examinations upon successful completion of these components.

#### **Final Examinations**

The examination consists of:

- Part I (MEDC 6630)- Examination in the Basic Sciences of Physiology, Anatomy, Pathology, Embryology, etc.
- Part II (MEDC 6635)- Written papers in Obstetrics and Gynaecology, Structured Extended Oral Examinations and the
  presentation of a Casebook records and commentaries.

### (1) Doctor of Medicine (DM) Part I has two papers -

Written paper: Multiple Choice Questions (MCQs), Extended Matching Items (EMIs), Structured Answer Questions (SAQs). Candidates must pass both Papers (1 and 2) to be awarded a Pass. Candidates are eligible to sit the DM Part 1 Examination after a minimum of 12months from the date of registration/entry into the DM programme.

Maximum number of attempts at DM Part I is two. There would no longer be an Oral Examination at the DM Part I Level for borderline or failing candidates.

(2) Doctor of Medicine (DM) Part II has two papers - (One in Obstetrics and the other in Gynaecology) Consists of Two Written Papers and Structured Extended Oral Examination (SEOE).

The part II Examination must be attempted for the first time, 3 years after successfully completing the Part I Examination.

The traditional Casebook may be amended to include a detail account of research project in the form of a prospective study instead of commentary which is usually in the form of a review of the literature. The study should commence immediately after the candidate passes the DM Part I Final Examination. The title of the study as well as the methodology would be determined by the candidate in collaboration with his or her supervisor. It should be the intention that this study should be published in a refereed journal. Casebook should include only a short description of up-to-date hospital statistics (such as annual report), with comparison on national and/or regional figures, description of standard procedures with a focus on safety and governance. Casebook must also include ten Obstetrics and ten Gynaecology cases managed by the candidate.

### Criteria for Award of Degree

Candidates must pass all components of both Parts I and II of the DM Examinations within the allocated time frame **AND** obtain an accepted Casebook in order to be awarded the Degree in the Doctor of Medicine in Obstetrics and Gynaecology.

Please contact the following person(s) responsible for distribution of packages and orientation (once accepted into the programme):

### Professor Bharat Bassaw,

Office of the Unit of Obstetrics and Gynaecology, DCSS, FMS, UWI First Floor, Mt. Hope Women's Hospital

Telephone: 662-6418

Email: obsgynfms@gmail.com

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# **DM Ophthalmology**

**Department of Clinical Surgical Sciences** 

### **Qualifications for Entry**

MBBS from accredited medical school, full medical board registration, previous resuscitation courses recommended (ACLS, APLS, ATLS).

### Aims and Objectives of Programme

- 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.

### **Programme Structure and Curriculum**

The DM Ophthalmology is a 6-year part time programme covering the following courses:

<b>Course Code</b>	Course Title	Year Offered	Semester Offered	Prerequisites
MEDC 6661	DM Ophthalmology Part I	1 and 2	I & II	-
MEDC 6662	DM Ophthalmology Part II	3	I & II	MEDC 6661
MEDC 6663	DM Ophthalmology Part III	4 to 6	I & II	MEDC 6662

#### Part I MEDC 6661 (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 (e.g. 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

During this period, the student is introduced to basic medical and surgical ophthalmology including Optics and Refraction. The student will acquire basic clinical and surgical skills in ophthalmology.

By the end of the first year, the student must have chosen a research topic and would be expected to commence work on the project.

The student is expected to commence writing up of the cases for the case book. On average, 2 cases per year is expected. 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 MEDC 6662 (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.

The trainee will continue working on the research project and case book. During this period the candidate will continue to gain clinical and surgical ophthalmology skills

#### Part III MEDC 6663 (3 Years)

This final part consists of

• Three (3) years, 2 of which is spent locally and a compulsory one year period which is 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. Candidates should be enhancing and consolidating their knowledge with respect to aetiology,

#### THE FACULTY OF MEDICAL SCIENCES

pathogenesis, genetics, clinical manifestations, differential diagnosis, investigations and treatment options (medical and surgical).

 Enhancing surgical skills, audit (including annual audit of the trainees cataract surgery outcomes) and research will be emphasised.

The trainee will continue working on the research project and case book.

The candidate will be examined at the end of the three years.

### **Teaching Methods**

Ward Round Teaching, General and Specialist (Retina, Glaucoma and Paediatrics) Clinics, Journal Club (once per month), Didactic Lectures, Case Presentations, Grand Rounds, Invited speakers (local, regional and international), Minimum of 2 theatre sessions per week. In addition to this either a minor ops or Laser list may be done.

#### **Continuous Assessment**

OSCARs (Ophthalmic Surgery Continuous Assessment Record) and multi-source feedback. The trainees surgical log book is examined at each OSCAR.

#### **Final 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)
- Physiology of eye, adnexae, CNS including related general physiology.
- Ocular Pathology, Basic Pathology, Microbiology, Biochemistry, General Medicine in association with Ocular Pathology.

Candidates must pass Section A and pass at least 2 parts of Section B to qualify for entry into the second part of the programme. Candidates who trail one subject of Section B may be allowed to commence Part II of the programme, but must resit and pass the relevant section within 1 year to be allowed to continue in the programme. Candidates who have not completed the Part 1exam 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

The candidate must pass the Practical Refraction and OSCEs in order to pass the Part II examination.

#### Part III

The Part III examination will be undertaken at the end of the 6 years of training, provided that the candidate has:

- Successfully passed the Part I and II Examinations
- Satisfactorily completed their one year extraregional period
- 3. Satisfactorily completed their Casebook and Research Project
- 4. Acceptance of the candidate's certified list of required operative procedures

The Part III Examination will consist of 3 parts:

- a) Essay Paper
- b) Oral Examination

c) Clinical Examination including OSCEs

The OSCE stations will include but not be limited to:

- 1. Anterior Segment
- 2. Neuro ophthalmology

- 3. Strabismus
- Posterior Segment

Candidates must pass all sections of the OSCE to pass the Part III examination. All 3 sections of the Part III must be passed in order to attain a pass at the Part III level. If the candidate has to re-sit the examination, he will need to re-sit the entire examination, not only the parts that were failed.

### **Criteria for Award of Degree**

- 1. Successful completion of the final examination
- 2. The completed corrected casebook (with all 10 cases) and the research project must be submitted NO LESS than 6 months before the Part III examination.
- 3. A one year extra-regional period MUST be undertaken. This is usually done in the 6th year of the programme, however, it may be started in the 5th year or earlier. It is important that the student starts to arrange their elective at least 1-2 years in advance. So by the 4th year of the programme the process should have been started.

The extra-regional training site MUST be approved by the Specialty board or DM Ophthalmology Programme coordinator at least 6 months before the extra-regional training commences.

Please contact the following person(s) responsible for distribution of packages and orientation (once accepted into the programme):

**Melrose Yearwood** (Orientation) 14/ Second Floor/Room 205 Telephone: 645 3232 ext 2864

Email: melrose.yearwood@sta.uwi.edu

# **DM Orthopaedic Surgery**

**Department of Clinical Surgical Sciences** 

### **Qualifications for Entry**

The applicant should be a graduate in medicine of a University or Medical School recognised by the University of the West Indies. Fully registered in the territory or territories in which training will take place. Applicants for entry to the DM programme in Orthopaedics must have completed twelve (12) months at House Officer level in an approved post, of which at least six (6) months must have been in Orthopaedics with the remaining period in Accident and Emergency, General Surgery, Neurosurgery or Urology. The applicant should show evidence of having successfully completed an Advanced Trauma Life Support (ATLS) course as well as a Basic Surgical Skills (BSS) course.

The date of entry will normally be determined by the date when the applicant begins work in a recognised post in an accredited hospital. An applicant may apply to enter the programme before securing such a post. The applicant may then receive from the Office of Graduate Studies and Research provisional acceptance for entry to the programme contingent upon obtaining an accredited post. After the applicant has secured such a post, the date of entry will be determined by the Office of Graduate Studies & Research.

### Aims and Objectives of Programme

To provide the candidate with the knowledge and skills to enable independent specialist orthopaedic practice.

### **Programme Structure and Curriculum**

The DM Orthopaedic Surgery is a 6-year part time programme covering the following courses:

Course Code	Course Title	Year Offered	Semester Offered	Prerequisite
MEDC 6607	DM Part I Orthopaedics	1	I & II	
MEDC 6619	DM Part II Orthopaedics – Paper II	3	I & II	MEDC 6607

### Part 1 (2 years)

This is common with the DM in General Surgery: Residents will rotate through any six to eight (6-8) of the following specialties for a period of three (3) months each:

a. General Surgery
b. Accident and Emergency
c. Neurosurgery
d. Cardiothoracic Surgery
e. Orthopaedic Surgery
f. Paediatric Surgery
g. Plastic Surgery
h. Urology
i. Otolaryngology
j. Anaesthetics/ICU

### Part 2 (4 years)

During the second part of the programme the resident will be expected to remain within the speciality of Orthopaedics. Students will spend a minimum of six (6) months but not exceeding twelve (12) months on one unit. The resident will rotate amongst the approved teaching institutions spending at least twelve (12) months at any one institution. It is expected that during this time students will have exposure to the following:

a. Trauma d. Sports Medicine b. Joint Reconstruction e. Spine

c. Paediatric Orthopaedics

#### **Teaching Methods**

Training will normally take place at the following approved institutions:

a. Eric Williams Medical Science Centre c. San Fernando General Hospital

b. Port of Spain General Hospital d. Sangre Grande Hospital (18 months ONLY)

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#### Continuous Assessment

Residents are subject to continuous work place based assessment (WPBA) of performance by their supervisor. The Annual Review of Competence Progression (ARCP) will form the basis of progression within the programme. Residents are expected to have the following documents available for assessment:

- a. Current Curriculum Vitae
- b. Log Book
- c. Completed Assessment Forms

If the assessment is found to be unsatisfactory, the Speciality Board may recommend one or more of the following:

- a. Counselling/Academic warning in writing
- b. Remedial work
- c. Repeating of the unsatisfactory rotations
- d. Withdrawal from the programme

All DM II residents are expected to sit the American Association of Orthopaedic Surgeons (AAOS) Orthopaedic In Training Examination (OITE) as part of their continuous assessment.

All DM residents are expected to take part in the following activities:

- a. Journal Club Meetings
- b. Multidisciplinary Team Meetings
- c. Morbidity and Mortality Meetings
- d. Teaching of Undergraduates
- e. Attendance at local, regional and international courses and conferences

### **Final Examinations**

- a. The Part I examination is taken at the end two (2) years and consists of a written
- b. paper and oral examination in the following disciplines:
  - · Section A:Principles of Surgery
  - Section B:Anatomy, Physiology, Pathology
- c. Residents must pass Section A and at least two (2) parts of Section B to enter into the second part of the programme.
- d. Residents must sit the Part 1 Examination no later the two and a half years (2 ½) after entering the programme.
- e. The following four (4) requirements must be completed before the Part II examination:
  - A satisfactory standard of in-course assessments
  - Log book
  - Completed Case Book
  - Completed Research Project
- f. Residents must conform to the University Regulations on Examinations for Higher Degrees. Any further details can be obtained from the UWI Orthopaedic Unit.
- g. The Part II examinations are taken at the end of a minimum of four (4) years after passing the Part I examination. It consists of the following:
  - · Assessment of
    - Log Book
    - Case Book
    - Research Project
  - Written Papers 1 and 2
  - Oral Examination
- h. Residents must pass all components of the Part II examination.
- i. Residents who have not completed the Part I or II examination within one (1) calendar year of their last sitting of the respective examinations will normally be required to withdraw from the programme.
- j. Residents will not usually be allowed more than two (2) attempts at any one examination. Failure at the second attempt will necessitate withdrawal from
- k. Residents may not reapply to the programme after withdrawal.

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### Criteria for Award of Degree

Residents will be considered as having successfully completed the programme when the following four (4) requirements have been met:

- a. Satisfactory performance of all rotations
- b. Acceptance of the certified Log Book
- c. Acceptance of the Case Book
- d. Acceptance of the Research Project
- e. Satisfactory performance in the Part I and II examinations

Failure to complete the programme in the prescribed times will require withdrawal from the programme.

Please contact the following person(s) responsible for distribution of packages and orientation (once accepted into the programme):

Melrose Yearwood (Orientation)

14/ Second Floor/Room 205 Telephone: 645 3232 ext 2864

Email: melrose.yearwood@sta.uwi.edu

# DM Otorhinolaryngology (ENT)

**Department of Clinical Surgical Sciences** 

### Qualifications for Entry

The applicant should be:

- a) A graduate in Medicine of a University or Medical School recognized by The University of the West Indies.
- b) Fully registered in the territory or territories in which training will take place.

### Aims and Objectives of Programme

- 1. Identify and select medical doctors who are eligible and interested in becoming Otorhinoloryngologists.
- 2. Teach trainees to diagnose Otorhinolaryngological conditions using history, clinical examination and special investigations.
- 3. Teach trainees to treat Otorhinolaryngological conditions using conservative means or surgical interventions as appropriate
- 4. Emphasize the importance of practicing evidence-based Medicine using Journal review and research techniques
- 5. Instil the significance of a multidisciplinary approach for the management of patient's problems and to develop the interpersonal and communication skills to work on such a team.
- 6. Train specialists who are able to help the development of public policies relevant to the specialty, both nationally and regionally.
- 7. Develop professional behaviour, including honesty, compassion, level headedness, decorum and respect for others.
- 8. Teach trainees to employ clear, concise, accurate and precise verbal communication with colleagues, other staff, patients and patients' family members.

### **Programme Structure and Curriculum**

The DM Otorhinolaryngology is a 6-year part time programme covering the following courses:

Course Code	Course Title	Year Offered	Semester Offered	Prerequisite
MEDC 6631	DM Otorhinolaryngology Part I	2	I & II	-
MEDC 6632	DM Otorhinolaryngology Part II	6	I & II	MEDC 6631
MEDC 6633	DM Otorhinolaryngology Part II – Research Project	6	I & II	MEDC 6631
MEDC 6634	DM Otorhinolaryngology Part II – Casebook	6	1&11	MEDC 6631

### **Teaching Methods**

Various modes of delivery of teaching will be utilized in the Programme including:

- Didactic lectures using multimedia
- Clinical teaching in the Clinics, Operating theatres and on the Wards
- Journal Clubs
- Use of electronic resources, such as My el-earning for self-directed learning

#### **Continuous Assessment**

The candidates are assessed regularly for satisfactory progress and intervention will be made if necessary

#### **Final Examinations**

DM Part 1 exam DM Part 2 exam

### Criteria for Award of Degree

Successful completion of:

- DM Part 2 exam
- Case Book
- Research Project

Please contact the following person(s) responsible for distribution of packages and orientation (once accepted into the programme):

Melrose Yearwood (Orientation)

14/ Second Floor/Room 205 Telephone: 645 3232 ext 2864

Email: melrose.yearwood@sta.uwi.edu

## **DM Paediatrics**

**Department of Clinical Medical Sciences** 

### **Qualifications for Entry**

UWI Regulations for Graduate Programmes to be followed.

### Aims and Objectives of Programme

UWI Regulations for Graduate Programmes to be followed.

### **Programme Structure and Curriculum**

Students would be required to register for the following courses in this part-time programme which is completed within 4 to 6 years, with a maximum of 3 years in DM Paediatrics Part 1 and a maximum of 3 years in DM Paediatrics Part 2:

<b>Course Code</b>	Course Title	Year Offered	Semester Offered	Prerequisite
MEDC 6617	DM Paediatrics Part I	1 and 2	I & II	Fully registered with the Medical Board of Trinidad and Tobago, and a minimum of one year's experience in the practice of paediatrics.
MEDC 6622	DM Paediatrics Part II	3 and 4	I & II	Passed DM I
MEDC 6693	DM Paediatrics Dissertation*	Years 1 - 4	1 & 11	Passed DM I

### **Teaching Methods**

<u>UWI Regulations for Graduate Programmes</u> to be followed:

### **Continuous Assessment**

<u>UWI Regulations for Graduate Programmes</u>to be followed. MEDC 6693 is the Dissertation/Research Project. \*This is begun in Year I and continued through years 2-4 with submission of the final report by Jun 15 of the student's final year i.e., 6 months before appearing for the final exaMs

### **Final Examinations**

<u>UWI Regulations for Graduate Programmes</u> to be followed:

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### Criteria for Award of Degree

**UWI Regulations for Graduate Programmes to be followed:** 

Please contact the following person(s) responsible for distribution of packages and orientation (once accepted into the programme):

#### Dr Sherman Soman

Building 69, 1st Floor

Telephone: 645-3232 Extension 3909 Email: sherman.soman@sta.uwi.edu

## **DM Psychiatry**

**Department of Clinical Medical Sciences** 

### **Qualifications for Entry**

Applicants will be eligible for entry after completing their Internship and at least six months of a Senior House Officer rotations. The candidate must be in a job in Psychiatry at an approved hospital before beginning the course. Following submission of their applications, candidates may be required to attend an interview to be eligible for selection to the programme.

### Aims and Objectives of Programme

- To produce a graduate who can function at the clinical level of a Consultant or the academic level of a Lecturer in Psychiatry.
- To ensure that the graduate is fully equipped to function in any Caribbean territory as a Consultant General Psychiatrist.
- To practice Psychiatry in an ethical manner
- To instil the importance of lifelong and self-directed learning
- To have the competence to diagnose and manage the majority of conditions in Psychiatry.
- To have a working knowledge of research methodology.

### **Programme Structure and Curriculum**

This 4-year part time programme covers the following courses:

Course Code	Course Title	Year Offered	Semester Offered	Prerequisite
MEDC 6614	DM Psychiatry Year I	1	1&11	MBBS
MEDC 6613	DM Psychiatry Part I Year II	2	1&11	MEDC 6614
MEDC 6604	DM Psychiatry Part II Year III – Research Paper	3	1&11	MEDC 6613
MEDC 6727	DM Psychiatry Part II Year IV	4	I& II	MEDC 6604

### **Teaching Methods**

Lectures, tutorials, seminars and clinical case based teaching.

Presentation and communication skills, experiential instruction.

#### **Continuous Assessment**

Continuous assessment of the candidate's performance is carried out by his/her supervisor. The supervisor will be a member of the Specialty Board in Psychiatry. If the assessments are found to be unsatisfactory, the Specialty Board may recommend one or more of the following:

- a. Counselling/academic warning in writing
- b. Remedial work
- c. Repeating the unsatisfactory rotations
- d. Withdrawal from the programme, if poor performance persists

The Year 1 Part 1 (Basic Sciences) examination will be held at the end of the Year 1 and candidates are evaluated in the Basic Sciences (Neuroanatomy, Neurophysiology and Psychology).

### **Final Examinations**

Before admission to any examination, candidates must be certified by their supervisors as having completed the relevant parts of the programme.

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Examinations are in two parts, Parts I and Part II, and are normally held once per year in May/June.

#### Part I Examination (Years 1 & 2)

The Year 1 Part 1 (Basic Sciences) examination will be held at the end of the Year 1 and candidates are evaluated in the Basic Sciences (Neuroanatomy, Neurophysiology and Psychology). The Part 1 Year 2 examination is held at the end of the second year. In this examination candidates are assessed in Neurology and Psychiatry. The examination comprises:

- a. A knowledge based examination in Neurology and Psychiatry consisting of two written papers.
- b. A clinical/oral examination in Neurology.
- c. A clinical/oral examination in Psychiatry.

#### Part I Year 3 - Research Project

All students must submit a completed research project to the Specialty Board through the Director of the programme, by the end of the first semester of Year 4.

a. The research project should be produced based on cases seen and should form a distinct contribution to the knowledge of the subject presented.

#### OR

b. A formal research project on an area of interest.

The research project must be of satisfactory literary standard and should attain standards suitable for publication in a peer reviewed journal. It should not exceed 20,000 words; a typical report has

approximately 12,000 words. The report must follow the University's Guide for the Preparation of Theses, Research Papers and Project Reports. The guide to Project Reports is the one applicable to the DM research project.

#### Part II Examination (YEAR 4)

Candidates must have completed the following three (3) requirements before being allowed the sit the Part II examination:

- a. Satisfactory continuous in-course assessments
- b. Satisfactory completion of the Part 1 assessment
- c. Accepted Research Projects

The Part II examination is held at the end of the fourth year and candidates are evaluated in Psychiatry. This exam consists of:

- a. Two written papers
- b. A clinical examination
- c. An oral examination based on standardized vignettes or standardized questions.

Following the submission of the research project, the examiners may:

a. accept the work and the student proceed to the final year of the programme and sit the Part II examination.

#### OR

b. accept the work with modification, which must be carried out in the time specified and resubmitted PRIOR to sitting the Part II examination.

#### OR

c. reject the work. In this case the student will not be allowed to sit the final Part II examination.

### Criteria for Award of Degree

A candidate is deemed to complete the programme if they have met the following requirements:

- a. Year 1- satisfactory performance in the Part 1 Year 1 examination
- b. Year 2- Pass all parts of the Part 1 Year 2 examination in the same sitting
- c. Research Project acceptance and submission of corrected project
- d. Part II Pass each written paper, pass the clinical examination and pass the oral examination in the same sitting.

Please contact the following person(s) responsible for distribution of packages and orientation (once accepted into the programme):

### Ms Isabelle La Roche

Psychiatry Unit, Clinical Medical Sciences, Building 67 Ground, Room 007

Telephone: 645-3232 Extension 2915 Email: <u>isabelle.laroche@sta.uwi.edu</u>

# **DM Radiology**

**Department of Clinical Medical Sciences** 

### **Qualifications for Entry**

- i. (See General Regulations)
- ii. Candidates are accepted into the programme in July only.
- iii. Candidates with a poor academic record will not be considered for the program. A poor academic record is defined as failure of any two or more final examinations during the entire undergraduate programme.
- iv. Candidates are required to have at least one year of clinical experience post internship including a minimum of six months in accident and emergency.
- v. Special consideration would be given to candidates with prior radiology experience. Applicants who are deemed acceptable may be required to have an interview.

#### Exemption

vi. Candidates who have completed periods of study in recognized hospitals or institutions may apply to the Specialty Board for exemption from the appropriate section of the programme.

## Aims and Objectives of Programme

The aim of the DM in Radiology programme is to train doctors in the specialty of General Diagnostic Radiology to a level that allows them to practice as a specialist in the field of general diagnostic radiology. Diagnostic Radiology is central to the practice of modern medicine and the main objective of the DM Radiology programme is to ensure that the increasing demands for medical professionals in the West Indian territories served by the University of the West Indies are fulfilled.

### Programme Structure and Curriculum

This 4-year part-time programme covers the following courses:

Course Code	Course Title	Year Offered	Semester Offered	Prerequisite
MEDC 6711	DM Radiology Part 1 Paper 1 (Radiological Anatomy, Techniques and Practical Procedures, Radiography and Physics and Apparatus Construction).	1	1 & 2	A graduate in Medicine with acceptable qualifications of a University or a Medical
MEDC 6712	DM Radiology Part 1 Paper 2	1	1 & 2	School recognised by The
MEDC 6713	DM Radiology Part 1 Paper 3	1	1 & 2	University of the
MEDC 6714	DM Radiology Part 1 Paper 4	1	1 & 2	West Indies fully registered
MEDC 6715	DM Radiology Research Project	2 & 3	1 & 2	in the territory or
MEDC 6716	DM Radiology Part 2 Paper 1 (training in Radiography, Computerised Tomograph, Ultrasound, Nuclear Medicine and Magnetic Resonance Imaging).	2,3,4	1 & 2	territories in which training takes place.  Candidates applying for entry to the DM
MEDC 6717	DM Radiology Part 2 Paper 2	2,3, 4	1 & 2	(Radiology) programmes
MEDC 6718	DM Radiology Part 2 Paper 3	2, 3, 4	1 & 2	must, in addition to
MEDC 6719	DM Radiology Part 2 Paper 4	2,3, 4	1 & 2	the above requirement, have completed six (6) months in General Medicine, General Surgery or Child Health and have completed at least one year in a clinical position after the internship period.

#### **Course Supervision**

The Specialty Board in Radiology is in overall charge of the programme. The programme will be under the general supervision of a Programme Coordinator, nominated by the Head of the Radiology Section, in consultation with the Head of the Department

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and appointed by the Specialty Board in Radiology. Each student will be assigned to a supervisor who will advise the student as to choice of projects, direction in their conduct of their research, the elective period and all other relevant matters.

#### Leave of Absence

The minimum time stated for the course results in 4 weeks per annum being available for leave of whatever sort, a total of 16 weeks for the duration of the programme. This stipulation will be adhered to except in extreme circumstances. Candidates who absent themselves without the necessary approval will be considered to have voluntarily withdrawn from the programme.

### **Teaching Methods**

i. The DM Radiology programme spans 4 years, which is divided into two parts: Part I and Part II.

#### Part I

ii. This consists of and includes radiologic physics, basic radiography, radiology procedures and anatomy.

#### Part II

- iii. This part of the programme consists of a minimum of 144 weeks in Diagnostic Radiology.
- iv. Trainees will also be given instructions in:
  - Basic research methods
  - Presentation of scientific papers
  - Medical and research ethics
  - Quality assurance
- v. The candidate's responsibility in discussion with their supervisor includes preparation of a Clinical Research Project, to be decided upon at the beginning of Year 2. By the end of year 2, their research protocol should have been submitted for approval. The report should be suitable for submission for publication in a peer reviewed scientific journal.
- vi. Candidates will be required to submit said scientific paper within a maximum of 18 months after commencing the project. This will allow ample time for review and corrections. Unless said project/paper is deemed satisfactory by the end of Year 3, the candidate will not be allowed to sit DM Part II examinations.
- vii. Trainees will also be expected to chair interdepartmental review meetings as part of their training, as well as to participate in the training of medical students.

#### Elective

viii. Candidates are encouraged to spend up to one year in a specialist department overseas approved by the Specialty Board. This can be from Year 2 through Year 4, the candidate being required to return to the Radiology department at the UWI, no later than 3 months prior to final DM examinations. GMC registration would be an asset in this regard as there are opportunities for hands on experience in the United Kingdom.

### **Continuous Assessment**

Students will be assessed at least semi-annually. Those with unsatisfactory records will be encouraged to improve; but if poor performance persists, any of the following courses of action may be undertaken:

- a) Counseling
- b) Remedial work
- c) Repeat rotation
- d) Withdrawal from the programme

### **Final Examinations**

The DM examinations in Radiology are held once per year, in early to mid-May.

- i. Repeat examinations may be held six months (in November of the same year) after the candidate's initial attempt, at the discretion of the Coordinator, in consultation with the Head of the Department. Please note that November examinations are for the express purpose of facilitating repeat candidates. Said exams will not be held if there are no candidates repeating examinations.
- ii. The Part I examination assesses knowledge and diagnostic skills covered in the curriculum for the Part I programme. The examination is held at the end of the first year. The examination consists of four parts, divided into two sections as follows:
  - Section A: Two written papers.
  - Section B: The clinical session, consisting of:
    - a) Film viewing spotter
    - b) An oral examination

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- iii. All candidates will sit Section A in their territory. Candidates successful in Section A will be invited to sit Section B, the clinical examination. The venue for this part of the exam will be announced to the candidates at least six (6) months prior to the examination date.
- iv. Candidates unsuccessful in Section A will be deemed to have failed the examination and will not be invited to the clinical examination.
- v. A candidate will be considered as successful in the Part I Examination if they have successfully passed Sections A and B of the examination.
- vi. The Part II examination is held at the end of the fourth year and covers the candidate's knowledge of the full range of diagnostic investigations and intervention procedures. The examination consists of four parts, divided into two sections as follows:
  - Section A: Two written papers.
  - Section B: The clinical session, consisting of:
    - a) Film viewing spotter
    - b) An oral examination
- vii. All candidates will sit Section A in their territory. Candidates successful in Section A will be invited to sit Section B, the clinical examination. The venue for this part of the exam will be announced to the candidates at least six (6) months prior to the examination date.
- viii. Candidates unsuccessful in Section A will be deemed to have failed the examination and will not be invited to the clinical examination.

### Criteria for Award of Degree

A candidate is deemed to have completed the program if they have met the following requirements:

- a) Part 1 Year 1 examination Pass, Proceed to Part II of the programme
- b) Research Project acceptance and submission of corrected project
- c) Part II Pass each written paper, pass the clinical examination and pass the oral examination in the same sitting.

Please contact the following person(s) responsible for distribution of packages and orientation (once accepted into the programme):

Dr Paramanand Maharaj

Building 3, 1st Floor

Telephone: 225-4673 Ext. 2170

Email: paramanand.maharaj@sta.uwi.edu

### **THE FACULTY OF MEDICAL SCIENCES**

# **DM Urology**

**Department of Clinical Surgical Sciences** 

### **Qualifications for Entry**

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

- a. At least one (1) year post internship with a registerable undergraduate degree.
- b. An interest in Urological Surgery including Endoscopic Urology.
- c. At least one (1) years' 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. will be exempt from the Basic Medical Sciences examination.

### Aims and Objectives of Programme

The training of a Urological Surgeon is aimed at producing a graduate who can perform and use appropriately the current techniques in general urology without supervision.

### **Programme Structure and Curriculum**

This programme spans 6 years part-time covering the following courses:

Course Code	Course Title	Year Offered	Semester Offered	Prerequisite
MEDC 6620	DM Part I Surgery	1 & 2	I and II	-
MEDC 6651	DM Urology Part I	2	I and II	-
MEDC 6652	DM Urology Part II	3	I and II	-
MEDC 6653	DM Urology Part III	4	l and ll	-
MEDC 6654	DM Urology Part IV	5	I and II	-

The first two (2) years are the same as those for the DM General Surgery.

The urology curriculum covers the following examinable areas:

- 1. Urinary Tract System in females and male
- 2. Male Reproductive System

### Sub Topics for both:

- a. Benign Prostatic Hyperplasia
- b. Andrology
- c. Bladder Dysfunction
- d. Trauma
- e. Female Urology
- f. Reconstructive Urology
- g. Oncological Urology
- h. Paediatric Urology
- i. Stones and Endourology

- j. Urinary Tract Infection and Male Reproductive System Infection
- k. Transplantation
- Applied Patho-Physiology, Nephrology, Transplantation and Principles of Urology
- m. Investigative & Technical Aspects
- n. Surgical Technique in Urology
- o. Research Methods
- p. Examination: See DM General Surgery

### **Teaching Methods**

Tutorials, multidisciplinary meetings, grand rounds, journal club research, audit, surgical skills training and workshops.

#### **Continuous Assessment**

Locally at the end of each rotation and national annual assessment.

#### **Final Examinations**

#### PART I

The Part I examination will consist of a written or MCQ and oral component of the following:

- a. Section A Principles of Surgery
- b. Section B Anatomy, Basic Pathology, Physiology (Including Biochemistry)

The students must pass Section A and at least two (2) parts of Section B to qualify for entry into the second part of the programme.

Students must sit the Part I examination no later than two and a half years (2 1/2) after entering the programme. Students who have not completed the Part I examination within one (1) calendar year of the last sitting of the examination will normally be required to withdraw from the programme. Students must SUCCESSFULLY complete ALL FOUR (4) components of the DM Part I within three (3) years of commencing the programme.

Students who do not pass Part II within five (5) years of completion of Part I will normally be required to withdraw from the programme.

Students will not usually be allowed more than TWO (2) ATTEMPTS at any one examination. Failure at the second attempt will necessitate withdrawal from the programme.

The student may not reapply to the programme after withdrawal.

### Criteria for Award of Degree

Students must pass the Part II examination, inclusive of the written and oral final examinations and must successfully complete the requisite casebook and research which must be accepted with no corrections.

Please contact the following person(s) responsible for distribution of packages and orientation (once accepted into the programme):

**Melrose Yearwood** (Orientation) 14/ Second Floor/Room 205 Telephone: 645 3232 ext 2864

Email: melrose.yearwood@sta.uwi.edu

# FELLOWSHIP PROGRAMMES

# Fellowship in Cardiovascular Medicine

**Department of Clinical Medical Sciences** 

### **Qualifications for Entry**

The candidate must fulfil all of criteria below. Because there is a perceived urgent national need for cardiologists, for a limited time only, criterion 2 will be allowed where criterion 3 is not fulfilled. The admission criteria are:

- Graduation from an accredited medical school by this is meant a medical school accredited by the Caribbean Accreditation Council for Medicine (CAAM) AND be fully registered with the Medical Board of Trinidad and Tobago
- Initially, the Membership of the Royal College of Physicians of the UK or Ireland (MRCP) will be allowed as a criterion for admission provided that
  - The candidate can show that he or she has had adequate proactive supervision in General Internal Medicine (GIM) during the two years prior to obtaining the MRCP
  - Admission of candidates with MRCP to the Fellowship in Cardiovascular Medicine programme will be decided on a case by case basis and is NOT automatic.
  - The MRCP as the sole postgraduate qualification will not be considered as a criterion for admission after 2016.
- Postgraduate training in GIM through a formal training programme as evidenced by:
  - DM Internal Medicine of the University of the West Indies
  - American Board of Internal Medicine
  - Royal College of Physicians of Canada with certification in GIM from Canada
  - European certification in internal medicine provided that the candidate is considered to be proficient in English e.g. certification by the General Medical Council of the UK as an internist.
- Demonstrated excellence in clinical knowledge and skills assessed from letters of recommendation and interview.
- Demonstrated clinical research desire/skills and/or participation in general internal medicine or cardiology service.
- Approved by a Training Selection Subcommittee for the Fellowship in Cardiovascular Medicine programme. The Training Selection Subcommittee will be appointed by the Sub-specialty Board for Cardiovascular Medicine (SSBC), see section C ('access and support').
- Because this is a postgraduate and subspecialty programme, candidates within the programme will be called Fellows.

### **Aims and Objectives**

The goal of this programme, which is entirely new, is to provide high quality, comprehensive training in Cardiovascular Medicine for qualified physicians in the Caribbean with the purpose of expanding capacity and access for cardiac care, initially in Trinidad and Tobago but eventually throughout the Caribbean islands.

### **Programme Structure**

- Course of study: Monthly training rotations, didactic lectures
- Proposed programme component arrangements:
  - Non-Invasive Cardiology testing laboratory
  - Cardiac Catheterization laboratory
  - Nuclear Medicine and Cardiac CT laboratories
  - Inpatient care services

Course Code	Course Title	Year Offered	Semester Offered	Prerequisite
Year I				DM GIM II
To be advised	Cardiac Inpatient/ Consultation Service	I	I	
To be advised	Diagnostic Cardiac Catheterization	I, II, III	I & II	
To be advised	Trans-thoracic Echocardiography	I, II, III	I & II	
To be advised	Cardiac Electrophysiology	l, II, III	I & II	
Year II				
To be advised	Cardiac Continuity Clinic	11, 111	I & II	
To be advised	Stress Testing	II	1 & 11	

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Year III				
To be advised	Dissertation	III	I & II	

### Course load/semester; part-time/full time Three-Year Programme:

- Year 1: Clinical Cardiovascular Medicine courses
- Year 2: Dissertation + Clinical Cardiovascular Medicine courses
- Year 3: Clinical Cardiovascular Medicine courses

There will be two semester examinations per year in years 1 and 3 but none in Year 2:

- Semester I (Clincial Exam)
- Semester II (Oral Exams)

#### Number of failures per semester:

Criteria to move from year to year within the programme are stated in 3b below.

Students who fail to meet these requirements:

- In year 1: the student will not be allowed to progress to year 2
- In Year 2: No semester exam will be required in year 2 but in order to go to year 3 the Programme Coordinator must be satisfied that the student has completed the research project and so recommend to the SSBC.
- Failure to progress to the next consecutive year of the programme will require repeat of the entire year provided this does not infringe paragraph 7d below.

#### Re-sit examinations:

There will be **ONE RESIT** for the final examination for any course.

### Assessment procedures for courses, coursework, fieldwork, internships, or other

There will be:

- in-house formative continuous assessment
- semester examinations

#### Admission into any semester exam

Both of the following criteria will have to be met. The student must have:

- successfully completed the previous year of the programme
- passed the coursework for all courses offered

### Assessment procedures for research in this programme

This will consist of a dissertation that in the opinion of the Programme Director and Programme Coordinator is at postgraduate standard and should lead to publication in a peer-reviewed journal. The paper will be scored in accordance with the requirements for MSc Theses and a final mark will be awarded for this paper.

#### Time limits for completion of the (Fellowship in Cardiovascular Medicine) programme

Semester examinations will be held six-monthly and the final examination at the end of three years from admission to the programme. A candidate would normally be expected to sit the final examination between a minimum of 3 years and a maximum of 5 years after enrolment into the programme.

### Continuous assessment (formative assessment) and promotion from Year to Year

• The purpose of continuous assessment is to establish competence on each individual rotation. The assessment criteria and methods vary slightly and are described with each clinical rotation in the appendices. It is expected that the trainees gain competence in every rotation as a criterion for certification.

### Promotion from one year to the next

- Students must pass each course exam
- Students would also be expected to have a satisfactory progress report for each clinical rotation during each year
- The final decision on progress from year to year will rest with the Specialty Board for Internal Medicine on recommendation from the Subspecialty Board for Cardiology.
- Students who fail to meet these requirements:
  - In Year 1: the student will not be allowed to progress to Year 2

### **THE FACULTY OF MEDICAL SCIENCES**

- In Year 2: No semester exam will be required in Year 2 but in order to go to Year 3, the Programme Coordinator must be satisfied that the student has completed the research project and so recommend to the SSBC.
- Failure in a semester 1 exam will not prevent the student from enrolling in semester 2 of that year provided that:
  - the assessments during the clinical rotations in that semester is satisfactory.
  - the Subspecialty Board for Cardiology recommends that the student be allowed to register for semester 2 in that year.

## Criteria for Award of Degree

#### Distinctions

These will be awarded using accepted UWI standard according to the Regulations for Graduate Diplomas and Degrees.

Please contact the following person(s) responsible for distribution of packages and orientation (once accepted into the programme):

### Dr Ronan Ali

Department of Medicine, 2nd Floor, Building 67, EWMSC

Telephone: 663-4332

Email: Ronan.Ali@sta.uwi.edu

# MPhil/PhD PROGRAMMES

# MPhil/PhD Biochemistry

**Department of Preclinical Sciences** 

## **Qualifications for Entry**

Holders of degrees in Biochemistry as major, molecular biology with biochemistry, biology, or other related disciplines in the life sciences who meet the UWI minimum entry requirements for MPhil and PhD degrees (as per page 2, <u>Board for Graduate Studies and Research Regulations for Graduate Diplomas and Degrees</u> with effect from August 2014).

### Aims and Objectives of Programme

The objective of the programmes is to train students for careers in research and teaching in molecular genetics and related fields. A graduate from the MPhil programme could expect to take up a position as a research technician or an equivalent post. The PhD graduates of the programme are expected to make a significant contribution to the field and be able to carry out independent research. These graduates would be suited as research scientists, university lecturers, science policy advisors and other positions requiring sophisticated training at the PhD level.

### **Programme Structure and Curriculum**

The duration of the MPhil programme is 3 years full time and 5 years part time and the PhD programme is 5 years full-time or 7 years part-time, covering the following courses:

Course Code	Course Title	Credits	Year Offered	Semester Offered	Prerequisite
MEDC 6924	Research Methods for Health Science	4	1&2	I	-
MEDC 6925	Biostatistics and Data Analysis for Health Sciences	4	1&2	I & II	-
MPhil Student	ts only				
MEDC 7041	Scientific Presentation and Critique1	1	1	Year Long	-
MEDC 7042	Scientific Presentation and Critique2	1	2	Year Long	MEDC7041
MEDC 7043	Scientific Presentation and Critique3	1	3	Year Long	MEDC7042
BIOC 7000	MPhil Thesis – Biochemistry (MD)	0			MEDC6924, MEDC6925, MEDC7041, MEDC7042, MEDC7043.
PhD Students	only				
MEDC 8041	Scientific Presentation and Critique1	1	1	Year Long	-
MEDC 8042	Scientific Presentation and Critique2	1	2	Year Long	MEDC8041
MEDC 8043	Scientific Presentation and Critique3	1	3	Year Long	MEDC8042
BIOC 8000	PhD Thesis – Biochemistry (MD)	0			MEDC6924, MEDC6925, MEDC8041, MEDC8042, MEDC8043.

### **Teaching Methods**

The programmes are delivered primarily through self-directed learning (via research) under the guidance of the student's research supervisor and advisory committee. Compulsory taught courses are face-to-face. Teaching in these courses is primarily didactic with practical components, with the exception of Scientific Presentation and Critique which comprises of student and staff presented research seminars and facilitated journal club sessions.

#### Continuous Assessment

Student's overall progress is evaluated by their Supervisor(s) and their wider Committee of Advisors (inclusive of supervisors) who shall respectively submit bi-annual and annual progress reports to the Campus Committee through the Head of Department.

#### **Final Examinations**

Examination is by thesis (and oral examination in the case of PhD) as prescribed by the University regulations (pages 25 – 27, Board for Graduate Studies and Research Regulations for Graduate Diplomas and Degrees with effect from August 2014). Successful completion of all prescribed taught courses and graduate seminars is a pre-requisite for thesis submission.

### Criteria for Award of Degree

MPhil and PhD degrees shall be awarded on the basis of examination by thesis as per University regulations (pages 25 – 27, <u>Board for Graduate Studies and Research Regulations for Graduate Diplomas and Degrees</u> with effect from August 2014)

Please contact the following person(s) responsible for distribution of packages and orientation (once accepted into the programme):

### Head, Department of Preclinical Sciences

Building 36/1<sup>st</sup> Floor/Room 110 Telephone: (868)662-1873

Email: Head.Preclinical@sta.uwi.edu

# **MPhil Community Health**

**Department of Paraclinical Sciences** 

### **Qualifications for Entry**

To be admitted to the prescribed course of study for the qualifications for entry is a first degree and two years post graduate experience based on the "UWI Regulations for Graduate Programmes to be followed"

### Aims and Objectives of Programme

- To provide the candidate with the expertise of various skills in Community Health
- Plan and execute a research project which includes development of a protocol, collection of data and analysis and interpretation of the data.

### **Programme Structure and Curriculum**

The duration of the MPhil programme is 2 years full time and 3 years part time while the PhD programme is 3 years full-time or 5 years part-time, covering the following courses:

<b>Course Code</b>	Course Title	Credits	Year Offered	Semester Offered	Prerequisite
MEDC 6924	Research Methods for Health Science	4	1 & 2	I	-
MEDC 6925	Biostatistics and Data Analysis for Health Sciences	4	1 & 2	1 & 11	-
MPhil Student	s only				
MEDC 7041	Scientific Presentation and Critique 1	1	1	Year Long	-
MEDC 7042	Scientific Presentation and Critique 2	1	2	Year Long	MEDC 7041
COHE 7000	MPhil Thesis	0	FT- 2 PT- 3		MEDC 6924, MEDC 6925, MEDC 7041, MEDC 7042
PhD Students	only				
MEDC 8041	Scientific Presentation and Critique 1	1	1	Year Long	-
MEDC 8042	Scientific Presentation and Critique 2	1	2	Year Long	MEDC 8041
MEDC 8043	Scientific Presentation and Critique 3	1	3	Year Long	MEDC 8042 MEDC 6924 MEDC 6925, MEDC 8041, MEDC 8042 MEDC 8043
COHE 8000	PhD Thesis				

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# **Teaching Methods**

The teaching approach relies on a mixture of teaching methods and strategies that include:

Lectures

**Tutorials** 

Seminars

Computer Skills Lab

### **Continuous Assessment**

All regulations and assessment procedures must be consistent with those provided in the University of the West Indies General Regulations for Postgraduate Degrees and Diplomas.

- Reports of the various components of the research project i.e. reports on protocol, data collections, data analysis and data interpretation.
- 60% Continuous Assessment and 40% Final Report.

#### **Final Examinations**

There is no final examination. However, a Research Project is required at the end of the last semester of the programme. This will be assessed by internal and external examiners.

### Criteria for Award of Degree

The candidate must make a minimum of 50% of the continuous assessment and a minimum of 50% for the final project report to be awarded the MPhil/PhD.

Please contact the following person(s) responsible for distribution of packages and orientation (once accepted into the programme):

#### Dr Kameel Mungrue

Building 39/Ground Floor/Room #02W Telephone: 645-3232 ext 2838; 645-6741 Email: kameel.mungure@sta.uwi.edu

# MPhil/PhD Human Anatomy

**Department of Preclinical Sciences** 

#### **Qualifications for Entry**

Holders of degrees in Anatomy as major, genetics and molecular biology, biology, or other related disciplines in the life sciences who meet the UWI minimum entry requirements for MPhil and PhD degrees (as per page 2, Board for Graduate Studies and Research Regulations for Graduate Diplomas and Degrees with effect from August 2014).

# Aims and Objectives of Programme

The objective of the programmes is to train students for careers in research and teaching in molecular genetics and related fields. A graduate from the MPhil programme could expect to take up a position as a research technician or an equivalent post. The PhD graduates of the programme are expected to make a significant contribution to the field and be able to carry out independent research. These graduates would be suited as research scientists, university lecturers, science policy advisors and other positions requiring sophisticated training at the PhD level.

#### **Programme Structure and Curriculum**

The duration of the MPhil programme is 3 years full time and 5 years part time and the PhD programme is 5 years full-time or 7 years part-time, covering the following courses:

<b>Course Code</b>	Course Title	Credits	Year Offered	Semester Offered	Prerequisite
MEDC 6924	Research Methods for Health Science	4	1 & 2	l	-
MEDC 6925	Biostatistics and Data Analysis for Health Sciences	4	1 & 2	I & II	-
MPhil Students only					
MEDC 7041	Scientific Presentation and Critique 1	1	1	Year Long	-

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MEDC 7042	Scientific Presentation and Critique 2	1	2	Year Long	MEDC7041
MEDC 7043	Scientific Presentation and Critique 3	1	3	Year Long	MEDC7042
ANAT 7000	MPhil Thesis – Human Anatomy	0	Successful completion of taught courses mandatory before proceeding to thesis		MEDC 6924, MEDC 6925, MEDC 7041, MEDC 7042, MEDC 7043.
PhD Students	only				
MEDC 8041	Scientific Presentation and Critique1	1	1	Year Long	-
MEDC 8042	Scientific Presentation and Critique2	1	2	Year Long	MEDC8041
MEDC 8043	Scientific Presentation and Critique3	1	3	Year Long	MEDC8042
ANAT 8000	PhD Thesis – Human Anatomy	0	Successful completion of taught courses mandatory before proceeding to thesis		MEDC 6924, MEDC 6925, MEDC 8041, MEDC 8042, MEDC 8043.

# **Teaching Methods**

The programmes are delivered primarily through self-directed learning (via research) under the guidance of the student's research supervisor and advisory committee. Compulsory taught courses are face-to-face. Teaching in these courses is primarily didactic with practical components, with the exception of Scientific Presentation and Critique which comprises of student and staff presented research seminars and facilitated journal club sessions.

#### **Continuous Assessment**

Student's overall progress is evaluated by their Supervisor(s) and their wider Committee of Advisors (inclusive of supervisors) who shall respectively submit bi-annual and annual progress reports to the Campus Committee through the Head of Department.

#### **Final Examinations**

Examination is by thesis (and oral examination in the case of PhD) as prescribed by the University regulations (pages 25 – 27 Board for Graduate Studies and Research Regulations for Graduate Diplomas and Degrees with effect from August 2014). Successful completion of all prescribed taught courses and graduate seminars is a pre-requisite for thesis submission.

# Criteria for Award of Degree

MPhil and PhD degrees shall be awarded on the basis of examination by thesis as per University regulations (pages 25 – 27 Board for Graduate Studies and Research Regulations for Graduate Diplomas and Degrees with effect from August 2014).

Please contact the following person(s) responsible for distribution of packages and orientation (once accepted into the programme):

Head, Department of Preclinical sciences

Building 36/1st Floor/Room 110 Telephone: (868)662-1873

Email: Head.Preclinical@sta.uwi.edu

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# MPhil/PhD Human Physiology

**Department of Preclinical Sciences** 

### **Qualifications for Entry**

Holders of degrees in physiology, neurophysiology, Biology or other related disciplines in the life sciences who meet the UWI minimum entry requirements for MPhil and PhD degrees (as per page 2, Board for Graduate Studies and Research Regulations for Graduate Diplomas and Degrees with effect from August 2014).

# Aims and Objectives of Programme

The objective of the programmes is to train students for careers in research and teaching in neuroscience related fields. This is a rapidly evolving and increasingly important area that ultimately impacts social, health and economic sphere of human endeavour. A graduate from the MPhil programme could expect to take up a position as a research technician or an equivalent post. The PhD graduates of the programme are expected to make a significant contribution to the field and be able to carry out independent research. These graduates would be suited as research scientists, university lecturers, science policy advisors and other positions requiring sophisticated training at the PhD level. Graduates will also be suited to work within the pharmaceutical industry.

#### **Programme Structure and Curriculum**

The duration of the MPhil programme is 3 years full time and 5 years part time and the PhD programme is 5 years full-time or 7 years part-time, covering the following courses:

# **Teaching Methods**

The programmes are delivered primarily through self-directed learning (via research) under the guidance of the student's research supervisor and advisory committee. Compulsory taught courses are face-to-face. Teaching in these courses is primarily didactic with practical components, with the exception of Scientific Presentation and Critique which comprises of student and staff presented research seminars and facilitated journal club sessions.

#### Continuous Assessment

Student's overall progress is evaluated by their Supervisor(s) and their wider Committee of Advisors (inclusive of supervisors) who shall respectively submit bi-annual and annual progress reports to the Campus Committee through the Head of Department.

#### **Final Examinations**

Examination is by thesis (and oral examination in the case of PhD) as prescribed by the University regulations (pages 25 – 27 <u>Board for Graduate Studies and Research Regulations for Graduate Diplomas and Degrees</u> with effect from August 2014). Successful completion of all prescribed taught courses and graduate seminars is a pre-requisite for thesis submission.

### Criteria for Award of Degree

MPhil and PhD degrees shall be awarded on the basis of examination by thesis as per University regulations (pages 25 – 27 Board for Graduate Studies and Research Regulations for Graduate Diplomas and Degrees with effect from August 2014).

Please contact the following person(s) responsible for distribution of packages and orientation (once accepted into the programme):

Head, Department of Preclinical sciences

Building 36/1st Floor/Room 110 Telephone: (868) 662-1873

Email: <u>Head.Preclinical@sta.uwi.edu</u>

# MPhil/PhD Medical Microbiology

**Department of Paraclinical Sciences** 

# **Qualifications for Entry**

For entry into the MPhil programme applicants must possess the MSc in Medical Microbiology or its equivalent. Applicants must possess the Master of Science Medical Microbiology, Master of Philosophy in Medical Microbiology degree from the UWI or its equivalent for entry into the PhD programme. Candidates who are graduates of other Universities must meet the UWI minimum entry requirements for MPhil and PhD degrees (as per page 2, <u>Board for Graduate Studies and Research Regulations for Graduate Diplomas and Degrees</u> with effect from August 2014).

# Aims and Objectives of Programme

To produce medical microbiologist who can respond to the needs of the region in laboratory management, diagnostic microbiological services, teaching and research.

# Programme Structure and Curriculum

The MPhil in Medical Microbiology programme covers 3 to 7 years and the duration of the PhD programme is 4 to 8 years covering the following courses:

Course Code	Course Title	Credits	Semester Offered	Year	Prerequisite
Courses for MPhi	l Medical Microbiology – 3-7 years dura		MEDC 7015 will not be		
MEDC 7015	Fundamentals of Medical Microbiology	6	1 & 2	1	required for UWI MSc Medical Microbiology
MEDC 7021	MPhil Thesis – Medical Microbiology				graduates.
MEDC 6924 or MEDC 6310	Research Methods	4	2	1	UWI MSc Medical Microbiology graduates will not be required to do this course
MEDC 6925 or MEDC 6120	Statistics	4	1 & 2	1	UWI MSc Medical Microbiology graduates will not be required to do this course
Courses for PhD I	Medical Microbiology – 4-8 years durati	ion			MEDC 8010 will not be
MEDC 8010	Fundamentals of Medical Microbiology	6	1 & 2	1	required for UWI MSc and MPhil Medical Microbiology graduates.
MEDC 6924 or MEDC 6310	Research Methods	4	2	1	
MEDC 6925 or MEDC 6120	Statistics	4	1 & 2	1	
MEDC 8021	PhD Thesis – Medical Microbiology				

#### **Teaching Methods**

The MPhil and PhD programs are research-based programs and candidates will have their thesis examined at the end of their study. This will also involve oral defence of their work for the PhD candidates and if necessary for the MPhil candidates also.

#### **Continuous Assessment**

This is not required for MPhil and PhD students.

#### **Final Examinations**

Examination of submitted thesis and oral examinations or defence of the thesis or research work.

# Criteria for Award of Degree

The MPhil degree will be awarded to individuals who have completed the required credit courses including successful submission and passing thesis examinations. PhD students will be required to complete required credit courses including successful oral defence of their research work for the award of their degree.

Please contact the following person(s) responsible for distribution of packages and orientation (once accepted into the programme):

Ms Petrina Best or Unit's Secretary

Unit of Microbiology/Pathology; Room 62, Building 4, Dept. of Paraclinical Sciences

Telephone: 663-1141 or 645-3232 Ext 2253

Email: petrina.best@sta.uwi.edu

# PhD Molecular Genetics

**Department of Preclinical Sciences** 

# **Qualifications for Entry**

Holders of degrees in molecular genetics, genetics, molecular biology, biology, biochemistry, cell biology, microbiology, virology or other related disciplines in the biological sciences who meet the UWI minimum entry requirements for MPhil and PhD degrees (as per page 2, <u>Board for Graduate Studies and Research Regulations for Graduate Diplomas and Degrees</u> with effect from August 2014).

# Aims and Objectives of Programme

The objective of the programmes is to train students for careers in research and teaching in molecular genetics and related fields. A graduate from the M.Phil programme could expect to take up a position as a research technician or an equivalent post. The PhD graduates of the programme are expected to make a significant contribution to the field and be able to carry out independent research. These graduates would be suited as research scientists, university lecturers, science policy advisors and other positions requiring sophisticated training at the PhD level.

#### **Programme Structure and Curriculum**

The duration of the MPhil programme is 2-3 years full time and 4-5 years part time and the PhD programme is 3-5 years full-time or 5-7 years part-time, covering the following courses:

<b>Course Code</b>	Course Title	Credits	Year Offered	Semester Offered	Prerequisite
MEDC 6924	Research Methods for Health Science	4	1 & 2	I	-
MEDC 6925	Biostatistics and Data Analysis for Health Sciences	4	1 & 2	1 & 11	-
MPhil Student	s only				
MEDC 7041	Scientific Presentation and Critique1	1	1	Year Long	-
MEDC 7042	Scientific Presentation and Critique2	1	2	Year Long	MEDC 7041
MOGN 7000	MPhil Thesis – Molecular Genetics	0			MEDC 6924, MEDC 6925, MEDC 7041, MEDC 7042
PhD Students	only				
MEDC 8041	Scientific Presentation and Critique1	1	1	Year Long	-
MEDC 8042	Scientific Presentation and Critique2	1	2	Year Long	MEDC 8041
MEDC 8043	Scientific Presentation and Critique3	1	3	Year Long	MEDC 8042
MOGN 8000	PhD Thesis – Molecular Genetics	0			MEDC 6924, MEDC 6925, MEDC 8041, MEDC 8042, MEDC 8043.

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# **Teaching Methods**

The programmes are delivered primarily through self-directed learning (via research) under the guidance of the student's research supervisor and advisory committee. Compulsory taught courses are face-to-face. Teaching in these courses is primarily didactic with practical components, with the exception of Scientific Presentation and Critique which comprises of student and staff presented research seminars and facilitated journal club sessions.

#### **Continuous Assessment**

Student's overall progress is evaluated by their Supervisor(s) and their wider Committee of Advisors (inclusive of supervisors) who shall respectively submit bi-annual and annual progress reports to the Campus Committee through the Head of Department.

#### **Final Examinations**

Examination is by thesis (and oral examination in the case of PhD) as prescribed by the University regulations (pages 25 – 27 Board for Graduate Studies and Research Regulations for Graduate Diplomas and Degrees with effect from August 2014). Successful completion of all prescribed taught courses and graduate seminars is a pre-requisite for thesis submission.

# Criteria for Award of Degree

MPhil and PhD degrees shall be awarded on the basis of examination by thesis as per University regulations (pages 25 – 27 Board for Graduate Studies and Research Regulations for Graduate Diplomas and Degrees with effect from August 2014).

Please contact the following person(s) responsible for distribution of packages and orientation (once accepted into the programme):

# Head, Department of Preclinical Sciences

Building 36/1st Floor/Room 110 Telephone: (868)662-1873

Email: Head.Preclinical@sta.uwi.edu

# MPhil/PhD Neuroscience

**Department of Preclinical Sciences** 

# **Qualifications for Entry**

Holders of degrees in Neuroscience, Physiology, Pharmacology or Biology or other related disciplines in the life sciences who meet the UWI minimum entry requirements for MPhil and PhD degrees (as per page 2, <u>Board for Graduate Studies and Research Regulations for Graduate Diplomas and Degrees with effect from August 2014</u>).

### Aims and Objectives of Programme

The objective of the programmes is to train students for careers in research and teaching in neuroscience related fields. This is a rapidly evolving and increasingly important area that ultimately impacts social, health and economic sphere of human endeavour. A graduate from the MPhil programme could expect to take up a position as a research technician or an equivalent post. The PhD graduates of the programme are expected to make a significant contribution to the field and be able to carry out independent research. These graduates would be suited as research scientists, university lecturers, science policy advisors and other positions requiring sophisticated training at the PhD level. Graduates will also be suited to work within the pharmaceutical industry.

#### **Programme Structure and Curriculum**

The duration of the MPhil programme is 3 years full time and 5 years part time and the PhD programme is 5 years full-time or 7 years part-time, covering the following courses:

<b>Course Code</b>	Course Title	Credits	Year Offered	Semester Offered	Prerequisite
MEDC 6924	Research Methods for Health Science	4	1 & 2	I	-
MEDC 6925	Biostatistics and Data Analysis for Health Sciences	4	1 & 2	I & II	-

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MPhil Studen	ts only				
MEDC 7041	Scientific Presentation and Critique1	1	1	Year Long	-
MEDC 7042	Scientific Presentation and Critique2	1	2	Year Long	MEDC 7041
NESC 7000	MPhil Thesis – Neuroscience	0	N/A		MEDC 6924, MEDC 6925, MEDC 7041, MEDC 7042
PhD Students	only				
MEDC 8041	Scientific Presentation and Critique1	1	1	Year Long	-
MEDC 8042	Scientific Presentation and Critique2	1	2	Year Long	MEDC 8041
MEDC 8043	Scientific Presentation and Critique3	1	3	Year Long	MEDC 8042
NESC 8000	PhD Thesis – Neuroscience	0	N/A		MEDC 6924, MEDC 6925, MEDC 8041, MEDC 8042, MEDC 8043.

#### **Teaching Methods**

The programmes are delivered primarily through self-directed learning (via research) under the guidance of the student's research supervisor and advisory committee. Compulsory taught courses are face-to-face. Teaching in these courses is primarily didactic with practical components, with the exception of Scientific Presentation and Critique which comprises of student and staff presented research seminars and facilitated journal club sessions.

#### Continuous Assessment

Student's overall progress is evaluated by their Supervisor(s) and their wider Committee of Advisors (inclusive of supervisors) who shall respectively submit bi-annual and annual progress reports to the Campus Committee through the Head of Department.

#### **Final Examinations**

Examination is by thesis (and oral examination in the case of PhD) as prescribed by the University regulations (pages 25 – 27 Board for Graduate Studies and Research Regulations for Graduate Diplomas and Degrees with effect from August 2014). Successful completion of all prescribed taught courses and graduate seminars is a pre-requisite for thesis submission.

#### Criteria for Award of Degree

MPhil and PhD degrees shall be awarded on the basis of examination by thesis as per University regulations (pages 25 – 27 Board for Graduate Studies and Research Regulations for Graduate Diplomas and Degrees with effect from August 2014).

Please contact the following person(s) responsible for distribution of packages and orientation (once accepted into the programme):

Head, Department of Preclinical Sciences

Building 36/1st Floor/Room 110 Telephone: (868)662-1873

Email: <u>Head.Preclinical@sta.uwi.edu</u>

# MPhil/PhD Pathology

(with sub-disciplines in: Chemical Pathology, Anatomical Pathology, Haematology, Immunology)
Department of Paraclinical Sciences

# **Qualifications for Entry**

To be admitted to the prescribed course of study for the MPhil and PhD degrees in Pathology in the selected available various sub-disciplines of Haematology, Chemical Pathology, Immunology and Anatomical Pathology the student must be:

- Normally be a University Graduate with a first class honours or an upper second class honours degree from a recognized
  university in science or medicine [including Medical Science Degrees, BBMed Sci. majors, Physiotherapy, Pure Science
  degrees (including Chemistry, Zoology and Forensic Sciences)] will be considered for admission to the MPhil programme
  based on the selected sub-disciplines of Haematology, Chemical Pathology, Immunology and Anatomical Pathology.
  Candidates with a MBBS degree will be required for admission under the disciplines of Anatomical Pathology and
  Haematology.
- Candidates with an appropriate technical qualification and work experience, or equivalent qualifications, will also be considered for admission to the course following an interview by the Paraclinical Department.
- Students will be required to satisfy the credit requirements for postgraduate study as prescribed by the Board of Graduate Studies. If they have not already completed suitable and recognized courses in Research Methods, then they will be required to do so. This will also contribute to credit requirements.

# Aims and Objectives of Programme

The MPhil and PhD programmes are research-oriented in areas of basic and clinical investigations in the selected sub-disciplines of Haematology, Chemical Pathology, Immunology and Anatomical Pathology.

The doctoral programme seeks to produce knowledgeable and competent persons who will provide a high level of leadership in research in the selected sub-disciplines of Haematology, Chemical Pathology, Immunology and Anatomical Pathology. PhD students will attend regular seminars arranged by the programme and make presentations once per semester. PhD students must complete a minimum of 9 credits and conduct research leading to a thesis. Students will be required to submit a research thesis and pass an oral examination before graduation.

MPhil students will attend regular seminars arranged by the programme and make presentations once per semester. MPhil students must complete a minimum of 6 credits and conduct research leading to a thesis which must be submitted before graduation.

#### The Programme

• To provide persons with the fundamental and critical skills for assessing problems and responding to health challenges in the selected sub-disciplines of Haematology, Chemical Pathology, Immunology and Anatomical Pathology.

#### **Programme Structure and Curriculum**

The duration of the MPhil programme is 2 years full time and 3 years part time and the PhD programme is 3 years full-time or 5 years part-time, covering the following courses:

<b>Course Code</b>	Course Title	Credits	Year Offered	Semester Offered	Prerequisite
	Courses common to MPhil/PhD				
MEDC 6924	Research Methods for Health Sciences	4	1 or 2	Year Long	-
MEDC 6925	Bio Statistics and Data Analysis for Health Sciences	4	1 or 2	Year Long	-
	MPhil Courses				
MD 70A**	Introductory Course to Chemical Pathology**		1	Year Long	-
MD 70B**	Chemical Pathology Aspects of Intermediary Metabolism**		1	Year Long	-
MEDC 7041	Scientific Presentation and Critique	1	1	Year Long	-

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MEDC 7042	Scientific Presentation and Critique	2	Year Long	-
GRSM 7000	MPhil Presentation	1		Students are
GRSM 7001	MPhil Presentation	2		required to do two
GRSM 7002	MPhil Presentation			presentations
MEDC 7700	MPhil Thesis Pathology (Sub-discipline Pathology)			-
	PhD Courses			
MEDC 8041	Scientific Presentation and Critique	1	Year Long	-
MEDC 8042	Scientific Presentation and Critique	2	Year Long	-
MEDC 8043	Scientific Presentation and Critique	3	Year Long	-
GRSM 8000	PhD Presentation	1		Students are
GRSM 8001	PhD Presentation	2		required to do
GRSM 8002	PhD Presentation	3		three
GRSM 8003	PhD Presentation			presentations
MEDC 8030	PhD Thesis (Sub-discipline Pathology)			-

# **Teaching Methods**

Lectures seminars, small group teaching and mentorship.

#### **Continuous Assessment**

Students are required to pass departmental examinations in addition to the credits as specified in the UWI Regulations for Graduate Programmes for MPhil and PhD degrees.

#### **Final Examinations**

Examination is by thesis (and oral examination in the case of PhD) as prescribed by the University regulations (pages 25 – 27 Board for Graduate Studies and Research Regulations for Graduate Diplomas and Degrees with effect from August 2014). Successful completion of all prescribed taught courses and graduate seminars is a pre-requisite for thesis submission.

### Criteria for Award of Degree

The award of the degree is based on presentation of a thesis of original research which significantly advances the selected discipline in Pathology. The examination for the degree is by assessment of the thesis and a viva voce examination. The MPhil and PhD degrees in Pathology will be offered when necessary in accordance with the UWI Regulations for Graduate Programmes.

Please contact the following person(s) responsible for distribution of packages and orientation (once accepted into the programme):

*Dr A. V. Chalapathi Rao*Building #05, Room #003
Telephone: 645 0774

Email: chalapathi.rao@sta.uwi.edu

# MPhil/PhD Pharmacology

**Department of Paraclinical Sciences** 

# **Qualifications for Entry**

The entry requirement is a GPA score of 3.0 or above which conforms to the traditional Upper Second Class. Exemptions to completing Departmental courses in Basic and Systemic Pharmacology include a BSc in Pharmacy, Pharmacology or an MBBS.

Candidates other than those holding a BSc. Pharmacy, Pharmacology or MB.BS are expected to complete a Departmental course covering Basic and Systemic Pharmacology, as well as basic sciences, including Biochemistry and Physiology, relevant to the understanding of pharmacological principles. As far as possible candidates will be provided with the opportunity to participate in at least two (2) laboratory rotations outside of their primary research; to include analytical techniques, animal experimentation, molecular biology or other relevant areas available within, but not restricted to, the Faculty of Medical Sciences. Candidates are encouraged to present or publish at least two (2) first-authored primary research papers in forums or peer-reviewed journals before submission of their thesis.

# Aims and Objectives of Programme

Pharmacology is the study of drugs and how they affect the body from drug-induced molecular and cellular reactions to the clinical evaluation of therapeutic efficacy. It focuses on drug use for the improvement of health and quality of life, for treatment and prevention of disease and also as research tools for the further exploration of body functions. MPhil/PhD training in Pharmacology aims to provide candidates with the requisite expertise in the concepts, approaches and techniques of the basic and clinical research and facilitates the development of independent investigators.

#### Programme Structure and Curriculum

The duration of the MPhil programme is 2 years full time and 3 years part time and the PhD programme is 3 years full-time or 5 years part-time, covering the following courses:

<b>Course Code</b>	Course Title	Credits	Year Offered	Semester Offered	Prerequisite
MEDC 6924	Research Methods for Health Science	4	1 & 2	I	-
MEDC 6925	Biostatistics and Data Analysis for Health Sciences	4	1 & 2	I & II	-
MPhil Students	s only				
MEDC 7041	Scientific Presentation and Critique1	1	1	Year Long	-
MEDC 7042	Scientific Presentation and Critique2	1	2	Year Long	MEDC 7041
PHAT 7000	MPhil Thesis – Pharmacology and Therapeutics	0	FT- 2 PT- 3		MEDC 6924, MEDC 6925, MEDC 7041, MEDC 7042
PhD Students	only				
MEDC 8041	Scientific Presentation and Critique1	1	1	Year Long	-
MEDC 8042	Scientific Presentation and Critique2	1	2	Year Long	MEDC 8041
MEDC 8043	Scientific Presentation and Critique3	1	3	Year Long	MEDC 8042, MEDC 6924, MEDC 6925, MEDC 8041,
PHAT 8000	PhD Thesis – Pharmacology and Therapeutics	0	FT - 3 PT - 5		MEDC 8042, MEDC 8043.

# **Teaching Methods**

MEDC 6924 and MEDC 6925 are delivered by didactic lectures and tutorials. MEDC 7041/7042 (MPhil); MEDC 8041/8042/8043 (PhD) are graded seminars based on the candidate's research topic.

#### **Continuous Assessment**

Continuous assessment would consist of Faculty-based courses MEDC 6924 & MEDC 6925 (MPhil/PhD) and graded seminars MEDC 7041/7042 (MPhil); MEDC 8041/8042/8043(PhD).

#### **Final Examinations**

Examination is by thesis (and oral examination in the case of PhD) as prescribed by the University regulations (pages 25 – 27 Board for Graduate Studies and Research Regulations for Graduate Diplomas and Degrees with effect from August 2014). Successful completion of all prescribed taught courses and graduate seminars is a pre-requisite for thesis submission.

# Criteria for Award of Degree

The award of the degree is based on presentation of a thesis of original research which significantly advances the discipline in Pharmacology. The examination for the degree is by assessment of the thesis and a viva voce examination. Candidates must pass ALL compulsory written and seminar courses, as well as the final thesis. PhD candidates MUST pass the final oral examination. The MPhil and PhD degrees in Pharmacology will be awarded in accordance with the UWI Regulations for Graduate Programmes.

Please contact the following person(s) responsible for distribution of packages and orientation (once accepted into the programme):

Dr Yuri Clement

Building 35 / Ground Floor/Room #008

Telephone: 645 0774

Email: yuri.clement@sta.uwi.edu

MPhil/PhD Veterinary Anatomy
MPhil/PhD Veterinary Clinical Medicine
MPhil/PhD Veterinary Microbiology
MPhil/PhD Veterinary Parasitology
MPhil/PhD Veterinary Pathology
MPhil/PhD Veterinary Pharmacology
MPhil/PhD Veterinary Physiology
MPhil/PhD Veterinary Public Health & Epidemiology
MPhil/PhD Veterinary Toxicology

School of Veterinary Medicine

The School of Veterinary Medicine offers postgraduate studies leading to MPhil and PhD degrees of Veterinary Anatomy, Veterinary Clinical Medicine, Veterinary Microbiology, Veterinary Parasitology, Veterinary Pathology, Veterinary Physiology, Veterinary Physiology, Veterinary Public Health and Epidemiology and Veterinary Toxicology. The degree programmes are primarily by research and guided studies with limited course work requirements where necessary. Details of the application process and the documents required are available at <a href="https://sta.uwi.edu/admissions/postgrad/">https://sta.uwi.edu/admissions/postgrad/</a>.

### **Qualifications for Entry**

The following are eligible for admission to the MPhil degree programme:

- 1. Graduates of The University of the West Indies or of any other university, recognised for this purpose, holding the Doctor of Veterinary Medicine degree (DVM) or its equivalent.
- 2. Graduates of The University of the West Indies or of any other university, recognised for this purpose, holding first class or second class degrees (preferably second class upper degrees).
- 3. Applicants who do not satisfy the requirements outlined in nos. 1 and 2 (above) may be admitted to the MPhil programme only if they have passed prescribed qualifying courses. Such candidates may be admitted as qualifying students.

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4. Only candidates who hold Doctor of Veterinary Medicine (DVM) degrees qualify for degrees in Veterinary Clinical Studies. Degrees in non-clinical areas are open to holders of Doctor of Veterinary Medical degrees (DVM) as well as holders of other suitable degrees, which must be obtained at the level of second class upper or first class. Those with second-class lower degrees may apply only if they have a minimum of B grade in the area of interest at the degree examination and are usually required to fulfil certain conditions.

#### Qualifications for entry into the PhD degree programmes

Candidates for admission into the PhD programme should be:

- Holders of MPhil degrees of The University of the West Indies, or of any other University recognised by The University
  of the West Indies.
- 2. Holders of Masters of Science Degrees (MSc), by thesis, of The University of the West Indies or of any other University recognised for that purpose.
- Candidates may have their registration upgraded from MPhil to PhD degrees, if the requirements of the upgrade are
  met. (The requirements are outlined in the regulations for postgraduate studies of The University of the West Indies)

# Aims and Objectives of Programme

Our MPhil and PhD programmes aim to:

- introduce students to research skills and specialist knowledge.
- give qualifying students the opportunity to carry out focussed research in the discipline of their choice.
- provide an opportunity for students to acquire and develop skills and expertise relevant to their research interests.

# MPhil and PhD degrees can be obtained in the following disciplines.

#### 1. VETERINARY ANATOMY

- Neuropathological evaluation of swayback disease as compared with Alzheimer's disease
- Rabbits as an animal model for Alzheimer's disease
- Anatomical studies in the agouti
- Distribution and types of congenital abnormalities in animals
- Gross anatomical studies of rare species of animals

#### 2. VETERINARY CLINICAL MEDICINE

- Campylobacter fetus subspp veneralis and Trichomonas fetus subspp veneralis in some selected dairy herds
- A prospective study on transplacental transmission of equine piroplasmosis
- Molecular and clinical dynamics of canine haemopathogens
- The occurrence of tick borne diseases
- Reconstructive surgery in companion animals
- Minimally invasive orthopaedic surgery in companion animals
- Epidemiological investigations into racing and training injuries in the racing thoroughbred population of Trinidad and the Caribbean
- Pathology of the upper respiratory tract of racing thoroughbreds using dynamic endoscopy

#### 3. VETERINARY MICROBIOLOGY

- Identification and characterisation of viruses circulating in domestic poultry and wild birds
- Identification and characterisation of viruses affecting swine populations
- Identification and characterisation of viruses affecting the fertility of dairy cattle
- Identification and characterisation of viruses affecting small ruminants
- Identification and characterisation of viruses affecting aquatic animal health
- Priority zoonotic viruses within the Caribbean
- Wildlife reservoirs for zoonotic and animals viruses
- Vector-borne virus spread and transmission
- Role of insect vectors as hosts for zoonotic and animal viruses
- Identification and detailed characterization of bacterial pathogens affecting duck production
- Molecular analysis of multidrug resistant bacterial pathogens associated with food-producing animals

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 Epidemiology, genomic characteristics and antimicrobial susceptibility profiles of the Staphylococci isolated from humans, animals and milk in Trinidad and Tobago

#### 4. VETERINARY PARASITOLOGY

- Investigations into the phytoacarcidal action of Neem oil in Boophilus microplus
- Internal parasites and gastrointestinal microbiology of wild agouti
- Tick and tick borne diseases
- Anthelminthic resistance in small ruminants
- Phylogenetic characteristics of Sarcoptes scabiei in domestic animals in Trinidad

#### 5. VETERINARY PATHOLOGY

- Haematological values in copper deficient sheep
- Pathology and pathogenesis of tick borne diseases
- Pathology and pathogenesis of avian viral and bacterial diseases
- Pathology of spontaneous animal neoplasms
- Diseases of ruminants

#### 6. VETERINARY PHARMACOLOGY

- Evaluation and standardisation of medicinal plants with varied biological activity
- Evaluation of the antibacterial activity of plant extracts.

#### 7. VETERINARY PHYSIOLOGY

- Establishment of ELISA techniques to measure progesterone concentrations in samples
- Involvement of protein kinase C (pck) in the self-priming of gonadotrophin-releasing hormone (GnRH)
- Grazing behaviour and physiological adaptability of large and small ruminants
- Attainment of puberty in buffalo heifers
- Semen characteristics and evaluation in buffalypso and rabbits
- Improvement of reproductive efficiency by using recent estrus synchronization protocols in domestic animals

#### 8. VETERINARY PUBLIC HEALTH AND EPIDEMIOLOGY

- Isolation and characterisation of *E. coli* and *Salmonella* spp. in pets
- Use of a rapid assay system for detection of Campylobacter spp. prevalence in chickens from 'pluck shops'
- Evaluation of the efficacy of Brucella abortus vaccine strain RB<sub>51</sub> in domestic water buffaloes (Bubalus bulbalis)
- Subclinical mastitis and antimicrobial residues in dairy cows
- Bacterial aetiology of pneumonia
- Microbial quality of water supplied to urban and rural communities
- Epidemiology of zoonotic bacterial diseases
- Microbial quality of ready-to-eat foods of animal origin
- Food safety problems in the Caribbean
- A retrospective study on antimicrobial sensitivity and resistance patterns from data submitted to human and veterinary diagnostic laboratories in Trinidad and Tobago a one health approach
- A study on welfare of dairy cattle in Trinidad, Tobago, Antigua and Barbados
- Toxoplasmosis in animals and humans.
- Dog bites in primary school children
- Antimicrobial resistance in food producing animals a farm to fork approach

#### 9. VETERINARY TOXICOLOGY

- The occurrence of veterinary medicines, pharmaceuticals and personal care products in foods of animal origin in Trinidad
- Safety and quality assurance of food of animal origin

Please note that these topics are provided only as a guide to prospective students. Research at the SVM is not confined to the stated topics.

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# **Programme Structure and Curriculum**

#### **MPhil Programmes**

Course of Study

Candidates for the MPhil degree are required to register for taught courses amounting to a minimum of six (6) credit hours. These courses normally include Biostatistics and Research Methodology, and any other courses that the supervisory committee may deem necessary for the candidate.

Candidates are required to present two (2) seminars before the completion of the MPhil degree programme, one in the first half of the course and the second at the end of the course based on their research. Attendance at postgraduate seminars is mandatory.

#### Duration of the MPhil Programme

The MPhil programme is offered to both full-time and part-time students. Full-time students are expected to complete the programme within 24 months of registration. Part-time students are expected to complete the programme within 36 months.

#### **PhD Programmes**

Course of Study

The minimum duration of the programme is three calendar years (36 months) of full-time study or five calendar years (60 months) of part-time study.

Candidates are required to register for taught courses amounting to a minimum of nine (9) credit hours (credits gained prior to upgrade from MPhil to PhD contribute towards this total). The PhD programme is fundamentally a research degree, however the supervisory committee may recommend some course work but this should not form a significant part of the programme.

Candidates are required to present at least three (3) seminars based on their research, before the completion of the programme. Attendance at postgraduate seminars is mandatory.

#### List of Core Courses, Semesters offered and Credits:

Course Code	Course Title	Credits	Semester Offered	Prerequisites/ Comments
MEDC 7041	Scientific Presentation and Critique I	1	1 and 2	-
MEDC 7042	Scientific Presentation and Critique II	1	1 and 2	MEDC 7041
MEDC 7043	Scientific Presentation and Critique III	1	To be advised	MEDC 7042
AGBU 6301 or MEDC 6924	Research Methodology* Research Methods for Health Sciences	4	1	-
AGRI 6620 or MEDC 6925	Biostatistics* Biostatistics & Data Analysis for Health Sciences	4	1 or 2	-
MEDC 8041	Scientific Presentation and Critique I	1	1 and 2	-
MEDC 8042	Scientific Presentation and Critique II	1	1 and 2	MEDC 8041
MEDC 8043	Scientific Presentation and Critique III	1	To be advised	MEDC 8042

In addition to these core courses students are required to register for thesis courses in their respective disciples.

#### **List of Thesis Courses:**

Course Code	Course Title	Prerequisites/Comments
<b>MPhil Programme</b>		
VEAN 7000	MPhil Thesis Veterinary Anatomy	MEDC7041, MEDC7042 and MEDC7043,
VETM 7000	MPhil Thesis Veterinary Clinical Medicine	BIOSTATISTICS. RESEARCH METHODOLOGY
VEMI 7000	MPhil Thesis Veterinary Microbiology	Any other courses that the advisory committee
VEPA 7000	MPhil Thesis Veterinary Parasitology	may deem necessary for the candidate. All
To be advised	MPhil Thesis Veterinary Pathology	MPhil programmes require a minimum of 6
To be advised	MPhil Thesis Veterinary Pharmacology	credits including core courses above.
VEPH 7000	MPhil Thesis Veterinary Physiology	
VEPE 7001	MPhil Thesis Veterinary Public Health	
To be advised	MPhil Thesis Veterinary Toxicology	

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PhD Programme		
VEAN 8000	PhD Thesis Veterinary Anatomy	MEDC8041, MEDC8042 and MEDC8043,
To be advised	PhD Thesis Veterinary Clinical Medicine	BIOSTATISTICS. RESEARCH METHODOLOGY
VEMI 8000	PhD Thesis Veterinary Microbiology	Any other courses that the advisory committee
VEPA 8000	PhD Thesis Veterinary Parasitology	may deem necessary for the candidate. All
To be advised	PhD Thesis Veterinary Pathology	PhD programmes require 9 credits including
To be advised	PhD Thesis Veterinary Pharmacology	core courses above.
VEPH 8000	PhD Thesis Veterinary Physiology	
VEPE 8001	PhD Thesis Veterinary Public Health	
To be advised	PhD Thesis Veterinary Toxicology	

# **Teaching Methods**

The programmes are delivered primarily through self-directed learning (via research) under the guidance of the student's research supervisor and advisory committee. Compulsory taught courses are face-to-face. Teaching in these courses is primarily didactic with practical components, with the exception of Scientific Presentation and Critique which comprises of student and staff presented research seminars and facilitated journal club sessions.

### **Continuous Assessment**

Student's overall progress is evaluated by their Supervisor(s) and their wider Committee of Advisors (inclusive of supervisors) who shall respectively submit bi-annual and annual progress reports to the Campus Committee through the Head of Department.

### **Final Examinations**

Examination is by thesis (and oral examination in the case of PhD) as prescribed by the University regulations (pages 25 – 27 Board for Graduate Studies and Research Regulations for Graduate Diplomas and Degrees with effect from August 2014). Successful completion of all prescribed taught courses and graduate seminars is a pre-requisite for thesis submission.

# Criteria for Award of Degree

MPhil and PhD degrees shall be awarded on the basis of examination by thesis as per University regulations (pages 25-27 Board for Graduate Studies and Research Regulations for Graduate Diplomas and Degrees with effect from August 2014).

Please contact the following person(s) responsible for distribution of packages and orientation (once accepted into the programme):

Mrs Leslie Ann Romain-Hood

Building 49

Telephone: 645-3232 ext. 4215

Email: Leslie-Ann.Romain-Hood@sta.uwi.edu

# **DIPLOMA PROGRAMMES**

# **Diploma - Family Medicine**

**Department of Paraclinical Sciences** 

# **Qualifications for Entry**

Candidates seeking entry to the Diploma programme in Family Medicine must possess an MB BS degree or equivalent from an approved university and must have Full Registration with the Medical Board of Trinidad and Tobago. In addition, applicants must have at least one year's clinical working experience, preferably in Primary Care.

### Aims and Objectives of Programme

Its overall aim is to create the competent independent community based Family Physician.

#### **AIMS**

- To provide education and training in Family Medicine relevant to the needs of the Caribbean community.
- To stimulate the professional development of the general practitioners based on their existing experience, and to enhance
  their competence and ability to function effectively and efficiently as Family Physicians. To provide a continuing education
  base for the development of a career structure for Family Physicians.

#### **Programme Structure and Curriculum**

This 2-year part time diploma programme covers the following course:

<b>Course Code</b>	Course Title	Credits	Year Offered	Semester Offered	Prerequisite
MEDC 6511	Learning & Teaching in Primary Care	1.5	Year 1	1	-
MEDC 6521	Evidence Based Medicine	2	Year 1	1	-
MEDC 6512	The Consultation & Communication	1.5	Year 1	1	-
MEDC 6513	Medical Ethics & the Doctor Patient Relationship	1.5	Year 1	1	-
MEDC 6515	Health Promotion, Screening and Risk Assessment Issues in Primary Care	1.5	Year 1	1	-
MEDC 6517	Chronic Diseases in Primary Care	1.5	Year 1	1	-
MEDC 6529	Clinical Sessions (Part I & II)	NA	Year 1	1	-
MEDC 6516	Health Care of the Elderly	1.5	Year 2	2	-
MEDC 6522	Gender Issues in Health/Women's Health	1.5	Year 2	2	-
MEDC 6523	Sexualities and STD's	1.5	Year 2	2	-
MEDC 6524	Child and Adolescent Health	1.5	Year 2	2	-
MEDC 6528	Medico-legal Issues	1.5	Year 2	2	-
MEDC 6525	Mental Health/Counselling	1.5	Year 2	2	-
MEDC 6529	Clinical Sessions (Part I & II)	NA	Year 2	2	-
MEDC 6530	Written Exam		Year 2		Successful completion of all modules

#### **Teaching Methods**

A myriad of teaching strategies are employed. These include, staff and student led presentation on relevant topics; class room discussion on current clinical and ethical issues; recording and review of clinical encounters and analysis of patient-centeredness of the consultation; identification of clinical challenges and developing search strategies, identification of relevant papers and critical appraisal of content to drive clinical practice; formal class debate on a current clinical or ethical dilemma; conduction of an audit; observing and being observed while in clinical practice

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#### **Continuous Assessment**

Continuous assessment contributes 24% of the final mark. The continuous assessments consists of written exams, including short answer questions (SAQs), Extended matching questions (EMQs), essays, class room presentations, class room debate, individual and team assignments, an audit. An additional 6% is given to the students' personal reflection on their learning during the 2 years - this is both classroom, clinical, CME (Continuous Medical Education) sessions attended and papers read. These 2 marks - 24% and 6% make up the 30% of the Portfolio. See below.

#### **Final Examinations**

Students who have successfully completed all modules and accumulated the required module credits will be allowed to sit the final examination. The final assessment will comprise of 3 components:

- The Portfolio consisting of all module assignments, CME reports, personal reflections on learning and tutor comments-30% of the final mark
- An Objective Structured Clinical Examination (OSCE) 40% of the final mark. However the OSCE examination must be passed to succeed overall.
- Written examination (MEDC 6530) 30% of the final mark.

### Criteria for Award of Degree

To be successful, candidates are required to achieve a passing grade in all components of the examination. Further information can be obtained from the Family Medicine office.

Please contact the following person(s) responsible for distribution of packages and orientation (once accepted into the programme):

#### Ms Karen Moseley

Building 25, 1st Floor, Room 106

Telephone: 645-6741 /645-3232 Ext 2838 Email: karen.moseley@sta.uwi.edu

# **Diploma - Emergency Medicine**

**Department of Clinical Surgical Sciences** 

# **Qualifications for Entry**

MBBS from accredited medical school, medical board registration, at least 6 months experience in an Emergency Department

# Aims and Objectives of Programme

The aim of the Diploma in Emergency Medicine is to equip medical practitioners working in emergency situations with the core knowledge required to provide safe and effective emergency medical care in a variety of clinical settings.

#### **Programme Structure and Curriculum**

The Diploma in Emergency is an 18 month part-time programme commencing in January (Semester II) each year. Courses for which students must register are provided below:

Course Code	Course Title	Credits	Year Offered	Semester Offered	Prerequisite
MEDC 6901	Introductory Module	0	Year 1	II	-
MEDC 6802	Evidence Based Medicine MSc	2	Year 1	I	-
MEDC 6903	Toxicological and Environmental Emergencies	2	Year 1	I	-
MEDC 6904	Paediatric Emergencies	4	Year 1	I	-
MEDC 6902	Principles of Emergency Medicine and Life Support	6	Year 1	II	-
MEDC 6905	Adult Medical Emergencies	4	Year 1	II	-
MEDC 6908	Behavioural and Psychiatric Emergencies	2	Year 1	I	-
MEDC 6906	Trauma Management	4	Year 2	II	-
MEDC 6916	Management of The Acute Surgical Patient	2	Year 2	II	-
MEDC 6920	Diploma in Emergency Medicine Examination	0	Year 2	I & II	Successful completion of all modules

### **Teaching Methods**

Weekly tutorials, bedside teaching, weekly department teachings, grand rounds and will be conducted in 8 modules which will include teaching, grand rounds, pod casts, short courses for practical skills, journal reviews, scenario practise, mini conferences and clinic sub specialty sessions. Course work assignments include protocols, case reports and presentations.

# **Continuous Assessment**

Feedback from supervisors and residents on modules, mock exams, short exams, regular appraisals every 3 to 6 months.

#### **Final Examinations:**

Written exam, OSCE and orals.

# Criteria for Award of Degree

Students must pass all modules and components of the exam.

Please contact the following person(s) responsible for distribution of packages and orientation (once accepted into the programme):

#### Ms Oli-Ann Atkinson/Ms Melrose Yearwood

Building 14, 3<sup>rd</sup> Floor, Room 302/Building 14, 2<sup>nd</sup> Floor, Room 205

Telephone: 645-3232: ext 2862/2864

# **Diploma - Management of HIV Infections**

# **Department of Clinical Medical Sciences**

This is a taught part-time course with the instruction provided by local and international professionals with the necessary expertise in treatment, care and support of PLHA. Teaching methods will be through blended learning and shall include face-to-face, distance learning, debates and team presentations.

# **Qualifications for Entry**

This programme is relevant for the following categories of individuals:

- Medical doctors, pharmacists and dentists
- Nurses with bachelor degrees from any recognized university
- Registered Nurses with a minimum of three (3) years' experience
- Social workers
- Mid-level management staff from government ministries, private sector and NGOs, e.g. individuals working for at least three (3) years as managers of HIV/AIDS related NGOs, counsellors with training or experience in assisting PLHA
- Tutors and lecturers in training institutions

Applicants must possess a bachelor's degree in the health related sciences or appropriate social science from an approved university, or equivalent qualification and work experience.

Applicants who may not have a first degree must demonstrate a body of relevant professional experience. In these instances where qualification and experience other than approved degree are being considered, a decision on enrolment will be based on a completed application form, recommendation from employer, a personal letter indicating interest in the field of study, CV information and interview with the potential candidate.

# Aims and Objectives of Programme

#### Aim

To facilitate expanded access to knowledge and education in the area of the management of HIV infection throughout the Caribbean and beyond. The courses offered shall cover all aspects of HIV/AIDS including care, prevention, clinical management, leadership, monitoring and evaluation and quality improvement.

#### **Objectives**

This programme will enable students to:

- Acquire essential knowledge and skills that will prepare them to provide care services for people living with HIV (PLHIV)
  and those affected by HIV and AIDS.
- Understand the transmission of HIV and strategies that can be used to prevent its spread.
- Deliver the knowledge and skills for effective healthcare in relation to HIV.
- Provide a range of policy perspectives and developments in treatment and care of PLHIV.

Candidates are expected to complete the programme in one year and are expected to participate on a part-time basis in training for eight (8) hours per week for thirty (30) weeks. The candidates must complete seven (7) core courses in addition to one (1) of the elective courses.

Candidates with medical, social work, pharmacy, dietetics and nursing background will be expected to complete the elective practicum on Treatment and Care, and submit a casebook OR complete a research project and submit a dissertation. Candidates without a medical background will be expected to complete:

- four (4) practicum rotations.
- a Research Project and submit a report/dissertation.

### **Programme Structure and Curriculum**

The following courses are covered for this 1-year programme:

<b>Course Code</b>	Course Title	Credits	Year Offered	Semester Offered	Prerequisite
MHIV 5007	Research Methods and Designs	2	1	I	-
MHIV 5001	HIV Epidemiology and Pathogenesis	4	1	I	-
MHIV 5002	Laboratory Techniques for Diagnosis of HIV	1	1	I	-

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MHIV 5003	General Management of HIV/AIDS	5	1	I & II	-
MHIV 5004	HIV Co-infections and Other Related Issues	5	1	II	-
MHIV 5005	HIV and Health Systems	1	1	II	-
MHIV 5006	Sexual and Reproductive Health	2	1	II	-
MHIV 5008	Dissertation*	2	1	II	MHIV 5007
MHIV 5009	Practicum*	2	1	II .	-

<sup>\*</sup> Students can pursue either the MHIV5008 (Dissertation) or MHIV5009 (Practicum) for completion.

### **Teaching Methods**

Blended (Face to face and distance - online)

#### Continuous Assessment

Candidates will be assessed through a combination of formative and summative course assignments. Students who fail the continuous assessment of any course (40% of the total final mark for the course) shall be allowed to repeat that course once.

Students passing the continuous assessment but failing any end of course examinations (60% of the total final mark for the course) shall be eligible for one re-sit at the next available sitting of the examination. This applies to all semesters.

Dissertation: The aim of this course is to instil scientific research skills and to enable the candidate to solve problems using recognised scientific methodologies.

*Practicum*: The aim of this practicum is to give the candidate hands-on clinical experience in the form of bed-side teaching and dealing with psychosocial issues while attending clinics supervised by consultants and other specialized HIV workers.

#### **Final Examinations**

The final exit examination will be held in May. Before admission to any examination, candidates must be certified by the programme coordinator as having completed the relevant parts of the courses. The final exit examination is 60% of the total final mark for the course.

#### Criteria for Award of Degree

The Diploma in the Management of HIV Infection shall be awarded to students who have successfully completed the six core and one elective courses.

A distinction is awarded to candidates who achieve an average of 70% or better (Grade A) in the written courses and a mark of 70% or better in the research paper or project report. A candidate failing a course (including an elective course) required for the completion of the programme shall be ineligible for the award of distinction. Students requiring extra time to complete their Case Report or Dissertation shall also be ineligible for the award of distinction, even if the total marks achieved fall within the distinction range.

Please contact the following person(s) responsible for distribution of packages and orientation (once accepted into the programme):

#### **Ms Stacey Grant**

Building 69, 1st Floor, Room 103

Telephone: 662-9596 or 662-4673 Ext. 3912

Email: stacey.grant@sta.uwi.edu

# **MSc PROGRAMMES**

# **MSN Advanced Nursing**

**UWI School of Nursing** 

# **Qualifications for Entry**

The MSN programme is available to general, psychiatric and midwifery trained nurses who are registered/licensed in their current jurisdiction of practice; can verify first registration/ licensure if it is different from that which is currently held, and qualifies for registration/licensure in the region served by The UWI, AND

- 1. Have a total of three (3) years post nurse registration/licensure clinical experience. The time spent on any educational programme is not included in this three (3) years practice requirement. AND
- 2. Hold an undergraduate degree with not less than second class honours OR
- 3. Hold a graduate degree OR
- 4. Hold approved technical and/or professional qualification(s) awarded by an approved Institution of Higher Education (Tertiary) and approved by this University and currently holds a position comparable for the area of the degree sought within the Regulations. All attempts will be made to facilitate the goals of the individual student, professional and career expectations, and employment realities.

#### An applicant will be expected to:

- 1. Arrange to have the relevant original educational transcripts sent directly by the educational institution to The UWI.
- 2. Complete a portfolio relevant to education/leadership/management (practice) experience on the identified form.
- 3. Submit two (2) references on The UWI form directly to The University of the West Indies.
- 4. Submit the application for admission and the required materials listed in the instructions to the identified office by the date requested with the appropriate fee.

# Aims and Objectives of Programme

At the end of the course of studies, students will be expected to develop the following competencies consistent with their majors:

#### **Education Specialists:**

- 1. Examine and critique education processes from an Evidence Based Policy perspective.
- 2. Apply techniques of program evaluation research in a wide variety of education settings and content areas.
- 3. Design research to evaluate learning effectiveness and appropriate learning outcomes.
- 4. Design basic research to examine cognition and perception with applications to nursing and health sciences.
- 5. Demonstrate skills in testing, measurement, and foundational psychometrics.
- 6. Apply appropriate technology in education in different education settings.
- 7. Utilize principles of curriculum development in informing review or development of nursing curricula.

#### Leadership/Management Specialists:

- 1. Demonstrate competence in applying leadership and management theories and principles in clinical settings.
- 2. Promote the environment to facilitate Evidence Based Policy for health care delivery
- 3. Critically appraise relevant evidence-based literature and apply leadership/management processes in clinical settings
- 4. Actively contribute to the development of evidence for improving patient outcomes and health care delivery.

#### **Evidence-Based Practice-Level Specific Competencies**

- 1. Apply principles in reading and critical appraisal of evidence in literature
- 2. Synthesize findings and evaluate their applicability to practice
- 3. Apply evidence in implementation and evaluation of the delivery of services.
- 4. Critically evaluate empirical studies, including quantitative, qualitative, and mixed methods studies, with a practical emphasis on the interpretation of results and application of the findings to nursing education.

# **Programme Structure and Curriculum**

The MSN is a full-time one Academic Year programme comprising three Semesters that requires a minimum of forty-four (44) credits including a thesis or a research project. Wherever applicable, all prerequisite courses must be completed prior to full admission to the MSN programme. The programme is developed as two majors namely, Nursing Education or Nursing Leadership and Management. Each candidate will select a major as identified on their application. Common to the both majors are identified core courses totalling twenty-two to twenty-four (22-24) credits with the Education and Leadership / Management. Students must successfully complete all core courses prior to matriculating into their identified majors where they will be required to complete a total of twenty-two (22) credits. Further, all students must also complete a Research Project / Thesis, and an Elective and/or Independent Study.

Course Code	Course Title	Credits	Year Offered	Semester Offered
NURS 6017	Theoretical and Scientific Basis for Advanced Practice	3	1	1
NURS 6018	Current Issues In Nursing and Healthcare	2	1	1
NURS 6021	Leadership and Fiscal aspects of Advanced Practice	2	1	1
NURS 6022	Cultural/Spiritual aspects of Advanced Practice	2	1	1
NURS 6019	Methods in Clinical Nursing Research	2	1	1
NURS 6023	Organizational Behaviour and Processes	3	1	1
EDUCATION SPE	CIALIZATION			
NURS 6001	Curriculum Development for Advanced Practice in Nursing	3	1	2
NURS 6002	Seminar in Education and Evaluation	2	1	2
NURS 6003	Teaching and Learning Strategies	3	1	2
NURS 6006	Theories and Concepts in Nursing Education	3	1	2
NURS 6014	Professional Nursing	2	1	2
NURS 6005	Instructional Application of Technology	3	1	3
NURS 6007	Seminar in Nursing Education	2	1	3
NURS 6004/40	Nursing Practicum	5	1	3
NURS 6015	Quality Management in Nursing and Health Care	3	1	3
NURS 6020	Research Project/Thesis	9	1	Year Long
LEADERSHIP/M/	ANAGEMENT SPECIALIZATION			
NURS 6009	Managing Within Healthcare Organization	3	1	2
NURS 6014	Professional Nursing	2	1	2
NURS 6008	Nursing Management and Clinical Systems	3	1	2
NURS 6011	Introduction to Healthcare Financing	3	1	2
NURS 6010	Nursing Management of Human Resources	3	1	2
NURS 6013	Nursing Leadership/management Seminar	2	1	3
NURS 6016	Nursing Leadership/Management Practicum	5	1	3
NURS 6012	Financing and Budgeting for Nursing Systems	2	1	3
NURS 6015	Quality Management in Nursing and Healthcare	3	1	3
NURS 6020	Research Project/Thesis	9	1	Year Long

#### **Teaching Methods**

This is a fully 'online' programme and all courses will be presented using the "online learning" approach that will utilize technologies in education including Blackboard Collaborate and myElearning. Each student will be assigned a Research Supervisor who will provide academic supervision and advising for their research project/thesis.

### Continuous Assessment

Candidates for the MSN degree will be assessed using a number of continuous assessment activities. There will be no final examination for any course since the continuous assessment exercises will compromise 100% of the marks that will accrue from the assessments. All assessments will be through written submissions, however, for the practical component of the programme, students

 Candidates will have course work and final assessments by written, oral and practicum functional examinations, with internal and external examiners appointed by the faculty.

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- The minimum pass is Grade B for each theoretical course and for each course with a practicum.
- Students have only one (1) opportunity to repeat a failed course and must register for and pursue the course(s) when they are next available or normally given.
- Pre-requisites are to be successfully completed before proceeding to those courses which require them. Students are required to pass pre-requisites at a Grade B and are not allowed a resit.

Students are required to pass all assessments in Semester one and Semester two prior to proceeding on their practicum or pursuing their research project/thesis. Students, who fail courses in Semester one and Semester two will be required to undertake these courses at the next Semester when it is offered. Success in these courses at the second attempt would result in students' ability to proceed to their practicum and research project/thesis. All students' research project/thesis must be marked by the immediate Supervisor and one other member of staff at the level of Lecturer or above. The total marks from each marker shall be added and averaged to determine the final score for the student. In cases where there is at least to marks difference in scoring, a third examiner must be selected to mark the paper. In those circumstances, the third examiner shall be considered the final marker for the research project/thesis.

### A student may be given:

- One opportunity to rewrite his/her research project
- One opportunity to repeat an oral presentation of the research project

Repeating courses, rewriting research proposals and projects could have implications for the length and cost of the programme.

#### **Unsatisfactory Rate of Progress**

Students whose rate of progress is considered UNSATISFACTORY could be asked to withdraw.

Unsatisfactory rate of progress is defined as when a *full time* student:

- 1. Fails more than two (2) courses in Semester I or
- 2. Fails more than (3) courses in Semester II or
- 3. Fails five (5) courses between Semesters I & II or
- 4. Fails any course with a practicum
- 5. Fails to adhere to professional nursing standards

#### OR

#### When a *part time* student fails

- 1. Fails the course(s) taken in semester I or II, Year I or
- 2. Fails one or more courses in any subsequent semester and before acquiring thirty (30) credits or
- 3. Fails any course with a practicum
- 4. Fails to adhere to professional nursing standards

A full time student will be asked to withdraw if he/she fails more than three (3) courses in Semester I.

A student will be asked to withdraw if he/she fails all courses taken in Semester I.

#### **Final Examinations**

There shall be no final examination since the continuous assessments shall constitute 100% of the marks.

#### Criteria for Award of Degree

Students who successful complete all course requirements will be eligible for the award of their degree consistent with the regulations for the award of degrees.

Please contact the following person(s) responsible for distribution of packages and orientation (once accepted into the programme):

*Dr Philip Onuoha*, Senior Lecturer and Coordinator/*Ms Denisha Piper*, Programme Clerical Assistant UWISoN Premises at Corner of College and Cecilia Road, El Dorado

Telephone: 1-868-225-1026

Email: Philip.Onuoha@sta.uwi.edu; Denisha.piper@sta.uwi.edu;

# **MSc Clinical Psychology**

**Department of Clinical Medical Sciences** 

# **Qualifications for Entry:**

The selection of students for the MSc Clinical Psychology programme is a lengthy and difficult process as many excellent applications are received annually. Many factors play a role in the selection process including an applicant's academic history, research experience, clinical experience, recommendations, and motivation for professional study and promise for the field. Stronger applications will show evidence of a comprehensive educational foundation in Psychology and experience in working (paid or voluntary) with client groups relevant to the practice of Clinical Psychology. Ideal applicants will embody the attributes of emotional maturity, self-awareness and interpersonal skills as these are critical prerequisite factors for professional development. The programme does not typically consider applicants currently studying psychology as undergraduates. Short listed candidates will be invited to attend an interview. The following represents the minimal requirements for admission to the MSc Clinical Psychology programme:

- A bachelor's degree in Psychology from a recognised university with first class honours or good upper second class honours.
- Candidates are expected to have successfully completed courses in the following areas:
  - Research Design/Statistics and Experimental Psychology competency using statistical software (e.g. SPSS) is expected
  - Developmental Psychology
  - Physiological Psychology
  - Abnormal Psychology
  - Cognitive Psychology
  - Psychology Research Project Direct experience of conducting a research project either at an undergraduate level or in subsequent work is required
  - Clinical Experience Voluntary or paid experience working with popularly or areas relevant to clinical psychology.
- Personal Statement- This statement gives you an opportunity to submit information that you would like to have evaluated with your application.
- Two Letters of Recommendation. The committee views in-depth letters from persons who know your work in a number of
  courses or a variety of settings and can attest to your interpersonal attributes and competence as more important than a
  vague, general letter addressing your competence or academic prowess.
- · A curriculum vita listing educational and professional experiences and accomplishments.

# Aims and Objectives of Programme:

The general aim is to produce graduates with the theoretical knowledge and practical skills to work in a variety of roles and settings within the Caribbean.

At the end of the programme candidates should have acquired and demonstrated substantial understanding of, and competence in the following areas:

- a) The breadth of scientific psychology, its history of thought and development, its research methods, and its applications to the Caribbean situation. (To achieve this end, the students shall be exposed to the current body of knowledge in at least the following areas: biological aspects of behaviour; cognitive and affective aspects of behaviour, social aspects of behaviour; history and systems of psychology in the Caribbean; psychological measurement; research methodology; and techniques of data analysis);
- b) Scientific, methodological and theoretical principles of major psychological interventions and the practice of professional psychology. (To achieve this end, the students shall be exposed to the current body of knowledge in at least the following areas: individual differences in behaviour; human development; dysfunctional behaviour or psychopathology; professional and standards and ethics)
- c) Diagnosing or defining problems through psychological assessment and measurement and formulating and implementing intervention strategies (including training in empirically supported procedures). (To achieve this end, the students shall be exposed to the current body of knowledge in at least the following areas: theories and methods of assessment and diagnosis; effective intervention; consultation and supervision; and evaluating the efficacy of interventions);
- d) Design and implementation of research. (To achieve this end, the students shall be exposed to the current body of knowledge on ethics in research, conducting clinical research, research methodology and data analysis as well as report writing);
- e) Issues of cultural and individual diversity that are relevant to all of the above; and

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f) Attitudes essential for life-long learning, scholarly inquire, and professional problem-solving as psychologists in the context of an evolving body of scientific and professional knowledge.

# **Programme Structure and Curriculum**

The MSc Clinical Psychology degree is offered as a two (2) year full time programme. Courses for which students must register are listed below:

Course Code	Course Title	Credits	Year Offered	Semester Offered	Prerequisite
CLSY 6100	Psychopathology	3	1	I	-
CLSY 6200	Psychological Assessment –Adult	3	1	I	-
CLSY 6300	Clinical Research Skills	3	1	1	-
CLSY 6400	Caribbean Psychology	3	1	1	-
CLSY 6501	Practicum I- Diagnosis & Assessment of Adult Psychopathology	1	1	I	-
CLSY 6700	Caribbean Ethics & Professional Practice Seminar	1	1	II	-
CLSY 6201	Psychological Assessment –Child	3	1	II	-
CLSY 6101	Individual Psychotherapy Research & Theory	3	1	II & Summer	-
CLSY 6203	Group Therapy	3	1	II	-
CLSY 6502	Practicum II- Diagnosis & Assessment of Adult and Child Psychopathology	2	1	II	-
CLSY 6503	Practicum III	4	1	Summer	-
CLSY 6102	Applied Health Psychology	3	2	I	-
CLSY 6401	Issues in Human Development	3	2	I	-
CLSY 6504	Practicum IV	7	2	Year Long	-
CLSY 6103	Clinical Neuropsychology	3	2	II	-
CLSY 6800	Research Paper	6	2	Year Long	-
CLSY 6701	Caribbean Ethics & Professional Practice Seminar-II	1	2	II	-

## **Teaching Methods**

UWI Regulations for Graduate Programmes to be followed.

#### **Continuous Assessment**

UWI Regulations for Graduate Programmes to be followed

#### **Final Examinations**

UWI Regulations for Graduate Programmes to be followed

### Criteria for Award of Degrees

UWI Regulations for Graduate Programmes to be followed

Please contact the following person(s) responsible for distribution of packages and orientation (once accepted into the programme):

#### **Miss Celine Richards**

Psychiatry Unit, Building 69, Ground Floor- EWMSC Telephone: 662-3968 or 225-4673 ext. 2914

Email: Psychology@sta.uwi.edu or Celene.richards@sta.uwi.edu

# **MSc Medical Microbiology**

**Department of Paraclinical Sciences** 

# **Qualifications for Entry**

Candidates for the MSc Medical Microbiology must hold an Upper Second-class Honours degree in Medical Microbiology/Microbiology/Medical Laboratory Technology or Sciences from a recognised university. Graduates in a science not specializing in General Microbiology or Medical Microbiology will be required to complete the fundamental courses and examination before admission into the full MSc programme. Candidates who hold the MBBS and BB Med Science of this University or those who have similar qualifications may apply for exemption from the fundamental courses by presenting details of their courses and examination results.

# Aims and Objectives of Programme

#### **Aims**

The aim of the programme is to produce graduates with a systematic understanding of the scientific basis of microbiological concepts. Graduates will be equipped with the knowledge, analytical and practical skills to permit them to pursue careers in the microbiology in hospital, diagnostic laboratory or research settings. The programme will also prepare graduates for terminal degree training in medical microbiology (PhD, DM, and MD).

#### **Objectives**

On completion of the programme the student should be able to:

- Demonstrate an understanding of the important bacterial, viral, parasitic and fungal infections of medical importance
- Demonstrate an understanding of the principles of bacterial, viral, fungal and parasitic classification
- Demonstrate an understanding of the mechanisms of pathogenesis for bacterial, viral, parasitic and fungal pathogens of medical importance
- Demonstrate an understanding of immune responses to organisms of medical importance
- Be able to perform the range of laboratory tests required for isolation and identification of important microbial organisms of humans

<b>Course Code</b>	Course Title	Credits	Semester Offered	Year	Prerequisite	
Remedial courses to qualify for MSc programme -1 year duration					Where a candidate does	
MEDC 5400	Fundamentals of Medical Bacteriology	4.0	1		not have a strong Microbiology background and/or qualifications to	
MEDC 5401	Fundamentals of Medical Mycology	3.0	1			
MEDC 5402	Fundamentals of Medical Parasitology	3.0	1			
MEDC 5403	Introduction to Laboratory Diagnosis of Microbial Infections	6.0	Year Long		undertake this MSc, such a student will be required	
MEDC 5404	Fundamentals of Medical Virology	4.0	2	1	to pursue a remedial	
MEDC 5405	Fundamentals of Medical Immunology	2.0	2		programme. The remedial courses consist of 22 credits with foundational background and base in the subspecialty of Medical microbiology.	
Courses for M	Sc Medical Microbiology – 1 year duration				Remedial courses where	
MEDC 6820	Medical Bacteriology	5.0	1		applicable	
MEDC 6821	Medical Mycology	3.0	1			
MEDC 6822	Molecular Biology Applied to Infectious Diseases	3.0	1			
MEDC 6823	Medical Virology	5.0	Year Long			
MEDC 6824	Applied Medical Immunology	3.0	2	1		
MEDC 6825	Medical Parasitology	2.0	2			
MEDC 6826	Diagnostic Medical Microbiology	6.0	Year Long			
MEDC 6830	Research Project	6.0	Year Long			
MEDC 6310	Research Methods for Health Sciences	4.0	1 or 2			
MEDC 6120	Biostatistics and Data Analysis for Health Sciences	4.0	1 or 2			

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- Understand the principles of quality control of laboratory tests, information flow and laboratory standards
- Demonstrate an understanding, and an ability to apply, the principles of disinfection, sterilization and laboratory safety in practical situations.
- Design and conduct sound research
- Search the literature using electronic and conventional methods
- Critically review material identified in this search
- Devise different types of research objectives and select valid study designs to address these
- Write a study protocol and obtain ethical approval for a research project
- Apply appropriate methods to test hypothesis tests, determine optimum sample size for different types of study design
- Devise a data management plan for a research project
- Apply appropriate methods to evaluate and summarise both qualitative and quantitative information; devise a timetable
  of objectives to manage and complete a research project to time and within financial constraints; communicate clearly and
  concisely the findings of a research project to specialist and non-specialist audiences; draw appropriate implications for
  practice, policy and further work from research findings.

# **Programme Structure and Curriculum**

The MSc Medical Microbiology covers 1 year. However students may be required to complete remedial courses for 1 year to qualify for entry into the programme: The programme is structured as follows:

#### **Teaching Methods**

The programme will be delivered through a mixture of didactic lectures; tutorials and seminars, lectures and seminar notes posted online through myElearning, reference material and coursework with a strong laboratory component. Each candidate will be attached to clinical microbiology laboratories of all of the regional health authority hospitals where diagnostic skills are learned and examined.

#### Continuous Assessment

Marked out of 40%, may comprise multiple in house examinations in the form of multiple choice questions (MCQ), short answer questions (SAQ) and short essay questions (SEQ).

#### Final Examinations

Marked out of 60%, comprises multiple choice questions (MCQ), short answer questions (SAQ) and short essay questions (SEQ); practical laboratory examinations and Objective Structured Practical Examinations (OSPE) where necessary.

#### Criteria for Award of Degree

Successful completion of ALL courses and completion of research project.

Please contact the following person(s) responsible for distribution of packages and orientation (once accepted into the programme):

Ms Petrina Best or Unit's Secretary

Unit of Microbiology/Pathology; Room 62, Building 4, Dept. of Paraclinical Sciences

Telephone: 663-1141 or 645-3232 Ext 2253

Email: petrina.best@sta.uwi.edu

# **MSc Public Health (MPH)**

**Department of Paraclinical Sciences** 

# **Qualifications for Entry**

To be admitted to the prescribed course of study for the degree of Master of Public Health (MPH) candidates must either:

- Be registered medical practitioners, dental surgeons, or veterinary surgeons, with at least three years professional experience preferably in Public Health after successfully completing the final examination in their discipline; or
- Be graduates of an approved university with at least three years of relevant practical experience; or
- Hold an approved technical or professional qualification awarded by an approved body and approved by this university
  and have had at least five years relevant practical experience; or
- Have in the opinion of the University, other qualifications of special relevance to the course and in the opinion of the
  University, have had at least five years of relevant practical experience.

# Aims and Objectives of Programme

- To provide persons with the fundamental and critical skills for assessing community health problems and responding to public health challenges.
- To enable persons to use and apply principles, methods and analytical techniques of public health and allied disciplines for the improvement of population health and well-being.
- To enable persons to plan and manage public health programmes, develop and implement solutions to the public health problems, both within the context and settings of the Caribbean region and globally.

#### **Programme Structure and Curriculum**

The MPH is a two (2) year part-time programme covering the following courses:

Course Code	Course Title	Credits	Year Offered	Semester Offered
PUHE 6002	Epidemiology 1	3	1	I
PUHE 6004	Research Methodology	3	1	I
PUHE 6006	Social & Behavioural Sciences	3	1	I
PUHE 6003	Biostatistics	4	1	II
PUHE 6019	Health Promotion & Health Communication	3	1	II
PUHE 6007	Environmental & Occupational Health 1	3	1	II
PUHE 6010	Epidemiology 2	3	1	III
PUHE 6015	Disaster Preparedness	3	1	III
PUHE 6005	Health Economics 1	3	1	III
PUHE 6014	Public Health Policy & Law	3	2	I
PUHE 6018	Monitoring & Evaluation	3	2	I
PUHE 6013	Health Management	3	2	I
PUHE 6030	Practicum	3	2	II
PUHE 6040	Project Report	15	2	III

## **Teaching Methods**

The teaching approach relies on a mixture of teaching methods and strategies that include:

- Active learning processes whereby the student uses the skills acquired in the core courses and integrate them to engage in
  analytical thinking and problem solving. Active learning includes problem based learning where the student is required to
  research information in order to find solutions
- · Didactic lectures for delivery of course content interspersed with short problem solving discussions
- Case based teaching which uses current situations for analysis and problem solving
- Experiential learning and field work where students learn by doing and by reflecting and sharing their experiences. This includes practical and field exercises.
- Discussions, seminars, and presentations. These are powerful tools to promote memorable learning. These help to develop
  not only communication skills but also engage the participants in cognitive and integrated thinking and decision making. In
  these methods, students are able to share and include their past experiences in coming to practical reasoned conclusions.
  The programme includes an on-the job practicum, and a supervised research/ work related report project.

Discussions can be online as well as in the classroom. Courses will be available through myeLearning and use of online discussions is encouraged.

#### **Continuous Assessment**

All Regulations and Assessment Procedures must be consistent with those provided in the University of the West Indies General Regulations for Postgraduate Degrees and Diplomas. Candidates must complete all courses to be eligible for the award of the MPH degree. A combination of continuous (in-course) assessment and final examination is employed in the various modules.

#### **Final Examinations**

There is no final examination for the MPH. However, a Research Project is required at the end of the last semester of the two-year programme. This will be assessed by internal and external examiners.

### Criteria for Award of Degree

For the award of the MPH degree, candidates are required to take courses totalling 40credits and in addition are also required to submit a project report based on research in a chosen aspect of public health approved by the Unit of Public Health and Primary Care (see below). The project report counts for 15 credits.

Please contact the following person(s) responsible for distribution of packages and orientation (once accepted into the programme):

Ms Karen Moseley (Clerical Assistant)

Public Health & Primary Care Unit; 1st Floor, Room 106, Building 25, Dept. of Paraclinical Sciences, EWMSC

Telephone: 645-6741 or 645-3232 Ext. 2838

Email: Karen.Moseley@sta.uwi.edu

# OTHER PROGRAMMES

# Part 1 MFDS Examination – Royal College of Surgeons

School of Dentistry

The School of Dentistry has over the past ten (10) years been an examination centre for the Diploma of Membership of the Faculty of Dental Surgery - MFDS Part I Examination, Royal College of Surgeons, Edinburgh, Scotland, U.K. Examinations are held twice per year in April and October/November. Information for this programme is available from: <a href="https://www.rcsed.ac.uk/examinations/information-on-exaMsaspx?group=2&exam=e3b598eb-a6d4-4c8c-898b-40b69526167d&loc=0&courses=available">https://www.rcsed.ac.uk/examinations/information-on-exaMsaspx?group=2&exam=e3b598eb-a6d4-4c8c-898b-40b69526167d&loc=0&courses=available</a>

# **Advanced Education in General Dentistry Residency**

School of Dentistry

The School of Dentistry is an approved site for the Lutheran Medical Center (LMC) Advanced Education in General Dentistry (AEGD) Residency Programme. This is currently offered only to graduates of the School of Dentistry who are enrolled in the prelicensure year of vocational training.

The AEGD is a U.S. Program whereby newly graduating dentists in the U.S. can opt for a year of additional training. The one at UWI is administered by the Lutheran Medical Center, which has headquarters in Brooklyn, New York, and runs parallel to the year of <u>vocational training</u>. The UWI Dental School is their first non-US site. Vocational trainees enrolled in the AEGD are termed residents.

#### Structure

The programme is structured to match the vocational training programme. In addition, LMC residents will attend teleconferencing sessions three times a month, where they will participate in interactive lecture sessions with the LMC residents at other US sites. There are no costs associated with the programme. You must be CPR certified, and you must have Internet access.

#### **Applications**

Applications for LMC residency positions are invited immediately after final exam results are released. The programme at UWI is one year, and you must complete the entire year in order to obtain your certificate of completion.

#### **Optional Second Year AEGD**

Successful completion of the first year makes you eligible for a second year that can be done at LMC sites in Puerto Rico, Colorado, Massachusetts or Arizona. The second year has a public health project, and a focus on a particular specialty. You are also paid a stipend as a second year resident. Certain states will waive State Board licensure examinations to residents who successfully complete the Second year AEGD.

#### **Benefits**

LMC residents have access to the LMC Online Library, and all their educational resources. Residents are eligible to participate in online discussion groups and literature discussions that are administered by U.S. specialists. They also participate in asynchronous webinars, teleconferencing sessions, and learn about quality assurance especially, with respect to clinical record keeping. There are also opportunities for interaction with other LMC residents in the U.S., Puerto Rico and Hawaii.

#### **U.S. Licensure**

In order to practice in the U.S., you must fulfil the requirements of the state. This may include participating in a two or three-year programme of advanced standing, administered by various dental schools, writing of the Parts 1 and 2 ADA National Board Examinations, and writing a State Board Exam. Some states will waive the State Board Examination for graduates of the two-year AEGD programme.

#### **Further Information**

Email the Assistant Director, AEGD programme or go to the LMC website for more information.

