# FACULTY OF MEDICAL SCIENCES

### **MONA**

Year ending July 31, 2009



Professor Archibald McDonald, MBBS, DM (Surg) UWI, FRCSEd, FACS– Dean

## Dean's Overview

During the past academic year the Faculty continued its programme of transformation, with emphasis placed on strengthening its academic programmes and putting in place financial and management systems to sustain these changes. The 5-year strategic plan was completed and now guides our operations. Although there were many successes, progress was hindered by outdated practices and culture inside and outside of the faculty. Colleagues, academic and administrative, sometimes had difficulty understanding changes and in some instances there was passive resistance.

Student enrollment continued to grow increasing by 20 percent over the previous year mainly due to a 16 percent increase in the number of undergraduates (Table 1). The 5 percent increase in graduate enrolment was less than projected but this was due in part to attempts to improve supervision and throughput in graduate programmes.

The Faculty is cognizant of the fact that planning and innovation are critical to ensure that measures are in place to cope with the increased enrolment. Much of our work during the year was geared towards ensuring that our philosophy of small group teaching was not compromised. Therefore the faculty expanded clinical training at remote sites such as the Cornwall Regional Hospital, the Kingston Public Hospital, Victoria Jubilee Hospital and Bustamante Children's Hospital. Mandeville and Spanish Town Hospital were accredited by the Faculty's accreditation committee and clinical training should commence at these institutions early in this academic year.

The Campus and UWI leadership led by the Principal and Vice Chancellor worked with the faculty to develop a business plan aimed at improving conditions at the University Hospital.

This was completed and discussions are to be held with the Jamaican and regional governments on the implementation of the plan in whole or in parts. The unsatisfactory state of the University Hospital continues to be a major challenge for the Faculty of Medical Sciences. Developmental work continued on the new teaching complex for the Department of Basic Medical Sciences and we closed the year without the construction being started. Architectural plans were approved and a contractor selected and work should begin during the next academic year.

#### Student Enrollment and Access

Table 1 below compares undergraduate enrolment with the previous year. The demand for health care workers is increasing consequent on the aging of the world's population. As detailed in the Faculty's strategic plan, the Faculty has shifted its policy of training only for the local and regional markets. Students are now trained to international standards which equip them to work and compete in the global market. The number of applicants to our programmes continues to increase. Their academic standard is also higher. The Faculty must therefore continue to increase access without compromising standards. The student body is now more diversified with a higher percentage of students from the rest of the regional and a higher proportion of international students. Unfortunately this information is unavailable for this report but should be included next year as the Mona campus improves its data management capabilities. This diversification in the student population will enhance the learning experience for our students and strengthen the regionalism of the UWI.

Table 1
Undergraduate Student Enrolment in the Faculty of Medical Sciences
- 2008/2009 vs 2007/2008

Programme	Major & Minor	No. of Students 2008/2009	No. of Students 2007/2008
BBMedSci	Anatomy	1	3
	Biochemistry	1	3
	Pharmacology	32	26
	Physiology	1	1
	Year 1 students	41	21
	Subtotal	76	54

BSc	Nursing (Post RN)	18	27
	Nursing (generic)	726	676
	Online delivery	323	164
	Physical Therapy	83	75
	Diagnostic Imaging	77	46
	Subtotal	1227	988
MBBS	Bachelor of Medicine & Surgery	766	733
	Subtotal	2068	1775

#### **Student Achievements**

The faculty graduated 365 Undergraduate students in the Academic Year 2008/2009. This was almost unchanged compared with the previous academic year despite a 26 percent increase in graduates from the MB BS Programme. There was a 15.8 percent decrease in the number of graduates from the BSc(generic) Nursing programme.

MB BS	126
BSc Nursing (Generic)	181
BSc Nursing (Post RN)	20
BSc Physical Therapy	23
BBMedSci	15

The Stage 1 MB BS Examination was discontinued as part of the ongoing curricular reform. With the implementation of the GPA regulations, the Faculty felt that this examination was unnecessary.

Table 2
MBBS Examination Results
The MBBS Examination for academic year 2008/09

	Pass	Honours	Distinction	Fail
Medicine (MD500)	95	6	_	13
Surgery (SU500)	84	10	_	10
Obstetrics & Gynaecology (OG500)	102	3	1	7

#### **Prizes Awarded**

The following students were awarded prizes in the final MB BS examinations for Academic Year 2008/2009:

Overall Clinical Medal: – Avia Forbes

Medical Association of Jamaica – Avia Forbes

**Insurance Fund Prize in Obstetrics** 

and Gynaecology:

Allenbury Prize in Medicine: – Zelia Budhan

Professor Owen Morgan Prize: – Zelia Budhan

**Dr. Aubrey McFarlane Bursary:** – Stephanie Lyew

**Dr. the Hon. John Hall Prize:** – Kurleigh Martin

Joselle Cook Clive Goulbourne

Claudine DeSouza

The Bachelor's programmes in Speech and Occupational Therapy were not started in this academic year as planned but should commence at the start of academic year 2009 / 2010.

#### Research

The Faculty had 262 peer reviewed publications during the year, 235 in journals and 27 book chapters. The per capita publication remained at approximately 1.5. The international profile of the University was enhanced due to more international collaboration and participation in several multi-centre clinical trials. The Cardiac simulator, developed by Drs Paul Ramphal and Daniel Coore from the Departments of Surgery, Radiology, Anaesthesia and Intensive Care and Computer Science collaboration with the Engineering Department of the University of Technology, also contributed to this enhanced international reputation as a number of institutions in the USA have decided to participate in the further development and manufacture of this cutting edge tool which is used in the training of cardiac surgeons.

Efforts continue to build capacity in research, through further strengthening of the Research Resource Centre in the Dean's Office and also strengthening the links with the TMRI. A programme of FMS/TMRI Fellowships has been developed which gives young

members of the academic staff the opportunity to spend time in the TMRI to improve their research skills and develop a research agenda. They are expected to return to their department to lead its research efforts. Currently two members of staff are in the programme and plans are to enroll three to five annually. The Programme is funded by the Faculty.

Table 3
Publications per Department

Department	Publications 2007-2008	Publications 2008-2009	Conference Presentations 2007 -2008	Conference Presentations 2008 - 2009
UWI School of Nursing	4	4	13	11
Basic Medical Sciences	35	34	11	19
Community Health & Psychiatry	22	36	54	69
Medicine	13	20	45	60
Obstetrics, Gynaecology & Child Health	47	38	43	21
Pathology	18	29	19	25
Microbiology	12	9	5	4
Surgery, Radiology, Anaesthesia & Intensive Care	50	46	74	70
TMRU / Sickle Cell Unit	47	38	_	_
Total	248	235	214	279

#### Research Awards

At the Principals annual awards ceremony, three papers were awarded "Best Publications". These were:

- Leslie A. Samuels, Loxley Christie, Bianca Roberts-Gittens, Horace Fletcher and Joseph Frederick "The effect of hyoscine butylbromide on the first stage of labour in term pregnancies". British Journal of Obstetrics and Gynaecology, 2007;114(12):1542-1546.
- Maxine Gossell-Williams, K Lyttle, T Clarke, M Gardner and O Simon. "Supplementation with Pumpkin Seed Oil improves

- Plasma lipid profile and Cardiovascular Outcomes of Female non-ovariectomized and ovariectomized Sprague-Dawley Rats". *Phytotherapy Research*, 2008;22(7):873-877.
- JM East "Mesh Tuck Repair of Ventral Hernias of the Abdomen: A New, Simplified Technique for Sublay Herinorrhaphy". West Indian Medical Journal, 2007; 56(6): 514-519.

#### The most outstanding researchers were:

- Dr Minerva Thame from the Department of Obstetrics and Gynaecology and Child Health. She serves as Head of the Department of Paediatrics/Child Health and is one of the most well known names internationally on the subject of in utero exposure and subsequent neonatal outcomes. During the period under review she published 9 research manuscripts, five of which appeared in the West Indian Medical Journal and the other four in reputable international journals.
- The research team of the "Kingston Pediatric and Perinatal HIV/AIDS Program" led by Celia DC Christie-Samuels also comprises Paulette M. Palmer, Russell B. Pierre, J. Peter Figueroa and many other collaborators in the University of the West Indies and its Hospital along with the Ministry of Health and its Hospitals and Clinics, who were mostly responsible for preparing a compendium of twenty original research manuscripts on "Pediatric and Perinatal HIV/AIDS in Jamaica", as the June Special Issue of the West Indian Medical Journal 2008:57(3):187-320.

# The selection in the category "The Project Attracting the Most Research Funds" was:

- "Aromatic amino acid metabolism in the pathogenesis of Kwashiorkor" with Professor Terrence Forrester as Principal Investigator, along with Drs Asha Badaloo and Marvin Reid of the Tropical Medicine Research Institute and their collaborators.
- External funding from the United States' National Institutes of Health for this project was estimated at JA\$32,300,000.00 (that is, 32.3 Million Jamaican dollars) for the period under review.

The final category was "Best book".

■ The text selected for the award was "Perspectives in Caribbean Psychology", edited by Professor Frederick Heckling, Dr Brigitte Matthias, Dr Kai Morgan and Dr Roger Gibson.

#### **Research Grants**

The Faculty attracted approximately US \$ 500,000 in research grants during the year. Details can be found in the individual departmental reports.

#### **Graduate Studies**

The Faculty of Medical Sciences had 626 registered graduate students for academic year 2008/2009. The distribution is shown in Table 4.

Table 4 Registered Students (2008-2009)

Programmes	Numbers
DMs	279
Taught Masters:	
MPH	37
MPH-Health Education/ Promotion	n 22
Nutrition	28
Epidemiology	11
Microbiology	3
Cultural Therapy	3
Nursing:	
Administration	11
Clinical Specialist	1
Education	24
Family Nurse Practitioner	15
Mental Health/Psychiatric	12
Nurse Practitioner	
Online Masters:	
Counseling	56
Sports Medicine	13

#### Research Degrees:

MPhils	55
PhDs	56
Total	626

One hundred and thirty one students graduated from our graduate programmes during the year as shown in Table 5.

	Table 5	
Pr	ogrammes Numbers	
DMs:		
	Anaesthesia & Intensive Care	3
	Internal Medicine	8
	Obstetrics & Gynaecology	9
	Paediatrics	5
	Psychiatry	3
	Radiology	4
	Surgery – A&E	4
	- Cardiothoracic	1
	- ENT	2
	- General	6
	- Orthopaedics	1
	- Urology	1
Taugh	Masters:	
	MPH	21
	MPH-Health Education/ Promotion	7
	Nutrition	6
	Nursing	3
	Epidemiology	2
Online	Masters:	
	Counselling	37
Resear	ch Degrees:	
	PhDs	8
Total		131

#### **Income Generation and Budgetary Considerations**

Transforming the financial arrangements in the Faculty is central to its repositioning efforts, if it is to respond effectively to the challenges of the new dispensation. Our income generation efforts were again successful but there is need to increase income from research grants, clinical trials and private clinical practice. The Mona Institute of Medical Sciences is now profitable but there is need to expand in order to accommodate the increasing number of doctors wishing to practice there. Architectural plans are being developed for a new building. Nearly JA\$1 billion was raised during the year.

#### Conclusion

The Faculty of Medical Sciences' strategic plan is centred on the themes of expansion, financial independence and maintenance of quality. The past year demonstrated that we can do this successfully; we expanded our clinical training sites to ensure small group teachings in all our programmes; we increased enrolment, diversifying our student population thus enriching their learning experience; through successful income generation we increased the use of technology and employed multimodal delivery of our curricula in several areas. These initiatives are a few examples of our work but they demonstrate the inter-relatedness of the initiatives being undertaken in the faculty. The goal of producing graduates who are problem solvers and critical thinkers and being listed among the top medical schools by 2012 now appears to be achievable.