# FACULTY OF MEDICAL SCIENCES MONA

## Year ending July 31, 2006



Professor Archibald McDonald, MBBS, FRCSEd, FACS, DM (Surgery) UWI - Dean

### Dean's Overview

The 2005 / 2006 academic year was a very challenging but successful one for the Faculty of Medical Sciences, Mona. The highlight of the year was the achievement of full accreditation of the MB BS **Programme** by the Caribbean Accreditation Authority for Education in Medicine and Other Health Professions (CAAM). An internal quality Assurance Review carried out by the Board for Undergraduate Studies along with the visit of the CAAM accreditation team, proved to be catalytic to our efforts to continue the transformational process started the previous year. A significant part of the year under review was spent revising the new curriculum and the Faculty's regulations and making preparations for the visit of the CAAM team. The Faculty continued to expand and student enrolment was increased by 27 percent over the previous year. To cope with the expansion, improvement to the physical plant continued with completion of the expansion and renovation of many areas in the Basic Sciences and the Dean's Office. The Students' Lounge was refurbished and a new computer laboratory with 24 computers established in the Department of Basic Medical Sciences. internet access is now available in many areas of the Faculty. research scientists were appointed in the Office of the Dean with a mandate to increase research capacity and output and enhance the teaching of Research Methodology and Biostatics to undergraduate and graduate students.

#### Student Enrolment and Access

In keeping with its strategic objectives, the faculty continued to expand and increase student enrolment. The 27 percent growth was achieved through a further expansion of the MB BS Programme by an increase in the number of international students and the Full Fee Paying Programme. There was also increased enrolment in the Baccalaureate Programmes in Nursing, Physical Therapy and the Basic Medical Sciences. This is shown in the table below.

Student Enrolment in Faculty of Medical Sciences 2005 / 2006 VS 2004 / 2005

Programme	Majors & Minors	No. of students 2004 /5	No. of students 2005
BBMedSci	Anatomy	4	5
	Biochemistry	4	6
	Pharmacology	8	20
	Physiology	2	4
	Subtotal	18	35
BSc	Nursing (Post RN)	32	43
	Nursing (generic)	291	471
	Nursing Administration	1	0
	Physical Therapy	38	49
	Subtotal	362	563
Certificate	Nursing Administration	1	
MB BS	Bachelor of Medicine & Surgery	574	631
	TOTAL	955	1229

Further increase in enrolment is likely as the Faculty has begun to explore the possibility of increasing the programmes offered through an expansion of the BBMedSci Programme which is to serve as the gateway to training in many of the professions allied to Medicine.

The Faculty is positioning itself to expand its training facilities to meet the demands of the growing Health Care Industry and to retain its position as the leading institution of training for Caribbean Health Care Professionals. The UWI School of Nursing (UWISON) in collaboration with Ryerson University has embarked on a programme to make its courses available online to students of the UWI twelve while the newly established Medical Education Unit in the Office of the Dean has undertaken training of academic staff in the on-line placement of student lectures. The Unit is also expected to strengthen staff development and support curricula and other faculty programmes.

Negotiations have started for a partnership with Sinai Hospital and Lifebridge Health in the USA to increase throughput from the Bachelor of Nursing Programme and to upgrade the facilities at UWISON, while franchising of the BSc Nursing Programme to the Community Colleges was strengthened with the signing of a memorandum of understanding with Knox Community College.

The School for Physical Therapy was transferred to the Faculty and is now the fifth section in the Department of Basic Medical Sciences. A Bachelor's Programme in Diagnostic Imaging was approved by the Board for Undergraduate Studies and is to commence in year 2006 / 2007.

#### **Enhancing Quality and Student Centredness**

The first cohort of students in the new curriculum in the MB BS Programme completed their training and sat final examinations in May / June 2006. A total of 80 sat the examinations, 69 passed and one student graduated with an honours degree. The performance of the students appeared to be better than those trained under the old curriculum.

The new curriculum was revised to address observed weaknesses. The number of lectures was reduced by 10 percent, and all modules and clerkships were transformed into university courses. Student Course and Study Guides were produced to support the new curriculum.

The Faculty was mandated to convert to a Grade Point Average (GPA) system in academic year 2006 / 2007 and this is now in an advanced stage of development. Cross Campus agreement with St Augustine, Cave Hill and the Bahamas, is now being sought. The assessment process has been strengthened with the introduction of standard setting in all examinations and delivery of course material was improved through an increase in the use of information technology. These changes in the curriculum will make more time available for students to participate in self learning, a prerequisite to producing doctors who are life long learners.

To ensure continuation of small group teaching in the face of increased student numbers, the role of the clinical training sites outside the University Hospital of the West Indies (UHWI) was enhanced through the appointment of an associate Dean and the development of a Memorandum of Understanding with the Jamaican Ministry of Health. Rotations through Kingston Public, Bustamante Children's, National Chest and Victoria Jubilee Hospitals will be increased to accommodate additional students. To ensure quality, student facilities at these sites will be improved.

A review of UWISON's programmes was done by the Quality Assurance Department and the School received high commendation for maintaining consistently high quality assurance procedures.

#### Research

The Faculty took the strategic decision to collaborate more closely with the Tropical Medicine Research Institute (TMRI), in particular the Tropical Medicine Research Unit (TMRU) and Sickle Cell Unit. Traditionally, research done by the TMRI was not included in the Faculty's statistics resulting in an underestimation of the Faculty's research output and the exclusion of some researchers from eligibility for the Principal's Annual Research Award. By working more closely with the TMRI it is anticipated that the quality and quantity of research done will improve.

With the inclusion of the TMRI's Units the Faculty published 187 papers in peer reviewed journals during the year; when the TMRI was excluded, (for comparison with the previous year), there was a 17 percent increase in publications. The per capita research output for the Faculty was therefore 0.9 compared with 0.6 for 2004 / 2005. The research output per Department is shown in the table below.

Department	Publications	Conference Presentations
THE CALL CALL CANADAN A		4.
UWI School of Nursing (UWISON) 3		17
Basic Medical Sciences	34	29
Community Health & Psychiatry	29	48
Medicine 9		23
Obstetrics, Gynaecology & Child Health	n 22	23
Pathology	15	25
Microbiology	20	14
Surgery, Radiology, Anaesthesia & 26		105
Intensive Care		
TMRI	37	not submitted
TOTAL	187	261

Another strategic decision was to undertake clinical trials. Currently there are five trials underway and these are being conducted by Professors C. Christie and F. Hickling and Drs. D. Mitchell, M. Reid and G. Wharfe who all serve as principal investigators.

A Centre for Clinical Trials is currently being established in the Dean's Office to coordinate this activity.

#### Research Awards

The Faculty produced a number of high quality research papers which received commendation at the Principal's Research Awards Ceremony. The following papers received best publication awards:

Coard, K., et al "Gleason Grading of Prostate Cancer: Level of Concordance between pathologists at the University Hospital of the West Indies". American Journal of Clinical Pathology 2004; 122: 373-376.

McKenzie, C. A., Forrester, T., Sergeant, G., et al (UGTIAI) "Variation and Gallstone Formation in Sickle Cell Disease". Blood 2005; 105:968-972.

Knight-Madden, J., Forrester, T., Lewis, N.A. RN et al "Asthma in children with Sickle Cell Disease and its association with Acute Chest Syndrome". Thorax 2005; 60; 206-210.

In addition, awards for outstanding research were presented to:

- Professor Celia D. C. Christie and the Vaccines Infectious Diseases Centre and the Kingston Pediatric and Perinatal HIV/AIDS Programme – Rotovirus Vaccine Trial Pediatric and Perinatal HIV/AIDS Leadership Initiative in Kingston, Jamaica.
- 2) Professor Terrence Forrester, and the Tropical Medicine Research Institute (TMRI)

#### **Funded Projects**

The Faculty continues to attract a significant number of research grants as well as funds for the conduct of clinical trials. During the year approximately US \$5.9m was received and earmarked for use on funded projects. The breakdown of this income is available in the individual departmental reports.

#### Conferences, Workshops and Seminars

Several conferences and seminars were hosted by the Faculty during academic year 2005/2006. Details are given in the departmental reports but included:

The 14th Annual Research Conference and Workshop on "Clinical Trials: Building Capacity and Competence" November, 16-18, 2005. UWISON's Annual Nursing Midwifery Research Conference and Mary Jane Seivwright Day, (June 1-3, 2006), at which the Caribbean Journal of Nursing and Midwifery was launched.

#### **Income Generation and Diversification**

Significant success was again achieved in this area. Mandated by the Campus to raise 100 million dollars the faculty surpassed this target by almost 100 percent made possible from earnings from its full fee paying arrangements in the MB BS and Nursing programmes. Significant income was also generated from clinical trials, research grants and consultancies mainly through the Mona Institute of Medical Sciences (MIMS).

#### Governance and Improved Process Efficiency

Over the years the work of the Faculty had been impeded by communication issues and a lack of follow up. An analysis of the problem suggested that this situation was made worse by the governance structure within the Faculty which has led to poor reporting mechanisms. To improve communications, the format of the Faculty Board meeting was changed to include reports from Heads of Departments, Programme Directors and Deputy Deans. A monthly meeting between the Dean and Heads of Departments is now held. Monthly reports from the Heads are circulated prior to and discussed at each meeting.

Every area of work in the Faculty is now assigned to a Deputy/Sub/Associate Dean who reports to the Dean and the Faculty Board. This has improved communications and allowed for greater efficiency.

#### STUDENT ACHIEVEMENTS

#### Undergraduate Programme

The Faculty graduated 121 undergraduate students in Academic Year 2005/2006:

MB BS		96
BSc Nursing		1
Certificate Nursing Education		7
Certificate Nursing Administration	6	
BSc Physical Therapy		11

Of the 108 candidates of the Class of 2009 who sat the Stage I MBBS/BMedSci examination, 104 students were successful in the first attempt; one gained honors with distinction and 34, honours.

#### **MBBS** Examination Results

The MBBS examination results for Academic Year 2005 / 2006 were as follows:

#### Stage II

	Dates	Di	st./Hons.	Pass	Fail
Medicine (MD 500) Ju	ine 2006 1	70	8		
Surgery (SU 500)	June 2006	10	65	4	
Obstet. & Gynaecology (OG500	June 2006		5	69	6

#### Prizes Awarded

The following students from Mona were awarded Stage II prizes and awards for Academic Year 2005 / 2006:

Allenbury Prize in Medicine	Rondell Graham
Dr Aubrey McFarlane Bursary	Cathy Maddan
General Surgery Prize	Ian Molyneaux
Sir Maurice Byer Prize in Preventative Medicine	Derwin Christmas
Sir Harry AnnamunthodoPrize	Cathay Maddan
Overall Clinical medal	Rondell Graham
Surgery Medal	Cathay Maadan
Medicine	Rondell Graham

#### **Graduate Studies**

The Graduate Studies programmes were reorganized and monthly meetings of the Faculty Committee for Graduate Studies introduced. The DM Regulations were revised and a research component added to all DM programmes. One DM name change was approved and the "DM Anaesthesia" became the "DM Anaesthesia and Intensive Care".

The Faculty awarded the following postgraduates Degrees during the academic year:

DM Anaesthetists		4
DM Emergency Medicine		2
DM Medicine		2
DM Obstetrics & Gynaecology	8	
DM Paediatrics		7
DM General Surgery		1
DM Neurosurgery		2
DM Urology		1
DM Family Medicine		1
MSC Family Medicine		4
Master of Public Health (MPH)	25	

There were 482 Graduate students registered in the Faculty during the academic year. This included 20 PhD students. Number of graduates registered in each discipline are shown below.

#### DM Programmes

Anaestheisia		21
Emergency Medicine		16
Family medicine	1	
Haematology		4
Medicine		28
Microbiology		1
Obstetrics & Gynaecology		31
Paediatrics		23
Psychiatry		6
Surgery		73
Total		204
MPH		25

#### MPhil

Anatoy	2
Biochemistry	28
Pharmacology	19
Physiology	9
Public Health	17
Total	75

#### MSc

	Counselling	88
	Family medicine 10	
	Microbiology	3
	Nursing (Administration)	5
	Nursing (Education)	14
	Nursing (Family Nurse Practitioner) 8	
	Nursing (MHealth/Psychiatric Nurse Prac.)	5
	Nutrition	25
	Total	158
PhD		
	Microbiology	2
	Nutrition	5
	Clinical Psychiatry	13
	Total	20

#### Conclusion

The faculty is proud of its achievements during 2005 / 2006 but recognizes that this in only the beginning of the transformational process. Further improvement in the physical and information technology infrastructure, the diversification and strengthening of its financial resources as well as the enhancement of its administrative processes will continue during the next academic year. The building of research capacity through training in research methodology, the establishment of the Research Resource Centre and increased collaboration with local and international partners should result in a significant increase in the research output; our target for the next two years is a per capita output of 1.5. Other areas of emphasis will be harmonization of the MB BS curricula on our four campuses, strengthening the governance of the Faculty across campuses and improvements aimed at creating the best learning experience for our students.