

FACULTY OF MEDICAL SCIENCES

MONA

Year ending July 31, 2010



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

Overview

The emphasis in the Faculty of Medical Sciences this year, was on improving facilities for students on the Mona Campus as well as at the other clinical training sites. Work commenced on the Basic Medical Sciences Complex and the refurbishing of the Departments of Pathology and Microbiology. Student facilities such as computer laboratories, libraries, leisure areas and call rooms were put in place at the Kingston Public Hospital and the Cornwall Regional Hospital. The Mandeville Regional Hospital was accredited for clinical rotations and work has commenced on upgrading student facilities.

Student enrolment continued its upward trend and there was a significant increase in the number of students admitted to the flagship MB BS Programme. The increase resulted from a greater demand for places and requests from the regional governments for more of their students to be admitted to this programme. The number of first class honours and straight A students applying to the programme has also increased. The Nursing Council of Jamaica limited the enrolment of students in the Bachelor of Nursing Programme to 100 annually thus thwarting the attempts to increase enrolment in this nationally important programme.

The unsatisfactory state of the University Hospital continued to be a major challenge for the Faculty. Preparation of a business plan aimed at improving conditions at the hospital was completed and the UWI leadership presented the plan to the regional governments. The plan calls for a greater involvement of the UWI in the management of the hospital and a restructuring of its funding arrangements. Discussions on the commercialization of Pathology and Microbiology continued throughout the year and improvements in the management of these departments

should become apparent in the coming year with the acquisition of a Laboratory Information System and the employment of a Business Manager.

To keep track of the increased enrolment, the Faculty's staff complement was extensively reviewed, resulting in an increase in the number of Associate Lecturers to approximately 220. Plans were also made to regularize the employment of persons currently serving on temporary contracts, while an effort was made to ensure that persons employed on a full time basis were performing at optimal levels.

Student Enrollment and Access

Table 1 below compares undergraduate enrolment for the academic year 2009/2010 with the previous year and shows a 10 percent increase.

Table 1

Undergraduate Student Enrolment in the Faculty of Medical Sciences 2009/2010 vs 2008/2009

| Programme | Major & Minor | No. of Students 2009/2010 | No. of Students 2008/2009 |
|-----------|--------------------|------------------------------|------------------------------|
| BBMedSci | Anatomy | 5 | 1 |
| | Biochemistry | 1 | 1 |
| | Pharmacology | 43 | 32 |
| | Physiology | 4 | 1 |
| | Year 1 students | 32 | 41 |
| | Subtotal | 85 | 76 |
| | | | |
| BSc | Nursing (Post RN) | 11 | 18 |
| | Nursing (generic) | 817 | 726 |
| | Online delivery | 366 | 323 |
| | Physical Therapy | 118 | 83 |
| | Diagnostic Imaging | 77 | 77 |
| | Subtotal | 1389 | 1227 |

| | | | |
|------|--------------------------------|-------------|-------------|
| MBBS | Bachelor of Medicine & Surgery | 909 | 766 |
| | Total | 2298 | 2068 |

Student Achievements

The faculty graduated 518 Undergraduate students in the Academic Year 2008/2009. This represents a 41 percent increase over the previous year and was due to an increase in the number of graduates from the Nursing Programmes.

| | |
|------------------------|-----|
| MB, BS | 124 |
| BSc. Nursing (generic) | 268 |
| BSc. Nursing (Post RN) | 81 |
| BSc. Physical Therapy | 28 |
| BBMedsci | 1 |

Table 2

MBBS Examination Results

The MBBS Examination for academic year 2009/10

| | Pass | Honours | Distinction | Fail |
|----------------------------------|------|---------|-------------|------|
| Medicine (MD500) | 107 | – | – | 19 |
| Surgery (SU500) | 105 | 8 | – | 9 |
| Obstetrics & Gynaecology (OG500) | 010 | 7 | 10 | 2 |

Medals and Prizes Awarded

The following students were awarded prizes in the final MB BS Examinations for Academic Year 2009/2010:

| | |
|---|---|
| Overall Clinical Medal: | – David Walcott |
| Medicine & Therapeutics Medal Obstetrics & Gynaecology Medal: | – Jonathan Ho David Walcott Sonya Reid |
| Pathology/Microbiology Medal: | – Heidi-Anne Hanson |
| Medical Association of Jamaica Insurance Fund Prize in Obstetrics and Gynaecology: | – Sonya Reid |
| Allenbury Prize in Medicine: | – Jonathan Ho Luke Foster |
| Professor Owen Morgan Prize: | – Jonathan Ho David Walcott |
| Dr. Aubrey McFarlane Bursary: | – David Walcott |
| Dr. The Hon. John Hall Prize: | – Asana Anderson Deon Flemming Luke Foster Gail Lewis David Walcott |

Research

The Faculty continued its emphasis on capacity building in research through strengthening the role of the Research Resource Centre and the establishment of a research fellowship programme with the TMRI. To date four academic staff members have benefitted from this programme.

In respect of publications, the Faculty had 236 peer-reviewed publications during the year, representing a per capita publication rate of 1.2. Thus despite excellent work by several colleagues the Faculty's research output is still unsatisfactory.

Table 3**Publications per Department**

| Department | Publications 2008-2009 | Publications 2009-2010 | Conference Presentations 2008-2009 | Conference Presentations 2009-2010 |
|--|-----------------------------------|-----------------------------------|---|---|
| UWI School of Nursing | 4 | 5 | 13 | 10 |
| Basic Medical Sciences | 34 | 39 | 11 | 26 |
| Community Health & Psychiatry | 36 | 34 | 54 | 33 |
| Medicine | 13 | 24 | 45 | 52 |
| Obstetrics, Gynaecology & Child Health | 47 | 35 | 43 | 10 |
| Pathology | 18 | 13 | 19 | 22 |
| Microbiology | 12 | 11 | 5 | – |
| Surgery, Radiology, Anaesthesia & Intensive Care | 50 | 38 | 74 | 51 |
| TMRU/Sickle Cell Unit | 47 | 48 | – | – |
| Total | 248 | 236 | 214 | |

Research Awards

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

- **Michael Boyne, Carolyn Taylor-Bryan, Franklyn Bennett, Tamika Royal Thomas, Rainford Wilks, Terrence Forrester** and collaborators – “The association of hypothalamic-pituitary-adrenal axis activity and blood pressure in an Afro-Caribbean population, *Psychoneuroendocrinology*. 2009;34:736-42
- **Jeffery East, Christopher Valentine, Garfield Blake** and collaborator – “Sentinel lymph node biopsy for breast cancer using methylene blue dye manifests a short learning curve among experienced surgeons: a prospective tabular cumulative sum (CUSUM) analysis”, *BMC Surgery*, 9:2 (27 January 2009)

- **Cliff Riley, Andrew Wheatley, Helen Asemota** and collaborators – “The interplay between yam (*Dioscorea* sp) starch botanical source, micromeritics and functionality in paracetamol granules for reconstitution”, *European Journal of Pharmaceutics and Biopharmaceutics*, 2008;70, 326-334.

The most outstanding researchers were:

- **Professor Terrence Forrester**, the Director of the Tropical Medicine.

Professor Forrester’s principal research priority during the year Aug 1, 2008- July 31, 2009 was the elucidation of the mechanisms, which underlie the increased risk of obesity and cardio metabolic disease in populations from poor societies with a history of chronic under nutrition. During the period he published 14 research manuscripts; 13 of which appeared in internationally recognized journals while the remaining one was published in the University’s *West Indian Medical Journal*.

- **Dr Donovan McGrowder**, a Senior Lecturer in the Department of Pathology and Consultant Chemical Pathologist at the University Hospital of the West Indies.

Dr McGrowder and colleagues in the Department of Haematology, Research & Development and Anaesthetics at Royal Brompton Hospital London, carried out studies examining postoperative bleeding and the accompanying increased risk of morbidity and mortality. He and colleagues at the Department of Clinical Biochemistry at the Royal Brompton Hospital, London have also focused on diagnosing iron deficiency in patients with medical problems - such as infection, inflammation and malignancy, which generally make the diagnosis difficult.

The selection in the category “**The Project Attracting the Most Research Funds**” was: “Creation of a Caribbean Health Leadership Institute”, managed by Professor Brendan Bain. The project attracted US\$2,884,108.00 over five years, and was funded by the United States Centre for Disease Control Prevention.

The final category – **The Research Project with the Greatest Business/Economic/Development Impact** saw the award going to the project entitled “Impact of Jamaica National Building Society’s Micro-Credit Programme on Health and Development in Jamaica”, managed by Terence Forrester, Claremont Kirton, Georgia McLeod, Georgiana Gordon-Strachan and Colette Cunningham-Myrie.

Research Grants

The Faculty attracted approximately US \$2,607,881 in research grants during the year, details of which appear in the individual departmental reports.

Graduate Studies

The Faculty devoted much effort to designing new programmes and gaining approval for their launch. The MSc Programme in Gerontological Nursing began this year while plans are in place for the following programmes to be launched during the 2010/2011 academic year:

- The MSc in Forensic Sciences
- Clinical Fellowship in Nephrology
- Clinical Fellowship in Child and Youth Psychiatry
- Diploma in Family Medicine.

An unprecedented five candidates were registered in the DM Anatomical Pathology Programme while the Department of Microbiology dramatically increased its graduate student numbers to 12.

Table 4**Registered Students (2009-2010) – Graduate Studies**

| Programmes | Numbers |
|--------------------------------|----------------|
| DMs | 283 |
| Taught Masters | |
| MPH | 41 |
| MPH-Health Education/Promotion | 9 |
| Nutrition | 20 |
| Epidemiology | 1 |
| Microbiology | 2 |
| Cultural Therapy | 3 |
| Nursing: | |
| Administration | 17 |
| Clinical Specialist | 3 |
| Education | 18 |
| Family Nurse Practitioner | 18 |
| Mental Health/Psychiatry | 10 |
| Online Masters | |
| Counseling | 59 |
| Sports Medicine | 13 |
| Research Degrees | |
| MPhils | 52 |
| PhDs | 55 |
| Total | 604 |

Table 5**Number of Programme Graduates (2009/2010)**

| Programmes | Number |
|-------------------|---------------|
|-------------------|---------------|

DMs:

| | |
|------------------------------|---|
| Anaesthesia & Intensive Care | 3 |
| Internal Medicine | 6 |
| Obstetrics & Gynaecology | 5 |
| Paediatrics | 5 |
| Psychiatry | 3 |
| Radiology | 4 |
| Pathology | 2 |

Surgery:

| | |
|--------------------|---|
| General | 2 |
| Orthopaedics | 1 |
| Urology | 1 |
| Ophthalmology | 1 |
| Emergency Medicine | 5 |
| ORL | 1 |

Taught Masters:

| | |
|--------------------------------|----|
| MPH-Health Education/Promotion | 14 |
| Nutrition | 6 |
| Epidemiology | 6 |
| Microbiology | 2 |
| Nursing | 31 |
| Sports Medicine | 2 |

Online Masters:

| | |
|------------|----|
| Counseling | 38 |
|------------|----|

Research Degrees

| | |
|--------|---|
| MPhils | 3 |
| PhDs | 7 |

| | |
|--------------|------------|
| Total | 148 |
|--------------|------------|

Income Generation and Budgetary Considerations

During the academic year under review the UWI received a further reduction in government funding. In response and anticipation of further budget cuts the faculty sought to strengthen its income generation and cost cutting initiatives. Agreed strategies included increasing income from undergraduate and graduate level full fee paying programmes, (through increased student intake and expanding the number of such programmes), and from short courses mounted mainly during the summer months.

Strategies for reducing expense centred on regulating the amount spent on overseas travel, (primarily through use of modern IT facilities) and monitoring staff and student use of various utilities.

Conclusion

The Faculty of Medical Sciences, Mona focused on improving infrastructure including student facilities, income generation and diversification, and building research capacity. This will provide the framework for further enhancement of our international reputation in the areas of training and research in the years ahead. With the reduction in the government subvention to the UWI, the year ahead will be difficult but the Faculty will continue to play a leadership role on the Mona Campus as it continues its process of transformation.