DEPARTMENT OF BASIC MEDICAL SCIENCES

Wayne McLaughlin, BSc Waterloo, PhD UWI
– Head of Department

WORK OF THE DEPARTMENT

During the 2007/2008 Academic Year, one of the major activities of the Department was to develop and present its five-year strategic plan. The key strategic areas that were considered included teaching and learning, research and graduate studies, developing core facilities, encouraging collaborative and interdisciplinary research, staffing, developing taught masters programmes, improving infrastructure and equipment, and improving income generation capabilities.

Under teaching and learning, both the BBMed Sci and Physical Therapy programmes will be reviewed in the next academic year to ensure that they reflect developments in the discipline and professional practice. An internship programme for students in the BBMed Sci programme will be developed to improve job skills through placement in industry. New academic programmes and courses to fill identified gaps or respond to emerging market needs e.g. Forensic Science, Microbiology were initiated. The Department does not yet offer taught graduate programmes. This is an area that will be explored in the coming year in order to provide potential students with access to attractive taught MSc programmes that are flexible in delivery and meet stakeholder needs.

In the area of research and graduate studies, the key focus was to strengthen academic supervision and overall programme quality in research at the MPhil and PhD levels and reduce the through-put time of graduate students. In the last academic year weekly postgraduate seminars continued with much success. The department also began to invest in world-class research infrastructure by developing core research and service facilities which are recognised as best practice. The department with funding from the Dean’s Office and Bursary acquired a state-of-the-art GC/MS, an automated solvent extraction system and
freeze drier to support undergraduate training and to help to stimulate translational research and commercialisation particularly in biochemistry, pharmacology and toxicology. Caribbean Genetics (CARIGEN) purchased several pieces of key equipment, including a real time PCR cycler and a level-2 biosafety cabinet, for work in molecular diagnostics. Notably, the Department of Microbiology in collaboration with CARIGEN was successful in the WHO External Quality Assessment Programme (EQAP) for the Detection of influenza Virus type A by real time PCR. The Animal House was refurbished to include animal breeding rooms and staff facilities.

In 2007/08 one-hundred and sixty-nine students were registered in the MBBS programme. The BBMed Sci programme continued to be oversubscribed but only 22 students were accepted due to space limitation. Forty-one students were accepted in the Physical Therapy programme and 228 students were enrolled in the FPAS Biochemistry, Biotechnology and Molecular Biology programmes. Students’ assessment of teaching was good. The average scores for students’ assessment of lecturers in the MBBS, BBMed Sci and FPAS programmes were 4.29, 4.33 and 3.88, respectively, and the average scores for course assessment were 3.89, 4.10 and 3.65, respectively.

Postgraduate registration declined slightly. Four students were registered in Biochemistry, one in Molecular Biology, three in Pharmacology and two in Physiology.

The Department hosted a workshop on “Early-onset of type-2 diabetes: metabolic and genetic characterization in Mexico and Jamaica” The workshop was part of the Technical and Scientific Co-operation Programme between Mexico and Jamaica, and was held on April 15, 2008. Members of the academic staff and their postgraduate students participated in several international conferences, and were also successful in attracting significant research funds of approximately US$200,000. The per capita publication rate for the department was 1.0, down from 1.14 in the previous year.

The Department welcomed Dr. Manish Ramavat, Lecturer in Physiology, Dr. Roy Thomas Lecturer in Anatomy, Mrs. Sharmella Roopchand-Martin and Mrs. Gail Nelson, Lecturers in Physical Therapy. Dr. Lauriann Young-Martin was appointed Head of the Physiology Section, replacing Dr. James Mills who retired. Mr. Michael Gardner, Head of the Anatomy Section was on sabbatical leave. During this period Mr. Cyril Fletcher acted in the capacity of Head of the
Anatomy Section. Dr Shamir Cawich was appointed in the Department of Surgery and Dr. Roger Hunter resigned. Dr. Rachael Irving was appointed Research Fellow in the Biochemistry Section, where she continues to work in the area of diabetes and the genetics of Jamaica athletes in collaboration with University of Glasgow and the University of Technology (UTECH).

STAFF AWARDS AND RECOGNITION

Dr. Michelle Hamilton was awarded the UWI/Guardian Life Premium Teacher of the Year. The following academic staff members were also recognised for score equal to or in excess of 4.8 on their students’ evaluations: Professors Norma Anderson and Dalip Ragoobirsingh; Drs. Maxine Gossell-Williams, Oswald Simon, and Paul Singh; Ms. Rosalee Chingara, Carron Gordon and Sharmella Martin. The following persons were recognised for their years of service: Dr. Andrew Pearson (30), Merle Dennis-Lawrence (21), Dr. Icolyn Amarakoon (15), Thornia Smith (15) and Sandrea Bennett-Miller (15)

PAPERS PRESENTED


- Beman, D, Paul, TJ, Branday, JM, Young, L, Williams, E (2007). Tough for students but easy for judges or vice versa?! An early evaluation of Angoff item accuracy in three examinations. 11th Annual IAMSE Meeting, Cleveland, Ohio.
• Dilworth, L., Asemota, H., Green, C. and Bailey, D. (2007). Bioactive compounds in commonly eaten foods and their impact on animal nutrition. 121st AOAC International Annual Meeting and Exposition, Anaheim, California, USA.


• Paul, T. J, Williams, E, Young, L, Branday, JM, Carpenter, R, Gordon, O, (2007). Adding personality to medical teaching at the University of the West Indies, Jamaica. 11th Annual IAMSE Meeting, Cleveland, Ohio.
PUBLICATIONS

Book Chapters


Refereed Journal Articles

WIMJ = West Indian Medical Journal


**Abstract in Peer Reviewed Journal**

* Bowers, A.S., Pepple, D.J., Reid, H.L. (2007). The oxygen delivery index in subjects with normal haemoglobin (HbAA), sickle cell trait (HbAS) and homozygous sickle cell disease (HbSS). *WIMJ* 56 (Suppl 3): 27


* Cawich, S. O. M Arthurs, T Murphy, JM Plummer, DIG Mitchell, EW Williams, MS Newnham, MEC Mcfarlane. (2007) Recent Advances in Endoscopic Retrograde Cholangiopancreatography at the University Hospital of the West Indies. *WIMJ*. 56(S3): 3

Percutaneous Endoscopic Gastrostomy at the University Hospital of the West Indies in Jamaica. WIMJ 56(S3): 32.


INCOME GENERATION

Research Grants

Professor Helen Asemota

Environmental Health Foundation of Jamaica (EHF). “Bioactivity Screening of Jamaican Plants Extracts” US$8,600.00.

Dr. Paul Brown

National Health Fund (PI) “Seroepidemiology and pathophysiology of leptospirosis in Jamaica” J$6,200,000

University of Minnesota Interdisciplinary International Research Circle Grant (Co-PI) “Geographical information system (GIS) as a tool in epidemiological assessment of human leptospirosis in Jamaica”. US$35,000

Dr. Sherline Brown

Coconut Industry Board/Common Funds for Commodities (CFC) “Sustainable Coconut Production through Control of Coconut Lethal Yellowing” (CFC/FIGOOF/22) US$29,500

Dr. Maxine Gossell-Williams

CHRC Grant Award: “Evaluation of the physiological, cytological benefits of pumpkin seed oil supplementation in post-menopausal women”. US$5000


Dr. Lisa Lindo

Principal’s New Initiative Fund “The effect of some nitric oxide releasing compounds on the central nervous system and platelet aggregation” J$1,500,000

Dr. Dagogo Peppe

Principal’s New Initiative Fund: “Maternal blood viscosity and perinatal outcome in homozygous sickle cell disease” J$1,400,000
Dr. Lauriann Young-Martin


School of Graduate Studies and Research, Mona Campus. “Mechanisms Associated with Learning and Memory in Ageing”. US$3,790

School of Graduate Studies & Research Funding for Postgraduate students totalled approximately US$18,000

CATEGORIES OF STUDENTS

First Class Honours Degree Awarded

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<th>BB Med Sci</th>
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<td>Physiology</td>
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<td>Physical Therapy</td>
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<td>Biotechnology with Botany</td>
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Postgraduate Degrees Awarded:

- Sasha Campbell  PhD Biochemistry
- Janet Campbell-Shelly  PhD Pharmacology
- Damian Cohall  PhD Pharmacology
- Yvonne Bailey-Shaw  MPhil Biochemistry
- Suzette Curtello  MPhil Biochemistry
- Margot Thompson  MPhil Pharmacology

PUBLIC SERVICE

Professor Helen Asemota

- Member, International Proxy Parents’ Education Committee, Jamaica.
- Scholarship Liaison Officer, Organization of scholarships/bursaries for underprivileged Jamaican students including some UWI students.
– Member of Executive Committee, International Christian Fellowship (ICF), USA.

**Dr. Paul Brown**
– Member, Technical working group on Leptospirosis, Jamaica

**Mr. Michael Gardner**
– Executive Member, Jamaica Historical Society

**Dr. Kerith Golden**
– Vice Chairman, Stock Form Road Citizens Association, Golden Spring, St. Andrew
– Member, Editorial Advisory Board for Stewarts Post Harvest Review.

**Dr. Maxine Gossell-Williams**
– Scholarship Chair, Jamaica Fulbright-Humphrey’s Alumni Association
– Member, Optimist Club of North St. Andrew
– Pharmacology Section Representative, Central Drug and Therapeutics Committee- Ministry of Health.
– Executive Member, Citizen Association of Armour Glades

**Professor McFarlane-Anderson**
– Chairman, Education Committee - International Proxy Parents
– Member, Friends of Foundation for International Self Help (FISH).

**Dr. Wayne McLaughlin**
– Board Member, Coconut Industry Board
– Deputy Chairman, National Commission on Science and Technology, Jamaica - Biosafety Committee
– Council Member, Jamaica Society for Agricultural Sciences

**Professor Dalip Ragoobirsingh**
– Chief Examiner, Caribbean Examination Council, CSEC Human & Social Biology
– Diabetes Educator, Diabetes Association of Jamaica (DAJ)

**Dr. Oswald Simon**
– Observer, Technical Advisory Committee for the CARICOM Drug Testing Laboratory

**Dr. Paul Singh**
– Member, Caribbean Poison Information Network Management Committee

**Dr. Lauriann Young-Martin**
– Council Member, Holy Cross Community