WORK OF THE DEPARTMENT

During the academic year, the Department made progress in implementing some of the strategic initiatives in its 2007-2012 Strategic Plan and also some of the recommendations from five-year review for the Basic Medical Sciences. The major achievements were

• The review of the BB Med Sci programme

• Increased student intake in the BB Med Sci and Physical Therapy programmes

• The strengthening of academic supervision and overall programme quality in research training at the MPhil and PhD levels, including weekly departmental graduate seminars

• The development of taught master’s programmes in Applied Pharmacology and Physical Therapy

• The introduction of a Diabetes Education Curriculum for Health Care Professionals

• The improvement of the IT infrastructure in the Physiology Lecture theatre and the Pre-Clinical Lecture Theatre for teaching.

• The acquisition of teaching and research equipment in Anatomy and Physiology

In 2009/10 two-hundred and sixty-four students were registered in the MBBS programme, 31 in the BB Med Sci programme and 51 in the Physical Therapy programme. Two hundred and sixty-seven students
were enrolled in the FPAS Biochemistry programme. Students’ assessment of teaching was good as the academic staff continues to be highly rated by students. Members of the academic staff and their postgraduate students participated in several international conferences, and were also successful in attracting research funds of approximately US$263,000. The research output declined, with less than one original paper published per staff in peer reviewed journals.

Professor Helen Asemota continued her secondment at Shaw University, USA where she also serves as the Principal Investigator for the “Shaw in Jamaica MoN Prostate Cancer Research Project”. The project is a joint one between SHAW, UWI and and is funded by the NIH. Shaw University students under the scheme of Minority Health and Health Disparities International Research training (MHIRT) of the National Center on Minority Health and Heath Disparities (NCMHD), NIH, USA visited the department to undertake a summer research internship on prostate cancer survey and training. The project which began in 2009 will train Shaw Minority Students in prostate cancer research over a five year period at UWI, Mona.

**Staff Awards and Promotions**

**Dr. Wayne McLaughlin** was promoted to Professor of Molecular Biology. Drs. Dagogo Pepple and **Maxine Gossell-Williams** were promoted to Senior Lecturer in Physiology and Pharmacology, respectively. Dr. Gossell-Williams assumed the responsibility as the Head of Section of Pharmacology, taking over from Professor Simon who retired last year.

**Drs. Paul Brown** and **Icolyn Amarakoon** were awarded Fulbright Research Fellowships to pursue research at the University of Minnesota School of Veterinary Medicine, St. Paul, Minnesota and Institute of Human Virology, University of Maryland, School of Medicine in Baltimore, Maryland, respectively. Dr. Brown conducted research on the regulation of gene expression in Leptospira, while Dr. Amarakoon conducted research on the molecular biology of HIV and antiretroviral drug resistance in Jamaican patients infected with HIV/AIDS.
Staff Development

Miss Thornia Smith, Senior Administrative Assistant successfully completed her MSc in Applied Psychology (Health) at the UWI, Mona. Miss Andrea Richards, Senior Medical Technologist, successfully completed a certificate course in “Effective Project Planning and Evaluation in Health Research” organized by the Clinical Epidemiology Unit, TMRI. Mrs. Yvonne Bailey, Senior Secretary, successfully completed the certificate course in “Project Management” from the Mona School of Business. Mrs. Juliet Waugh and Ms. Juliet Mair, Senior Departmental Attendant and Senior Laboratory Attendant pursued a course in Hospitality Management hosted by the Human Resources Division, Mona Campus.

PAPERS PRESENTED


• Henry, T., Oswald Simon, and Maxine Gossell-Williams Ginger oleoresin supplementation lowers blood pressure and triglyceride levels in hypercholesterolemic rats FASEB J. 2010 24:960

• Hyde, C. D. Maxine Gossell-Williams, Tiffany Hunter, Donnette Simms-Stewart, Donovan McGrowder, Horace Fletcher, and Eric Choo-Kang. Pumpkin Seed Oil Supplementation improves

• Jacob, A. S., Oswald Rudolph Simon, Delano Samuel Wheatle, and Peter Lanton Ruddock Antihistaminergic effect of a pure compound (GT) isolated from garden slug (Diplosolenodes occidentalis) on tracheal smooth muscle contraction. FASEB J. 2010 24:970.1

• Levy Arkene and Dwayne G Stupack Cytotoxic activity of Taraxacum officinale in OV2008 human ovarian cancer cell line is mediated by caspase 8 activity FASEB J. 2010 24:965.3.

• Lopez, Anna-Lee, Maxine D Gossell-Williams, Oswald R Simon, and Howard Phillips Phosphatidylcholine supplementation alleviates the impaired glucose response induced by acute methionine loading FASEB J. 2010 24:569.3


• Pearson, Andrew G.M. Biochemical and microbiological investigations into the utilisation of agro-industrial wastes in Jamaica. New York State Agricultural Experiment Station, Geneva, N.Y. July 16, 2010.


• Young-Martin, L. Estrogen not Testosterone Enhances Memory of a Negative Patterning Discrimination Task in Aged Male Rats. Annual International Conference on Alzheimer’s Disease (ICAD), Reed Messe Wien, Vienna, Austria, July 11-17, 2009.

Papers presented at the Faculty of Medical Sciences 18th Annual Research Conference on Child Health: From The Womb to Adolescence, The University of the West Indies, Mona Campus, November 11-13, 2009.

• Brown, Caneta, N McFarlane-Anderson, L Lindo, K Bishop, T Dasgupta. The Effect of S-Nitroso-N-acetylpenicillamine and S-nitrosoglutathione on Blood Pressure, Urinary Protein Levels and Pup Weight in Pregnant Rats.

• Brown, Caneta, N McFarlane-Anderson, L Lindo, K Bishop, T Dasgupta. The Effect of S-Nitroso-N-acetylpenicillamine and S-nitrosoglutathione on Blood Pressure, Urinary Protein Levels and Pup Weight in Pregnant Rats.

• Daley-Beckford, DK. RL Alexander-Lindo, T Yee, P. Reese. The Isolation of the Hypoglycaemic Principles from Eucalyptus camaldulensis showing a similar effect as Metformin.


• Manya, S., R. L. Alexander-Lindo, M. Gossell-Williams. Development of a New Rat Model of Type 2 Diabetes Mellitus.
• Wynter, T., PDA Singh, NP Williams, W McLaughlin. The effect of *Momordica charantia* extract on colorectal cancer precancerous lesions (abberant crypt foci).


• Brown, Kesi, R.L. Alexander-Lindo, Tara P. Dasgupta. The Effect of Two S-nitrosothiols on Glucose Metabolism and Spatial memory.


• Ragoobirsingh, D. The Universities Diabetes Outreach Programme

**PUBLICATIONS**

**Books and Monographs**


* Ragoobirsingh D. Chronic Care Passport. (2010). Developed for the Pan American Health Organization Caribbean Quality of Diabetes Care Improvement Project


Technical Reports


**Refereed Journal**


psychotropics at the University Hospital of the West Indies in Jamaica. *Journal of Medicine Use in Developing Countries.* 1(2): 46-51.


* Pepple, DJ, LE Young and RG Carroll. (2010) A Comparison of Students’ Performance in Multiple Choice and Long Essay Questions in the MBBS Stage I Physiology Examination at the UWI, Mona Campus. Advances in Physiology Education 34: 86-89.


**Abstract in Peer Reviewed Journal**

* Brewster, A., Hudson GA. Knowledge, attitudes and behaviour of students at The University of the West Indies, Cave Hill campus, towards diabetes. *WIMJ* 58: (Suppl 4) 1-51 pg. 39.


* Grant SA. And GA Hudson (2009). Obesity, diet and physical activity in teenagers (15 -18 years) in rural and urban high schools. *WIMJ* 58: (Suppl 4) 1-51 pg. 39.


* Powell, S., Hudson GA. Prevalence of sport-related injuries and its association with the conduction of pre-participation physical examination in track and field athletes in high schools in Manchester. *WIMJ* 58: (Suppl 4) 1-51 pg. 40.


(Zingiberaceae officinale) on the activity of the enzyme lipoxygenase. WIMJ 54 (4):44.


**INCOME GENERATION**

**Research Grants:**

*Campus Committee for Research and Publications and Graduate Awards = CRPG Awards*

**Dr. Paul Brown**

- Prevalence and Molecular Characterization of Cryptosporidium, *Giardia*, and *Leptospira* in Surface Waters. University of Minnesota International Collaborative Seed Grant with a Focus on Africa or Water in the World; Co-PI (with Dr. Paul Allwood, UMN) **US $30,000**

- *recA* - and *relA* - gene regulation in pathogenic *Leptospira* species. US State Department (Fulbright Scholarship FY09); PI **US$10,000**

- Investigation of the basis of attachment of *Leptospira* species to mammalian cells CRPG Fund, UWI, Mona; PI (Awarded to Gabrielle Andrade) **US $2,050**

- Mechanism of degradation of organic compounds and consequent biochemical effects in aquaculture species. CRPG Fund, UWI, Mona; PI (Awarded to Ann-Tenneil O’Conner) **US$1700**
- Malaria and leptospirosis as possible causes of fever during an epidemic of dengue in Jamaica. CHASE Fund; Co-PI (with Prof. John Lindo) **JM $3 million**

**Dr. Sherline Brown**
- Characterization and distribution of citrus greening disease in Jamaica” CRPG Grant **US $3000.00**

**Dr. Arkene Levy**
- Investigation of the correlation between ovarian cancer FAK expression and tumour invasive and migratory potential. Principal’s New Initiative Reseaqrch Fund, UWI, Mona **JA$1.5M**
- “Antidiabetic properties of Petiveria alliacea” CRPG Award for Sara-Lou Christie: **US $2000.00**
- “Anti-inflammatory active Cassia alata Linn leaf extract on CFA induced arthritis in rats.” CRPG Award for Anishka Lewis: **US$2000.00**

**Dr. Lisa Lindo**
- Forest Conservation Fund in collaboration with Dr. Rupika Delgoda (Natural Product Institute) **JA$11.9M**
- The Isolation, Purification and Elucidation of the Hypoglycaemic Principle/s in Eucalyptus camululensis Extract. CRPG Award: 2010 **US $2000.00**
- The isolation and identification of the active Hypogycemic Principle in Sechium edule (Cho Cho) leaves. CRPG Award: 2009 **US $2000.00**

**Dr. C. Ralph Nwokocha**
- Vasoactive effect and possible mechanism of action of Peperomia pellucida extract in thoracic aortic rings of normotensive and hypertensive rats. Principal’s New Initiative Research Fund, UWI, Mona **US $16,700**
Professor Oswald Simon

- Campus Committee for Research and Publication and Graduate Award for Tricishanna R. Henry: “Ginger oleoresin supplementation lowers blood pressure and triglyceride levels in hypercholesterolemic.” JA$156,577.00
- CRPG Award for Audrey Jacob: “Antihistaminergic effect of a pure compound (GT) isolated from garden slug (Diplosolenodes occidentales) on tracheal smooth muscle contraction.” JA $156,577.00

Dr. Paul Singh

- CRPG Award for Shakira Wade: “Investigation of the antineoplastic properties of Momordica charantia” US $2000.00

Dr. Maxine Gossell-Williams

- Campus Committee for Research and Publication and Graduate Award for Coretha Hyde: “The benefits of pumpkin seed oil supplementation in postmenopausal women and ovariectomized rats.” JA $156,577.00
- Grants from Dr. Reddy Pharmaceuticals for Jacqueline Campbell: “Promoting Pharmacovigilance among healthcare professionals in Jamaica” JA $15,000.00
- Grants from Novartis for Jacqueline Campbell: “Promoting Pharmacovigilance among healthcare professionals in Jamaica” JA $15,000.00
- Grants from Roche Pharmaceuticals for Jacqueline Campbell: “Promoting Pharmacovigilance among healthcare professionals in Jamaica” JA $25,000.00

PUBLIC SERVICE

Professor Helen Asemota

- Member, International Proxy Parents’ Education Committee, Jamaica
– Member, Executive Committee, International Christian Fellowship (ICF), USA.

– Chairman & Co-Founder, Imade Asemota Foundation (IAF) for Sickle Cell Research & Patients’ Welfare, USA.

Dr. Paul Brown
– Judge, JPS Science and Technology Expo for Schools, National Finals
– Chief Judge, JPS Science and Technology Expo for Schools in Eastern Region
– Member, American Society for Microbiology Country Liaison for Jamaica

Professor Dalip Ragoobirsingh
– Chief Examiner, Human & Social Biology Caribbean Secondary Examination Certificate Caribbean Examinations Council
– Temporary Advisor, Caribbean Diabetes Quality of Care Improvement Project Pan American Health Organization
– Consultant Diabetes Educator, Diabetes Association of Jamaica

Ms. Gillian Hudson-Ducasse
– Member, Combined Disabilities Association
– Member, Friends of the Consie Walters Cancer Care Center

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, 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, MOH
– Executive Member, Citizen Association of Armour Glades

**Dr Arkene Levy**
– Chair, membership committee, Jamaica Fulbright Humphrey Alumni Association JFHAA
– Staff representative, Rotoract Club of UWI
– Member, CARPIN Education Subcommittee
– Member, Levy Foundation: Fund raising for the reconstruction of the St Paul’s Anglican Church

**Professor McFarlane-Anderson**
– Chairman, Education Committee, International Proxy Parents

**Professor 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

**Ms. Gail Nelson**
– President, Jamaica Physiotherapy Association
– Jamaica’s representative, North American/Caribbean Regional Chapter, World Confederation of Physical Therapy

**Professor Omkar Parshad**
– Immediate Past President, Lions Club of St. Andrew, Jamaica
– Vice President, Indian Cultural Society in Jamaica
Professor Harvey Reid

– Member, Board of Governors, Cross Keys High School, Manchester
– Member, Jamaica Wellness Cluster
– Member, Manchester Herb and Spices Association
– Member, Manchester Chamber of Commerce
– Member, Rural Agricultural Development Authority (RADA)

Professor. 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

Dr. Andrew Wheatley

– Director, Jamaica Anti-Doping Commission
– Member, Jamaica National Commission for UNESCO
– Chair, Subcommittee on Science and Education, National Anti-Doping Commission
– Vice-president, Association of Local Government Authorities of Jamaica (ALGAJ)
– Chair, Education and Outreach Committee (JADCO)
– Mayor, St. Catherine Parish Council
## Students Registration in Programmes

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<th>Programme</th>
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<td>Year 3 = 41</td>
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## Postgraduate Degrees Awarded

- STENNETT, Dewayne – PhD Biochemistry
- LINDSAY, Carole – MPhil Biochemistry
- O’CONNOR, Nadia – MPhil Pharmacology

## Postgraduate Scholarships Awarded

- BROWN, Kesi
- BURNETT, Aniki
- CHRISTIE, Sara-Lou