DEPARTMENT OF BASIC MEDICAL SCIENCES

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

WORK OF THE DEPARTMENT

uring 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

- Brown, Caneta, N McFarlane-Anderson, L Lindo, K Bishop, T Dasgupta. S-Nitroso-N-acetylpenicillamine and S-nitrosoglutathione Reverse Preeclampsia in Rats. 2nd International Conference on Drug Discovery and Therapy in Dubai, February 1-4, 2010.
- Brown, Kesi J., Alexander-Lindo, R. Lisa and Dasgupta, Tara. The Effect of Two S-nitrosothiols on Spatial Memory. 2nd International Conference on Drug Discovery and Therapy in Dubai, February 1-4, 2010.
- Brown P. Antimicrobial susceptibilities, and SCCmec multi-locus VNTR analyses of polymorphism and genetic relationships of clinical isolates of MRSA. 14th International Congress on Infectious Diseases, Miami, FL, USA. March 11-14, 2010.
- 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

HDL and LDL cholesterol in Post-Menopausal Women: A Random Double-Blind Pilot Study FASEB J. 2010 24:588.6

- 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
- Miller David J. and Andrew G.M. Pearson. Geomorphic and sediment dynamics in Manatee Bay, St. Catherine, Jamaica: A hurricane impact complex response system. Association of American Geographers, Annual Meeting, Washington D.C., April 14-18, 2010.
- Moodie-Henry, B. J. Manley E West, and Maxine Deborah Gossell-Williams Alkaloids of Borreria verticillata mediate hypotensive activity through muscarinic, M3 receptor, a stimulatory release of nitric oxide (NO). FASEB J. 2010 24:773.7
- Ogunsalu C, Arunaye F, Ezeokoli C, Gardner MT, Rohrer M, Prasad H. Mathematical model for osteobstruction in Bone Regeneration mechanism; A headway in skeletal tissue engineering. American College of Oral and Maxillofacial Surgeons Conference. April 2010. San Antonio Texas, USA.
- Ogunsalu C, Arunaye F, Ezeokoli C, Gardner MT, Rohrer M, Prasad H. Mathematical model for osteobstruction in Bone Regeneration mechanism; A headway in skeletal tissue engineering. Presented at the American College of Oral and Maxillofacial Surgeons Conference. AEEDC Dubai 2010.

- 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.
- Rowe, N., PDA Singh, W McLaughlin, MT Gardner. Preliminary investigation of the effects of Jamaican ginger (*Zingiberaceae officinale*) on the activity of the enzyme lipoxygenase.West Indian Medical Journal 54 (4):44, 2009.
- 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.
- Henry, T., O Simon M Gossell-Williams. Effect of ginger oleoresin on blood pressure and serum lipids in hypercholesteroleamic rats.
- 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).

Papers presented at the 16th Annual International Diabetes Conference, Jamaica Grande Resort, Ocho Rios, St. Ann, Jamaica. (March 25-28, 2010).

- Brown, Kesi, R.L. Alexander-Lindo, Tara P. Dasgupta. The Effect of Two S-nitrosothiols on Glucose Metabolism and Spatial memory
- Bryan, Sophia, R.L. Alexander-Lindo, Tara P. Dasgupta. Nitric Oxide Inhibitors Hold Promise for Diabetes Research.
- McFarlane-Anderson, Norma. Stem Cells and Diabetes Mellitus (DM): A biological approach to curing Diabetes Mellitus.
- Ragoobirsingh, D. The Universities Diabetes Outreach Programme

PUBLICATIONS

Books and Monographs

- * Barcelo, A., E. Carrasco, D. Ragoobirsingh, E. Duarte, J. Gagliardino, G. Xuereb and F. Canete. (2009) <u>Building Blocks</u> in <u>Diabetes Education and Control: A Framework for</u> <u>Comprehensive Diabetes Care</u>, Pan American Health Organization, Washington, D.C, USA, 2009.
- * Brown, P.D. (2009). Multiple drug resistance. <u>In Multiple Drug</u> <u>Resistance.</u> Eds. Agoston Meszaros and Gusztav Balogh. Nova Science Publishers, Inc, New York, USA. ISBN, 978-1-60741-595-4.
- * Irving R. Hormones (2010). Our Family History and Diabetes in Pregnancy: Genetics and biochemistry in the Black womb. Lambert Academic Publishing Germany. [978-3-8383-3698-5].

- * Irving R, Charlton V. (eds). (2010) Jamaica Gold: Jamaican Sprinters. University Press, Jamaica. [ISBN 978-976-640-234-1].
- * Ragoobirsingh, D., and Ann Fullick. (2009). <u>Human and Social Biology for Caribbean Secondary Education Certificate</u>, 2nd edition, Pearson/Longman Publishing for the Caribbean, London, England.
- * Ragoobirsingh D. Chronic Care Passport. (2010). Developed for the Pan American Health Organization Caribbean Quality of Diabetes Care Improvement Project
- * Scott R, Irving R, Charlton V, Pitsiladis Y. (2010). White men cannot run: Where is the Scientific Evidence? For Sands R and Sands L. Anthropology of Sport and Human Movement. Lexington Books, a division of Rowman & Littlefield Publishers, Inc. [ISBN-10:0739129392].

Technical Reports

- * Ragoobirsingh, D. Pan American Health Organization Report on Training for Implementation of the Caribbean Diabetes Project in Tobago, October 19, 2009.
- * Ragoobirsingh, D. Pan American Health Organization Report on Guiding and Supporting National Quality Improvement Initiatives for Diabetes in Less Well served parts of the World: A Proof Concept Project in the Caribbean-Guyana (February 3-5), February 15, 2010.
- * Ragoobirsingh, D. Pan American Health Organization Report on Diabetes Quality Care Project, Belize, March 23, 2010.
- * Ragoobirsingh, D. Pan American Health Organization Report on Quality of Care Improvement, Trinidad and Tobago, (April 11-15), April 26, 2010.

* Ragoobirsingh, D. Pan American Health Organization Report on Mentoring the Improvement of the Quality of Diabetes Care in Tobago, (July 11-16) July 30, 2010.

Refereed Journal

WIMJ = West Indian Medical Journal

- * Bailey-Shaw, Y., Golden, K. D., Pearson, A. G. M. and Porter, R. B. R (2009). Characterization of Jamaican Agro-Industrial Wastes. Part I: Characterization of amion acids using high performance liquid chromatography: Precolumn derivation with phenylisothiocyanate. *Journal of Chromatographic Science* 47: 3-9.
- * Campbell, Sacha, Ruby Alexander-Lindo, Tara Dasgupta and Donovan McGrowder. (2009). The Effect of S-nitrosocaptopril and S-nitroso-*N*-acetyl-*D*, *L*- penicillamine on blood glucose concentration and Haemodynamic Parameters. *Journal of Applied Biomedicine*. 7: 123-131.
- * Fisher L. P. Tennant and W. McLaughlin (2010). Detection and characterization of Citrus tristeza virus stem pitting isolates in Jamaica. *European Journal of Plant Pathology*. 127:1-6
- * Grant JA, Bonnick T, Gossell-Williams M, Clayton T, Cook JM, Jackson YA (2009). Synthesis, pharmacological studies and molecular modeling of some tetracyclic 1,3-diazepinium chlorides. *Bioorg Med Chem.* 18(2): 909-921.
- * Gordon, C. D., Williams, S.K.P., Hudson G.A., Stewart, J. Factors predicting academic performance of Physical Therapy students (Diploma level). *WIMJ* 59 (2): 203-208.
- * Gordon, L., D. Ragoobirsingh, E. Morrison, E. Choo-Kang, D. McGrowder and E. Martorell (2010). Lipid Profile of Type 2 Diabetic and Hypertensive Patients in the Jamaican Population. *Journal of Laboratory Physicians* 2: 25-30.
- * Gossell-Williams, M., Williams-Johnson, O. Simon. (2009). Non-fatal self-poisoning trends involving analgesics and

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

- * Gossell-Williams, M. (2010). Pharmacovigilance healthcare professionals'role in benefits versus harm analysis of drugs use. *WIMJ* 59 (1): 73-75.
- * Jackson, Maria.D., Susan P.Walker, Candace M. Simpson, Norma McFarlane-Anderson, Franklyn I Bennett, Kathleen C M et al. Coard. (2010). Body size and risk of prostate cancer in Jamaican men. *Cancer Causes Control* 21:909-917.
- * Less, L. A., D. Ragoobirsingh, E. Morrison, M. Boyne; P. Anderson-Johnson (2010). A Preliminary Report on An Assessment of a Community-based Intervention for Diabetes Control in Adults with Type 2. *Family Practice* 27: 46-52.
- * McGrowder, D., P. D. Brown, R. Alexander-Lindo, S. Budall, R. Irving and L. Gordon. The use of soluble transferrin receptor in the detection of rHuEPO abuse in sports. [Review article] *Biochemistry Insights* 3: 7-18.
- * McGrowder, Donovan, Algie Williams, Lorenzo Gordon, Tazhmoye Brown, Ruby Alexander-Lindo, Rachael Irving, Michelle Hamilton, Yeiny T.P. Fraser. (2009). Hypocalciuria in Preeclampsia and Gestational Hypertension due to decreased fractional excretion of calcium. *Archives of Medical Science* 5, 1: 80-85.
- * McGrowder, Donovan, Kevin Grant, Rachael Irving, Lorenzo Gordon, Tazhmoye Crawford, Ruby Alexander-Lindo, Yeiny T.P Fraser. (2009). Lipid Profile and Clinical Characteristics of Women with Gestational Diabetes and Preeclampsia. *Journal of Molecular Biochemistry* 28 (2): 1-5.
- * McGrowder, D., R. Lisa Alexander-Lindo, P. Brown (2009). The use of soluble transferrin receptor in drug testing and as a marker of iron status in athletes. *Biochemistry Insights* 3:7-18. http://www.la-press.com/the-use-of-soluble-transferrin-recep tor-in-the-detection-of-rhuepo-abu-article-a1867

- * McGrowder D, Bourne P, Crawford T, Irving R, Brown P, Crawford L. (2010). How prepared are medical and non-medical laboratories in Jamaica for accreditation? *Accreditation & Quality Assurance*. DOI:10.1007/S00769-0100686-5. Online ISSN 0949-1775.
- * Mills J, Irving R, Choo-Kang E, Wright-Pascoe R, McLaughlin W, Mullings, A, Gabay L, Kulkarni S. (2010). Multigenerational inheritance and clinical characteristics of three large pedigrees with early onset type 2 diabetes in Jamaica. *Pan Am J Public Health* 27 (6): 435-441.
- * Mulabagal, Vanisree, Ruby L Alexander-Lindo, David L. DeWitt and Muraleedharan G. Nair. (2009). Health-Beneficial Phenolic Aldehyde in *Antigonon Leptopus Tea*. *Evidenced Based Complementary and Alternative Medicine* 1-6.
- * Ogunsalu C, Arunaye F, Ezeokoli C, Gardner MT, Rohrer M, Prasad H. (2010) Mathematical model for osteobstruction in Bone Regeneration mechanism; A headway in skeletal tissue engineering. Oral Surg, Oral Med, Oral Pathol, Oral Rad. 110 (3): 315-16
- * Ottey-Allen, A., G. Burnell, W. Duncan, C. Simpson, D. McGrowder, R. Alexander-Lindo (2010). Assessment of blood donation process at four major centres in Jamaica. *Journal of Diagnostic and Clinical Research*. 4: 2720-2727.
- * Pearson, Andrew G.M. (2010). Rum: the spirit of the Caribbean. *CaribXplorer* 1 (1): 38-41.
- * 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.
- * Roopchand-Martin, S. (2010). Rehabilitating Patients in Virtual Environments. *CaribXplorer*. 1 (2): 15-17.

- * Scott R, Irving R, Irwin L, Morrison M, Charlton V, Austin K, Tladi D, Headley A, Kolkhorst F, Yang N, North K, Pitsiladis P. ACTN3 and ACE genotypes in elite Jamaican and US sprinters. *Med Sci Sp Exer* 2010; 42(1): 107-15.
- * Stephenson, S., P. D. Brown, A. Holness & M. Wilks. (2010). Emergence of *qnr*-mediated quinolone resistance among *Enterobacteriaceae* in Jamaica. WIMJ 59 (3): 241-244.
- * Tennant, P. F., D. Robinson, L. Fisher, S-M. Bennett, D. Hutton, P. Coates-Beckford and W. McLaughlin (2009). Diseases and Pests of Citrus (*Citrus*). *Tree and Forestry Science and Biotechnology*. March Issue p 81-107.
- * Thaxter, K, Young L, Parshad O, Young R, Addae J. (2010) An extract of Neem leaves reduces anxiety without causing motor side effects in an experimental model. *WIMJ* 59 (3):
- * Vaz, Kurt, Donovan McGrowder, Ruby Alexander-Lindo, Lorenzo Gordon, Paul Brown, Rachael Irving. Knowledge, awareness and compliance with universal precautions among health care workers at the University Hospital of the West Indies. (2010). *Indian Journal of Occupational and Environmental Medicine*. 1(4): 171-181.
- * Vaz, Kurt Donovan McGrowder, Paul Bourne, Tazhmoye Crawford, R. Lisa Alexander-Lindo, Rachael Irving. (2010). Prevalence of injuries and reporting of accidents among health care workers at the University Hospital of the West Indies. *International Journal of Occupational Medicine and Environmental Health* 23 (2): 133-143.

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.

- * Brown, C. N. McFarlane-Anderson, L. Lindo, K.Bishop, T. Dasgupta. The Effect of S-Nitroso-N-Acetylpenicillamine and S-nitrosoglutathione on Blood Pressure, Urinary Protein Concentration and Pup Weight in Pregnant rats. WIMJ 58: (Suppl 4) 1-51 p.15
- * Cox, P. St. L. and Williams, SKP.(2009). Life After Lower Extremity Amputation in Diabetics, 1-3 Years Post Amputation. WIMJ 58 (Supp 4):26.
- * Daley-Beckford, DK., RL Alexander-Lindo, T. Yee, P. Reese. The Isolation of the Hypoglycaemic Principles of *Eucalyptus camaldulensis*, showing a similar effect as metformin. *WIMJ* 58: (Suppl 4) 1-51 p.19.
- * Forsythe D, Nelson G, Gordon C (2009). Recruitment of the Rectus Abdominis During a Traditional Crunch and a Crunch Using the Ab Lounge. WIMJ 58 (Suppl. 4) p 41
- * Gordon MR., Hudson GA, Reid M, Asnani, MR. Living with sickcle-cell disease: The relationship between socio-economic status, quality of life and frequency of hospital admission. *WIMJ* 58: (Suppl 4) 1-51 pg. 40.
- * Grant SA. And GA Hudson (2009). Obesity, diet and physical activity in teenagers (15 -18years) in rural and urban high schools. *WIMJ* 58: (Suppl 4) 1-51 pg. 39.
- * Gregg, A., Gordon, C., Roopchand-Martin, S., (2009). The effect of virtual reality training on gross motor function in children with cerebral palsy; a pilot study. *WIMJ* 58: (suppl 4), p27.
- * Hunter R., Gordon C (2009). Determinants of Physical Exercise Participation in Young Adults. WIMJ 58 (Suppl 4), p27.
- * Levy, A.S., Simon, O.R. (2009) Six-shogaol inhibits production of tumor necrosis factor alpha, interleukin-1 beta and nitric

oxide production in lipopolysaccharide-stimulated mouse macrophage RAW 264.7 cells. *WIMJ* 58 (4): pp 295.

- * Lue-Chin, P., and Roopchand-Martin. (2009). Plyometric training for Jamaica's national netball team. *WIMJ* 58: (suppl 4), p27.
- * Manya, S., RL Alexander-Lindo, M. Gossell-Willliams. Streptozotocin and nicotinamide-induced Type 2 diabetes mellitus development in the Sprague-Dawley rat (2009). WIMJ 58: (Suppl 4) 1-51 p.20.
- * Meade L, Thaxter K, Chin L, Rattray C, Samuels L. (2009). A comparative clinical trial assessing the efficacy of the Transcutaneous Bilichek © system for assessment of serum bilirubin levels at the University Hospital of the West Indies. *WIMJ*, 58 (Supp 4): 49.
- * Nathaneal, R., Hudson G.A. (2009). Effects of the rocking horse on gross motor function in children with cerebral palsy: A pilot study in Trinidad. *WIMJ* 58: (Suppl 4) 1-51 p 28.
- * Powell, S., Hudson GA. Prevalence of sport-related injuries and its association with the conduction of pre-partcipation physical examination in track and field athletes in high schools in Manchester. WIMJ 58: (Suppl 4) 1-51 pg. 40.
- * Hume, A. and Williams, SKP (2009). Is TENS Helpful in the Treatment of Osteoarthris. WIMJ 58 (Supp4) p 26
- * Powell, D. and Williams, SKP (2009). Determining the Relationship between Body Mass Index and Pulmonary Function in Jamaicans 20-25 Years Old. WIMJ 58 (Supp 4) p26.
- * Roopchand, S., Fung, J., Visintin, M., Barbeau, H., (1998). The Effects of Unloading on Overground Ambulation in Stroke Clients. *Archives of Physical Medicine and Rehabilitation*. 79 p1324.
- * Rowe, N., PDA Singh, W. McLaughlin, MT Gardner (2009). Preliminary investigation of the effects of Jamaican ginger

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

- * Solomon, D.,S. Roopchand-Martin (2008). Do Pain Scores Correlate with Disability in Trinidadians with Chronic Low Back Pain. *WIMJ* 57: (suppl 4),p38.
- * Taylor,T. and Roopchand-Martin, S., (2009). The effectiveness of hold relax techniques for increasing flexibility of the hip adductors. *WIMJ* 58: (suppl 4), p 26.

INCOME GENERATION

Research Grants:

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

Dr. Paul Brown

- Prevalence and Molecular Characterization of Cryptosporidia, *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 Research 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 camuldulensis* Extract. CRPG Award: 2010 US \$2000.00
- The isolation and identification of the active Hypogycaemic 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
- Friends, Foundation for International Self Help (FISH).

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

BB Med Sci. MB BS Year 1 = 31 Year 1 = 267 Year 2 = 40 Year 2 = 273 Year 3 = 22 Year 3 = 170

Physical Therapy

FPAS (Biochemistry)

Year 1 = 51	Year 1 = 267
$Year \ 2 = 38$	Year 2 = 109
Year 3 = 41	Year $3 = 64$

Postgraduate Degrees Awarded

STENNETT, Dewayne	-	PhD Biochemistry
LINDSAY, Carole	_	MPhil Biochemistry
O'CONNOR, Nadi a	_	MPhil Pharmacology

Postgraduate Scholarships Awarded

BROWN, Kesi BURNETT, Aniki CHRISTIE, Sara-Lou