



DEPARTMENT OF BASIC MEDICAL SCIENCES

Departmental Report August 2020 - July 2021

Prof. Jean-Pierre Louboutin · Head of Department
MD, PhD

WORK OF THE DEPARTMENT

The Department was faced with yet another year of the COVID-19 pandemic. Despite this setback, all categories of staff members have been actively forging ahead to keep the Department afloat in order to reach significant achievements in Teaching/Learning and Research regardless continuous challenges. There has been a great team effort to ensure that teaching and research were maintained at the highest level in spite of the financial issues and what seems to be the new normal during the AY2020-2021. Everyone has basically mastered the new teaching platform (Blackboard collaborate) with the assistance that our technical team provided to the Academic staff. The Department purchased a high resolution digital camera to facilitate laboratory recordings, considering that the students are not currently able to attend labs face to face due to the COVID-19 pandemic. This has proved to be quite efficient as the technical team along with the Teaching Assistants have been able to upload all the labs on time for each group. Similarly, we decided to acquire a software called Bodyvix, which is a 3D Anatomy learning platform. Using this software, students can not only virtually dissect, peel away layers and visualize anatomy in 3D, just as they would in the cadaver lab, but also familiarize themselves with common variants, injuries, pathology, developmental stages and more. Moreover, the software provides the ability to upload MRI and CT scans directly into the system's library. This software will be very important for the teaching of Anatomy in the MBBS/DDS, PharmD, BBMedSc, Physical Therapy, SMRT, Nursing programmes, the MSc Forensics and Biomedical Research Programmes, as well as in the DM Surgery and Radiology, and MPhil/PhD Programmes. Both initiatives contribute to foster the Digital Transformation of the University. Collaboration continued with the Section of Anatomy, UWI, Cave Hill (Dr. Keerti Singh) for streaming Lectures, Labs, POLs, Reviews as well as organizing quizzes using virtual clickers be-

tween UWI, Mona and Cave Hill. The PharmD programme received funding from CHASE – one in the amount of J\$18,500,000.00 in April 2020 and another in the amount of J\$3,004,000.00 mid-December 2020 to construct a Sterile lab. The second amount was to aid in financing IT, etc. The Sterile Pharmacy Lab was completed in Semester II of the Academic Year 2020/2021.

STAFF AWARDS AND PROMOTIONS

Prof. Maxine Gossell-Williams and Prof. Chukwuemeka Nwokocha were promoted to the

rank of Professor effective February 2021.

Dr. Carron Gordon was promoted to the level of Senior Lecturer, effective August 1, 2021.

Prof. Chukwuemeka Nwokocha received the Principal's award for the best research publication for 2020. (with Dr Warren, Prof Nwokocha, Dr Nwokocha, Dr Harrison, Dr Thompson); Modulatory Effect of Guinep (*Melicoccus bijugatus* Jacq) Fruit Pulp Extract on Isoproterenol-Induced Myocardial Damage in Rats. Identification of Major Metabolites Using

High Resolution UHPLC Q-Orbitrap Mass Spectrometry. *Molecules* **2019**, 24(2), 235.

Prof. Chukwuemeka Nwokocha received the Principal's award for most outstanding researcher for 2020.

Mrs. Carole Lindsay was promoted to the post of Lecturer effective August 2020.

Mr. Compton Beecher received the Vice Chancellor's Award for excellence in Service.

Dr. Simone Badal was one of eight candidates included in the shortlist for the Nature 2020

Driving Global Impact Award to be posted on their website shortly.

Dr. Karen Thaxter-Nesbeth was awarded a Postgraduate Certificate in Paediatric Emergency

Medicine (Edinburgh) in 2020.

Resignation

Miss Stacy-Ann Brown resigned from the post of Scientific Officer in the PharmD Programme in November 2020.

Mr. Deno Grant resigned in June 2021.

Retirement

Mr. Nichaniel James – January 19, 2021

Mrs. Yvonne Bailey – May 2, 2021

Long service Award

| | |
|--------------------------------|----------|
| Dr. Paul Singh | 40 years |
| Dr. Ruby Lindo | 30 years |
| Miss Talitha Farquharson | 15 years |
| Mr. Deno Grant | 15 years |
| Ms. Gillian Hudson | 15 years |
| Ms. Heather-Dawn Scott | 15 years |
| Mr. Clement Gregory | 15 years |
| Mr. Cordell Miller | 15 years |
| Ms. Sonja Williams | 15 years |
| Dr. Sherline Brown | 15 years |
| Dr. Carron Gordon | 15 years |
| Mrs. Marjorie Edwards-Merchant | 15 years |

ACCESS

STUDENTS

UNDERGRADUATE STUDENTS REGISTRATION

BB Med Sci.

Year 1 = 26

Year 2 = 18

Year 3 = 26

(Physiology Major)

Year 2 = 3

Year 3 = 8

(Anatomy Major)

Year 2 = 8

Year 3 = 16

(Pharmacology Major)

Year 2 = 16

Year 3 = 25

BAMS1002 = 38

BAMS1005 = 36

BSc -Physical Therapy

Enrolment

Year 1 = 35

Year 2 = 40

Year 3 = 42

Total = 117

Graduated

43 students graduated in January 2021 with the BSc Physical Therapy at a Virtual Ceremony

Graduation Ceremony.

PharmD (Registrations in BMS courses)

Year 1 = 24

Year 2 = 28

Year 3 = 24

Year 4 = 19

Year 5 = 15

FST (Registrations in BMS courses)

Year 1

Semester 1

BIOC 1020 = 304

BIOC 1021 = 0

MICR 1010 = 280

MICR 1011 = 0

Semester 2

BIOC 1020 = 65

BIOC 1021 = 279

MICR 1010 = 65

MICR 1011 = 273

Year 2

Semester 1

BIOC 2014 = 161

Semester 2

BIOL 2312 = 141

MICR 2211 = 154

Year 3

Semester 1

BIOL 3312 = 78

BIOC 3013 = 63

MICR 3213 = 87

MICR 3214 = 32

BIOT 3113 = 64

Semester 2

BIOC 3011 = 63

BIOC 3014 = 37

BIOL 3313 = 54

BIOT 3114 = 53

BIOT 3116 = 28

MICR 3215 = 58

MICR 3216 = 24

POST GRADUATE STUDENTS REGISTRATION

Taught Masters

MSc Forensic Science = 18

MSc Physical Therapy = 8

MSc Biomedical Research = 10

MSc

MSc FSCI (Chemistry) - 1

MSc FSCI (Mol Biology) - 5

MSc FSCI (Pathology) - 6

MSc (Toxicology) - 6

Research

MPhil = 31

PhD = 23

POSTGRADUATE DEGREES AWARDED

PhD

Rochell Davis

Tricia Fraser

Henkel Valentine (High Commendation)

MSc Biomedical Research – (4)

Omnia Attallah (Distinction)

Alexander Carrington

Krisan Montgomery

Mario Jackson

MSc Forensic Science – Chemistry – (3)

Calisa Joseph

Corey Roberts

Jhourdane Johnson

MSc Forensic Science – Molecular Biology – (9)

Alana Ingram (Distinction)

Kristina Ramsoomair (Distinction)

Sara-Loi Spencer (Distinction)

Danique Thomas

Juvaughn Jackson

Melissa Frater-Evans

Nikitia Whyte

Sherray Parkinson

Toni-Ann Dacres

MSc Forensic Science – Toxicology – (6)

Shinese Dann (Distinction)

Bridgette Bolton-Brown

Colette Edwards

Emeral Melville

Fabian Powell

Kia Smith

MSc Forensic Science – Pathology – (1)

Daniel Black

PUBLICATIONS

REFEREED JOURNAL ARTICLES

PM Alarcón-Elbal and SL Sandiford (2021). One health entomology in the Insular Caribbean: time to bet on prevention. InterAmerican Journal of Medicine and Health, 4. <https://doi.org/10.31005/iajmh.v4i.170> (IF= NA).

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SL Sandiford, TK Thompson and JJ Anzinger (2021). Assessment of commercial SARS-

CoV-2 antibody assays, Jamaica. *Int J Infect Dis.* 2021 Apr;105:333-336

<https://www.sciencedirect.com/science/article/pii/S1201971221001454> (IF= 3.6). S Wauchope, MA Roy, W Irvine, I Morrison, E Brantley, **M Gossell-Williams**, A Timme-

Laragy and R Delgoda (2021). Dibenzyl trisulfide binds to and competitively inhibits the cytochrome P450 1A1 active site without impacting the expression of the aryl hydrocarbon receptor. *Toxicology and Applied Pharmacology*, 419, 115502. (IF= 4.2). VF Kugener, ES Freedland, KI Maynard, O Aimer, PS Webster, M Salas and **M Gossell-Williams** (2021). Enhancing Pharmacovigilance from the US Experience: Current Practices and Future Opportunities. *Drug Safety*. <https://doi.org/10.1007/s40264-021-01078-8>. (IF= 5.6).

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utilization of nuclear medicine technology in Jamaica: audit of a private facility. *World Journal of Nuclear Medicine* 20(2):129-132. (Original Research). (IF = NA). A Condappa, D McGrowder, W Aiken, W McLaughlin and **M Gossell-Williams** (2020). Evaluation of Plasma Circulating Cell Free DNA Concentration and Integrity in Patients with Prostate Cancer in Jamaica: A Preliminary Study. *Diseases*, 8(3), 34. (Brief Report). (IF = NA).

A Khan, **PDA Singh**, PB Reese, J Howden, M Golding and T Thomas (2020). Investigation of the preliminary mechanism of action for the acute anti-inflammatory activity of the methanol extract of *Smilax ornata* Lem. *Journal of Ethnopharmacology*. 248, 112360. (IF = 4.3).

A Dasantos, C Goddard and **D Ragoobirsingh** (2020). Depression in Barbadian Adults with Type 2 Diabetes. *J. Diabetes and Metabolic Disorders*. 20;19:1465-1471.

<http://doi.org/10.1007/s40200-020-00677-z> (IF = 0.7). P Barrett-Brown, D McGrowder and **D Ragoobirsingh** (2021). Diabetes Education Cornerstone in Management of Diabetes Mellitus in Jamaica. *AIMS Medical Sciences*, 8: 189-202. (IF = NA). CS Dike, CN Orish, **CR Nwokocha**, FD Sikoki, BB Babatunde, C Frazzoli and O E Orisakwe.

(2021). Phytowaste as nutraceuticals in boosting public health. *Clinical Phytoscience*. 7 (1), 1-23. (IF = NA). J Christian Jr, K Harewood, V Nna, AB Ebeigbe and **CR Nwokocha** (2021). Covid and the virtual classroom: the new normal? *Journal of African Association of Physiological Sciences*. 9 (1), 1-9. (IF = NA).

A Fevrier-Paul, AK Soyibo, N De Silva, S Mitchell and **CR Nwokocha** (2021). Addressing the Challenge of Potentially Hazardous Elements in the Reduction of Hypertension, Diabetes and Chronic Kidney Disease in the Caribbean. *Journal of Health Pollution*. 11 (30), 210613. (IF = NA).

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SO Cawich, RA Ali, **MT Gardner**, J Charles, S Sandy, NW Pearce and V Naraynsingh (2020). Hepatic Surface Grooves in Trinidad & Tobago. *Surgical and Radiologic Anatomy*. Dec;42(12):1435-1440. doi: 10.1007/s00276-020-02540-5. (IF = 1).

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Anatomic Variations of the Intra-Hepatic Biliary Tree in the Caribbean: A Systematic Review. *World J Gastrointestinal Endoscopy*. 2021; 13(6): 1-6. DOI: 10.4253/wjge.v13.i6.0000. (IF = 0.4). SO Cawich, V Naraynsingh, NW Pearce, R Deshpande, R Rampersad, **MT Gardner**, F Mohammed, R Dindial and TA Barrow (2021). Surgical Relevance of Anatomic Variations of the Right Hepatic Vein. *World J Transplantation*. 11(6): 1-6. DOI: 10.5500/wjt.v11.i6.0000.

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Number of publications: 50.

Average Impact Factor: 3.9

PATENTS

Stewart, C., Masekela, R., Green, R. J., & Pepper, M. S. (2021). European Patent No. EP3371325B.

Stewart, C., Masekela, R., Green, R. J., & Pepper, M. S. (2021). United States Patent No. 11060146

TECHNICAL REPORTS

D Ragoobirsingh, WHO Guideline Development Group Nutrition Action 2013-14 et al, WHO Guideline: Wheat Flour Fortification. WHO Press, Geneva: World Health Organization, September 16-17, 2020. In Press.

BOOKS AND BOOK CHAPTERS

DA McGrowder, FG Miller, **C Nwokocha**, **CF Wilson-Clarke**, M. Anderson, LW Anderson-Jackson, L Williams and **RL Alexander-Lindo** (2020). Medical Herbs and the Treatment of Diabetes Mellitus: Mechanisms of action. In Hussain, A., & Behl, S. (Ed.), Treating Endocrine and Metabolic Disorders with Herbal Medicines (pp. 48-73) IGI Global.

<http://doi:10.4018/978-1-7998-4808-0.ch003>

<https://www.igi-global.com/book/treating-endocrine-metabolic-disorders-herbal/244581>

Contribution RAL: Outline chapter, wrote 20% of draft and reviewed drafts and assisted with responding to reviewers.

ALIGNMENT

PAPERS PRESENTED AT SCIENTIFIC MEETINGS

M Gossell-Williams. Cultural Dimension of Pharmacovigilance. Presented graduate students of The National Institute of Pharmaceutical Education and Research (NIPER), Hajipur, India held May 28, 2021. Medicine. 31:81-87. (Journal Impact Factor = 1.2).

S Sandiford. Symposium Vectors and their Communicable Diseases: Advancing from the "One Health" Approach, XVI International Congress of Scientific Research (XVI CIC), organized by the Ministry of Higher Education, Science and Technology of the Dominican Republic. The Hunt for Arboviruses in Jamaica. June 2021 (virtual)

S Badal. The first Caribbean Cell Line, ACRJ-PC28. Accepted for virtual poster presentation at the AACR 2021 Virtual Cancer health Disparities Conference, October 2021.

S Badal S. Tools for characterization and further characterizations. Oral presentation at the CapTC on Science of Global Prostate Cancer Disparities in Black Men Virtual Conference, 2020.

S Badal. Increasing the representation of Black Cell Lines in Basic Science Research. Speaker at the University of Bristol Virtual Inclusive Research Collective, 4-Part Online Seminar Series, June 2021.