



DEPARTMENT OF PATHOLOGY

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Head of Department

WORK OF THE DEPARTMENT

The Department of Pathology at The University of the West Indies (UWI), Mona is formed by the consolidation of three sub-departments, which represent three unique but related medical specialties – Anatomical Pathology, Chemical Pathology and Haematology/ Oncology. As a result, the department provides an extensive array of clinical and laboratory services and undertakes a wide range of teaching/learning and research activities through the various laboratories and units that it operates.

ACCESS

STUDENTS

Undergraduate Programmes

The academic staff continued to conduct teaching/learning activities for undergraduate students in various programmes within the Faculty of Medical Sciences and the Faculty of Science and Technology, and the annual Professor Stanley E.H. Brooks Prize was presented to the student in the 2023 Bachelor of Medicine and Bachelor of Surgery (MBBS) graduating class who had been the best performer in the Year 4 Pathology Clerkship.

Graduate Programmes

Doctor of Medicine (DM) programmes

For the DM Pathology programme, the May/June 2023 examinations represented the first year of joint examination with the St. Augustine campus, which established an identical programme in 2021. Both St. Augustine Part I candidates were successful, as were four (4) Mona Part I and two (2) Mona Part II candidates. There was one

May/June 2023 examination candidate for DM Chemical Pathology and she was successful. There were no candidates for DM Haematology/Medical Oncology. The annual Professor Barrie Hanchard Conference Grant was awarded to students performing well in the DM Pathology programme.

Master of Philosophy/Doctor of Philosophy (MPhil/PhD) Chemical Pathology

Two MPhil students continued in the MPhil/PhD programme in Chemical Pathology and they are both scheduled for PhD transfers in Semester II of the 2023/2024 academic year.

ENHANCEMENT OF TEACHING/LEARNING

Activities undertaken by the department in an effort to enhance the quality and quantity of teaching/learning include:

- The appointment of Dr. Andrew Evans (University of Toronto), an internationally acclaimed pathologist with numerous accolades for teaching and research, to the post of Honorary Professor in the Department of Pathology.
- Organization of Special Lectures, presented as part of the Faculty's Clinico-pathological Conference series hosted by the Department of Pathology. These Special Lectures are most commonly delivered by overseas-based UWI medical school alumni who are experts in their given fields.

PUBLICATION

Efforts made to increase research output

The department continued its work on existing projects, forged new research collaborations with extra-departmental researchers and agencies, and increased the engagement of technological staff and graduate students in research activities, including publication, as outlined below:

Jamaica Cancer Registry (JCR)

A collaborative agreement with the Registrar General's Department is being prepared, in order to obtain mortality data. This will allow the population-based JCR to expand case registration to include mortality, and therefore regularly publish data related to cancer mortality and survival. The JCR also continued its longstanding work of registering new cases of cancer and preparing data for cancer incidence statistics and publication.

Sick Kids-Caribbean Initiative (SCI)

In 2013, the SCI established a hospital-based paediatric cancer registry in the Department of Pathology, which registers all cases of childhood cancer diagnosed and/or treated at the University Hospital of the West Indies. Case registration continued in the 2022/2023 academic year, and the data collected will be used for upcoming research publications.

Fox Chase Cancer Center (FCCC), Philadelphia, USA

The department continued its collaboration with the FCCC on two projects: “The Jamaica Sherlock Lung Cancer Study: Tracing lung cancer mutational processes in never smokers” and “Impact of African ancestry on DNA polymerase beta (POLB) protein expression and survival in patients with oral cavity and laryngeal squamous cell carcinoma”.

Molecular Oncology Research Group (Department of Pathology and the Caribbean Institute for Health Research – CAIHR)

This group is investigating the molecular landscape of the common cancers in our population – a population comprised predominantly of individuals of African ancestry.

Departments of Pathology and Surgery, UWI, Mona and Department of Urology, Johns Hopkins University, Baltimore, Maryland, USA – Research on Prostate Cancer

This is a newly established research group which will be investigating the X285K variant of the *HOXB13* gene, and other genetic alterations, in prostate cancers in Jamaican men.

RESEARCH PUBLISHED DURING THE 2022/2023 ACADEMIC YEAR

Books and Monographs

- Browne-Farmer C, Baxter JB, Alexis C, Allen U, Beeput S, Bodkyn C, George C, Gibson D, **Gibson T**, Leandre-Broome V, Mclean-Salmon S, Reece-Mills M, Sin Quee C, Gupta S. “*Reflections on the SickKids-Caribbean Initiative: Local Oncology Databases Development*”. Toronto: Hospital for Sick Children; 2023.

Refereed Journal Articles

- Clarke S, **Chin SN**, Dodds L, George SHL, Badal S. “Racial disparities in breast cancer preclinical and clinical models”. *Breast cancer research: BCR* 2022; 24(1): 56. <https://doi.org/10.1186/s13058-022-01551-x>

- Harrison S, Judd J, **Chin S**, Ragin C. “Disparities in Lung Cancer Treatment”. *Current oncology reports* 2022; 24(2): 241–248. <https://doi.org/10.1007/s11912-022-01193-4>
- **Dilworth L**, Stennett D, Bailey D, Omoruyi F. “Effect of *Annona squamosa* leaf extract on human promyelocytic leukemia cells subjected to oxidative stress”. *Journal of complementary and integrative medicine* 2023; <https://doi.org/10.1515/jcim-2023-0048>.
- **Dilworth L**, Stennett D, Omoruyi F. “Cellular and Molecular Activities of IP6 in Disease Prevention and Therapy”. *Biomolecules* 2023; 13(6): 972. <https://doi.org/10.3390/biom13060972>.
- **Ho JD**, Ho JAS, Ruddock R, **Spencer SA**. “Isolated, nonsyndromic mucocutaneous plexiform neurofibromas: A systematic review of the clinicopathologic features.” *Am J Dermatopathol* 2022; 44(12): 904-912. doi:10.1097/DAD.0000000000002322
- Chung HJ, Jablon K, Dawkins O, Richardson M, **Ho JD**. “The frequency of reporting race, ethnicity and skin phototypes in dermatology case reports” *JAAD International* 2023; doi: <https://doi.org/10.1016/j.jdin.2023.04.001>.
- **Ho JD**, **Collie CJ**, **Spencer S**. “The histopathologic spectrum of alopecias seen in a Jamaican setting.” *Am J Dermatopathol* ();10.1097/DAD.0000000000002487, June 28, 2023. | DOI: 10.1097/DAD.0000000000002487
- **McGrowder D**, Tulloch-Reid MK, Coard KCM, et al. “Vitamin D deficiency at diagnosis increases all-cause and prostate cancer-specific mortality in Jamaican men”. *Cancer Control* 2022; 29. doi:10.1177/10732748221131225.
- **McGrowder D**, Coard K., Aiken W, **Gibson T**, Morrison-Blidgen B, McFarlane S, Mayhew R. “Association of prostate cancer and lipid profile: a case-control study”. *Journal of Medical and Health Studies* 2022; 3: 123–129.
- Ben EE, Beshel JA, Owu DU, Palacios J, **Nwokocha M**, Bórquez J, Simirgiotis MJ, Nwokocha CR. “Identification of phytochemicals and assessment of hypoglycemic and haematological potentials of Terminalia catappa Linn leaf extract in alloxan-induced diabetic Wistar rats”. *Cardiovasc Hematol Agents Med Chem* 2023; 10.2174/1871525721666230526152917. Advance online publication. <https://doi.org/10.2174/1871525721666230526152917>
- Thomas J, Anderson T, James-Green T, **Nwokocha M**, Palacios J, Pepple D, Nwokocha C. “*Artocarpus Altilis* (Breadfruit) could Reverse Myocardial Infarction Through the Normalization of the Oxygen Haemoglobin Dissociation Curve”. *Cardiovasc Hematol Agents Med Chem* 2022; 20(3): 212-218. doi: 10.2174/1871525720666220203110919. PMID: 35125088.
- Valentine H, Aiken W, Morrison B, Zhao Z, Fowle H, Wasserman JS, Thompson E, Chin W, Young M, Clarke S, Gibbs D, Harrison S, McLaughlin W, Kwok T,

Jin F, Campbell KS, Horvath A, **Thompson R**, Lee NH, Zhou Y, Graña X, Ragin C, Badal S. "Expanding the prostate cancer cell line repertoire with ACRJ-PC28, an AR-negative neuroendocrine cell line derived from an African-Caribbean patient". *Cancer Res Commun*. 2022 Nov; 2(11):1355-1371. doi: 10.1158/2767-9764.crc-22-0245. Epub 2022 Nov 7. PMID: 36643868; PMCID: PMC9836004.

- Dawkins YM, Rowe-Gardener S, Guthrie-Dixon N, **Thompson R**, Thompson T, Lee MG, Cunningham-Myrie C. "*H. pylori* predictors and outcomes among adults undergoing upperendoscopy at a Jamaican teaching hospital: A cross-sectional study". *Helicobacter* 2023 Apr 6:e12968. doi: 10.1111/hel.12968. Epub ahead of print. PMID: 37025012.

ALIGNMENT

PAPERS PRESENTED

- **Collie C, Ho JD**. "The Marley Malady: Melanoma in Jamaica, still a deep-seated problem." 31st Annual Caribbean Dermatology Association Conference; Runaway Bay Jamaica, November 2022
- **Ho JD**. "The Histopathologic Spectrum of Alopecias Seen in a Jamaican Dermatopathology Setting" 31st Annual Caribbean Dermatology Association Conference; Runaway Bay Jamaica, November 2022
- Adams T, Smith-Matthews S, **Ho JD**. "Lichen Planopilaris Associated With Ponatinib Use in a Patient With Chronic Myelogenous Leukemia" 31st Annual Caribbean Dermatology Association Conference; Runaway Bay Jamaica, November 2022
- Dawkins O, Berry F, East-Innis A, **Ho JD**. "A Californian Import: Cutaneous Coccidioidomycosis" 31st Annual Caribbean Dermatology Association Conference; Runaway Bay Jamaica, November 2022
- Douglas A, McNish A, Smith-Matthew S, East-Innis A, **Ho JD**. "A Case of 'Wet Gangrene': Dermatology to the Rescue" 31st Annual Caribbean Dermatology Association Conference; Runaway Bay Jamaica, November 2022
- Morris D, Thomas R, **Ho JD**. "Green Skin: Not Just for Martians". 31st Annual Caribbean Dermatology Association Conference; Runaway Bay Jamaica, November 2022
- Ruddock R, **Ho JD**, East-Innis A, Smith-Matthew S, Braham D. "Pustules With a Twist: A Case Series of Patients With Monkeypox at the University Hospital of the West Indies". 31st Annual Caribbean Dermatology Association Conference; Runaway Bay Jamaica, November 2022

- Ruddock R, Smith-Matthews S, Fitz-Henley M, **Ho JD**. “Unusual Malignant Transformation in a Longstanding Nevus Sebaceus.” 31st Annual Caribbean Dermatology Association Conference; Runaway Bay Jamaica, November 2022
- Thomas J, Braham D, **Ho JD**. “Necrolytic Migratory Erythema: sine Hyperglycemia.” 31st Annual Caribbean Dermatology Association Conference; Runaway Bay Jamaica, November 2022
- Welch J, Smith-Matthews S, **Ho JD**. “Melanoma Arising at the Site of Trauma With Widespread Metastasis” 31st Annual Caribbean Dermatology Association Conference; Runaway Bay Jamaica, November 2022
- **Lowe D**: ‘Chemotherapy in Prostate Cancer’, Ministry of Health and Wellness Prostate Cancer Symposium, Virtual Seminar, September 12, 2022
- **Lowe D**: ‘Molecular Profiling in Colorectal Cancer – Impact on Therapy and Challenges in the Resource Limited Environment’, Annual Colorectal Cancer Symposium, Virtual Meeting, March 12, 2023
- **Lowe D**: ‘Advances in the Systemic Treatment of Cervical Cancer’ – Caribbean Gynaecologic Cancers Symposium 2023, AC Marriott Hotel, Kingston, May 15, 2023.
- **Webster S, Shirley S**. “Histopathologic Findings in Clinical Acute Appendicitis: the University Hospital of the West Indies Experience in the Era of Computed Tomography” Poster presentation, CARPHA Annual Health Research Conference, Paradise Island, Bahamas, April 2023.

PUBLIC SERVICE

Dr. T. Gibson, Dr. J. Jaggon, Dr. K. Bishop, Dr. S. Shirley, Dr. R. Thompson, Dr. M. Bromfield, Dr. S. Spencer, Dr. S. Green and Dr. S. Webster

- *Pro bono Consultations*: Cytopathology Consultation for the Jamaica Cancer Society

Dr. S. Chin

- *Memberships*: (1) Jamaica Cancer Care and Research Institute; (2) Oncology Advisory Board, Expert Panel of Physicians, National Health Fund; (3) National Screening Guidelines Committee on Chronic Non-communicable Diseases, Ministry of Health & Wellness; (4) Advisory Committee, Cancer Commemorative Events, Non- Communicable Disease and Injury Prevention Unit, Ministry of Health & Wellness

Dr. D. Lowe

- *Chairman*: Cancer Technical Working Group, Ministry of Health and Wellness
- *Membership (Executive committee)*: Haemophilia Association of Jamaica
- *Board Member*: Leukaemia Care Foundation

Dr. D. McGrowder

- *Memberships:* (1) Accreditation Evaluation Committee, Jamaica National Agency for Accreditation (JANAAC); (2) Accreditation Council, JANAAC;

Dr. L. Dilworth

- *Board memberships:* (1) University Council of Jamaica (Chairman – Accreditation and Development Sub-Committee); (2) Council of Community Colleges of Jamaica; (3) North-East Regional Health Authority (NERHA)

Dr. D. Brady West

- *Membership:* National Bioethics Committee of Jamaica

AGILITY

INCOME GENERATION

Research Grants

- “A pilot investigation of the carrier rate of the X285K variant of *HOXB13* in Jamaican men with prostate cancer diagnosed at The University of the West Indies, Mona, and the associated clinical, pathological and genomic correlates”. **TN Gibson**, J Luo, B Morrison-Blidgen, W Aiken, **S Green**, **RK Thompson**, A Burnett, M Reid. *Patrick C. Walsh Foundation, Johns Hopkins University, U.S.A.* US\$ 50,000.00, April 2023–April 2024

Income-generating Clinical Laboratory Work

In September 2022, the department’s accredited laboratories were awarded re-accreditation to the ISO 15189:2012 Standard for a further four (4) years, by the Jamaica National Agency for Accreditation (JANAAC). Clinical service and income generating activities continued as follows:

Laboratories

Histology: 5,375 surgical cases (generating 31,699 tests) and 1,115 immunohistochemistry tests

Cytology: 1,562 gynaecological and 580 non-gynaecological cases

Cytogenetics: Closed temporarily due to reagent supply issues

Chemical Pathology: 120,874 tests

Routine Haematology: 101,130 tests

Blood Bank: 3,268 blood donors processed and 19,512 tests performed

Flow Cytometry: 46 tests (laboratory closed from April 2022–January 2023)

Autopsy Service

69 autopsies (24 perinatal and 45 adult cases)