

DEPARTMENT OF MEDICINE

Prof. Michael Boyne Head Of Department

BSc, MB.BS, MD, FRCPC, FRCP (Edin)

OVERVIEW

Department of Medicine Mission

To train the modern, exceptional clinician using innovative, patient-centred research and delivering empathetic, high-quality, patient care. Department of Medicine Vision Our vision is to be the leading academic clinical unit in the Caribbean emphasizing excellence in training, clinical research and patient care.

Department of Medicine strategic initiative:

The 2019 Strategic Plan of the Department contributes to the UWI strategic objectives of AC3, AC4, AL2 and AG2. Historically, the Department of Medicine has a strong foundation in clinical medicine and patient-oriented research. The Department strives to expand/upgrade its research, services, technology and staffing to facilitate fingerprinting of diseases and precision medicine for individualized care.

WORK OF THE DEPARTMENT OF MEDICINE 2021-2022

High levels of clinical admissions and COVID surges remained existential threats to the Department's staffing and morale during this period. As we care for the burden of COVID patients, the Delta variant surge in August-November 2021 and the Omicron variant surge in January-February 2022 were very challenging. However, with the falling rates of hospitalized patients in mid-2022, we were able to disband our dedicated COVID Medicine Team. This allowed us to refocus on our subspeciality services and thus the training of students. Despite the challenges during this past year, the Department continued to maintain our roles in training, research and other academic activities.

Some of the notable departmental activities of the past year include:

1. Nephrology Division in collaboration with the Caribbean Institute of Nephrology, University of Michigan, and the International Society of Nephrology hosted the 14th Annual International Conference on Nephrology and Hypertension on January 29, 2022. The theme was "Pandemic of Acute Kidney Injury."

2. Cardiology Division observed Cardiovascular Week, February 13-18, 2022. The activities were capped by Dr Deron Reid, Consultant Cardiologist, Cornwall Reginal Hospital giving the featured lecture on "Heart disease in pregnancy/obstetric cardiology – why is it so important?" on February 18. In support, Dr Marilyn Lawrence-Wright wrote an article that was published in the Sunday Gleaner of March 20, 2022 entitled "It doesn't just affect men – tackling heart disease in women." https://jamaica-gleaner.com/article/commentary/20220320/marilyn-lawrence-wrightit-doesnt-just-affect-men-tackling-heart-disease.

The Cardiology Division also supported the inaugural Percutaneous Cardiac Interventions Convention held in Montego Bay, St James, April 29-30, 2022. It highlighted the importance of cardiovascular care while underscoring the goal of advancement within the Caribbean region. Its lecturers featured the first female interventionalist, Dr Racquel Gordon and the first female ablation electrophysiologist, Dr Nordia Clare-Pascoe. (https:// www.jamaicaobserver.com/health/cardiac-convention-a-success-for-local-regional-medical-advancement/).

3. Regional Grand Rounds were done with Cayman, Trinidad , Bermuda, and Barbados in collaboration with the American College of Physicians, Caribbean Chapter in March and June 2022 .

4. The Eric Cruickshank Memorial Lecture was given on June 17, 2022 by Dr Robert McLean, Associate Clinical Professor, Yale University, and Past – President, American College of Physicians who spoke on "Pearls in Rheumatology."

Staff training

Associate lecturers, Dr Lisa Chin-Harty and Dr Marie Williams, left in 2022 for 2-year fellowships in the United Kingdom under the Royal College of Physicians' Medical Training Initiative to study Endocrinology/Diabetes and Stroke Medicine/Neurology, respectively.

oDr Trudy Harper-Smith (hospital consultant) and Dr Tanesha Davis (hospital consultant) will be pursuing fellowships in the UK in July 2022.

1.Retirement

Dr Michael Fitz-Henley, Lecturer in Dermatology

Dr. Karel DeCeulaer, honorary lecturer and consultant rheumatologist Dr Hopeton Falconer, MBBS coordinator at Mandeville Regional Hospital.

Recognition

Dr Swane Gardener and Prof Michael Boyne were elected Fellows in the American College of Physicians.

oDr Tamara Thompson was elected as a Fellow of the Infectious Disease Society of America.

oDr Althea East-Innis was appointed as Associate Editor of the journal Dermatologic Therapy.

1.Special projects: The Department, through the leadership of Dr Swane Gardener and Dr Tameka March-Downer, helped lead the rollout of MT2020 (Mission Thrombectomy 2020) global initiative to improve stroke care. There was a week of special activities on January 24-29, 2022 along with the visiting MT2020 team from the University of Miami. This initiative will also assist in the UHWI becoming certified as an Advance Stroke Centre.

2.We resumed our Summer Review of Internal Medicine Symposium for the general practitioners as there were none in 2020 and 2021. It was held on July 10, 2022 by Zoom, covered 9 clinical topics, all given by Department lecturers.

ACCESS 1.Students - Undergraduate teaching

The Department continued its didactic lectures in Internal Medicine to MBBS students in the 1st year, as well as clinical teaching to 2nd, 3rd and 5th years. Students in the Junior Clerkship rotation were stationed at the Kingston Public Hospital (KPH) and the University Hospital of the West Indies (UHWI). Senior clerkship students rotated through UHWI and several other hospitals (KPH, Spanish Town Hospital, Cornwall Regional Hospital, Mandeville Regional Hospital, May Pen Hospital, and St. Ann's Bay Hospital). There were limitations in the numbers of students who could be accommodated at the peripheral hospitals and this caused some crowding at the UHWI. More teaching was done as face-to-face this year on ward rounds, clinics and tutorials. We continued to refine our pedagogy and student assessments as led by our medical education specialist, Dr Swane Gardener. We restarted OSCE examinations for the Junior and Senior students using 3-4 clinical stations.

Postgraduate teaching

1. Doctor of Medicine (Internal Medicine) professional degree oAt present, there are over 50 residents among the four years including 13 junior residents who started the programme in July 2022. We also continue to use medical officers and senior house officers to reduce the patient workload.

After the recent poor performance in the DM Internal Medicine examinations, we made several changes in the teaching programme and MCQ examination preparation. Dr Patrice Francis-Emmanuel was added as a Co-coordinator of the DM Internal Medicine Programme, to bolster its administrative support. Prof Wright Pascoe-Williams helped with coordinating examination preparations. We also enrolled the residents in the ACP-ITE (American College of Physicians In-Training Examinations) programme which exposed the residents to high-level MCQ testing and provided formative assessments. In the June 2022 examination, three of the 4 candidates (75%) passed the DM Part 2 examination.

oA weekly neurology lecture series in collaboration with the SUNY, Downstate New York was started in January to aid postgraduate training, hosted by Dr Tameka March-Downer.

oThe Department presented awards for the "Residents of the Year" in July 2022. The winners were chosen by lecturers/associate lecturers by an online poll:

1.Dr Shahna Barrett was the 2022 Junior Resident of the Year
2.Dr Amber Perez-McKoy was the 2022 Senior Resident of the Year
3.Dr Patrice Francis-Emmanuel was selected by the residents as the 2022
Consultant of the Year.

4.DM Dermatology professional degree. This programme continued to expand as 3 new residents started the programme in July 2022. There are now 9 residents in programme supported by a teaching complement of 5 dermatologists (3 lecturers, 1 associate lecturer and 1 hospital consultant).

5.PhD (Medicine). 2 students (Dr Ingrid Tennant and Ms Gail Nelson) submitted their written theses and are awaiting their oral defences. 6.Fellowship programmes in Infectious Disease, Nephrology, Cardiology and Gastroenterology. These 2-year professional programmes remain limited due to inconsistent funding of posts. However, we had our inaugural Gastroenterology Fellow start in July 2022, who was funded by the Ministry of Health and Wellness. Dr Jehovan Fairclough, an interventional gastroenterologist who joined the Department as a hospital consultant, also supported this fledgeling fellowship programme. The single fellow in Nephrology graduated with high commendation in January 2022. 7.Postgraduate certification, MRCP(UK). The UWI is the first MRCP(UK) Clinical Examination (Practical Assessment of Clinical Examination Skills - PACES) centre for the Caribbean and Latin America. The first offering of the MRCP PACES examination successfully occurred on March 18-20, 2022 at the Teaching & Research Centre, FMS. Four more local examiners were also trained and certified. The second offering will be in October 26-29, 2022. Hopefully we can conduct PACES examinations twice yearly afterwards.

PUBLICATIONS

1. Research

The Department continued its prior research agenda and research teams. Some of the areas include: 1. Nephrology: Epidemiological research in chronic kidney disease and acute kidney injury, especially the effect of COVID.

2. Pulmonology: The "Burden of Obstructive Lung Disease Follow-up in low/middle income countries (BOLD II)" continues to recruit nationwide to determine the incidence of obstructive lung disease in Jamaica. 3.Infectious Diseases: AIDS research and epidemiology research in

COVID-19.

4.Dermatology: epidemiology of common dermatological diseases and tumours in people of the African diaspora.

5.Endocrinology: Developing a clinical trial using loss-framed incentives to improve metabolic control in patients with type 2 diabetes.

Referred Journal Articles

- Ho JD, McNish A, McDonald L, Burrell C, Smith-Matthews S. Alopecia universalis with unusual histopathologic features after vaccination with ChAdOx1 nCoV-19 (AZD1222). JAAD Case Rep. 2022 Jul;25:4-8.
- Ho JD, Smith-Matthews S. Longstanding itchy axillae in a young woman. JAAD Case Rep. 2022 Apr 14;24:45-47.
- Thomas R, Smith-Matthews S, Ho J. Giant condyloma of Buschke-Lowenstein in a patient with pemphigus vegetans treated with intralesional and systemic human papillomavirus vaccine. JAAD Case Rep. 2021 Dec 29;20:54-57.
- Fisher LA, Stephenson S, Marshall Tulloch Reid M, Simon G. Anderson. Acute Kidney Injury following Cardiopulmonary Bypass in Jamaica. JTCVS Open 2022. https://doi.org/10.1016/j.xjon.2022.05.012
- Tapper M, McGrowder DA, Dilworth L, Soyibo A. Prospective Comparison of 24-Hour Urine Creatinine Clearance with Estimated Glomerular Filtration Rates in Chronic Renal Disease Patients of African Descent. Medicines (Basel) 2021 Sep 1;8(9):48.
- Clinical Features and Outcomes of COVID-19 at a Teaching Hospital in Kingston, Jamaica. Tamara Thompson, Yvonne Dawkins, Swane Rowe-Gardener, Lisa Chin-Harty, Kyaw Kyaw Hoe, Trevor S. Ferguson, Kelvin Ehikhametalor, Kelly Ann Gordon-Johnson, Varough Deyde. medRxiv Preprint doi: https://doi.org/10.1101/2022.04.27.22274270.
- Thompson DS, McKenzie K, Badaloo A, Taylor-Bryan C, Tennant IA, Soares D, Osmond C, Forrester TE, Boyne MS. Rates of growth during and after nutritional rehabilitation and liver fat in adult survivors of severe acute malnutrition. Preprint on MedArchive (doi: https://doi.or

g/10.1101/2022.06.08.22276056); and under review at PLOS Global Public Health.

- Thompson DS, McKenzie K, Opondo, Boyne MS, Lelijveld N, Wells J, Cole TJ, Anujuo K, Abera M, Berhane M, Kerac M, CHANGE Study Collaborators Group, Badaloo A. Faster post-malnutrition weight gain during childhood is associated with risk of non-communicable disease in adult survivors of severe malnutrition. medRxiv Preprint https:// www.medrxiv.org/content/10.1101/2022.03.02.22271635v1.
- Bergmark BA, Mathenge N, Merlini PA, Lawrence-Wright MB, Giugliano RP. Acute coronary syndromes. Lancet. 2022 Apr 2;399(10332):1347-1358.
- Leys YE, Nwokocha M, Walker JP, Butterfield TR, Frater VD, Thompson TK, Anderson M, Cloherty GA, Anzinger JJ. SARS-CoV-2 Receptor-Binding Domain IgG Response to AstraZeneca AZD1222 COVID-19 Vaccination, Jamaica. Am J Trop Med Hyg. 2022 Mar 23:tpmd211128. doi: 10.4269/ajtmh.21-1128.
- Lowe Jones R, Crichton E, Campbell KN, Hall D, Soyibo A. Organ Transplantation in Jamaica. Transplantation. 2022 Apr 1;106(4):677-679.
- Hoe KK, Han TL, Hoe THS. Hypoglycemic agents and prognostic outcomes of chronic kidney disease patients with type 2 diabetes. J Nephropathol. 2022;11(x):exx. DOI: 10.34172/jnp.2022.xx.
- Thompson DS, Francis-Emmanuel PM, Barnett AT, Osmond C, Byrne CD, Hanson MA, Gluckman PD, Forrester TE, Boyne MS. The effect of wasting and stunting during severe acute malnutrition in infancy on insulin sensitivity and insulin clearance in adult life. J Dev Orig Health Dis. 2022 Mar 1:1-7. doi: 10.1017/S2040174422000034.
- Thompson DS, Tennant IA, Soares D, Royal-Thomas T, Byrne CD, Forrester TE and Boyne MS. Liver fat in adult survivors of severe acute malnutrition. Sci Rep. 2022; 12: 3690

ALIGNMENT

Papers Presented/ Absract

 Nelson GA, Forrester T, Osmond C, Francis-Emmanuel PM, Boyne MS. The prevalence of sarcopenia amongst community-dwelling elderly in Jamaica. Poster at the 11th International Conference on Frailty & Sarcopenia Research (ICFSR), Sept 28, 2021. Published in Journal Frailty Aging; https://www.springer.com/journal/42415.

- Tamara Thompson, Yvonne Dawkins, Swane Rowe-Gardener, Lisa Chin-Harty, Kyaw Hoe, Kelvin Ehikhametalor, Trevor S. Ferguson, Kelly Ann Gordon-Johnson, Varough Deyde. Clinical features and outcomes among cases of SARS-CoV2 infection in Kingston, Jamaica: A Retrospective Cohort Study. Ministry of Health and Wellness 12th Annual National Health (2nd Virtual) Conference. Nov 17, 2021.
- Williams A, Knight-Madden J, Ramsay Z, Rowe-Gardener S. Comparison of High utilizers versus Low utilizers of Healthcare among Sickle Cell Disease patients at the University Hospital of the West Indies January 2019-December 2019. Ministry of Health and Wellness 12th Annual National Health (2nd Virtual) Conference. Nov 17, 2021.
- Dr Lori-Ann Fisher was invited to KDIGO (Kidney Disease: Improving Global Outcomes) Controversies Conference on Improving CKD Quality of Care: Trends and Perspectives held in Berlin, Germany from June 23-26, 2022.
- Dr Dee-Marie Wisdom (DM student, senior resident), and Dr Lori-Ann Fisher presented the abstract/poster "Neutrophil-lymphocyte ratio as a predictor of mortality in COVID-19" at the American Thoracic Society conference in Chicago, USA on May 13, 2022.
- Drs Paul Scott and Patrice Francis-Emmanuel presented at the MAJ/ CCFP/AGPJ symposium: Long Covid: It's Manifestations, Identification & Management on May 22, 2022.
- Prof Michael Boyne presented the topic: "Visceral obesity and insulin resistance" at the World Noncommunicable Diseases (NCD) Congress 2022 Prioritizing Prevention of NCDs: Taking Data and Knowledge to Action. University of Michigan at Ann Arbor. June 10, 2022.
- Prof Michael Boyne presented Managing Diabetes and COVID-19 infection. at the World Family Doctor Day Conference 2022 (Theme: Let's walk together to Combat Chronic Disease in Covid Era) on May 15, 2022.
- Prof Rosemarie Wright-Pascoe Williams, Dr Patrice Francis-Emmanuel and Michael Boyne were lecturers at the University Diabetes Outreach Programme 27th International Conference, April 22, 2022 on the topics of COVID and Diabetes/ Endocrine System.

PUBLIC SERVICE

Dr. Marilyn Lawrence Wright

- Vice-President and President-Elect, Caribbean Cardiac Society
- Conference Chair, Caribbean Cardiovascular Conference 2022 Caribbean Cardiac Society
- Member, Jamaica Coalition for Tobacco Control Executive Committee
- Development Committee Member, St. Clement's Mission of the St. Andrew Parish Church

Professor Rosemarie Wright-Pascoe Williams:

- Chairman, Board of Management of Central Medical Laboratory
- Member, Medical Association of Jamaica Council

Professor Michael Lee

- Member, Board of Executive, Food For the Poor
- Chair, Medical Committee, Food For the Poor

Dr. Tamara Thompson

- Women's Health Network, Member and annual volunteer
- Jamaica Ministry of Health and Wellness, COVID-19 Clinical Working Group
- Rotary Club of Kingston East and Port Royal, annual volunteer
- Infectious Diseases Society of America Minority Interest Group

Dr. Kyaw Hoe

 Outreach Renal Clinics at Mandeville Regional Hospital and St. Ann's Bay Hospital

Dr. Lisa Chin-Harty

• Treasurer, Caribbean Endocrine Society

Dr. Yvonne Dawkins

• Member, Women's Health Network

Dr Trevor Murphy

• President, Association of West Indian Gastroenterologists.

Dr. Lori-Ann Fisher

• Member, Board of Lupus Foundation of Jamaica

Dr. Mike Mills

- President, Association of Consultant Physicians of Jamaica
- Governor, West Indies, American College of Gastroenterology
- Member, Medical Association of Jamaica Council

Dr. Patrice Francis Emmanuel

• Ministry Of Health and Wellness ECHO Curriculum Development Committee member and presenter.

Professor Michael Boyne

- Board member, Victoria Mutual Foundation
- International Advisor for Royal College of Physicians representing the Caribbean
- Member, Journal of Clinical Endocrinology & Metabolism Editorial Board
- Member, National Health Fund Expert Panel of Physicians

AGILITY

Income Generation

There were no new research grants approved during this period.