

## DEPARTMENT OF MEDICINE

**Michael Boyne**, BSc, MB.BS, MD, FRCPC, FRCP (*Edin*) – Professor of Endocrinology and Metabolism – **Head of Department**



**F**or the period 2018/2019, Professor Rosemarie Wright-Pascoe served as Head of the Department from August 1, 2018 to January 10, 2019 and Professor Michael Boyne took up the mantle and acted as Head from January 28, 2019 to July 31, 2019.

### WORK OF THE DEPARTMENT OF MEDICINE

#### Undergraduate teaching

The Department continues to give didactic lectures in Internal Medicine to MBBS students in the first year and clinical teaching to 2nd, 3rd and 5th years. Students were assigned mainly to the UHWI. The Junior Clerkship rotation is for 3rd year clinical students who were stationed at the Kingston Public Hospital (KPH) and the UHWI. Senior students in their 5th year are assigned to UHWI, as well as peripheral teaching hospitals i.e. KPH, Spanish Town Hospital, Cornwall Regional Hospital, Mandeville Regional Hospital, May Pen Hospital, and St. Ann's Bay Hospital. We continue to try to deliver quality teaching as well as to improving our pedagogy and student assessment. Consequently, one lecturer has been earmarked for career development as a medical education specialist within the Department.

#### Postgraduate teaching

The Department has several postgraduate offerings:

A postgraduate professional programme leading to the *Doctor of Medicine (Internal Medicine)* degree. At present, there are 34 residents among the four years. However, the immense clinical load has led to the problem of inadequate staffing for all clinical areas, resident overwork, and student burnout is prevalent. This is a real danger for the future of the programme as several students have already taken leave of absence. Five junior residents started the programme in July 2019.

The *DM Dermatology* programme was launched with some fanfare on July 1, 2019. This programme was long-in-gestation, although there was a great need to provide locally-trained dermatologists since there were no prior local/regional opportunities. Four inaugural students were selected, and there is a teaching complement of 5 dermatologists (3 lecturers, 1 associate lecturer and 1 hospital consultant).

Research degree i.e. *PhD (Medicine)*. There are 2 students in their 3rd year, whose main supervisor is Prof Terrence Forrester, Chief Scientist, Solutions for Developing Countries (SODECO), UWI.

Fellowship programmes in Infectious Disease, Nephrology, Cardiology and Gastroenterology. There is increasing demand for these programmes, but they are plagued by no available funding for the fellows (so fellows have to be self-funding), threatening their long-term viability. Two programmes are active, with one fellow in Infectious Disease and the other in Nephrology.

### **Clinical Care**

The Department is primarily responsible for the admission, treatment and outpatient care of patients at the UHWI in the areas of internal medicine and the associated subspecialties. The clinical load is enormous and continues to grow with the growing obesity epidemic in an ageing Jamaican population. The bed occupancy for Medicine is usually over 100% and there is a growing need for the Medical ICU. Some highlights over the reporting period include:

### **Renal Service**

- Resumed kidney transplant at the UHWI in June 2019 in collaboration with the Department of Surgery.
- Established a renal transplant screening clinic and a post-renal transplant clinic weekly at UHWI.
- In collaboration with the Caribbean Institute of Nephrology, University of Michigan, and the International Society of Nephrology hosted the 11th Annual International Conference On Nephrology and Hypertension, January 18 & 19, 2019 at the Knutsford Court Hotel, Kingston. The theme was “*Targeting Chronic Non-communicable Diseases in the Caribbean*”.

### **Cardiology Service**

- Hosted Cardiology Week 2019 that culminated with Cardiology Symposium 2019, themed “*Healthy Hearts for a Healthy Nation*” on February 15, 2019. The symposium dealt with many contemporary topics e.g. the effects of mosquito-borne illness, cannabis, tobacco, and obesity on the heart.

- The state-of-the-art Interventional Suite was officially opened on May 30, 2019 at UHWI. This suite enables several procedures to be done, including cardiac catheterization and percutaneous coronary intervention (projections are for ~50 cases per week), which will improve undergraduate and postgraduate learning experiences.

### **Research**

The department conducts research in internal medicine and associated subspecialties. There are active efforts to improve the research output by improving training in research methodology and forming research teams. The areas with active research include Nephrology, Pulmonology, Gastroenterology, Dermatology and Endocrinology. These included:

- The Nephrology group continues to conduct epidemiological research in chronic kidney disease through its CKD Registry and reports annually at the International Conference on Nephrology and Hypertension in Jamaica.
- The follow-up study “Burden of Obstructive Lung Disease Follow-up in low/middle income countries (BOLD II)” was started. This nationwide study, as part of a multinational effort, will determine the incidence of obstructive lung disease in Jamaica.
- The Dermatology group is conducting a pilot randomized controlled clinical trial evaluating the treatment of pathologic scarring with a novel cream Keloflat® compared with standard topical steroid cream.
- A project in collaboration with the UWI-SUNY Health Research Task Force focusing on the epidemiology of patients with type 1 diabetes in Kingston.
- Michael Boyne and Tamara Thompson participated in the Royal Society meeting Caribbean Frontiers of Science, London March 20–21, 2019. This led to a follow-on grant proposal with collaborators at University of Cambridge follow-on Grant: FOS\R1\191008, “Prevalence of gestational diabetes mellitus (GDM) in high risk women in Kingston, Jamaica, and association with pregnancy outcomes.”

### **Outreach**

We are actively involved in continuing medical education for all members of the health team as well as for specialists in the field of internal medicine. The highlight was the Annual Summer Review, on July 5–7, 2019 to improve the education of primary care doctors and internists in common, topical problems. Many of the Department members formed its teaching faculty.

## Recognition

Professor Derek Bell, OBE, President of the Royal College of Physicians of Edinburgh (RCPE), presided over the signing of the Fellowship Roll for several local physicians at the 45th Annual Dr Ena Thomas Memorial Symposium in Kingston on Nov 24, 2018. The members of the Department who were recognized were Professor Michael Lee, Dr. Milton Arthurs, Dr. Adedamola Soyibo, and Prof Michael Boyne.

## PAPERS PRESENTED/ ABSTRACTS

- **Chin-Harty, Lisa.** “Initiating Insulin therapy.” Presented at Caribbean Endocrine Society Symposium September 2018, Port of Spain, Trinidad.
- **Yvonne Dawkins.** “Inflammatory Bowel Disease: An Overview and Update in Jamaica.” Ferring Pharmaceutical IBD Expert meeting, Spanish Court Hotel, October 24, 2018.
- **YM Dawkins, MG Lee, TS Ferguson, M. Arthurs, MO Mills, EK Donaldson, T Murphy** (2018). “Review of Patients With Inflammatory Bowel Disease at the University Hospital of the West Indies Between 1980 – June 2018.” *American Journal of Gastroenterology*: 114 (2018): S20, Abstract P074. Presented at Advances in Inflammatory Bowel Disease conference December 2018, Miami, USA.
- **Hoe, Kyaw.** “Iatrogenic Hospital Acquired Acute Kidney Injury: A wider Scope for Better Outcomes.” 11th Annual International Conference on Nephrology and Hypertension, Knutsford Court Hotel, Kingston, January 18, 2019.
- **Lee Michael G.** “Options for colon cancer and screening.” Presented at Colon Cancer Symposium. Jamaica Cancer Society, Association of West Indian Gastroenterologist March 2019.
- **Wright-Pascoe Williams, R.** presented by **Phillips K.** “Treatment Options in the Treatment of Type 2 diabetes mellitus” University Diabetes Outreach Programme, The 25th Annual International Diabetes Conference, Jewel Runaway Bay, Jamaica, April 26, 2019.
- **Wright-Pascoe Williams, R.** “New Evidence of Sitagliptin: COMPOSIT Studies M, R and I.” Merck Continuing Medical Education. The Jamaica Pegasus, Kingston, Jamaica. July 28, 2019 and Best of ADA, 2019 Jamaica.
- **Wright-Pascoe Williams, R.** “Prediabetes.” Merck Continuing Medical Education. The Terra Nova Hotel, Kingston, Jamaica, November 21, 2018.
- **Fisher, Lori-Ann.** “Diabetic Nephropathy.” Caribbean Association of Family Physicians March 10, 2019, Spanish Court Hotel, Kingston.
- **Fisher, Lori-Ann.** “Updates in Sickle Cell Nephropathy.” Caribbean Nephrology Conference January 18, 2019, Knutsford Court Hotel, Kingston.

- **Hoo Sang, Mark.** “Importance of Smoking Cessation” University Diabetes Outreach Programme, The 25th Annual International Diabetes Conference, Jewel Runaway Bay, Jamaica. April 26, 2019.
- **Hoo Sang, Mark.** ”Nurse Directed Heart Failure Clinics – The Local Experience” Heart Foundation of Jamaica (HFJ) Heart Month Medical Symposium, February 19, 2019, Spanish Court Hotel.
- **Thompson, Tamara.** “Implementation of HIV Self testing in an Emergency Medicine Department in Kingston, Jamaica: A Demonstration Project. (ID# 7041).” 14th International Conference on HIV Treatment and Prevention, June 2019, Miami, Fl, USA.
- **Thompson, Tamara.** “Swine Zoonoses.” University of South Carolina, Infectious Diseases Case Conference (Zoom Webinar). September 5, 2018.
- **Thompson, Tamara.** “HIV Epidemiology and challenges to breaking the chain of transmission: Perspectives from Jamaica.” Ochsner Clinical School Global Health Conference, Ochsner Medical Centre, New Orleans, Louisiana, May 20, 2019.
- Schade Stanton, **Tamara Thompson, Trevor Ferguson,** 1913. ‘Clinical Performance of the qSOFA Score Among Non-ICU Inpatients with Infection at a Tertiary Hospital in Jamaica From 2015 to 2016.’ Open Forum Infectious Diseases, 5, suppl 1 (2018): S550. Presented at Infectious Diseases Society of America, San Francisco, CA, October 2018.
- **Boyne, Michael.** “Disclosure, conflicts of interests” Presented at Dental Association of Jamaica 55th Annual Convention, Feb 10, 2019, Kingston, Jamaica.
- **Boyne, Michael.** “Current approaches to the medical management of thyroid disorders.” Presented at Caribbean Association of Otolaryngologists 27th Annual Scientific Conference, May 15, 2019; Kingston, Jamaica.
- **Boyne, Michael.** “Case presentations and discussions.” University Diabetes Outreach Programme, The 25th Annual International Diabetes Conference, Jewel Runaway Bay, Jamaica. April 27, 2019.
- **Boyne, Michael.** “Impact of gestational diabetes on our population.” Presented at Gestational Diabetes Workshop: What should be our local approach to care? UWI Mona, April 10, 2019 .

## PUBLICATIONS

### Referred Journal Articles

- **MG Lee, EW Williams, JM Plummer, Y Dawkins, T Murphy, K Gabriel, S Guyah, S French.** “Acute Pancreatitis – Guidelines to Management.” *West Indian Med J*; 68, Suppl. 2 (2019): 10–17.

- **KK Hoe, TL Han, TH Hoe, EN Barton:** “Severity and Outcomes in Association with Known Exposures and Susceptibilities among Afro-Caribbean Patients with Hospital-acquired Acute Kidney Injury.” *West Indian Med J* 68 (2019). DOI: 10.7727/wimj.2018.154.
- **K Eshkhametalor, LA Fisher, C Bruce, A Aquart-Stewart, J Minott, C Hanna, K Fletcher, C Wilson-Williams, L Morris, M Campbell, JA Henry.** “2018 University of the West Indies/University Hospital of the West Indies Guidelines for ICU Admission, Discharge and Triage.” *West Indies Medical Journal* 68, Suppl. 1 (2019); 46–54.
- **H Kramer H, A Soyibo, T Forrester, M Boyne, T Markossian, R Durazo-Arvizu, A Luke, R Cooper.** “The burden of chronic kidney disease and its major risk factors in Jamaica.” *Kidney Int.* 94, 5 (2018): 840–842.
- **MBC Maymone, JD Ho, D Saadeh, J Bhawan, NA Vashi.** “Asymptomatic Acquired Facial Hyperpigmentation: Challenge.” *Am J Dermatopathol.* 41, 5 (2019): e47.
- **MBC Maymone, JD Ho, D Saadeh, J Bhawan, NA Vashi.** “Asymptomatic Acquired Facial Hyperpigmentation: Answer.” *Am J Dermatopathol.* 41, 5 (2019): 391.
- **P Yap, J Ho, KA Fenton.** “Re-thinking the medical management of keloids: Reflections and experiences from a busy urban clinical practice in Kingston, Jamaica.” *International Journal of Keloid Research.* 3,1 (2019)
- **A Al-Haseni, JD Ho, MBC Maymone, J Bhawan, NV Vashi.** “Generalized dyschromia and erythematous papules in a 66 year old man: Challenge” *Am J Dermatopathol.* 41, 1 (2019): 70.
- **AMS Barron, JC Mantero, JD Ho, B Nazari, K Horback, J Bhawan, R Lafyatis, C Lam, JL Browning.** “Perivascular Adventitial Fibroblast Specialization Accompanies T Cell Retention in the Inflamed Human Dermis.” *J. Immunol.* 202, 1 (2019): 56–68.
- **Ho JD, Chung HJ, Barron AM, Ho DA, Sahni D, Browning JL, Bhawan J.** “An extensive CD34-to-CD90 fibroblast transition defines regions of cutaneous reparative, hypertrophic and keloidal scarring.” *Am J Dermatopathol.* 41, 1 (2019): 16–28.
- **S Suzuki, JD Ho, MT Rosenbaum, J Bhawan.** “Neutrophilic Fixed Drug Eruption: a mimicker of neutrophilic dermatoses.” *Clin Exp Dermatol.* 44, 2 (2019): 236–238.
- **J Cheng, J Ho, M Barrett, HJ Chung, C Lam.** “Linearized solar elastosis of the legs: A novel presentation and review of the literature.” *J Cutan Pathol.* 45, 11 (2018): 855–857.

- **JD Ho**, A Al-Haseni, S Smith, J Bhawan, D Sahni. “Bullous Complex Regional Pain Syndrome: A description of the clinical and histopathologic features.” *J Cutan Pathol* 45, 8 (2018): 633–635.
- A Nicholson, I Tennant, L White, CA Thoms-Rodriguez, L Cook, S Johnson, **T Thompson**, L Richards. (2018). “The knowledge, attitudes and practices of doctors regarding antibiotic resistance at a tertiary care institution in the Caribbean.” *Antimicrobial Resistance & Infection Control* 7, 1 (2018): 23.
- R Santosh, NA Christian, T Jones, CAA Thoms-Rodriguez, A Condappa, **T Thompson**, J Lindo. “Molecular epidemiology of human papillomavirus genotypes in oral rinses from HIV-positive and HIV-negative Jamaican patients.” *Journal of investigative and clinical dentistry* 10,1 (2019): e12365.
- **G Barrow**, M Brandeau. “A modified HIV continuum of care: six-year evaluation of a viral load cascade at a hospital-based clinic in Kingston, Jamaica.” *International Journal of STD and AIDS* 30, 8 (2019): 748–755.

#### **TECHNICAL REPORTS**

- KK Hoe, A Soyibo, EN Barton. “University Hospital of the West Indies Kidney Transplant Protocol: Standard Operation Procedure Manual 2018–19.”

#### **INCOME GENERATION**

##### **Grants**

- Peter Burney (PI), **Althea Aquart-Stewart** (Co-investigator); Medical Research Council MR/R011192/1, for “Burden of Obstructive Lung Disease Follow-up in low/middle income countries (BOLD II)” – **GBP 21,568.63**

##### **Other income**

- Summer Programme: Annual Review of Internal Medicine – **J\$1.5 million.**

#### **PUBLIC SERVICE**

##### **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

**Professor Michael Boyne**

- Board member, Victoria Mutual Foundation
- President, Association of Consultant Physicians of Jamaica
- Member, Medical Association of Jamaica Council
- Member, DOHAD (Developmental Origins of Health and Disease) Council, and planning committee member for 11th DOHaD World Congress, Melbourne, Australia in October 2019.
- Member, National Health Fund Expert Panel of Physicians

**Dr. Tamara Thompson**

- Member and annual volunteer, Women's Health Network
- Annual volunteer, Rotary Club of Kingston East and Port Royal
- 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. Charlton Collie**

- Chairman, Board of Directors, Pre-University School, Taylor Hall, UWI Mona.
- Chairman, Board of Directors, Ayrton Distributors Limited
- Department Representative, UHWI Drug and Therapeutics Committee
- Department Representative, UHWI Accident and Emergency Advisory Committee
- Examiner for the MBBS Exams for the School of Clinical Medicine and Research in Nassau, Bahamas May 2019
- Constituency Chairman/ MP Candidate, Jamaica Labour Party for South East, St. Andrew

**Dr. Mark Hoo Sang**

- Member, Cardiovascular Week Planning Committee for Annual Cardiovascular Week Symposium and Annual Cardiology Week Health Fair.

**Dr. Yvonne Dawkins**

- Member, Women's Health Network

**Dr. Lori-Ann Fisher**

- Board Member, Lupus Foundation of Jamaica

**STUDENTS**

The success rate of the final MBBS examination in Medicine & Therapeutics in May/June 2019 was commendable as the failure rate was only ~ 7%. Twenty-three students received honors in the examination. Dr. Kaesha Thomas received the Owen Morgan Prize in Medicine for the highest combined (written and clinical) score in the examination, while Dr Dea Thomas received the Allenbury Prize in Medicine for the highest marks in the clinical examination.

The pass rate for the DM Part 1 and 2 examinations in December was 100% among the 11 candidates. There was only one failure (of 6) in the May/June Part 1 examination.



## DEPARTMENT OF MICROBIOLOGY

Alison Nicholson, MB BS, DM (Med. Microbiology) – Head of Department

### WORK OF THE DEPARTMENT

The Department has continued, in pursuance of The UWI's triple A strategy, to foster growth and development, through continuing education to undergraduate and graduate students as well as providing diagnostic services to our internal and external stakeholders in the areas of immunology, bacteriology, virology, mycology and parasitology.

Over the reporting period, academic staff members have been actively involved in research activities including collaboration with external partners. Through Dr. Joshua Anzinger the Department of Microbiology welcomed the Co-Founder of the Global Virus Network (GVN), Professor Robert Gallo, world-renowned scientist who co-discovered HIV-1 in addition to discovering HTLV-1 and interleukin-2, to launch the new GVN Jamaica Affiliate. As part of the GVN, the department continued to facilitate students participating in the annual virology short course at the University of Maryland with DM candidate Dr. Ynolde Leys, Resident, attending the 2019 course.

Postgraduate students in the department, Mrs. Suzette Cameron-McDermott, Dr. Ynolde Leys, and Dr. Camille Blake were accepted as NIH Fogarty Scholars, under the supervision of Dr. Joshua Anzinger. Each of these students drafted a research proposal for their application and these were reviewed by a team of international experts. These projects will be developed in Jamaica with additional training at various collaborating laboratories of the State University of New York (SUNY).

Ms. Tiffany Butterfield and Mr. Chadwic Mears, both NIH Fogarty Scholars had the opportunity to receive advanced training at several research institutions. Ms. Butterfield, while at the University of Buffalo, gained the ability to perform bioinformatic pathway analysis for her research project. Mr. Mears also gained training in diagnostic arbovirus techniques for his research project while at the Wadsworth Laboratory in Albany, New York. Additionally, he was selected for advanced sequencing training at

the Research Center for Zoonosis Control, Hokkaido University, sponsored by the Japanese Government.

During the period 2018–2019 the Virology Laboratory responded to two major viral epidemics: influenza and dengue. Additional testing methodologies were introduced to facilitate rapid testing and early reporting of results.

The Collaboration between The University at Buffalo Center for Integrated Global Biomedical Sciences, The University of the West Indies, State University of New York (SUNY), Upstate Medical University and Jamaica Ministry of Health through co-investigator Professor John Lindo continues to grow. Professor Lindo has been representing The UWI at various meetings in an effort to establish a Clinical Research Center Network among other initiatives.

Dr. Sandra Jackson-Betty has continued consultative work with the World Health Organisation and has been focussing on Respiratory Syncytial Virus Global Surveillance – Phase 1 and Phase 2 through the WHO Global Influenza Programme – Global Influenza Surveillance and Response System. She has documented her findings.

The Department continued to bring awareness on how to manage infection to the medical fraternity and the general public through symposiums. World Sepsis Day was celebrated with the start of a church service, free online streaming to the Second World Sepsis Congress, presentation at Spanish Town High School and ended with a Symposium on Friday, September 13, 2018, on the theme: *Sepsis: Prevent it. Stop it. Treat it. Beat it.* The events were well attended and received sponsorship from various entities in corporate Jamaica.

### **Accreditation**

The Department, led by Professor Monica Smikle, had its second interim surveillance assessment on June 11–12, 2019. Findings which did not fulfil the requirements of the International Standard ISO 15189 and/or the Department's Quality Management System (QMS) were subsequently addressed and closed within the required timeline. The Department of Microbiology has been granted continued accreditation to the ISO 15189:2012 standard.

### **The National Influenza Centre (NIC)**

The National Influenza Centre (NIC) under the leadership of Professor Monica Smikle continued to perform the important functions of influenza surveillance and diagnosis in Jamaica in keeping with World Health Organization (WHO) terms of reference for National Influenza Centres. The NIC activities were supported by the collaborative efforts of the Ministry of Health (MOH), Jamaica, Centres for Disease

Control Prevention (CDC), Atlanta, Pan American Health Organization (PAHO) and The University of the West Indies.

A comprehensive panel of influenza diagnostic tests, including polymerase chain reaction (PCR) assay and virus tissue culture/isolation, were available throughout the 2018/2019 Influenza season. This is particularly important to note as a two-fold increase was observed in the number of specimens analysed for Influenza in 2018/2019 compared to the corresponding period in 2017/2018. The increase in the number of cases investigated was accompanied by a 50% increase in the positivity rate for Influenza. During the period under review NIC was favourably assessed by two external organizations including PAHO, Washington, February, 2019 and Jamaica National Agency for Accreditation (JANAAC), June 2019. Additionally, a member of staff received CDC sponsored influenza diagnosis training in Mexico.

#### **Antimicrobial Resistance:**

The UWI continued its partnership with the MOH in its fight against antimicrobial resistance. The Department of Microbiology, once again, through Dr Alison Nicholson, joined with the National Action Plan working group, to observe 'World Antibiotic Awareness Week' in the month of November. A symposium on the theme: *Antimicrobial stewardship: The last attempt to save our Antibiotics?* was held in both Kingston and St. Ann on November 14 and 16, 2018 respectively. Dr. Nicholson presented at both meetings on Antibiotic Resistance in Jamaica.

The Department, led by Dr. Alison Nicholson and Dr. Jerome Walker, using data collected from the Bacteriology laboratory, published Antibigrams which were distributed to all Consultants in the hospital. The idea behind the antibiograms was to keep all abreast of the organisms most commonly isolated from the hospital, along with their antibiotic susceptibility profile of organisms implicated in various infections in the hospital in order to guide empiric therapy while awaiting definitive culture results.

#### **Infection Prevention and Control**

The Microbiology Department continued to lead the Infection Prevention and Control programme. Under the leadership of Dr. Alison Nicholson, there was a thrust to institutionalise Infection Prevention and Control throughout the hospital. Education and training of all sectors of the workforce continued to be emphasized. The 2018/2019 period called for increased surveillance measures in light of the outbreaks experienced. Dr Nicholson led the development of a proposal for a postgraduate diploma programme in Infection Prevention and Control. This was approved by The University of the West Indies, Jamaica and should start in 2020.

**Mycology: Environmental Investigation of Mould**

The Mycology laboratory continued to be a major income generator both from clinical and environmental samples received from the UHWI, UWI and outside of the University Campus.

The full potential of the laboratory has not yet been realised.

The continued growth and success of the laboratory will depend on capital investment in obtaining the necessary material and equipment for antifungal susceptibility testing. The introduction of susceptibility testing, and its promotion among health care institutions will need a concerted effort to achieve this objective. Also, there is a need for material and reagents for conclusive species identification of the various yeasts. This must also be considered for increased income generation.

**Surveillance Reports**

The Department of Microbiology continued to submit monthly surveillance reports to the Ministry of Health and Wellness:

- General Virology Report
- Bacteriology Report
- Dengue Report
- Chikungunya Report
- HIV Report

**Department of Microbiology Newsletter**

*It's a Small World*, was developed by Dr. Alison Nicholson in keeping with the desire to improve communication between the Department and the community it serves. It will keep the community informed of any developments in the laboratory that would be of interest and where necessary will provide updates on any advances in diagnostic methods available in the department as well as any developments in Infection Prevention and Control in the Healthcare setting. The newsletter will be sent three to four times per year.

**PAPERS PRESENTED****Poster Presentations**

- Butterfield TR, Hanna DB, Kaplan RC, Xue X, Kizer JR, Durkin HG, Young MA, Nowicki MJ, Tien PC, Golub ET, Floris-Moore MA, Titanji K, Fischl MA, Heath S, Palmer CS, Landay AL, **Anzinger JJ**. "HIV+ Women with Diabetes

Mellitus Exhibit CD4+ T Lymphocyte Immunometabolic Dysfunction”. 10th International AIDS Society Conference on HIV Science. July 23, 2019, Mexico City, Mexico.

- Chin, A., Ali, I., Edwards, J., **Reynolds-Campbell, G.** “Kocuria species; A possible emerging foe in Jamaica”. The University of the West Indies, Faculty of Medical Sciences 27th Annual Research Conference and Workshop 2018 Violence, Trauma and Development. *West Indian Medical Journal* 67, 4 (2018):39.
- Kerr JS, Aitken W, Gossell-Williams M, **Nicholson AM, Thoms-Rodriguez C.** “Characterisation of the Aetiological Agents and their Susceptibility Patterns in Patients with Complicated Urinary Tract Infections in the University Hospital of the West Indies, Jamaica”. The University of the West Indies, Faculty of Medical Sciences 27th Annual Research Conference and Workshop 2018 Violence, Trauma and Development. *West Indian Medical Journal* 67, 4 (2018):39.
- Leys-Thomas YE, Thomas C, Burton N, **Anzinger JJ.** “Zika Virus Laboratory Diagnosis During the 2016 Jamaican Epidemic”. The University of the West Indies, Faculty of Medical Sciences 27th Annual Research Conference and Workshop 2018 Violence, Trauma and Development. *West Indian Medical Journal* 67, 4 (2018):39.
- Pearson, K., Nelson, K., **Reynolds-Campbell, G.** “Non-viral etiology of conjunctivitis at a tertiary level hospital in Jamaica.” The University of the West Indies, Faculty of Medical Sciences 27th Annual Research Conference and Workshop 2018 Violence, Trauma and Development. *West Indian Medical Journal* 67, 4 (2018):39.
- **Thoms-Rodriguez, C,** Facey, K, Edwards, J, **Reynolds-Campbell, G,** Wright, R, **Nicholson, A, Heslop, O.** “Cryptococcaemia in a Jamaican Cohort”. American Society for Microbiology Microbe. June 20–24, 2019, Moscone Centre, San Francisco, California.

### Oral Presentations

- **Anzinger JJ.** “HIV in the Caribbean”. 10th International Global Virus Network Meeting. November 28, 2018, Annecy, France.
- Christie DC, **Anzinger JJ.** “Jamaica VT study – Enrolments, Follow-up Preliminary Results & Lab Data”. ZIKAction Consortium Meeting. November 3, 2018, Rio de Janeiro, Brazil.
- Clarke K, Porter R, Facey P and **Thoms-Rodriguez CA.** “Essential oil composition and antimicrobial activity of *Cannabis sativa* grown in Jamaica at five stages of maturity”. 21st CAS General Meeting and Conference on Science Technology and Innovation – Vehicles for a Knowledge Based Economy. November 27–30, 2018, Mona Visitors’ Lodge and Conference Centre.

- **Jackson ST.** FLU: “Where are we 100 years after the Great Pandemic? Assessing the Risk to Jamaica. Environmental Impact on Health: A Clear and present danger”. Medical Association of Jamaica, Symposium. June 6–9, 2019. The Jamaica Pegasus Hotel, Kingston, Jamaica.
- **Nicholson AM.** “Antibiotic Resistance: The Jamaican Journey”. World Antibiotic Awareness Week. November 14, 2018. Main Medical Lecture Theatre, UHWI.
- **Nicholson AM.** “Antibiotic Resistance: The Jamaican Journey”. World Antibiotic Awareness Week November 16, 2018. Hibiscus Lodge, St Ann.
- **Reynolds-Campbell, G.** “Current status of diagnosis, treatment and surveillance of Histoplasmosis: analysis by regions: The Caribbean”. 2nd meeting of the International Histoplasmosis Advocacy Group (IHAG). March 22–24, 2019. Manaus, Brazil.
- **Reynolds-Campbell, G.** “Role of the environment in infection”. 8th Annual Scientific Conference of the Ophthalmological Society of Jamaica, Infection Control Symposium March 9, 2018. Legacy Suite, Jamaica Pegasus.
- **Thoms Rodriguez C.** “Tuberculosis: Updates on Diagnosis, Infection Prevention and Control”. Medical Association of Jamaica, Symposium. June 6–9, 2019. The Jamaica Pegasus Hotel, Kingston, Jamaica.

## PUBLICATIONS

### Refereed Journal Articles

- Ali I, Mundle M, **Anzinger JJ**, Sandiford SL, Butterfield TR, Crowe SM. “Tiger in the sun: A report of *Aedes albopictus* in Jamaica”. *Acta Tropica* 199 (2019):105–112.
- Arvind Babu RS, **Christian N**, **Lindo J**, Jones T, **Thoms-Rodriguez C**, Pinkney J, Thompson T, Barton E. “Molecular Epidemiology of Human Papillomavirus Genotypes in Oral Rinses from HIV Positive and HIV Negative Jamaican Patients”. *Journal of Investigative and Clinical Dentistry* 10:e12365 (2019). DOI:10.1111/jicd.12365
- Broor, S, Campbell, H, Hirve, S, Hague, S, **Jackson, S**, Moen, A, Nair, H, Palekar, R, Rajatonirina, S, Smith, PG, et al. “Leveraging the Global Influenza Surveillance and Response System for global respiratory syncytial virus surveillance-opportunities and challenges”. *Influenza Other Respiratory Viruses* (2019-00):1–8. DOI: 10.1111/irv.12672
- East J, T, Newnham M , Titus I , **Vickers I** , Brown H. “Guidelines on Management of the Patient with Diabetic Foot Infection”. In WIMJ Guidelines for Selected Surgical Diseases. *West Indian Medical Journal* 68, 2 (2019):18–26. DOI: 10.7727/wimj.2018.194

- Lee ML, **Lindo JF**, Auer, H, Walochnik, J. Successful extraction and PCR amplification of Giardia DNA from formalin-fixed stool samples. *Experimental Parasitology* 198 (2019):26-30. DOI:10.1016/j.exppara.2019.01.010
- Morse, GD, Lombardo, J.C, Forrester, T, Fletcher, H, McDonald, A, Talal, AH, Govindaraju, V, DeHovitz, J, **Lindo, JF**. Development of a dual university system health research partnership as a foundation for the Sustainable Development Goals. *The Lancet Global Health* 6, Suppl. 11 (2018): DOI:10.1016/S2214-109X(18)30140-2
- Rajendra Santosh, AB, **Christian, NA**, Jones, T, **Thoms-Rodriguez, CA**, Condappa, A, Thompson, T, Pinkney, J, Barton, EN, **Lindo, JF**. Molecular epidemiology of human papillomavirus genotypes in oral rinses from HIV-positive and HIV-negative Jamaican patients. *Journal of Investigative and Clinical Dentistry* 10, 1(2019):e12365. DOI:10.1111/jicd.12365
- **Reynolds-Campbell G, Nicholson A, Christian N, Willey B, Mazzulli T**. “16s rRNA methyltransferases in Gram negative bacilli from a tertiary care hospital in the Caribbean”. *West Indian Medical Journal e-Published*: 08 Mar, 2019 Doi: 10.7727/wimj.2018.131
- Willis R, **Heslop O**, Bodonaik N, Thame M, Smikle M. “Morbidity, mortality and antimicrobial resistance of pneumococcal infections in the Jamaican paediatric and adult populations”. *Human Antibodies* 27,2 (2019):155-160. DOI:10.3233/HAB-180361
- Willis R, **Smikle M, Heslop O** et al. “Pneumococcal disease burden, clinical presentations and vaccine coverage in the Jamaican population”. *Human Antibodies*. 26,4 (2018):193-199. DOI:10.3233/HAB-180338IOS.

### Technical Reports

- Hirve S, **Jackson S**. “WHO RSV surveillance – phase 1 overview, what’s new in phase 2?” WHO Meeting to Launch Phase-2 of the RSV Surveillance Based on the Influenza Platform. April 10–12, 2019, Kathmandu, Nepal.
- **Jackson S**. “RSV typing – logistics, timelines”. WHO Meeting to Launch Phase-2 of the RSV Surveillance Based on the Influenza Platform. April 10–12, 2019, Kathmandu, Nepal.
- **Jackson S**. “RSV surveillance monitoring and evaluation”. WHO Meeting to Launch Phase-2 of the RSV Surveillance Based on the Influenza Platform. April 10-12, 2019, Kathmandu, Nepal.
- **Jackson ST**. “WHO Global RSV Surveillance Sustainability”. WHO Meeting of Final Review of the RSV Surveillance Pilot based on GISRS. October 23–25, 2018, Bangkok, Thailand.

- **Jackson ST.** WHO Meeting of Mid-term Review of the RSV Surveillance Pilot Based on the Global Influenza Surveillance and Response System. December 18–20 2017 PAHO, Washington DC, USA. WHO Reference number: WHO/WHE/IHM/2019.2 <https://apps.who.int/iris/bitstream/handle/10665/311960/WHO-WHE-IHM-2019.2-eng.pdf>

### **INCOME GENERATION**

**Source:** Ministry of Health

**Title:** Identification of human viruses circulating in Jamaican mosquito species by next generation sequencing

**Grant Period:** 2019-2020

**Total Amount:** JA\$1,500,000.00

**Principal Investigator:** Joshua Anzinger

**Source:** UWI/SUNY Collaboration

**Title:** Evaluation of a Sputum Washing Device as a Means of Improving the Diagnostic Accuracy of the Sputum Gram Stain

**Grant Period:** 2019

**Total Amount:** USD\$8000

**Co-principal Investigator for Pilot Study:** Camille-Ann Thoms-Rodriguez

### **PUBLIC SERVICE**

**Anzinger JJ**

- Member, Caribbean Sub-regional Certification Committee for the Global Eradication of Poliomyelitis. Pan American Health Organization (PAHO). 2015–present.
- Member, The Arbovirus Diagnostic Network of the Americas (RELDA). 2017–present.
- Director, Global Virus Network, Jamaica Affiliate. Global Virus Network. 2018–present.
- Participant, Expert Consultation Meeting; Technical Guidelines for Laboratory Diagnosis of Arboviral Infections. Pan American Health Organization (PAHO). Washington, DC, USA; August 27–29, 2018.

**Lindo, J**

- Member, Board of the University Hospital of the West Indies

- Member, Scientific Leadership Committee, Center for Integrated Global Biomedical Sciences, University at Buffalo, SUNY.
- UWI liaison to Ministry of Health on Mosquito Research and Control Unit
- Co-chair (with Gene Morse) UWI/SUNY Global Health Research Taskforce
- Membership Chair, Rotary Club of New Kingston
- Chair, Finance Technical Working Group Caribbean Public Health Laboratories Network.

### **Reynolds-Campbell, G**

- Moderator at the Ministry of Health's 9th Annual Health Research Conference (2018)
- Moderator at the Caribbean Association of Clinical Microbiologists' (CACM) conference (2018)
- Jamaican delegate and member of the International Histoplasmosis Advocacy Group (IHAG) (2019)
- Member of Caribbean Association of Clinical Microbiologists (CACM) (2009–present)
- Secretary of the CACM (2017–present).

## **STUDENTS**

### **Awards**

- **Tiffany Butterfield (PhD student)** – Abstract accepted for presentation at 10th International AIDS Society Conference on HIV Science (peer-reviewed selection).
- **Ynolde Leys (DM student)** – American Society for Microbiology Microbe Best Poster Prize: "ZIKA Virus Laboratory Diagnosis during the 2016 Jamaican Epidemic. The University of the West Indies Faculty of Medical Sciences 27th Annual Research Conference 2018.

# DEPARTMENT OF OBSTETRICS & GYNAECOLOGY

Dr. Carole Rattray, MBBS, DM (O&G), FRCOG, FACOG – Head of Department



## WORK OF THE DEPARTMENT

The academic staff in the department consists of 5 senior lecturers, 6 lecturers and 6 associate lecturers. We offer subspecialty care in Fertility Management/Assisted Reproduction, Maternal-Fetal Medicine, Gynaecological Oncology and Urogynaecology in addition to general Obstetrics & Gynaecology. We offer undergraduate and postgraduate courses and have two Fellowship Programmes in Maternal-Fetal Medicine (MFM), in association with the PROMAC initiative and Gynaecological Oncology in association with the International Gynecologic Cancer Society.

### Obstetric Perinatal Service

This service manages high risk Obstetric cases and accepts referrals from the rest of the island. The Unit provides teaching for postgraduate and undergraduate medical students. Perinatal Audits occur monthly as a joint meeting with the Department of Child Health and the annual conference in February of each year is run by the High Risk Obstetric team in collaboration with the Neonatologists & Neonatal Pathologists.

The Labour Ward and Postnatal Services are supervised by consultants Drs. Michelle Campbell and Lenroy Bryan with assistance from Dr. Cathy Maddan. These consultants also teach undergraduate and postgraduate students as well as midwives in training.

The Department offers Obstetric Ultrasound Services to both the University Hospital of the West Indies and referrals from outside the University. Ultrasound courses are offered twice a year following on the PROMAC initiative. Ultrasound training is spearheaded by Dr. Nadine Johnson and Dr. Tiffany Hunter.

### Obstetrics Skills & Drills

We offer 2 Emergency Obstetrics Workshops (JOTTIE) each year sponsored by Ferring Pharmaceutical Ltd and offered as a multi-disciplinary training workshop for

Anaesthetic Residents, Accident and Emergency Residents, Paediatric Residents, Obstetrics & Gynaecology Residents and midwives from The University Hospital and Government Hospitals. It takes place in the simulation lab of the School of Nursing.

### **Oncology Unit**

Dr. Taylor & Dr. Bambury are the two trained gynaecological Oncologists in the department and together with Professor Fletcher, Dr. Rattray & Dr. Mitchell & Dr. Medley, form the Gynaecological Oncology Team. They are assisted by Sister Murdoch and her team of Oncology nurses as well as administrative secretary Miss Thompson. Residents rotate through the unit spending 2 months in the Colposcopy and general Oncology areas. Patients requiring colposcopy in the management of the abnormal cervical smear are seen in the Colposcopy clinics while patients with gynaecological malignancies, are seen in the Oncology clinic both in preparation for surgery and for post-surgery follow-up, post chemotherapy and radiation therapy. The Unit also has facilities for teaching both undergraduate and postgraduate students

### **Fertility Management Unit**

Dr. Vernon DaCosta is the director of this unit and together with Drs. Shaun Wynter, John Harriott, Loxley Christie, Sharifa Frederick and Michelle Bailey as clinicians, offer assisted reproductive referral services. Other staff members are Miss Denise Everett, a senior embryologist (Biologist) and Miss Hillary Walters, a staff Nurse as the coordinator of the programme. This team has championed the In Vitro Fertilization and Embryo Transfer Programme for Jamaica and the Caribbean. Pregnancy rates continue to improve and frozen embryos and donor eggs are now being stored. Minimally invasive procedures such as hysteroscopy and laparoscopy (both diagnostic and therapeutic procedures) are provided as day case procedures and the family planning clinic offers contraceptive and sterilization advice.

### **STAFF**

#### **Dr. Carole Rattray**

Position: Head of Department & Senior Lecturer

Responsibilities – Administrative, Teaching Undergraduate & Postgraduate students, Chair Fellowship in Gynaecological Oncology, Research.

#### **Dr. Shaun Wynter**

**Position: Senior Lecturer** – Assigned to Firm A with the concentration of work within the HWFMU and the general gynaecology clinic and wards.

Provides Departmental coverage for Head of Department in absence of Dr. Rattray

## TEACHING

### Undergraduate

Junior and senior clerkship tutorials as assigned. Students rotating on firm A to HWFMU, the wards and GOPD-A

### Postgraduate

Moderator and examiner of the DM teaching module, Principles of Gynaecologic Surger , January – March 2018.

Residents rotating to the HWFMU for endoscopic surgery training.

### Research

Preparation of protocol for chronic pain and Endometriosis.

### Income Generation

The endoscopic surgery procedures that I perform in the HWFMU are all income generating for the UWI.

## OUTREACH

- Member of the ISGE CAGES organising committee that planned the Intensive Endoscopic Training Week was held in September 2018.

### Papers / Posters Presented (Major conferences/Seminars)

- Common Gynaecological Issues in Adolescence. The Ministry of Health *in collaboration with* University Hospital of the West Indies 8th annual national workshop “*The Adolescent Patient*” Braco Melia Hotel, Jamaica, November 25, 2018.

## PUBLICATIONS

- K Carroll, A M Pottinger, S Wynter and V DaCosta Marijuana use and its influence on sperm morphology and motility: identified risk for fertility among Jamaican men Andrology. Accepted for publication 23 May, 2019.

## **PUBLIC SERVICE (MEMBERSHIP ON COMMITTEES/BOARDS OUTSIDE OF UWI)**

### **Awards/Prizes**

- November 2018 awarded the degree of **Master in Minimally Invasive Gynecologic Endoscopy** from the International Society for Gynecologic Endoscopy, ISGE

**Dr. Santosh Kulkarni**

**Position; Senior lecturer**

Teaching

Undergraduate- UG module in 3rd year, MBBS and 4th and 5th year clerkships

Postgraduate-

1) Convener of the module system for the DM curriculum at Mona

2) Commenced new cycle July 2016 to June 2020

Novel module Sept-Dec 2018 with Dr. C. Maddan Sexual medicine, covering issues female/male sexuality in health and disease. LGBTQ issues

**Dr. Donnette SimmsStewart**

**Position: Senior Lecturer**

Papers presented – Video presentation, “Fontana Mother and Child Initiative”. To be used in antenatal clinics in Jamaica.

Income generation – **Folic Acid Clinical Trial: Follow up of children (FACT 4 CHILD)** – \$US 3000

Public service – President *American college and Obstetricians and Gynaecologists – West Indies Section*

Students – Co-ordinator Urogenital Module

**Dr. Tiffany Hunter-Greaves**

**Position: Lecturer** – continues to champion the training of MFM specialists

**Dr. Nadine Johnson**

**Position: Lecturer** – Undergraduates, Postgraduates supervisor for Natasha Belmar – final year resident, Shanea Gibson – 3rd year resident.

**Academic pursuits** – Attended International Society of OBGYN annual clinical meeting October 2018.

**Dr. Cathy Maddan**

**Position: Associate Lecturer**

Research in preparation

The effect of UV light treatment on perineal healing after a vaginal delivery –

Dr. Cathy Maddan, Dr. Michelle Campbell Mitchell, Dr. Lenroy Bryan, Dr. Jody Ann White.

The impact of pregnancy and the puerperium on female sexual function in Jamaica.

Dr. Cathy Maddan, Dr. Michelle Campbell Mitchell, Dr. Lenroy Bryan, Dr. Melissa Forbes, Dr. Dominique Goldson.

**RESEARCH IN PROGRESS**

- Cervical health after a subtotal hysterectomy. – Dr. Cathy Maddan, Dr Astrid Batchelor, Dr. Peta Gaye Brown, Professor Horace Fletcher.
- Maternal near misses at the UHWI. – Dr. Cathy Maddan , Dr. Andre Brathwaite, Dr. Santosh Kulkarni.

**Completed research awaiting publication.**

- JAMAICA OBSTETRIC TEACHING AND TRAINING IN EMERGENCIES (JOTTIE) and its effectiveness. – Dr. Carole Rattray, Dr. Michelle Campbell Mitchell, Dr. Cathy Maddan, Dr. Lenroy Bryan.

**Committees**

- National Committee for Maternal Health, Ministry of Health & Wellness.
- National Guideline Development Committee for Obstetric Emergencies
- Team Member of Jamaica Obstetric Teaching and Training in Emergencies (JOTTIE).

**Charity**

- Scholarship Founder for Hampton Old Girls Association – Best Performance in Science at CXC.
- Saxthorpe Methodist Church Medical Clinic.
- Elsie Beaman Home for Girls Medical Volunteer.

**Dr. Michelle Campbell Mitchell**

**Position: Associate Lecturer**

Research in preparation

- The Impact of Pregnancy and the Puerperium on Female Sexual Function in Jamaica -  
Dr. Cathy Maddan, Dr. Michelle Campbell Mitchell, Dr. Lenroy Bryan, Dr. Melissa Forbes, Dr. Dominique Goldson.
- The Effect of UV Light Treatment and Perineal Healing after a Vaginal Delivery  
Dr. Cathy Maddan, Dr. Michelle Campbell Mitchell, Dr. Lenroy Bryan, Dr. Jody-Ann White.

#### **Research in progress**

- A Randomized Controlled Trial of Tranexamic Acid for the Reduction of Blood Loss in Women Undergoing Caesarean Section Deliveries.  
Dr. Carole Rattray, Dr. Jacqueline Minott, Dr. Leslie Samuels, Dr. Michelle Campbell Mitchell, Dr. Astrid Batchelor, Dr. Andre McDaniel, Dr. Althea Mitchell.

#### **Completed research awaiting publication**

- Jamaica Obstetric Teaching and Training in Emergencies (JOTTIE) and its effectiveness  
Dr. Carole Rattray, Dr. Michelle Campbell Mitchell, Dr. Cathy Maddan, Dr. Lenroy Bryan.

#### **Presentations**

- A Randomized Controlled Trial of Tranexamic Acid for the Reduction of Blood Loss in Women Undergoing Caesarean Section Deliveries  
Dr. Carole Rattray, Dr. Jacqueline Minott, Dr. Leslie Samuels, Dr. Michelle Campbell Mitchell, Dr. Astrid Batchelor, Dr. Andre McDaniel, Dr. Althea Mitchell.
- Jamaica Obstetric Teaching and Training in Emergencies (JOTTIE) and its effectiveness  
Dr. Carole Rattray, Dr. Michelle Campbell Mitchell, Dr. Cathy Maddan, Dr. Lenroy Bryan.

Both papers are to be presented at ACOG Annual District Meeting, September 27–29, 2019.

### **MEDICAL CHARITY/PUBLIC SERVICE**

- Hope Gospel Assembly Care Clinic
- Hope Gospel Assembly Back-To-School Fair Charity

### **NON-ACADEMIC STAFF**

Mrs. McLeanGuthrie, Senior Secretary

Miss Shauna Grant, Junior Secretary

Mrs. Wheeler Grant & Mrs. McLean, Laboratory Attendants

Miss Adequate Benjamin, Laboratory Technician

### **INTERNATIONAL Publication History**

Issue published online: 13 July 2010

Article first published online: 13 July 2010

### **VISITORS TO THE DEPARTMENT**

- Visiting ISGE surgeons from Belgium, Italy, Iran and India performed endoscopic cases in the HWFMU, alongside myself and other Firm A consultants, from September 24–28 2018.
- Professor Anthony Armson – Dalhousie University – MFM.
- Dr. Ian Harley – Belfast University – External Examiner Gynaecological Oncology.

### **PUBLICATIONS**

- K Carroll, A M Pottinger, S Wynter and V DaCosta Marijuana use and its influence on sperm morphology and motility: identified risk for fertility among Jamaican men *Andrology*. Accepted for publication 23 May, 2019.