

DEPARTMENT OF MICROBIOLOGY

Professor John F. Lindo, BSc, PhD UWI – Head of Department

WORK OF THE DEPARTMENT

During 2007/2008 there was a 6% increase in the numbers of clinical specimens processed by the laboratory (58,113) compared with 2006/2007 (54,946). A programme of universal testing for HIV infection among patients admitted to the University Hospital of the West Indies was implemented in collaboration with the Ministry of Health, Jamaica.



The department successfully completed the WHO External Quality Assessment Programme for the Detection of Type A Human and Avian Influenza Virus by PCR with a score of 100% in a turn around time of three days. We thank CARIGEN for collaborating with the department on this project.

There was an increase in per capita publication output for the academic staff from 0.4 in 2006/2007 to 1.2 for the period under review from a staff of 10 academics.

PAPERS PRESENTED

Non peer reviewed

Nicholson A

- Approach to Antibiotic Therapy, Caribbean Association of Clinical Microbiologists (CACM), Kingston, Jamaica 2007
- Update on Current Antibiotic Treatment Options, Medical Association of Jamaica Annual General Meeting, 2007
- Antimicrobial Resistance, Caribbean College of Physicians, Kingston, Jamaica 2007

- Rolling Back the Tide of Antibiotic Resistance, Freeport, Bahamas, 2007
- Antimicrobial Resistance, South Central Medical Association of Mandeville, Jamaica 2007

Peer reviewed abstracts/papers

WIMJ = *West Indian Medical Journal*

- Christian N, Roye-Green K, Smikle M. Epidemiological study of multidrug resistant *Klebsiella pneumoniae* by pulsed field gel electrophoresis at the University Hospital of the West Indies 2000-2004. Caribbean Health Research Council 53rd Annual Council and Scientific Meetings, April 2008, Paramaribo, Suriname. WIMJ 2008; 57 (Supp 2), 33.
- Saunders GL, Nicholson A, Roye-Green K, Bodonaik NC. Gentamicin Susceptibility and Extended-Spectrum Beta-Lactamase Activity in *Klebsiella pneumoniae* and *Escherichia coli* at the University Hospital of The West Indies. 15th Annual Conference of the Faculty of Medical Sciences, November 2007, Kingston, Jamaica. WIMJ 2007; 56 (Suppl. 3): 9
- Bodonaik NC, Heslop O, Willis R. Comparative in-vitro evaluation (MICs) of tigecycline with nine other antibiotics against clinical isolates of *Streptococcus pneumoniae* encountered in Jamaica. 13th International Congress on Infectious Diseases (13th ICID), Kuala Lumpur, Malaysia, June 2008.
- Bodonaik NC and McMorris N. Methicillin Resistance in Strains of *Staphylococcus aureus*: Periodic surveillance data in 25 years in a Tertiary Care Teaching Hospital of a developing country. 13th International Congress on Infectious Diseases (13th ICID), Kuala Lumpur, Malaysia, June 2008.
- Bodonaik NC and Heslop O. Highly susceptible strains of typhoid bacilli encountered in Jamaica. 13th International Congress on Infectious Diseases (13th ICID), Kuala Lumpur, Malaysia, June 2008.
- Christie CDC, Steel-Duncan J, Palmer P, Pierre R, Harvey KM, Johnson N, Samuels L, Dunkley-Thompson J, Singh-Minott I,

Anderson-Allen M, Billings C, Evans-Gilbert T, Rodriguez B, Moore J, McDonald-Kerr C, Taylor F, **Smikle M**, Williams E, Whorms S, Davis D, Mullings A, Morgan O, McDonald D, Alexander G, Onyonyur A, Hylton-Kong T, Weller P, Harris M, Haughton D, Woodham A, Carrington D, Figueroa JP. Effectiveness of Highly Active Antiretroviral Drugs in Preventing Mother To Child HIV Transmission and Reducing HIV-attributable Mortality in Jamaican Children. 18th International AIDS Conference: AIDS 2008, Abstract: A-072-0092-07072, Mexico City, August 3-8, 2008.

- Pierre RB, Singh-Minott I, Moore J, Carrington D, Harvey K, **Smikle M**, Figueroa JP, Christie CDC; Kingston Pediatric & Perinatal HIV/AIDS Program (KPAIDS) Research Group. Failure of antiretroviral therapy (ART) in Jamaican children: Poster presentation and Abstract, 18th International AIDS Conference, Mexico, August 3-8, 2008.

PUBLICATIONS

- * Barton M, Bell Y, Thame M, **Nicholson A**, Trotman H. Urinary Tract Infection in Neonates with Serious Bacterial Infections admitted to the University Hospital of the West Indies. *WIMJ* 2008; 57 (2): 101
- * Williams LA, Igietseme JU, Whittaker JA, **Smikle MF**, Bailey-Shaw YA, Barton EN. Immunological evidence supporting the use of extracts from *Boehmeria jamaicensis* Urb for treating the common cold and sinus infections. *WIMJ*. 2007 Dec; 56 (6):487-90.
- * McFarlane-Anderson N, Bazuaye PE, Jackson MD, **Smikle MF**, Fletcher HM. Cervical dysplasia and cancer and the use of hormonal contraceptives in Jamaican women. *BMC Women's Health*. 2008 May 30; 8:9.
- * Akpaka PE, **Smikle MF**. Molecular epidemiology of methicillin resistant coagulase-negative staphylococci isolates from blood specimens at a tertiary hospital in the Caribbean. *WIMJ*. 2007 Oct; 56(5):464-5.

- * Williams W, Sargeant LA, **Smikle MF**, Smith R, Edwards H, Shah D. The outcome of lupus nephritis in Jamaican patients. *Am J Med Sci*. 2007 Dec; 334(6):426-30.
- * Christie CDC, Steel-Duncan J, Palmer P, Pierre R, Harvey K, Johnson N, Samuels LA, Dunkley-Thompson J, Anderson M, Billings C, Evans-Gilbert T, Rodriguez B, McDonald C, Moore J, Taylor F, **Smikle MF**, Williams E, Whorms S, Davis D, Mullings A, Morgan O, McDonald D, Alexander G, Onyonyor A, Hylton-Kong T, Weller P, Harris M, Woodham A, Haughton D, Carrington D, Figueroa JP. Paediatric and Perinatal HIV/AIDS in Jamaica: An International Leadership Initiative, 2002–2007. *WIMJ* 2008; 57:3:204-214.
- * Johnson N, Palmer P, Samuels LA, Morgan O, Onyonyor A, Anderson M, Moore J, Billings C, Harvey K, Mullings A, McDonald D, Alexander G, **Smikle MF**, Williams E, Davis D, Christie CDC. Evolving Care of HIV-infected Pregnant Women In Jamaica – From Nevirapine to HAART. *WIMJ* 2008; 57:3:215-221.
- * Pierre RB, Steel-Duncan JC, Evans-Gilbert T, Rodriguez B, Moore J, Palmer P, **Smikle MF**, Davis D, Figueroa JP, Christie CDC. Effectiveness of Antiretroviral Therapy in Treating Paediatric HIV/AIDS in Jamaica. *WIMJ* 2008; 57:3:222-229.
- * Barnett AT, Crandon I, **Lindo JF**, Gordon-Strachan G, Robinson D, Ranglin D. An assessment of the process of informed consent at the University Hospital of the West Indies. *J Med Ethics*. 2008 May; 34 (5):344-7.
- * Gatei W, Barrett D, **Lindo JF**, Eldemire-Shearer D, Cama V, Xiao L. Unique *Cryptosporidium* population in HIV-infected persons, Jamaica. *Emerg Infect Dis*. 2008 May; 14(5):841-3.
- * Lammie PJ, **Lindo JF**, Secor WE, Vasquez J, Ault SK, Eberhard ML. Eliminating lymphatic filariasis, onchocerciasis, and schistosomiasis from the Americas: breaking a historical legacy of slavery. *PLoS Negl Trop Dis*. 2007 Nov 7; 1(2):e71.
- * Barrett DM, Steel-Duncan J, Christie CDC, Eldemire-Shearer D, **Lindo JF**. Absence of Opportunistic Parasitic Infestations among Children Living with HIV/AIDS in Children's Homes in Jamaica. *WIMJ* 2008; 57 (3):252-255.

PUBLIC SERVICE

Professor Monica Smikle

- Technical Assessor, National Accreditation Company
- Member, Core Working Group, Influenza (Pandemic) Preparedness

Dr Sandra Jackson

- Member, Surveillance subgroup, Influenza (Pandemic) Preparedness Plan Committee

Dr Ivan Vickers

- Member, Surveillance sub-group, Influenza (Pandemic) Preparedness Plan Committee

Professor John Lindo

- President, Rotary Club of New Kingston
- Consultant, World Bank on the Health of School age children in the Caribbean

Dr Alison Nicholson

- President, Caribbean Association of Clinical Microbiologists

Dr Nabin Bodonaik

- Member, Council of the International Society for Infectious Diseases(ISID)
- Member, Professional Development Working Group of the International Society for Infectious Diseases(ISID)

CATEGORIES OF STUDENTS

Undergraduate

The department continued to provide undergraduate training in the MBBS, BBMedSci, BSc Nursing and BSc Physical Therapy. The department participated in the preparatory work for delivery of the Microbiology/Pathology Clerkship at the UWI Western campus.

The Louis Grant Prize was awarded to Ephraim Ingram who attained the highest score in the microbiology aspect of the Pathology/Microbiology clerkship examination.

Postgraduate

Ms Nicole Christian and **Ms Natalie Smith** were awarded the MSc (Medical Microbiology) and **Dr Karen Shaw** was awarded the DM (Medical Microbiology).

Six candidates were registered in graduate programmes in medical microbiology.

These included two PhD and three MSc candidates. A review of the regulations and syllabus of the MSc (Medical Microbiology) has begun to bring the program in line with similar degrees offered by the UWI.

OBITUARY

Dr Geoffrey Lance Saunders - Lecturer (November 2001 to October 2007)

AWARDS

Principal's Research Award for "The Best Publication Faculty of Medical Sciences" for "Plasmodium malariae in Haitian Refugees Jamaica" John Lindo and collaborators Research Day 2008.