## DEPARTMENT OF MICROBIOLOGY

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#### WORK OF THE DEPARTMENT



Microbiology Department achieved most of its objectives for the academic year 2004/2005. A total 61,787 clinical specimens were processed during 2004/2005 compared to 67,122 in 2003/2004. There were increases in the number of specimens processed by Bacteriology Section (0.2%) and Virology Section (9.0%). Microbiology Department had some success with its income generating activities. Contractual arrangements

were made with the Ministry of Health to provide immunology and molecular diagnostic services to the HIV/AIDS Treatment and Policy Project. During 2004/2005 the department also acquired major new equipment which would upgrade its diagnostic and research capabilities. The Department continued to receive favourable results for the undergraduate medical microbiology courses (mean score  $4.1\pm~0.8$ ) and teaching assessment of lecturers (mean score  $4.5\pm~1.1$ ). The per capita publication output for the 10member academic staff over the period under review was 1.1.

Several members of staff were appointed during the period under review. Dr Ivan Vickers was appointed lecturer effective August 1, 2004. Kere-Ann Lindsay-Nelson and Wendy Waugh were appointed senior medical technologists; Maizie Moncrieffe-Williams, secretary and Peter Davis, laboratory attendant effective from July 1, 2005. Derrick Brown was promoted to stores assistant and Anthony Davis to chief laboratory attendant in charge effective May 1, 2005. Senior medical technologists Olivene Christie, Cheryl Chambers and Lennox Pryce were granted assisted passage leave and Trischa-Day Williams study leave for academic year 2004/2005. Oliver Campbell resigned his post of laboratory attendant August, 2004 after 15 years of service to the University. Dr Gwendolyn Dowe, senior lecturer retired July 31, 2005. The refurbishment of the physical plant was one major target that was not achieved. The reason for deferment is not clear as funds were identified to get the job done.

Microbiology Department's main targets for 2005/2006 include refurbishment of the Department, increasing the publications output per capita, graduation of the graduate students currently in the Department and enhancing the research activities.

#### PAPERS PRESENTED

Faculty of Medical Sciences 13th Annual Conference. Kingston, Jamaica. November 2004.

• "The association between tumour necrosis factor (TNF-\_) – 308 polymorphism and cervical dysplasia in Jamaican women." **PE Bazuaye,** Fletcher, MF Smikle, M Jackson, N

#### McFarlane-Anderson.

- . "The variation of dermatophyte species cultured (for Tinea capitis) from hair and scalp samples at the University Hospital of the West Indies." **A East-Innis**, A Nicholson.
- . "Molecular epidemiology of blood isolates of methicillin resistant coagulase negative staphylococci at the University Hospital of the West Indies." PE Akpaka, N Christian, NC Bodonaik, MF Smikle.
- . "The outcome of lupus nephritis in a cohort of Black Jamaican patients." **W** Williams, LA Sargeant, MF Smikle, R Smith, H Edwards, D Shah.
- . "Preliminary results of a study of opportunistic intestinal parasitic infections among persons living with HIV/AIDS in Jamaica." **DM Barrett**, A Nembhard, RW Sue-Ho, N Williams, D Eldermire-Shearer, J F Lindo.
- . "The prevalence of coagulase negative staphylococci in blood cultures at the University Hospital of the West Indies." **PE Akpaka**, N Christian, N C Bodonaik, MF Smikle.
- "Epidemiology of admissions for sports related injuries at the University Hospital of the West Indies." **J Williams**

Johnson, AH McDonald, N Meeks-Aiken, E Williams, JF Lindo, P Singh.

. "Isolation and identification of pathogenic Acanthamoeba strains from water sources in Jamaica West Indies." J Lorenzo-Morales, DM Barrett, A Ortega-Rivas, B Valladares, **JF Lindo**.

# Caribbean Health Research Council 50<sup>th</sup> Annual Council and Scientific Meetings. Trinidad and Tobago, April 2005.

- . "Seroprevalence of sexually transmitted infections among accepted and deferred blood donors in Jamaica." IE Vickers, AR Braithwaite, M Levy, JP Figueroa.
- . "Does a choice of condoms impact STI incidence? a randomized controlled trial." MJ Steiner, T Hylton-Kong, JP Figueroa, M Hobbs, F Behets, MF Smikle, K Tweedy, S Powell, L McNeil, A Braithwaite.
- . "Asymptomatic bacteriuria in sickle cell disease." V Cummings, S Ali, TE Forrester, K Roye-Green, M Reid.
- . "Epidemiology of blood isolates of coagulase negative staphylococci at the University Hospital of the West Indies" PE Akpaka, N Christian, NC Bodonaik, MF Smikle.
- . "Coagulase negative staphylococci from blood cultures: contaminants or pathogens?" NC Bodonaik, **S Moonah**.
- . "Impact of lifestyle risk intervention in high school children in Jamaica." **RB Pierre,** P Swaby, R Sue-Ho, C Walters.
- . Intestinal helminthic parasites of wild rats (Rattus sp.) in Jamaica and their zoonotic potential. **CA Waugh**, JF Lindo, P Foronda, M Angeles Santana, J Lorenzo-Morales, R D Robinson.
- . "Class I HLA -A-B haplotypes and tumour necrosis factor (TNF- $\_$ ) 308 polymorphism and cervical dysplasia." **PE Bazuaye**, H Fletcher, MF Smikle, M Jackson, N McFarlane-Anderson.
- . "A complex recombinant HIV-1 (CRF 06 cpx) was the predominant strain in Burkina Faso by the Mid-1980s." D Pieniazek, **A Schaefer,** J Mika, L Rose, O Heslop, M Rayfield, T Folks, M L Kalish. The 11<sup>th</sup> General Conference
  - on Retroviruses and Opportunistic Infections. San Francisco. 2004.

#### **PUBLICATIONS**

## Refereed Journal Articles

## WIMJ = West Indian Medical Journal

- .\* "CDC defined diseases and opportunistic infections in Jamaican children with HIV/AIDS." R Pierre, JC Steel-Duncan, T Evans-Gilbert, B Rodriquez, P Palmer, MF Smikle, S Whorms, I Hambleton, JP Figueroa, CD Christie. *WIMJ*. 53, 5 (2004): 315 -21
- .\* "Uptake of interventions, outcomes and challenges in caring for HIV-exposed infants in Kingston, Jamaica." J C Steel-Duncan, R Pierre, T Evans-Gilbert, B Rodriquez MF Smikle, P Palmer, S Whorms, I Hambleton, JP Figueroa, CD Christie. WIMJ. 53, 5 (2004): 308 -14.
- .\* "HIV seroprevalence, uptake of interventions to reduce mother to child transmission and birth outcomes in greater Kingston, Jamaica." N Johnson, AA Mullings, KM Harvey, G Alexander, D McDonald, MF Smikle, E Williams, P Palmer, S Whorms, JP Figueroa, CD Christie. *WIMJ*. 53, 5 (2004): 297 -302.
- .\* "Antibiotic sensitivity of *Helicobacter* pylori in Jamaica." MG Lee, M Arthurs, MF Smikle, G Dowe, V Levy, EN Barton. *WIMJ*. 53, 6 (2004): 374 -7.
- .\* "Influenza activity in Jamaica, 2003-2004: detection of the newly emerged influenza A Fujian/411/2002 (H3N2)." ST Jackson, G Dowe, MF Smikle. WIMJ. 53, 4 (2004): 258 -9
- \* "The epidemiology of mycotic vulvovaginitis and the use of antifungal agents in suspected mycotic vulvovaginitis and its implications for clinical practice." ST Jackson, L Rainford, A Miller, AM Mullings. *WIMJ*. 54, 3 (2005): 192

5.

- .\* "Infections linked to personal appearance workers." I E Vickers. WIMJ. 53, 6 (2004): 367.
  - \* "Photobacterium damsela bacteremia in a child with sickle cell disease." JM Knight-Madden, M Barton, N Gandretti, AM Nicholson. Paediatr Infect Dis J. 24, 7 (2005): 654-5.
- .\* "A peptide that shares similarity with bacterial antigens reverses thrombogenic properties of antiphospholipidantibodies in vivo." SS Pierangeli, M Blank, X Liu, R Espinola, M Fridkin, MV Ostertag, K Rove-Green, EN Harris, Y Shoenfeld. *J Autoimmun.* 22, 3 (2004): 217 -25.
- .\* "An unusual presentation of group B streptococcal sepsis." M Thame, L Franklin, J Young, C Hall, GL Saunders, NP Williams. *WIMJ.* 53, 6 (2004): 416 -9.
  - \* "Acanthamoeba infection as a cause of severe keratitis in a soft contact lens wearer in Jamaica." Z Wynter-Allison, JL Morales, D Calder, K Radlein, A Ortega-Rivas, JF Lindo.

    Am J Trop Med Hyg. 73,1 (2005) 92 -4.

### **CATEGORIES OF STUDENTS**

## Undergraduate

The undergraduate medical microbiology programme was taught to 394 students in different year groups of the MBBS curriculum and BBMed Sci programme.

## Postgraduate

Seven candidates were in graduate programmes in medical microbiology. These include the DM (2 candidates), PhD (2 candidates), MSc (2 candidates) and M Phil (1 candidate).