

DEPARTMENT OF PATHOLOGY

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– Head of Department

WORK OF THE DEPARTMENT



The performance of the Department in the period under review is highly commendable considering the challenging conditions. The research of the Department speaks for itself and has been recognized by the University by receiving the Principal's research awards not only for outstanding research but also for project attracting most research funds as well as for outstanding contribution to retro-virology.

The staff are equally and heavily involved not only in teaching both undergraduates reading for the MBBS degree and to postgraduates reading for the DM degree, but also in "new" curriculum development, implementation and assessment. The quality of the teaching was assessed by students for individual lecturers and the percentage score ranged from 86.5 to 98.8.

There is a total of 19 academic staff members in the Department, two of whom were away for further studies. A total of 15 peer review articles were published in international journals and a total of 20 papers were presented at various local and international conferences.

Two members of staff went overseas for further studies in Medical Genetics and Paediatric Pathology respectively. Dr. Tracey Gibson who went to Glasgow, Scotland for a course in Medical Genetics (will be returning in September 2005) and Dr. Karen Bishop who is studying Paediatric Pathology at The Hospital for Sick Children in Toronto, Canada, will be returning in January 2006. On her return, Dr. Gibson is desirous of setting up a Medical Genetics laboratory, a one of its kind, it is believed, in the Caribbean in order to offer Genetics Studies for dysmorphic children initially and then to the adults genetic oriented problems. Dr. Bishop on her return would be able to use this laboratory for her work in paediatric pathology as well.

The Department in the coming year will be able to produce research work of outstanding quality and also contribute to a high level training of undergraduate and postgraduate students for MBBS and DM degrees, respectively.

TEACHING

The Department of Pathology is a section of the Faculty of Medical Sciences through which the students are awarded MBBS degree. Students, however, have to be successful at a subject examination. The course for MBBS degree is five years and is divided into two stages – Stage I where the Pathology teaching is done mainly by didactic lectures, tutorials, seminars, POLs etc. The Pathology teaching in Stage II is done in clerkship.

The Pathology Department is continuing to execute undergraduate teaching. At Stage I level, three classes were taught in the period 2004/5 i.e. classes of 2007, 2008 and 2009. The class of 2006 has 105 students while the class of 2007 has 110 and the class of 2008 has 117 students. The teaching

was modular and Pathology lectures were in each module taught in these three years which required heavy involvement of all the academic staff members. In addition to didactic lectures, the staff members were also involved in tutorials, seminars and POLs.

The assessment was done at the end of each module, at the end of each semester and at the end of three years (class of 2007 and 2008) where students were awarded the BMedSci degree following which they were allowed to proceed to Stage II.

The clerkship was in Stage II where the class was divided into five groups and each group did 10 weeks intensive clerkship. The academic staff was also heavily involved in teaching and assessing. In addition, the resident staff was also involved in clerkship teaching. These residents, some of whom are appointed as Teaching Assistants and others are not, all in addition also assisted in teaching Anatomy at their practical/demonstration classes.

Postgraduate training leading to DM in Anatomical Pathology, Haematology and Chemical Pathology degrees continued for a near full complement of postgraduate students. The Department is proud to train Pathologists/Haematologists for the Caribbean and so far many territories have been enriched by these professionals viz. Antigua, the Bahamas, Barbados, Belize, St. Vincent, Trinidad and Tobago etc.

A total of five candidates sat the Part I examination in Anatomical Pathology DM programme, three in October/November 2004 and two in April/May 2005. Two of the three were successful in October/November 2004 and one in April/May 2005. Two candidates appeared for DM (Haematology) Part II examination in April/May 2005 of which one was successful. Currently there are a total of five students in Anatomical Pathology and four in Haematology reading for the DM.

The courses in basic and general Pathology to undergraduates at the University of Technology reading for BSc Pharmacy programme, at the UWI to undergraduates pursuing BSc Physical Therapy programme and to students of the School of Radiography at the University Hospital of the West Indies were also taught by members of academic and resident staff.

STAFF

Two members of staff earned senior promotion. Drs. Carlos Escoffery and Gurendra Char were promoted to professors in January and June 2005, respectively. Dr. Doreen Brady-West was awarded tenure and Drs. Loretta Buchner-Daley and Joye Taylor-Huston were made permanent.

Several members of staff continued to be involved in curriculum development, i.e. in planning and execution. Drs. Elaine Williams and Eric Choo-Kang served on the Curriculum and Assessment Committees. They were also members of Stage I and Stage II Committee. Drs. Nadia Williams and Gilian Wharfe were also serving on Stage II Planning Committee. Dr. Elaine Williams was also a member of the Faculty Staff/Student Liaison Committee.

Prof. Kathleen Coard was heavily involved in staff training workshops where she conducted workshops for academic and senior administrative staff of the Faculty in particular and the University in general.

Dr. Donovan McGrowder, a lecturer in Chemical Pathology section of the Department attended a training course conducted by the Association of Clinical Biochemists in Leeds, United Kingdom in April 2005.

Dr. Tracey Gibson, a temporary lecturer was enrolled in an MSc course in Molecular Genetics at the University of Glasgow in the United Kingdom from September 2004. The expected date for completion of her degree is August 2005 and she will resume her duties in the Department from some time in September 2005.

Dr. Karen Bishop, another temporary lecturer who was initially awarded a six months Fellowship at the Hospital for Sick Children in Toronto, Canada in January 2005 in Paediatric Pathology which has been extended to one year (based on her excellent performance), is expected to be back at UWI from January 2006.

Dr. Garfield Blake, a lecturer whose interest is Forensic Pathology and who had established ties with staff at the Norman Manley Law School continued dialogue with respect to medico-legal aspects of autopsies. He was instrumental in organizing formal seminars in continued understanding between legal and medical personnel in medico-legal procedures. He was also instrumental in organizing teleconferences whereby several members of the academic, and to some extent technological staff, have had further opportunities to develop their skills. These teleconferences were arranged and sponsored by the American Society for Clinical Pathologists (ASCP) and continue to play a significant role in continuing medical education (CME) for the departmental staff. The staff members also attended various local and international educational meetings where they were informed of recent developments in their fields of interests and also obtained CME hours. Many of the staff members have presented papers at these meetings as well.

Staff was actively involved in research which was borne out by a number of publications in various Journals and many presentations at local and international conferences. Research continued on HTLV-I infection, prostate cancer, breast cancer, analysis of medicolegal (Coroner's) autopsies, evaluation of brain biopsies utilizing Sterotexy methods, smear diagnosis in neurosurgical biopsies, strokes in Jamaican patients, spontaneous intra-cerebral hemorrhages, childhood tumour of central nervous system, a review of meningioma at UHWI, renal biopsy evaluation in sickle cell disease, outcome of patients with various classes of lupus nephritis, immunohistochemical studies, renal and liver cadmium and heavy metal concentration with International Centre for Environmental and Nuclear Sciences (ICENS), GI pathology related to polyps, hereditary polyposis syndrome and hereditary non-polyposis syndrome, colorectal cancer, Helicobacter Pylori associated diseases, carcinoid tumours and endometriosis of Gastro-Intestinal track, exfoliative and aspiration cytopathology, maternal mortality at UHWI, receptor status in breast cancers, thromboembolic diseases with uterine fibroids, aplastic anaemia in Jamaica, use of fresh frozen plasma at UHWI, usefulness of serum ferritin in assessing iron status in cystic fibrosis, analysis of urinary catecholamine and metaperesis in pheochromocytoma, serum uric acid markers of pre-eclampsia at UHWI.

LABORATORIES

The project undertaken to refurbish the Haematology and Chemical Pathology laboratories in the first phase and the consultant's offices including seminar room in the second phase was completed by early 2004. However, with the passage of hurricane Ivan there was considerable damage particularly to the sections of the roof which lead to flooding and damage to furniture and equipment. Until now the flooding occurs every time there is heavy rain. This has been repeatedly reported to the project office in an effort to have the problem rectified but to no avail. The Project Office promised to commence repairs soon.

Funding for supplies was extremely inadequate for proper and efficient running of the Departmental laboratories. For the same reason, many tests, some of which were of dire importance could not be offered due to the unavailability of the appropriate reagents. The period of unavailability was indeed a struggle and very frustrating for all members of staff and more so for the technical staff.

A master plan should be developed and budgetary allocation made for the replacement of equipment in the various laboratories so that at the end of their life span or in the event of damage there is timely replacement. Many of the equipment are extremely sensitive to voltage fluctuation which

happens quite frequently and unplanned replacement can cause severe strain on the budget.

With the advent of improved technology and greater knowledge of the subject/diseases, more sensitive and specific tests are offered which are expensive to perform thus cause further strain on budgetary allocation. However, being a flagship institution and attached to the only teaching hospital in the country we should be the first to provide these tests.

RESEARCH

The Department as usual continued to maintain high research output as seen by a number of articles published in peer review journals and many research in progress. There are certain specific areas, chief amongst which is the HTLV-I Project, a joint collaborative project between the Department and the Viral Epidemiology Branch of the National Cancer Institute/National Institute of Health (NCI/NIH), Bethesda, Maryland, USA. This project has been in existence since 1983 and has as its main objective to investigate all aspects of HTLV-I infection in Jamaica. Over the years various aspects of the epidemiology, disease association, and natural history have been thoroughly researched. The study which started in the previous year continued in the year under review viz HTLV-I infection in adults including the development of a cohort of blood donors. The registration of HTLV-I lymphoma/leukemia patients in the island also continued in the year under review.

The HTLV-I Project, Department of Pathology, UWI and the NCI, Bethesda, Maryland, USA were joint hosts of the 12th International Conference on Human Retrovirology held in Montego Bay, Jamaica, on June 22-25, 2005. More than 250 delegates from HTLV-I endemic and non-endemic countries participated in the conference which as in previous years brought together scientists and clinicians in the field of retrovirology to bridge discoveries about HTLV-I from the laboratory to clinical trials with a view to improve the health of those infected with the virus. Professor Barrie Hanchard and the Dean, Professor Owen Morgan from this Department and the Faculty respectively, were the local hosts of this conference. There were a total of 247 presentations (68 oral and 179 posters). Some of the local researchers from this Department were a part of the oral and poster presentations.

The other major research undertaken by the academic staff included breast cancer studies, colorectal cancer studies, leukemia studies, statistical analysis of cancer studies, prostate cancer studies, renal involvement in SLE and sickle cell disease studies, among others.

PAPERS PRESENTED

- . • “Mother-Child HLA Concordance as a Risk Factor for HTLV-1 Transmission” Biggar RJ, Ng J, Kim N, Hisada M, **Cranston B, Hanchard B**, Maloney E. 12th International conference on human retrovirology. June 2005
- . • “An Unusual Dermatological Pathology Presentation of Adult T-Cell Lymphoma” East Innis AD, **Hanchard B, Wharfe G**. 12th International conference on human retrovirology. June 2005
- 1/1. • “Birth Order and Mother-To-Child Transmission of HTLV1” Brooks KR, Karmaus W, Trivedi H, Pate E, **Hanchard B**. thInternational conference on human retrovirology. June 2005
- . • “Common Genetic Variants in Cytokine Genes and Risk of Human T-Cell Lymphotropic Virus Type I Infection In Jamaican Children” Brown B, Brown E, Yeager M, Welch R, **Cranston B, Hanchard B**, Hisada M. 12th International conference on human retrovirology. June 2005
- . • “Evaluation of Predictive Markers of HTLV-I-Associated Disease in Jamaica” Vanveldhuisen PC, Sawada T, Miley W, Levine PH, **Hanchard B, Cranston B**, Hisada M. 12th

International conference on human retrovirology. June 2005

. • “Epidemiology of HTLV-1 Infection: Where Do We Go From Here?” Mueller N, Okayama A, Stuver S, **Cranston B, Hanchard B**, Birman B, Hisada M. 12th International conference on human retrovirology. June 2005

. • “HTLV-1/11 Western Blot Seroindefinite Status and Its Association with Exposure to Prototype HTLV-1” Yao K, Hisada M, Maloney E, Yamano Y, **Hanchard B**, Wilks RJ,

Rios M, Jacobson S. 12th International conference on human retrovirology. June 2005

12. • “Follow-up Study of HTLV-1 Viral Markers in Children in Jamaica” Maloney E, Yamano Y, Vanveldhuisen P, Sawada T, Kim N, **Cranston B, Hanchard B**, Jacobson S, Hisada Mth International conference on human retrovirology. June 2005

. • “HTLV-1 Infection is Associated With Elevated Plasma Biomarkers of Immune Activation in Jamaica but Not In Japanese Carriers” Birman B, Mueller N, Breen EC, Stuver S, Okayama A, MartINEz-Maza O, Raker CA, Aziz N, Li H, **Cranston B, Hanchard B**, Hisada M. 12th International conference on human retrovirology. June 2005

. • “Serologic and Molecular Characteristics of Atypical HTLV Western Blot Banding Patterns in Jamaica Blood Donors” Li H, Walters M, Carrington M, Headley C, Amarasinghe A, Goeder J, **Cranston B, Hanchard B**, Hisada M. 12th International conference on human retrovirology. June 2005

. • “The Pathology of Congenital Heart Disease”, **Coard, Kathleen CM** 4th annual perinatal audit and symposium. Kingston, Jamaica. February 2005

. • “Utilization of Sterotaxy in Brain Biopsy -A More Refined and Accurate Method of Localizaton”, Bruce C, **Jaggon J**, Crandon I, **Char G**, Donaldson G, Patten D.

11. • “Non-infectious Pulmonary Complication of HIV” **Williams E**. Jamaican Association of Clinical Pathologists, thannual symposium. Kingston, Jamaica. November 2005

. • “Gastrointestinal carcinoids in Jamaica: 1966 -2002” Gaskin DA, Gaskin PS, **Williams NP**. Caribbean Health Research Council, 48th annual and scientific meetings. Tobago, April 2005

. • “Clinical Challenges in Gastroenterology”, Seaton T, Riddell R, **Williams N**. Association of West Indian Gastroenterologists. 19th annual meeting and International postgraduate course. Antigua. April 2005

. • “Brushings and Washings in the Investigation of Pulmonary Diseases” **Shirley SE** Jamaican Association of Clinical

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Pathologists. 11th annual symposium. Kingston, Jamaica. November 2004

. • “Clinico-pathologic Features of Breast in Jamaica: Preliminary Findings of the Jamaican Breast Disease Study” **Shirley SE**, Mitchell DIG, Soares DP, James MV, **Escoffery CT**, Rhoden AM, **Wolff C, Choy L**, Wilks RJ. Caribbean Health Research Council, 48th annual and scientific meetings. Tobago. April 2005

. • “Changing Incidence of Histological Subtypes in Lung Cancer, Kingston and St. Andrew, 1973-1997”, **Blake G**. Jamaican Association of Clinical Pathologists. 11th annual symposium. Kingston, Jamaica. November 2004

. • “Decreased in vitro Uptake by S-nitrosoglutathione in Adipose Tissues of Normal and Diabetic Rats”, **McGrowder D**, Brown P, Ragoobirsingh D. Diabetes and Aging. 11th annual International conference. Ocho-Rios, Jamaica. March 2005

. • “The Socio-biological Factors Governing Absolute Poverty and Sex, In Terms of

the Number of Children Produced”, Crawford T, Gardner M, **McGrowder D**. 30th Caribbean Studies Association Conference. Santo-Domingo, Republic of Dominica. June 2005

PUBLICATIONS

WIMJ = West Indian Medical Journal

- .* **Hanchard, B**. “Outcome of Early Life Exposure to Human T Cell Lymphotropic Virus Type” *Clinical Infectious Diseases* 41(4), 2005: 542 -3
- .* Hisada M, Stuver SO, Okayama A, Li HC, Sawada T, **Hanchard B**. “Persistent Paradox of Natural History of Human T-lymphotropic Virus Type I: Parallel” Analyses of Japanese and Jamaican Carriers, *Journal of Infectious Diseases* 190(9), 2004: 1605 -9
 - * Li HC, Biggar RJ, Miley WJ, Maloney EM, **Cranston B, Hanchard B**. “Provirus Load in Breast Milk and Risk of Mother-to-Child Transmission of Human T Lymphotropic Virus Type I” *Journal of Infectious Diseases* 190(7), 2004: 1275 -8
- .* Maloney EM, Nagai M, Hisada M. Soldan SS, Goebel PB, Carrington M, Sawada T, Brennan MB, **Cranston B, Hanchard B**. “Prediagnostic Human T Lymphotropic Virus Type I Provirus Loads Were Highest in Jamaican Children Who Developed Seborrheic Dermatitis and Severe Anemia” *Journal of Infectious Diseases* 189(1), 2004: 41-5
- .* **Coard KCM**, Freeman VL. “Gleason Grading of Prostate Cancer: Level of Concordance between Pathologists at the University Hospital of the West Indies” *American Journal of Clinical Pathology* 122, 2004: 373 -376
- .* **Char G, Ramjit C**, Fletcher H, Harvey W. “Granulosa Cell Tumour of the Ovary with Bilateral Mature Teratomas” *WIMJ* 53(2), 2005: 135
- .* Irvine RW, Ramphal PS, **Hall C, Char G**. “Struma Cordis in a Jamaican Woman” *Interact Cardio Vasc Thorac Surg* 4, 2005: 83 -84
- .* Thame M, Franklin L, Young J, **Hall C**, Saunders GL, **Williams NP**. “An Unusual Presentation of Group B Streptococcal Sepsis” *WIMJ* 53, 2004: 416 -9
- .* **Shirley SE, Escoffery CT**. “Usefulness of Touch Preparation Cytology in Postmortem Diagnosis: A Study from the University Hospital of the West Indies” *Internet Journal of Pathology* 3 (No 2), 2005
- .* **Gibson TN, Shirley SE, Escoffery CT**, Reid M. “Discrepancies between clinical and post-mortem diagnosis in Jamaica: A study from the University Hospital of the West Indies” *Journal of Clinical Pathology* 57, 2004: 980 -5
- .* Boyne MS, Sargeant LA, **Bennett FI**, Cooper RS, Forrester TE, Wilks RJ. “Features of Isolated Post-challenge Hyperglycaemia in Jamaican Adults” *WIMJ* 53, 2004:7-11
- .* Thame M, Osmond C, **Bennett F**, Wilks R, Forrester T. “Foetal Growth is Directly Related to Maternal Anthropometry and Placental Volume” *Eur J Clin Nutr* 58(6), 2004: 894 -900
- .* Boyne MS, Gaskin P, Luke A, Wilks RJ, **Bennett FI**, Younger A, Sargeant LA, Adeyamo AA, Cooper RS, Forrester TE. “Energetic Determinants of Glucose Tolerance Status in Jamaica Adults” *Eur J Clin Nutr*. 58, 2004:1666 -1668
- .* Nichols SD, Boyne MS, Thame M, Osmond C, Wilks RJ, **Bennett FI**, McFarlane-Anderson N, Young RE, Forrester TE. “Cold-induced Elevation of Forearm Vascular Resistance is inversely Related to Birth Weight” *Journal of Human Hypertension* 19, 2005: 309 -314
- .* Ragoobirsingh D, **McGrowder D**, Dasgupta T. “The Effect of Nitric Oxide on Glucose Metabolism” *Molecular and Cellular Biochemistry* 263, 2004: 29 -34

– Board of Directors, Jamaica Cancer Society

Dr. G. Blake

- .- Executive member, Jamaican Association of Clinical Pathologists
- .- Executive member, Medical Association of Jamaica

Professor K. Coard

- .- Secretary, Caribbean Cardiac Society
- .- Chairperson, Research Grants Awards Committee of the Caribbean Cardiac Society
- .- Mentor, UWI Mentorship Programme

Dr. N. Williams

- .- Immediate past president, UWI Medical Alumni Association
- .- Executive member, UWI Alumni Association
- .- Mentor, UWI Mentorship Programme
- .- Co-Host, Radio Mona programme, “Radio MD”

Dr. L. Buchner-Daley

– Board member, Penwood Medical and Dental Clinic

Dr. J. Taylor-Houston

– Chairperson, Leukemia CARE

PRIZES AND AWARDS

“Project Attracting the Most Research Funds” – Faculty of Medical Sciences – HTLV Project, Principal Investigator, **B. Hanchard**, Research Day Awards

“Best Publication” – Faculty of Medical Sciences -**B. Cranston, B. Hanchard** and Collaborators, Research Day Awards, January 2005

“Outstanding Contribution to Retrovirology” – **B. Hanchard**, 12th International Conference on Human Retrovirology, Montego Bay, Jamaica, June 2005

“Best Publication” – Faculty of Medical Sciences – Research Day 2005 for **Clinicopathological Features of Prostate Cancer in Jamaican Men Shirley SE, Escoffery CT, Sargeant LA, Tulloch T.**

