DEPARTMENT OF PATHOLOGY

Professor Dipak Shah, MB BS, DCP Baroda (I), DM (Path) UWI

– Head of Department

WORK OF THE DEPARTMENT

For the past several years the Department has been operating under continuing budgetary constraints with no immediate solution to the problem. Despite the fact that a comprehensive budget has been submitted we have not received the allotment.

A review of the Department was undertaken jointly by UWI and UHWI and comprehensive report was produced which was discussed by all the parties



concerned. It was concluded at the time of discussion that UHWI would contribute 50% of reagents costs towards the budget; however, to date this has not materialized.

In addition to the continuing constraints of recurrent budget, the Department is also in need of capital equipment. This is a laboratory based department which require (and has requested for some time) equipment to perform the many tests it offers to UHWI patients. The Department tried to keep the standards for these tests at an international level but had somewhat fallen in the past few years.

The morale of the staff was at an all time low but they must be congratulated for their exemplary performance in both quality research and teaching. We lost one staff member in Anatomical Pathology by way of resignation but were blessed by the addition of another staff member in Haematology. The Department has a complement of 19 academic staff. They were actively involved in teaching and research in addition to diagnostic work. Some staff (Haematology section) do treat patients as well. Despite the low morale and trying conditions, the per capita publication of their research work in Refereed peer reviewed and non-peer reviewed journals was just under one per staff in the year under review. In addition, they presented their work at various local, regional

and international conferences which were of extremely high standards and were well received by the conference attendees.

TEACHING

The Department was heavily involved in teaching Pathology in the MB BS programme at both Stages I and II. The classes taught at Stage I during the period under review were classes of 2009, 2010 and 2011. The number of students in each class was approximately 150, 165 and 170 respectively. The methods of teaching included didactic lectures, seminars, tutorials and POL's. Students (Stage II) from the Class of 2007 which approximate 117 rotated throughout the year for clinical clerkship. The teaching in the clerkship is intensive and is undertaken by academic staff and residents.

The students at both stages were highly motivated and were satisfied with the teaching and assessed lecturers and course highly with scores ranging from 3.8 to 4.9.

The DM programme saw three (3) students (1 from Barbados, 1 from Dominica and 1 from Jamaica) graduating with DM in Anatomical Pathology. The Anatomical Pathology programme had two students one Jamaican and one Barbadian who were in their second year of training. The Haematology section had two graduate students in their first year of training.

The academic and resident staff continued to teach courses in basic and general pathology to students enrolled in the BSc in Pharmacy (University of Technology), BSc Physical Therapy (UWI) and Diploma in Radiography (UWI).

STAFF

Dr. T. Gibson who returned to the Department after acquiring MSc in Medical Genetics from Glasgow, Scotland made progress in trying to establish a Cytogenetic laboratory which is now awaiting approval from the Dean of the Faculty of Medical Sciences. Dr. K. Bishop who returned with her Fellowship in Paediatric Pathology from Toronto, Canada started work in her area of specialty. The Department has been enriched by these two young lecturers whose specialty was not previously available not only in this Department but I believe throughout the region. Their expertise will also help in both undergraduate and post-graduate training.

This Department is one of few in the Faculty where staff members are actively involved in curriculum development and planning. Dr. E. Williams was appointed Deputy Chairperson for the Curriculum Committee. She along with Drs. N. Williams, G. Wharfe, E. Choo-Kang were active members on the Stage I and Stage II Committees. Dr.E.Williams also continues to serve on Staff/Students liaison committee. Professor K. Coard and Dr. E. Williams continued to serve on the Assessment and Examination Committee and Professor K. Coard continued to conduct "item writing" workshops, this time for the academic staff of the Department of Anesthetics and Intensive Care. She along with Dr. E. Williams also participated in special professional workshops entitles "What's New in Item Writing" conducted by Professor Robert Carroll.

LABORATORIES

Pathology is a laboratory based department which has various laboratories including surgical pathology, autopsy pathology, cytopathology, haematology, blood bank and chemical pathology. These laboratories not only produce various results on various samples submitted from out-patients and from the patients admitted on the wards of UHWI but also provides invaluable material for teaching and research.

A total of 644,060 tests were performed by Chemical Pathology laboratory and 163,388 by Haematology laboratory. The Blood Bank collected 3887 units of blood from voluntary donors for the patients requiring whole blood transfusion or transfusion of various blood products and a total of 11,492 blood products were manufactured by them. In addition, the blood bank performed 21,030 tests. The Cytology Laboratory processed 6,016 pap smears and 846 non-gynaecological specimens. The histopathology laboratory processed a total of 10,000 surgical cases and produced 30,154 paraffin blocks and a total of 49,660 slides. These included routine H & E stained slides, some special stains (histochemistry) and some immuno-stained slides including breast receptor. The unavailability of various monoclonal antibodies precluded this laboratory to do other more common and routine immunostain to further identify phenotype of cells. This would help pathologists to cone down on a specific diagnosis which is important for clinicians to treat effectively. This was one of the areas where we had fallen down in our standards.

The major portion of the recurrent budget is spent on reagents for thousands of tests performed by the various laboratories on samples received from UHWI patients. As previously mentioned, the 50% funding for reagents from UHWI to UWI did not materialize.

The long affiliation (23 years) with the National Cancer Institute/National Institute of Health (NCI/NIH), Bethesda, USA and the Department of Pathology for the HTLV-1 project came to an end in December 2006. Over the period the project gathered and analyzed data on several aspects of epidemiology, transmission, disease association and natural history of HTLV-1 both locally and internationally.

Although field work and data collection on this project has been concluded, data analysis and publication of data continues in conjunction with the Viral Epidemiology Branch of the NCI/NIH, Bethesda, USA. A new project for treatment study protocol was signed between NIH and this Department. The Principal Investigator for this project was Dr.Gilian Wharfe.

Although funding for the HTLV-1 Laboratory has ceased from NCI/NIH, the Flow Cytometry for leukemia patients was done from departmental funds and immunoassaying lymphoma cases by UHWI funds.

RESEARCH

Despite the low morale of staff, budgetory constraints, equipment breakdown, heavy teaching and service load, the department has kept the practice of producing quality research work. This is borne out by the number of publications of original work in peer reviewed and non-peer reviewed journals and presentations at local, regional and international conferences by the various staff members. The department was honored by the Principal research award for "Research Project Attracting the most research Fund." This was for the HTLV-1 research project (Principal Investigator Professor Barrie Hanchard)

The staff produced 18 original publications in peer and non-peer reviewed journals and presented 20 papers at various local, regional and international conferences.

The staff is actively involved in research work despite all odds. Although the HTLV-1 project has come to an end, the treatment protocol has been continuing with the Principal Investigator Dr. Gilian Wharfe. The other research being persuaded includes prostate cancer, neuropathology, immunology, breast cancer, HPV-DNA Studies, medico-legal autopsies, aspiration cytology, HTLV-1 associated diseases, nephropathology, gastrointestinal disease, Haemophilia, Blood ordering audit, treatment trial in ATL, hysterectomy and osteoporosis, fibroids and renal failure, renal and liver Cadmium concentration study.

PAPERS PRESENTED

Hanchard B.

- "Clinical Outcomes of HTLV 1 Infection" The Infections Basis of Cancer Pathogenic Insights and Therapeutic Opportunities Symposium, September 2007.
- "HTLV-1 in Jamaica" Advancements in Medicine A US and Caribbean Perspective Conference, Runaway Bay, February 2007

Coard KCM.

- "Cancer in the Caribbean" New Approaches to Cancer Chemoprevention – Ross University School of Medicine, Dominica, 28th Research Day Conference, October 2006.
- "A Review of Granular Cell Tumours at the University Hospital of the West Indies: 1965 to 2006", 52nd Scientific Meeting of the Caribbean Health Research Council, Montego Bay, Jamaica, April 2007.

Escoffery CT.

• "Borderline tumours of the ovary: Pathologist's perspective", 12th Annual Symposium of the Jamaican Association of Clinical Pathologists, Kingston, Jamaica. November 2006.

Williams, Elaine

 (with Joseph Branday, Annette Crawford-Sykes, and Donna Beman). "The Administrative Challenge of New Curricula in Old Medical Schools", 7th Annual conference, Association of Caribbean Higher Administrators (ACHEA) Barbados, July 2007.

N. Williams

 (with H. Fletcher, S. Mitchell, FI Bennett, D. Simms-Stewart, P. Scott, G. Wharfe and RJ Wilks): Difference in cardiovascular risk profile and osteoporosis in Jamaican black women with surgical and natural menopause. Caribbean Health Research Council 52nd Annual Council and Scientific Meetings, Montego Bay, Jamaica, May 2007.

- (with Robert Riddell, and Trevor Seaton): "A Clinical Potpourri in Gastroenterology" Association of West Indian Gastroenterologists, 21st Annual Meeting and International Postgraduate Course 2007, San Jose, Costa Rica, June 2007
- "H Pylori: Is it just a pain in the gut, or is it something serious" Association of West Indian Gastroenterologists Mini-Symposium, San Jose, Costa Rica, June 2007.

Shirley SE.

 (with Sinclair PA, Stennett MA, Codrington G, Bhatt R and Escoffery CT.) "The Pathology of Breast Cancer in Jamaica: The National Public Health Laboratory Study" 15th Annual Research Conference, Faculty of Medical Sciences, UWI, Mona, November 2006.

Jaggon, J.

 "Meningioma: A ten year experience at the University Hospital of the West Indies 1994-2003 – Caribbean Neurosciences Symposium 2007, Montego Bay, Jamaica

Wharfe G.

- "Fertility and Cancer" Jamaican Association of Clinical Pathologist Meeting, Kingston, November 2006
- "Treatment for head and neck cancer" Otolaryngology section Meeting, Texas, USA. November 2006

Lowe D.

- (with Adams P.) "Haemophilic Arthropathy Prevention and Cure", UWI Clinicopathological Conference (World Haemophilia Day), University Hospital of the West Indies, April 2007.
- "Familial Extra intestinal GIST Case Report", Annual Research Symposium, Department of Surgery, Radiology, Anaesthesia and Intensive Care, University Hospital of the West Indies, May 2007.

 "An Update in the Management of Cutaneous T-cell Lymphomas", Dermatology Association of Jamaica, Annual Symposium, Kingston, September 2007.

McGrowder, D.

- "Assessment of iron status in patients with cystic fibrosis using soluble transferring receptor." 15th Annual Research conference and Workshop on Drug Development from Natural Products: Past, Present and Future, UWI, Mona Kingston, Jamaica, November 2007.
- "The Importance of Accreditation to Jamaican Laboratories", GOJ/SIDA ISO/IEC 15189 – Standard for Medical Laboratories Training Workshop and Implementation Programme, Medallion Hall Hotel, Kingston, Jamaica.
- "How Prepared is Medical Laboratories in Jamaica for Accreditation?" Laboratory Accreditation Meeting Caribbean Epidemiology Centre, (CAREC/PAHO/WHO) Port of Spain, Trinidad, June 2007.

PUBLICATIONS

Refereed Journals

WIMJ = West Indian Medical Journal

- * Chaturvedi AK, Wilson M, Sanders-Lewis KA, Kati HA, Urquhart N, Walters MA, Miley W, Cranston B, Hanchard B, Hisada M, "Hematologic and biochemical changes associated with HTLV-1 infection in Jamaica: a report from the population-based Blood donors Study" Clinical Infectious Diseases 2007.
- * Fletcher H, Wharfe G, Williams E, Hanchard B, Mitchell D, "Multiple metachronous malignancies, one patient with three primary malignancies: a case report" Journal of Medical Case Reports May 2, 2007;1:15
- * Goedert JJ, Li HC, Gao XJ, Chatterjee N, Sonoda S, Biggar RJ, Cranston B, Kim N, Carrington M, Morgan O, Hanchard B, Hisada M. "Risk of human T-lymphotropic virus type I-associated diseases in Jamaica with common HLA types" International Journal of Cancer Sept. 1, 2007; 121(5):1092-7

- * Tseng FC, Brown EE, Maiese EM, Yeager M, Welch R, Gold BD, Owens M, Cranston B, Hanchard B, El-Omar E, Hisada M. "Polymorphisms in cytokine genes and risk of Helicobacter pylori infection among Jamaican children", Helicobacter Oct. 11, 2006 (5):425-30.
- * Maloney EM, Yamano Y, Vanveldhuisen PC, Sawada T, Kim N, Cranston B, Hanchard B, Jacobson S, Hisada M. Journal of Infectious Diseases Sept. 1, 2006; 194(5):552-60
- * Horace Fletcher, Gilian Wharfe, Elaine Williams, Barrie Hanchard, Derek Mitchell, "Multiple metachronous malignancies, one patient with three primary malignancies: A case report", Journal of Medical Case Reports, 1-5 (2007) May.
- * Coard K, "Primary Tumors of the Heart: Experience at the University Hospital of the West Indies" Cardiovascular Pathology 16; (2007) 98-10.
- * Coard K, Plummer J, "Massive Multilocular Cystic Leiomyoma of the Uterus: An Extreme Example of Hydropic Degeneration" Southern Med. J. 100; (2007 309-312.
- * McCaw-Binns A, Alexander SF, Lindo JLM, Escoffery C, Spence K, Lewis-Bell K, Lewis G. "Epidemiologic transition in maternal mortality and morbidity: New challenges for Jamaica." International Journal of Gynecology & Obstetrics 96: (2007) 226-32.
- * Duncan ND, Gabay L, Williams E, Dundas SE, Plummer N, Leake PA, "Hermaphrodism: "Cytogenetics, Gonadal Pathology and Gender Assignment: A Case Report" WIMJ, Vol. 55, 6 (2006) 430-433
- * Barrett K, McGrowder D, Brown P, Ragoobirsingh D, "Increased PC -1 phosphodiesterase activity and inhibition of glucose uptake in adipocytes of type 2 diabetic rats" Molecular and Cellular Biochemistry 293 (2006)1-2:9-14
- * Kahalid S, McGrowder D, Kemp M, Donovan J, "The usefulness of sTfR in assessing iron status in cystic fibrosis patients" Clinica Chimica Acta 378 (2007) 1-2: 194-200.
- * Rainford Wilks, Novie Younger, Jasneth Mullings, Mamvar Zohoori, Peter Figueroa, Marshall Tulloch-Reid, Trevor

Ferguson, Christine Walters, Franklyn Bennett, Terrence Forrester, Elizabeth Ward and Deanna Ashley, "Factors affecting study efficiency and item non-response in health surveys in developing countries: the Jamaica national healthy lifestyle survey. BMC Medical Research Methodology, 7:13 (2007)

Refereed Journals

- * Dupuis C, Coard, K, "A review of Granular Cell Tumours at the University Hospital of the West Indies; 1965 to 2006. WIMJ. 56 (Suppl 1) 54: 2007.
- * Gibson TN, Shirley SE, Escoffery CT, Reid M, "Discrepancies between Clinical and Postmortem Diagnosis in Jamaica: An Evaluation of Clinical Overdiagnosis" Internet Journal of Pathology 6; 2 (2007).
- * Shirley SE, Sinclair PA, Stennett MA, Codrington G, Bhatt R, Escoffery CT. "The Pathology of breast cancer in Jamaica: the National Public Health Laboratory Study. WIMJ, 55 (Suppl.) 27 (2006).
- * Brooks A, Wharfe G, Pedican M, Fletcher H, Williams N, "Fatal Pulmonary Embolism in Jamaican Women: A five year review of Post Mortems at UHWI "WIMJ, (Supp 4) 55:32 (2006)
- * Fletcher H, Mitchell S, Bennett F, Simms-Stewart D, Scott P, Reid M, Williams N, Wharfe G, Wilks R, "Difference in Cardiovascular disease risk profile and Osteoporosis in Jamaican black women with surgical and natural menopause." WIMJ, (Suppl) 56:40 (2007)

PUBLIC SERVICE

Professor B. Hanchard

- Board Member, Jamaica Cancer Society

Professor K. Coard

Treasurer, Caribbean Cardiac Society

 Chairman, Research Grants Awards Committee, Caribbean Cardiac Society

Professor D. Shah

- Deputy Chairman, Council, Profession Supplementary to Medicine, Ministry of Health
- Cytopathology Consultant, Jamaica Cancer Society

Dr. E. Williams

Cytopathology Consultant, Jamaica Cancer Society

Dr. N. Williams

- Executive Member, UWI Medical Alumni Association
- Member, UWI Mentorship Programme

Professor C. Escoffery

- Cytopathology Consultant, Jamaica Cancer Society

Dr. T. Gibson

Cytopathology Consultant, Jamaica Cancer Society

Dr. J. Jaggon

Cytopathology Consultant, Jamaica Cancer Society

Dr. L. Buchner

- Board Member, Penwood Dental Clinic

Dr. J. Taylor-Houston

Member, Leukaemia Care Foundation

Dr. D. McGrowder

- Member, Asian Journal of Biochemistry
- Member, Trends in Medical Research

AWARDS

Principal's Research Award for the "Project Attracting the Most Research Funds" for "Research on Epidemiology of HTLV-1 in Jamaica". Hanchard B, Wharfe G, Williams N, East-Innis A, Williams E, Cranston B. Research Day 2007.