



FMS NEWS

Faculty of Medical Sciences

UWI Cave Hill Campus

May 2010

FROM THE DESK OF THE DEAN

Crop Over, Christmas and cricket come and go with such speed we have hardly had time for them, with the hard work going into the opening of the full Faculty of Medical Sciences (FMS) Phase 1 programme in September 2008. The long-hoped-for 5-year MBBS program at Cave Hill allows students to start and finish their medical education at Cave Hill Campus and the Queen Elizabeth Hospital (QEH). It's been a frenetic time for us all, getting ready for our first cohort of Medical Students fifteen months after being given the word "Go!" But our tiny team has achieved a lot, and our students are dedicated and performing well.

We currently occupy a tiny but surprisingly effective temporary office space "on the hill" next to the CLICO Teaching Complex. Our splendid new **Teaching and Laboratory Complex**, next to Biology, was completed in record time and officially opened by the Prime Minister, the **Honourable David Thompson**, in October. Part of the old Administration buildings are being retro-fitted as the new office and seminar complex for the Faculty, and work has started, to be completed by August for the new academic year. These two facilities place the Faculty in close proximity to the Department of Biology, our major collaborator in both teaching and research, and whose assistance in getting the faculty off the ground has been of the greatest value.

The Government has given over the magnificent, formerly derelict **Nightingale Home** – home to nursing and medical students for decades – to be restored as the new **Clinical Teaching Complex**, and work will start on the refurbishment next month (June) to welcome the third year students to the QEH environment in January 2011. This Complex will include a State-of-the-Art



Official building opening ceremony, 22 October 2009: Laboratory and Teaching Complex, Faculty of Medical Sciences



Looking on at the unveiling of the plaque were (L-R) Professor Henry Fraser (Dean, FMS), Sir Hilary Beckles (Principal), Professor E. Nigel Harris (UWI Vice Chancellor), The Hon. David Thompson (Prime Minister of Barbados), Hon. Donville Inniss (Minister of Health), Sir George Alleyne (UWI Chancellor)

Clinical Skills Lab; a modern Medical Library to serve the entire hospital, Ministry of Health and Faculty of Medical Sciences; a students' lounge and gym; seminar rooms and offices. The derelict Tercentenary Ward has also been given over to be refurbished as clinical student's accommodation.

The Historic Class of 2013



Our first intake of Phase 1 students 18 months ago – the Class of 2013 – comprised 40 students. Our second intake – the class of 2014 – comprised 65 students, so we currently have 105 registered Phase 1 students.

The Class members of 2013 have already distinguished themselves

with outstanding academic performances, and the Dean's prizes for the best overall performance and runner up in Year 1 have been awarded to **Khatija Mongera** and **Gabrielle Scantlebury** respectively.

The Cave Hill Campus curriculum is essentially the same as that of Mona, both modelled largely on Britain's "Tomorrow's Doctors" guidelines for medical education, and the UWI medical teaching programmes are currently the only Caribbean medical programmes accredited by the Caribbean Accreditation Authority for Medical and other Health Programmes (CAAM-HP). The Dean has been University Dean from 2007 to 2009, working closely with **Professor Mike Branday**, University Curriculum Coordinator, to harmonise our curricula across campuses.

The Campus Curriculum team is led by **Dr. Priscilla Richardson**, Director of Medical Education, with **Dr. Damian Cohall** and **Dr. Michele Lashley**, Curriculum Coordinators, Phase 1 and Phase 2 respectively – all doing admirably a difficult and challenging task. Minor differences at Cave Hill Campus have included a strong Case-based component in the Introduction to Medical Practice from Semester 1, and an increase in time and a shift in the research rotation in year 3 to the summer, 2010.

The great challenge for the faculty has been developing a new curriculum with a limited number of staff, having to utilise a significant number of part time faculty (who have been enthusiastic and very helpful), and adaptation of a wide variety of teaching cultures and experiences to

the "Mona model" and University "best practice". But we believe that the multi-cultural composition of both our medical faculty and our student body will make for a rich and successful outcome.

The theme of the Faculty is "Teamwork, teamwork, teamwork", because with a strong sense of teamwork and cooperation great things are possible.

This is my last semester and my last newsletter, as I demit office (retiring for the second time!) this summer. After 48 years in medicine, 48 years association with the UWI and 33 years at Cave Hill Campus and the QEH, I can truly say how stimulating and rewarding it has been personally to see the huge successes of the Faculty and the CDRC. Indeed the CDRC has become a shining beacon in the University for its cutting edge and internationally recognised research, including the recent reporting of the glaucoma gene in our population. But we are merely on the brink of much greater things to come.

We will be warmly welcoming **Professor Mike Branday**, Professor of Surgery and distinguished medical educator, as our new Dean from August. Mike is a long standing friend and colleague, having worked closely with us in developing our new programme and visiting many times over the last few years in several capacities. He is a true Caribbean man, as his wife, Dr. Jacinta Branday, is from Trinidad and he spent his final year of medicine in Barbados. We look forward to a new and exciting era under Mike's leadership.

Henry Fraser

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FROM THE DESK OF

Director of Medical Education

**Dr. Priscilla Richardson,
Director of Medical
Education**

As we complete year two of our full Medical Faculty, and invite our third cohort of students to join the faculty, I am mindful of three things that have seen us to this point – leadership and vision, diversity, and harmonization.

Steered by the vision of the Principal and the Dean, a diverse faculty was appointed that represents varied regional perspectives on culture, education and pedagogy. There exist both challenge and opportunity in this diversity, but also an essential unity of purpose. The concerted efforts of our clinical colleagues have helped in fleshing out curriculum competencies, creating meaningful and innovative educational strategies, and provided guidance for assessment.

The Faculty's postgraduate Public Health programmes have been refined and retooled providing the opportunity to build on the groundwork laid by Professor Jose Ortega. Public Health is now ably directed by Dr. Alafia Samuels and includes a cohort of government public health practitioners. This spirit of teamwork has been a working model for the Basic Medical Sciences Department, with valuable part time contributions from clinical faculty, residents and family practitioners, allowing for "cooperative teaching and learning" strategies as we work together to instill and impart universal best practices within the mission of the Faculty of Medical Sciences.

With over 40 years of local clinical experience, backed by an even longer medical tradition at our UWI sister campus at Mona, Jamaica, the "harmonization" effort guides our mission and charts our future. Evolution is as natural as it is inevitable, and the work of the UCC (University Curriculum Committee) ensures that our philosophy remains "forward ever, backward never".



A captive audience of medical students at the REVERED-BOS Hypertension and Vascular Symposium, March 18-19, 2010



Some students and Faculty wearing the faculty colour purple, during Med. Sci. Week 2009, outside the Faculty Office

Faculty-building and resource-building are a continuously, inextricably linked process – whether speaking of people and purpose, or bricks and mortar. As I write this, our Faculty continues to broaden its scope and forge alliances with international colleagues at McGill University and King's College London. These types of innovations and partnerships will hugely benefit our students and the region.

As Director of Medical Education, it is my remit to help lead the educational mission forward. I am grateful for this opportunity.

Priscilla Richardson, BA, M.Ed., Ed.D.

FROM THE DESK OF *Administrative Officer*

This being my first entry in the Faculty's newsletter, it seems appropriate to share a few reflections. The last two years have been similar to carefully unwrapping a Christmas gift that has been meticulously wrapped and sealed from edge to edge to edge... seemingly to protract the inevitable revelation of what's hidden inside! Ever so often, after scratching and clawing at the paper, we give the box a gentle shake, listening for any rustling or rattling that might help us to identify the contents. Yet still, in the end, we are always surprised by what's inside.

From our humble beginnings and singular presence at the School of Clinical Medicine and Research in the QEH, the now-Faculty of Medical Sciences has increased its wingspan greatly to encompass both an administrative presence and state-of-the-art multipurpose facility in the FMS Laboratory and Teaching Complex on the Cave Hill Campus – a structure closely modeled on that of the new Northern Ontario School of Medicine. Our students and Lab Technologists have taken up permanent residence in the new building. Soon to follow will be the retrofitted former Administration Building – our new administrative home. For these, we continue to commend the efforts and diligence of our own UWI Office of Planning and Projects, Mr. Bruce Jardine of Gillespie and Steel Associates, the teams of Steve's Building Works and BCQS, and a number of others.

Next, we direct our focus to the facilities for our clinical students and QEH-based staff. Not only will the new infrastructure accommodate our greater student roll, but it will provide much-needed relief to the working and study conditions for all who must use our resources. With critical input from our clinicians into the design and conceptualization of the building, we are sure it will go a long way towards servicing everyone's needs.

We are functioning in an environment of increasing scarcity, and being asked to do more with less. Budgets are getting smaller, workloads larger, and relief can sometimes seem a long way off. But amidst all of this, three things become supremely important cornerstones of our progress: (i) a relentlessly positive attitude, (ii) a proactive work ethic, and (iii) operating under a very basic assumption that, on any given day, we are **all** trying to do the best we can. It is these values that will see us through.

Christianne Walcott, BA, MBA

AWARDS

DEAN'S PRIZE FOR MEDICAL HUMANITIES

(History Essay Prize) – Class of 2010

Joint winners:

Cheriann Catwell, for "The 1854 Cholera Epidemic in Barbados"

Shabier St. John, for "A Concise History of Medicine in Trinidad and Tobago: 1950 to 2000."

Honourable Mentions:

Simeona Jacinto, for "The Yellow Fever Outbreak in Barbados in 1647"

Katrina Best, for "Important figures in the History of Inhalation Anesthesia: the American and Barbadian Contributions"

Best Overall Performance, Year 1, Class of 2013:

First Place Khatija Mangera

Runner up: Gabrielle Scantlebury

VISITING LECTURERS AND ACADEMIC EVENTS

On March 16th we welcomed **Sir Christopher Edwards**, 3rd Sir George Alleyne Distinguished Lecturer, who repeated his Distinguished Lecture, delivered at the St. Augustine Campus on March 12th.

His lecture "*The Development of Medical Education towards 2020 and Beyond*" was a brilliant exposition on a subject dear to everyone's hearts at this critical phase of our development.

Sir Christopher is Chairman of *Medical Education England*, the body responsible for advising Ministers on the education, training and manpower requirements for doctors and other health care professionals. It was exciting to see how similar our problems and potential solutions are. The University and the Ministry of Health are discussing the formation of such a committee.

FACULTY APPOINTMENTS

Phase 1 (Basic Science) Programme

More than half of our planned basic science faculty are now in place.

Foundation faculty members were:

Dr. Priscilla Richardson (Director of Medical Education);

Dr. Uma Gaur (Senior Lecturer in Anatomy);

Dr. Abboud Ghalayini (Senior Lecturer in Biochemistry);

Dr. Carol Mulder (Senior Lecturer in Public Health and Epidemiology);

Dr. Udupa (Senior Lecturer in Pharmacology);

Dr. Damian Cohall (Lecturer in Pharmacology)

Dr. Kem Ojeh (Lecturer in Biochemistry and Genetics);

Dr. Jacqueline Vigilance (Lecturer in Physiology) and

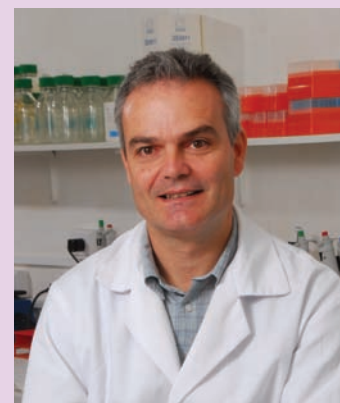
Dr. Subir Gupta (Lecturer in Physiology).

A second appointment will soon be made in Anatomy, and further appointments as the student numbers increase.

Dr. Alafia Samuels, formerly of the Government of Jamaica, PAHO / WHO and CARICOM, has been appointed Senior Lecturer in Public Health, and taken over the directorship of public health programmes until the arrival of Professor Nigel Unwin, who joins us from the University of Newcastle as Professor of Public Health and Epidemiology in August.

Mrs. Heather Hennis has been appointed in February as Lecturer in Measurement, Evaluation and Statistics.

We also congratulate Christianne Walcott, who joined us as Project Manager for the development of our Phase 1 programme, on her promotion to Administrative Officer, Faculty of Medical Sciences.



Professor Ian Hambleton, and Professor Clive Landis, promoted to Chairs in the past year

Clinical (Phase 2) Programme

New clinical faculty members, (since our last newsletter two years ago), are

Professor David Rosin, Professor of Surgery, formerly of St. Mary's Hospital, London,

Professor Hannu Savolainen (vascular surgeon),

Dr. Anders Neilsen, Senior Lecturer in Medicine (transferring from UWI at the Mount Hope Medical Complex,

Dr. Yasodananda (AY) Kumar, Senior Lecturer in Anaesthesia and Intensive Care (transferring from Consultant and Head of Anaesthesia, QEH),

our own DM graduate Dr. Carlisle Goddard, Lecturer in Medicine,

Dr. Desiree Skeete, Lecturer in Anatomical Pathology, and

Dr. Cheryl Alexis, Lecturer in Haematology.

Dr. Neilsen replaces Dr. Emile Mohammed, who returns to his QEH consultant role as nephrologist.

At the CDRC, Dr. Kim Quimby, immunologist, has been reappointed lecturer in Immunology.

We congratulate Professor Clive Landis and Professor Ian Hambleton of the Chronic Disease Research Centre (CDRC) on their promotion to personal chairs.

The FMS Laboratory and Teaching complex



State-of-the-art purpose built research facilities in the new Laboratory and Teaching Complex

The new three storey FMS building has a 210 seat capacity lecture theatre, multimodal, multidisciplinary teaching labs and research lab. The attractive peach colour of its elevator and stairwell towers present an outstanding landmark from the Spring Garden Highway!

The research space is designed to accommodate the research efforts and needs of the faculty's basic science investigators and collaborators. It will soon be fully equipped with core research equipment. Its location next to the Department of Biological and Chemical Sciences will create an important physical and intellectual collaborative environment among the staff of both faculties, and the development of the "Cave Hill Science Park", with a new initiative to establish a UWI Biotechnology Research Centre also underway. The objective of this effort is to create a multidisciplinary discovery approach, utilizing the expertise of the FMS and Biological and Chemical sciences research teams to address medically relevant questions (diabetes, heart disease and cancer) that impact the health of the public in Barbados and the region.

The research interests of the faculty are diverse and

involve a multi-disciplinary approach to addressing specific research projects. This strategy will include the use of biochemical, molecular, pharmacological and immune-cytochemical approaches in addressing specific basic science and clinical research projects.

It is also expected that research interests of the faculty will continue to be focused to a great extent on chronic and degenerative diseases (diabetes, atherosclerosis, heart disease and stroke) that impact the lives of citizens in Barbados and the greater Caribbean region.

The faculty's main research arm is the Chronic Disease Research Centre (the CDRC), established in 1992. It includes the Edmund Cohen Vascular Research Laboratory and is now also a unit of the cross-campus Tropical Medicine Research Institute. The CDRC has an outstanding track record, with research on diabetes, hypertension, stroke, eye disease, cancer and lupus, with funding from the Wellcome Trust of the UK and the National Institutes of Health of the USA. (See *Amputations in Barbados*)

The multi-modal Teaching Lab is housed on an entire floor of the new building, and is dedicated to teaching anatomy / histology labs, biochemistry / cell biology / physiology and pharmacology labs.

Amputations in Barbados: documenting a preventable problem.


Ian Hambleton & Anselm Hennis on behalf of the Diabetes Amputation Study Group (Anselm Hennis, Ian Hambleton, Ramesh Jonnalagadda, Henry Fraser, Pissamai Maul, Patricia Basdeo, Nish Chaturvedi, John Fuller) Staff at the **Chronic Disease Research Centre** conducted the Barbados studies of amputation among people with diabetes, in three stages. First, they counted the number of amputations at the QEH between 1999 and 2000. They then matched each amputation case to a control – someone with diabetes and no amputation. They used this case-control study to assess a range of factors that might increase the risk of amputation. Lastly, they followed cases and controls for five years to assess survival.

Using data from this study they estimate that every year in Barbados 1 in 100 people with diabetes will have an amputation, one of the highest rates reported worldwide.

Footwear choice was an important cause. Those reporting daily use of rubber slippers (thongs or flip-flops), fashion footwear weekly, or simply walking barefoot, were 3 times more likely to have an amputation – a highly statistically significant finding (1).

Traditional risk factors for diabetes complications, such as poor glycaemic control and neuropathy, were also associated with increased risk of amputation.


A new analysis shows that prognosis for amputees was poor (2). Over 80% had survived one-year after a minor amputation (toes or foot), 60% after amputation through the tibia or femur below the knee, and just 34% after an amputation above the knee.



The University of the West Indies. Cave Hill Campus.

chronic disease research centre

The Barbados Amputation Studies A report by Ian R Hambleton PhD



Background

Diabetes in Barbados may affect as many as 9% of all adults (about 17,000), and as many as 22% of the elderly (over 7,000), which matches or exceeds many Westernised nations. Foot ulcers in people with diabetes, and the amputations that may result are a big problem in developed countries, but there are limited data from the developing world.

The Barbados Amputation Studies

The Barbados Studies of Amputation among people with diabetes proceeded in three stages. First, staff at the Chronic Disease Research Centre counted the number of amputations at the QEH between 1999 and 2000. They then matched each amputation case to a control – someone with diabetes and no amputation. This 'case-control' study was used to assess a range of possible factors that might increase the chance of amputation. Last, they followed cases and controls for five years to assess survival among those with and without an amputation.

What we learnt

Using data from this study we estimate that every year in Barbados 1 in 100 people with diabetes will have an amputation, one of the highest rates reported worldwide. Poor diabetes control and inappropriate footwear increased a person's chance of a foot ulcer leading to an amputation. Among amputees, prognosis is poor. One year after amputation almost one-third had died, and this percentage worsened as the severity of the amputation increased. This mortality is the highest reported worldwide.

Diabetes care to prevent complications

If you have diabetes, controlling the level of glucose (or 'sugar') in your body and looking after your feet are cornerstones of managing your condition. With good management, complications of diabetes such as foot ulcers and amputations are less likely. Glucose control and foot care are low-tech and low-cost ways to prevent or delay the onset of diabetes complications.

The percentage of people with diabetes surviving for 1-year

Amputation Type	Survival Percentage
No Amputation	97%
Minor Amputation	81%
ANY Amputation	69%
Below the knee Amputation	66%
Above the knee Amputation	34%

Care for your feet

- Check your feet daily.
- Wash and dry your feet daily
- Keep your skin soft and smooth
- Trim your toenails

Protect your feet

- Your shoes should protect your feet
- Never walk barefoot
- Wear comfortable shoes that fit well

Using the healthcare system to cure complications

Anecdotally, local health care providers see these low survival rates as a result of late presentation. Despite three-quarters of participants reporting that they examined their feet daily, 62% waited 1 week or longer and 31% waited over 2 weeks before seeking medical attention for a foot injury that eventually led to amputation. If the delay in seeking health care is key, then much can be done. Education for patients and health care providers on diabetes management must be coupled with increased access to "multidisciplinary care" in the primary health care setting, including dedicated foot care clinics.

funded project

Study team • Anselm Hennis • Ian Hambleton • Ramesh Jonnalagadda • Henry Fraser • Pissamai Maul • Patricia Basdeo • Nish Chaturvedi • John Fuller

Research Poster presented in January 2010 on Cave Hill Research Day

- (1) Hennis AJ, Fraser HS, Jonnalagadda R, Fuller J, Chaturvedi N: Explanations for the high risk of diabetes-related amputation in a Caribbean population of black African descent and potential for prevention. *Diabetes Care* 27:2636–2641, 2004
- (2) Hambleton IR, Jonnalagadda R, Davis CR, Fraser HS, Chaturvedi N, Hennis AJ. All-cause mortality after diabetes-related amputation in Barbados: a prospective case-control study. *Diabetes Care*. 2009 Feb;32(2):306-7.

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Cardiovascular Centre of Excellence

The Faculty of Medical Sciences has been recognised internationally for its medical research in cardiovascular diseases with its approval as a Centre of Excellence by the highly touted Consortium of Southeastern Hypertension Control (COSEHC). COSEHC is a non-profit organization established to drive cardiovascular healthcare research and management in the southern belt of the USA.

The organization currently undertakes research and disseminates management guidelines for strokes, myocardial infarction and other cardiovascular sequelae of hypertension.

Professor Carlos Ferrario, Founder and current Vice President, COSEHC and Dr. Martin Didier, President of the Caribbean Cardiac Society were here to undertake the site visit for the collaboration. The Faculty used the occasion to host a two day symposium (March 18-19) on hypertension and vascular disease, where both visitors delivered presentations. Lecturer in Pharmacology and Symposium Coordinator, Dr. Damian Cohall, mentioned that medical research in the region has two important benefits from this new collaboration: access to international funding through collaboration with other centres, and being able to share COSEHC's data base of risk factor profiling of persons. He noted that there may be similar profiles in the Caribbean and the Southeastern USA due to similar ancestry. This will provide larger numbers for critical consideration in policy development for managing cardiovascular diseases in the region.



Ms. Angela Rose of the Chronic Disease Research Centre, presenting at the REVERED-BOS Hypertension and Vascular Symposium



Dr. Raymond Massay, consultant Cardiologist at the Queen Elizabeth Hospital, presenting at the REVERED-BOS Hypertension and Vascular Symposium

Faculty of Medical Sciences Active In Regional Research

The Caribbean Health Research Council (CHRC) 55th Annual Council and Scientific meeting was held in Trinidad and Tobago between April 21-24th, 2010. Many from the Caribbean and beyond attended this three day conference. The Faculty of Medical Sciences was well represented by Prof. H. Fraser, Drs. P. Adams, M. Emmanuel, T. Roach, N. Ojeh and Mrs A. Rose. The faculty participants had several oral and poster presentations reporting on research being conducted at the FMS. Some of the research presented by the faculty included reports on diabetes and hypertension, mental illness and depression, HIV demographics, adult stem cells and tissue engineering. Other interesting research covered at the conference included health services, AIDS/STI, nutrition, clinical studies and communicable diseases.