

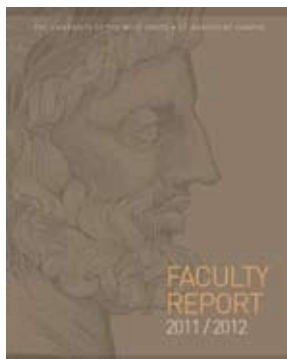


THE UNIVERSITY OF THE WEST INDIES • ST. AUGUSTINE CAMPUS

FACULTY  
REPORT  
2011 / 2012



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In this year's Report, we look back at the progress made over the last strategic planning period and look forward to building a stronger UWI to serve the needs of our region.

# FACULTY OF ENGINEERING

## Executive Summary

For the period under review, the Faculty of Engineering continued its major activities in three areas: Curriculum and Pedagogical Reform (CPR) at the undergraduate and postgraduate level; Research and Innovation (R&I); and Support Systems as they relate to The UWI Strategic Plan 2007-2012. These activities have been carried over to the new Strategic Planning period 2012-2017.

Graduation statistics predictably show Petroleum Geosciences leading the way with First Class awardees accounting for 42.9% of its graduates. Chemical Engineering and Electrical and Computer Engineering followed with approximately 16%. Industrial Engineering has been omitted from these statistics due to its low enrolment. More than 83% of graduates obtained Upper Second degrees or better.

Work continued on the three pillars of activity in CPR, R&I and Support Systems.



**PROFESSOR BRIAN COPELAND**  
DEAN, FACULTY OF ENGINEERING

### *Teaching and Learning including*

#### *CPR at all Levels*

- a. Further improvements were made to the Faculty Process Manual that documents all applicable regulations, procedures, roles and responsibilities in the Faculty of Engineering.
- b. Talks on Grade Point Average (GPA) system review continued with the Faculty initiating discussion on prerequisite courses. The Faculty has agreed to move to Learning Outcomes compliance before the change in the GPA grading scheme in 2014/2015.
- c. Plans for the proposed CVQ certified track were aborted to accommodate a proposal for an Industry Internship Programme being developed by the Department of Mechanical and Manufacturing Engineering.
- d. Department heads have been asked to start drafting plans for a 4-Year programme.

#### *Accreditation*

Five programmes were accredited during 2011/2012: the BSc Geomatics programme by the Chartered Institution of Civil Engineering Surveyors up to February 28, 2017; the BSc and MSc programmes in Mechanical and Manufacturing Engineering by the Institute of Mechanical Engineers for the 2011-2015 intakes; the MSc in Petroleum Engineering by the Energy

Institute for the 2009-2013 intakes; and the Institute of Materials, Minerals and Mining for the 2010-2014 intakes. The Institution of Chemical Engineers (ICHEME) accredited the BSc Chemical & Process Engineering for the 2011-2015 intakes and the MSc Chemical & Process Engineering for the 2010-2015 intakes. Additionally, the BSc Petroleum Geoscience programme was accredited by the Energy Institute for 2009 to 2013 and, at the same time, by the Geological Society for 2010 to 2016.

#### *Highlights*

Visits were made to Grenada's T.A. Marryshow Community College (TAMCC); the St. Vincent and the Grenadines Community College (SVGCC) and the Sir Arthur Lewis Community College (SALCC) in St. Lucia to discuss articulation into the BSc Engineering programme. Since then a UWI crafted Associate Degree has been proposed to provide a programme, beyond the Pre-Engineering programme, for potential regional candidates to enter the BSc programmes offered by the Faculty of Engineering at UWI.

The formation of a School of Engineering at the Mona Campus is fully supported by the Faculty of Pure and Applied Sciences at the Mona Campus and the Faculty of Engineering at the St. Augustine Campus of The University of the West Indies.

Approval was given for the Faculty to deliver an MPhil/PhD Programme in Project Management.

The Department of Mechanical and Manufacturing Engineering procured a Fortus 400mc 3D Printer

as part of its strategy of rekindling life into its manufacturing programme and in boosting its R&D activity in the area.

As always, the Engineering Institute offered Continuing Professional Development courses.

### **Research & Innovation**

In an initiative spearheaded by lecturer Dr. Graham King, the Department of Mechanical and Manufacturing Engineering established a new centre under the Engineering Institute called the Mechanical and Manufacturing Enterprise Research Centre (MMERC). It is intended that all manufacturing oriented research would operate under the centre.

Professor Jacob Opadeyi is leading a major project for the Engineering Institute to archive land information in Grenada.

The Engineering Institute began work on a proposal to restructure the Institute as a Centre for Technological Innovation. As such, the Institute will embark on a needs assessment study for engineering products and services, not only in Trinidad & Tobago but throughout the region.

The operations of the *West Indian Journal of Engineering* were reviewed and the several volumes were published over the period 2010, thus ending a long hiatus in activity. In addition, an update of the journal website is in progress.

### **Support Systems**

The issue of air quality in the Faculty, particularly in the Chemical Engineering laboratories, arose and in accordance with the Occupational Safety and Health Act (OSHA), the Faculty conducted air quality studies.

Revisions were started on the plans for a metric-based assessment and promotions procedure for the Faculty of Engineering.

The Faculty complex areas were renamed so as to recognise former lecturers:

**Block 1: Professor Kenneth S. Julien**

**Block 2: Professor I.D.C. Imbert**

**Block 9: Professor George Moon Sammy**

**Block 13: Professor Max Richards**

### **Department of Chemical Engineering - Summary**

The Petroleum Engineering Programme is now triply accredited, obtaining its third accreditation from the Institution of Chemical Engineers (IChemE), for a 3-year period from the 2011-2012 intake up to and including entry year 2013. Three staff members received Certificates of University Teaching and Learning (CUTL) from the Instructional Development Unit (IDU).

The Department also graduated two doctoral candidates. Research continued in the different disciplines within the Department - Chemical and Process Engineering, Food Science & Technology and Petroleum Studies - resulting in numerous publications and conference presentations from staff members. The Department also continued to collaborate with local, regional and international institutions and agencies.

During the period under review, the Department graduated 77 students from its undergraduate programmes as follows: First Class Honours (21%), Second Class Honours Upper Division (39%), Second Class Honours Lower Division (29%) 3<sup>rd</sup> Class Honours (2%) and Pass (9%). These results were much better than the previous year, both in terms of the quality of the degree awarded and the number of graduands, which reflected an increase of 31%. Graduating figures for the postgraduate programmes were: MSc Chemical & Process Engineering - 4 students, three with distinctions; MSc Food Science & Technology - 12 with 3 distinctions; Petroleum Engineering - 11 with 2 distinctions.

For the third consecutive year, a Chemical Engineering student, was selected as the Valedictorian for the Faculty. This year, the honour went to **Denilson Christopher**. The Department was awarded 1<sup>st</sup> place in the category 'Excellence in Collaboration and Teamwork' at the University's Retirement and Employee Recognition Award Ceremony held on June 15, 2012.

#### **Department of Civil & Environmental Engineering - Summary**

Civil and Environmental Engineering continued to perform creditably in the 2011/2012 period. The enrolment to the undergraduate programmes was near capacity and this is expected to continue for the next few years. The postgraduate enrolment remained similar to the previous year. In terms of research output, several manuscripts were published in archival-refereed journals and presentations made at a number of international conferences. The Department was also well

represented on several national and regional technical committees and hosted training seminars for public sector organizations on the seismic design of buildings. In keeping with its commitment to quality assurance and continuous improvement, five of the Department's eight programmes were audited by its accreditors, the Joint Board of Moderators under the UK-SPEC 2004 (Specification for Professional Engineering Competency). These programmes were successfully accredited for a period of four years.

#### **Department of Electrical & Computer Engineering - Summary**

Electrical & Computer Engineering delivered the revised MASc programme in Electrical and Computer Engineering during the period under review. This programme was approved by the University and introduced in the academic year 2011/2012. Improvements continued to the BSc programme in Electrical and Computer Engineering in accordance with recommendations from the March 2010 Quality Assurance Review and the November 2009 IET Panel.

Research was conducted in fuel cell technology, mobile applications for small-scale fisheries, multi-processor systems, linear circuit applications, steelpan technology, energy efficiency and renewable energy. The Department maintained collaborative arrangements with several regional and international institutions including the Caribbean Telecommunications Union, the Latin American and Caribbean Collaborative Research Initiative, IBM, Nvidia Corporation, MIT's NextLab, the Institute of Electrical and Electronic Engineers, Trinity College Dublin and the University of Calgary.

### Department of Geomatics Engineering and Land Management - Summary

Geomatics Engineering and Land Management continues to ensure that academic programmes evolve to meet the changing needs of stakeholders. This requires constant consultation as well as attention to the changing environment associated with the discipline. Based on which, three additional academic programmes have been introduced and the four taught programmes have gone through comprehensive reviews. Industry liaison committees for these four programmes have been set up and provide valuable avenues to discuss and address issues relevant to stakeholders. As a result, students in all academic programmes benefitted from the introduction of courses that allow professional attachments.

The Department plays an active role in development and research projects of national, regional and international value. These projects include disaster management for situations such as flooding, earthquakes; land deformation and coastal inundation due to sea level rise; land degradation; deforestation; urban planning; land administration systems; land management issues; marine and coastal zone management; and other related fields.

Several examples of local, regional and international collaboration also exist between members of the Department and Agencies/ Institutions - in Australia, Barbados, Canada, Guyana, Haiti, Jamaica, the Netherlands, Papua New Guinea, the Philippines, St. Lucia, Suriname, the USA and South America. In addition, staff

were to secure significant funding opportunities for research and professional projects from various organizations at home and overseas. Further staff members benefitted from many opportunities for professional development through training courses and sabbatical leave.

Significant accomplishments in the year under review:

1. Accreditation of the **BSc Geomatics** programme by the **Institute of Civil Engineering Surveyors**.
2. Significant research funding from several sources including the Government of Trinidad & Tobago through the RDI Fund, United Nations Development Programme - Small Grant Fund, European Union and the Food & Agriculture Organization
3. Several development projects from the Governments of Grenada, Guyana and Trinidad & Tobago.

### Department of Mechanical & Manufacturing Engineering - Summary

Members of staff in Mechanical and Manufacturing Engineering have been actively involved in Research and Innovation. Research conducted during the 2010/2011 academic year resulted in three successful MPhil/PhD theses, 33 journal articles and 16 other publications. The Department won the award for **Best Productive Research** in the Faculty of Engineering and hosted the Pan American Congress of Applied Mechanics from January 2-6, 2012.

The Department's five Graduate Studies Programmes are all well subscribed. The **Engineering Management Programme** has been offered in **Guyana** for Professional Engineers wishing to upgrade their qualifications while the MSc programme in Engineering Asset Management, started three years ago, has 48 students. The first graduates from the programme are expected next year.

Implementation of the revision of the curriculum of the three undergraduate programmes in the Department continued within the academic year. The Department had an accreditation visit by the **Caribbean Accreditation Council on Engineering and Technology** (CACET) in January 2012; following this exercise, it obtained a four-year accreditation. Meanwhile, the **Institution of Mechanical Engineers** (IMechE) of the United Kingdom granted accreditation for a period of five years for the 2011 to 2015 intakes for all the undergraduate programmes and for three Postgraduate Programmes: **MSc in Production Management**, **MSc in Production Engineering & Management** and **MSc in Engineering Management**. The Department intensified its efforts to implement the Action Plan with recommended departmental changes.

The Department graduated a total of 108 students: 74 Undergraduates, 34 MSc, 2 MPhil and 2 PhD students. Undergraduate student **Gerard Mohammed** obtained the best result among the graduating students in the entire Faculty of Engineering. The two PhD degrees were awarded with High Commendations.

## Enrolment

### *Undergraduate*

For the academic year 2011/2012, the undergraduate intake for all programmes in the Faculty was 414 students, including 24 at the Mona Campus, an increase of 11.6% over the previous year, which had an enrolment of 371.

### *Postgraduate*

The Faculty attracted 292 new students into its taught Postgraduate Diploma/Masters programmes, a 7.3% increase from the previous academic year with its enrolment of 272. New postgraduate enrolments in MPhil and PhD programmes increased by 11% to 20 students in 2011/2012. Research student enrolment is expected to remain low given the very good employment opportunities for lower level degree graduates in Trinidad & Tobago and the region for Engineers, Surveyors and Petroleum Geoscientists and the traditional lack of regional employment opportunities that fully utilise the skills of PhD and MPhil graduates.

## Graduation

### Undergraduate

In 2011/2012, the Faculty graduated 264 students in the various disciplines, 2.5% lower than the previous year's figures of 271 graduates.

Thirty-seven graduates achieved First Class Honours, 42.3% higher than the previous year.

The top undergraduate students were Brad D'Abreau (Chemical & Process Engineering), Delia Gaston (Civil Engineering), Vincent Ramoutar (Electrical and Computer Engineering), Randy Parey (Geomatics), Shalana Jahoor (Industrial Engineering), Abraham Derry (Land Management (Valuation), Gerard Mohammed (Mechanical Engineering) and Nirala Boodoo (Petroleum Geoscience).

### Mona School of Engineering

In the case of the Mona School of Engineering, six students graduated. Top student **Dayne Robinson** achieved First Class Honours and had the honour of being the valedictorian for the professional graduating group (Medicine, Law and Engineering).

### Postgraduate

In 2011/2012, 167 students graduated from taught postgraduate programmes, a 16% increase from the previous year. Twenty-seven of these students graduated with Distinction. Nine students graduated with research degrees: five MPhils and four PhDs. These are the PhD awardees and the titles of their respective theses:

**Roger Deo (PhD Chemical Engineering)**

Title of Thesis: *The Mitigation of Industrial Disasters in the Caribbean with respect to the Rapid Growth of the Chemical Industry*

**Sharad Maharaj (PhD Chemical Engineering)**

Title of Thesis: *Extraction Studies with Basil*

**Lisa Poonia Harrynanan** - with high commendation (PhD Agricultural Engineering)

Title of Thesis: *The Foaming and Foam-Mat Drying of Papaya and Pumpkin Purees.*

**Anthony Ademola Adeyanju** - with high commendation (PhD Mechanical Engineering)

Title of Thesis: *Thermal Performance of a Simultaneous Charging and Discharging Bed Energy Storage System.*

## Teaching & Learning

### Innovative Teaching/Learning Initiatives Department of Chemical Engineering

The Petroleum Engineering Programme is now triply accredited, obtaining its third accreditation from the Institution of Chemical Engineers (IChemE) for a 3-year period from 2011/2012 intake up to and including entry year 2013.

### Department of Civil & Environmental Engineering

The web-based application "myeLearning" and other ICT-based approaches are being increasingly utilised to provide students with always-available access to information and thereby improve student-centeredness in the Department.

### Department of Electrical & Computer Engineering

The Department continued its development of its Teaching and Learning processes. Among the accomplishments were adjustments to the BSc Programme according to recommendations of the Quality Assurance Review and the IET panel and the re-introduction of a split final year to enable improved academic performances.

### Department of Mechanical and Manufacturing Engineering

The Department reviewed its Quality Manual which defines its processes and procedures, particularly the ones involved in teaching and learning. Use of the web-based application "myeLearning" was intensified this academic year with most lecturers now using the software to provide academic information and interact with students.

## Graduate Studies

### New/Substantially Revised Programmes

#### Department of Civil & Environmental Engineering

Civil & Environmental Engineering continued its demand-driven approach which led to the sustaining of the Department's various programmes in terms of enrollment.

#### Department of Electrical & Computer Engineering

Electrical & Computer Engineering delivered the revised MASc Programme in Electrical & Computer Engineering, approved by the University in 2010-2011 and introduced in the 2011-2012 academic year.

### Department of Mechanical and Manufacturing Engineering

The five MSc programmes in the Department are progressing with the latest one, the MSc programme in Engineering Asset Management, now in its second year, expected to graduate the first set of students in 2013.

## Research & Innovation

### Department of Chemical Engineering

Drs. Brent and Jacqui Wilson initiated an in-house "Writing for Publication" Workshop for all staff members. Dr. Lorraine Sobers also initiated and successfully implemented an in-house series of lectures during the second half of the review period. These luncheon lectures were held on alternate Thursdays and highlighted research conducted by academic staff. The audience comprised both staff and students.

### Department of Civil & Environmental Engineering

Research has been initiated on the lateral load resistance of timber structures by Drs. W. Wilson, and I. Khan-Kernahan. Dr. Peters continues research on rainwater harvesting; Dr. A. Mwashu on sustainable soil reinforcement and energy efficiency in buildings; and Dr. R. Clarke on improved dynamic analysis of structures under earthquakes, and seismic risk analysis of residential structures.

### Department of Electrical & Computer Engineering

Electrical & Computer Engineering continued to publish scholarly research in international refereed journals and to deliver presentations at national, regional and international seminars and conferences.

### Department of Mechanical and Manufacturing Engineering

The Department finalised plans to set up a Mechanical and Manufacturing Engineering Research Centre within the Engineering Institute, with responsibility for gearing the Department towards industrially related research as well as innovation. The Centre has already held its first industry consultation and is collating industry-related projects.

## Major Projects Completed

### Department of Chemical Engineering – Petroleum Engineering

Removal of the PVT Equipment was completed during the period under review. A proposal has been formulated to set up a Hydrocarbon Research Center for conducting research in the areas of Gas Hydrates, Natural Gas and Heavy Oil and Oil Recovery from Tar Sands.

### Department of Geomatics Engineering and Land Management

Postgraduate research was conducted in a variety of areas relevant to the development of the region. Research areas include: Land Tenure and Natural Disasters in the Caribbean; a research project for the Food and Agricultural Organisation of the United Nations by **Charisse Griffith-Charles**; Sustainable Cities, Land Use Planning and Management: Greater Port of Spain, Trinidad by **Michelle Mycoo**; and the Impact of Global Climate Change of Forest Species Distribution, research being undertaken by PhD candidate **Shobha Maharaj** with Oxford University.

## Major Research in Progress

Among some of the major research currently in progress are: *Antimicrobial studies with Herbs and Spices* [GB-T] (**Gail S.H. Baccus-Taylor**); *Study of Microbial Paraffin Removal Technology in Oilfield* (**D. Chakrabarti**); *Heavy Oil Recovery, Oil Recovery from Trinidad Tar sands and Enhanced Oil Recovery/Carbon Dioxide Sequestration in Trinidad and MEOR*. (**Raffie Hosein**); *Steelman Technology* (**Professor Brian Copeland**); *Developing a Low Cost Mapping System for Natural Disasters in the Caribbean* (**Marcus Arthur, Raid Al-Tahir**) and the *Use of sensors to measure moisture contents in soils* (**Ekwue, E.I.**)

## Service to UWI 12+1 and Other Underserved Communities

The Faculty, in conjunction with the Open Campus, conducted visits to **Grenada's** T.A. Marryshow Community College (TAMCC); the **St. Vincent and the Grenadines** Community College (SVGCC) and the Sir Arthur Lewis Community College (SALCC) in **St. Lucia**. These visits served to initiate discussions on the issue of UWI articulation of their programmes and to apprise them of opportunities for access via the new pre-engineering programme. Of interest is the fact that there is a very aggressive move by the Illinois Institute of Technology to recruit the best Associate degree engineering graduates of the regional community colleges and give them advanced placement in admission.

Even as discussions with the aforementioned Tertiary Level Institutes (TLI's) continue, the concept of a UWI crafted **Associate Degree** has been suggested as a means of providing a robust route for entry into the BSc programmes offered by the Faculty of Engineering at UWI. The Faculty also held discussions with Dr. Cary Fraser, President of the **University of Belize**, on the issue of articulation of its Associate Degree programmes with The UWI.

## Faculty Outreach

### Department of Chemical Engineering

Departmental Staff members continue to provide public and professional service which contribute to the Department's Outreach Activities. **Jill Marcelle-DeSilva** engaged in research collaboration with MEEA and PetroCom Technologies on hydrate potential offshore East Coast of Trinidad and **Clyde Abder** served as an Alternate on the MEEA Task Force on Carbon Reduction Strategies.

The Food Science & Technology Unit (FSTU) continued product development and analytical research/studies in collaboration with the **Trinidad & Tobago Agribusiness Association** (TTABA), **Caribbean Agricultural Development Institute** (CARDI) and the **Inter-American Institute for Corporation in Agriculture** (IICA) in their root tubers and value added products programme. Further the FSTU completed product development and analytical studies with **Windward Islands Farmers Association** (WINFA) in fruit jams, jellies and beverages. **Blue Waters** also committed to sponsor a prize/award for the Unit.

### Department of Electrical & Computer Engineering

The department maintained collaborative arrangements with several regional and international institutions including the Caribbean Telecommunications Union, the Latin American and Caribbean Collaborative Research Initiative, IBM, NVIDIA Corporation, MIT's NextLab, the Institute of Electrical and Electronic Engineers, Trinity College Dublin and the University of Calgary. The results have included joint research programmes leading to journal publications, student exchanges and inputs to curriculum development. In particular, the Department has been designated an NVIDIA CUDA Teaching Centre by the NVIDIA Corporation.

## Strengthening the National Engagement Processes

### Department of Chemical Engineering

Staff members represented the Department on Conference, Seminar and Workshop Committees, State Boards and Cabinet-Appointed Committees. The Department continued collaborating and consulting with local, regional and international institutions and agencies.

### The Engineering Institute

The Engineering Institute continued its contribution to regional development through outreach activities in research, training and consultancies. Major activity continues to be the delivery of courses for continuing professional development (CPD). During the period under review, the Institute delivered 16 short courses and engaged in 16 projects.

Lecturer in the Department of Geomatics Engineering and Land Management, Dr. Charisse Griffith-Charles, Lecturer, initiated the Caribbean Land Administration and Management Unit.

## External Linkages

The Faculty engaged in discussions and initiatives with the following entities:

- Association of Professional Engineers of Trinidad & Tobago
- Board of Engineering of Trinidad & Tobago
- bpTT Endowed Senior Position in Reservoir/Petroleum Engineering
- Caribbean Telecommunications Union
- CEP Limited
- CISCO Academy
- CL Energy Services Limited
- GBest Trading Company Limited
- IBM
- Indian Institute of Technology, Kharagpur, India
- Industrial Gases Limited
- Microsoft
- MIT's NextLab
- NASA
- Neal & Massy Motors
- NVIDIA Corporation
- PCS Nitrogen Trinidad Limited
- Petrotrin

- Phoenix Park Gas Processors Limited
- Powergen

#### Sponsors of Annual Prizes & Awards

- Trinidad & Tobago National Petroleum Marketing Company Limited
- The Institute of Electrical and Electronic Engineers
- The Latin American and Caribbean Collaborative Research Initiative
- The University of Calgary
- The University of Trinidad & Tobago
- Trinidad & Tobago Methanol Company (TTMC)
- Trinity College, Dublin
- Trintoplan Consultants Limited
- UNESCO-IHE (Edulink Project including COSTATT, the University of Guyana and WASA).
- Unilever Caribbean Limited
- URISA
- WASA

## Revenue Generation & Cost Containment

### Engineering Institute

The Engineering Institute generated more than TT\$1 million by hosting short professional courses. Its Summer School programme also earned at least TT\$540,000 during the period under review. The Classroom Technology Support Unit (CTSU) continued its drive to equip and to provide technical support for all lecture rooms with audio/visual equipment using the Penn State standards for classrooms. For 2011/2012, work was extended to the IDC Imbert Building. The Unit now augments its installations with security surveillance systems and has fully equipped two video conferencing facilities.

# Projected Activities for 2012/2013

## Department of Civil & Environmental Engineering

### *Flooding Studies*

In 2011/2012 the Water Group, under Dr. Cooper, completed data collection at the Acono River Catchment. This is part of the research work to understand the hydrologic response of the steep catchments of the Northern Range that can lead to effective and long-lasting solutions to hydrologic related problems such as flooding, landslides and sedimentation.

The work will build on two recently completed graduate research projects that determined estimates of sediment loadings due to the prevailing land use activities, including a limestone quarry. The focus this year will be on developing an instrumentation network for hydro-meteorological measurements and the understanding of the physical features of the catchment via satellite imagery, engineering surveys and various field investigations. Two MPhil students are to be procured to identify suitable hydrologic models for the catchment.

### *River Appreciation*

The water group, under Dr. Shrivastava, plans to heighten public awareness on the opportunities and challenges in the utilisation of the region's rivers. Video-photography, animation and local television media are proposed as sensitization mechanisms for the population.

### *Soil Erosion Control*

The materials group under Dr. Mwasha has proposed the development of sustainable soil reinforcement to preclude slope stability failure and excessive erosion due to torrential rain. The project entails developing appropriate solutions that depend on the level of exposure, and provide dissemination materials for stakeholders.

### *Seismic Thin Masonry Walls and Hurricane Resistant Roofing*

The Structures Group under Dr. Clarke proposes to continue work on improving, to acceptable levels, the seismic performance of residential structures built with legacy masonry blocks otherwise deemed inadequate. Work will continue on the construction of a prototype house with a previously developed experimental hurricane resistant roof.

## Department of Electrical & Computer Engineering

The Department intends to submit an accreditation application for the MASc programme while continuing to enhance the research programme and improve the undergraduate programme.

## Distinguished Visitors

**Henry Mwanaki Arinaitwe,**  
Makerere University

**The Honourable Nizam Baksh,**  
Minister of Community Development

**Glen Bright,**  
Professor of Mechatronics, Robotics and  
Advanced Manufacturing Systems/Head of School,  
Mechanical Engineering,  
University of KwaZulu-Natal,  
Durban

**Michael T. Dugger,**  
Sandia National Laboratories

**Cary Fraser,**  
President,  
University of Belize

**Suresh Garimella,**  
Purdue University, USA

**Mario Gonzalez (Professor Emeritus),**  
CACET visiting team and  
Professor at University of Texas at Austin, ECE

**Mintha Gyampoh,**  
Chemitech Limited

**Halfani R. Halfani,**  
Director, Exploration & Production,  
TPDC, Dar es Salaam,  
Tanzania

**Thomas Hodge,**  
Anguilla Electricity Company and Director/  
CARILEC

**John Robert Ikoja-Odongo,**  
Makerere University,  
Uganda

**Gary Jackson,**  
Executive Director,  
CARILEC

**Kishore Jhagroo,**  
STLE International

**Todd Jurgenberg,**  
U.S. Embassy

**George Mondo Kagonyera,**  
Chancellor, Makerere University,  
Uganda

**Ahmed Khalifa,**  
Enppi Branch Manager,  
Venezuela

**The Hon. Dr. Pudenciana Kikwembe,**  
Member, Public Organisations Accounts  
Committee,  
Tanzania

**Abbas Mussa Kisuju,**  
Ministry of Energy & Minerals,  
Dar es Salaam,  
Tanzania

**Samuel Kyamanywa,**  
Makerere University,  
Uganda

**Francis de Lanoy,**  
University of the Netherlands Antilles

**The Hon. Dr. Festus Limbu,**  
Head of Delegation/Member,  
Energy & Minerals Committee,  
Tanzania

**D. Mace,**  
CACET  
Practitioner

**Neo Maruping,**  
Education Attaché,  
Embassy of the Republic of Botswana,  
Washington DC, USA

**Kevin Motilal,**  
Technical Associate,  
NP STLE Representative

**His Excellency Ali Saleh Mourad,**  
Egyptian Ambassador  
to the Republic of Trinidad & Tobago

**Joseph Mugisha,**  
Makerere University,  
Uganda

**Oswald Kyamulesire Ndoleriire,**  
Makerere University,  
Uganda

**Raffaella Ocone,**  
External Examiner and  
Professor of Chemical Engineering,  
Heriot Watt University

**Nigel Penna,**  
Chartered Institution of  
Civil Engineering Surveyors  
Accreditor  
Fortis TCI Ltd and Director/CARILEC

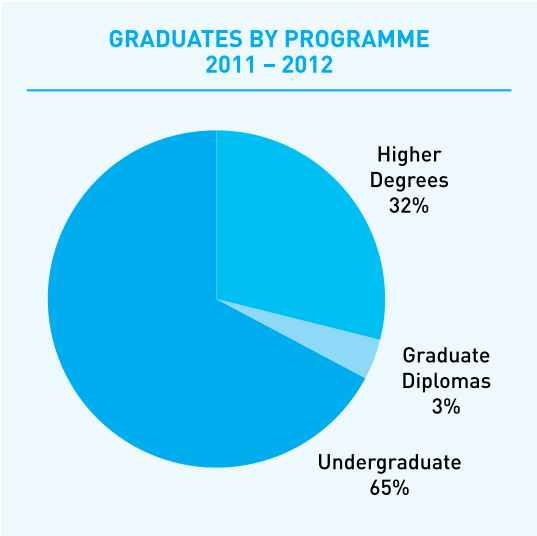
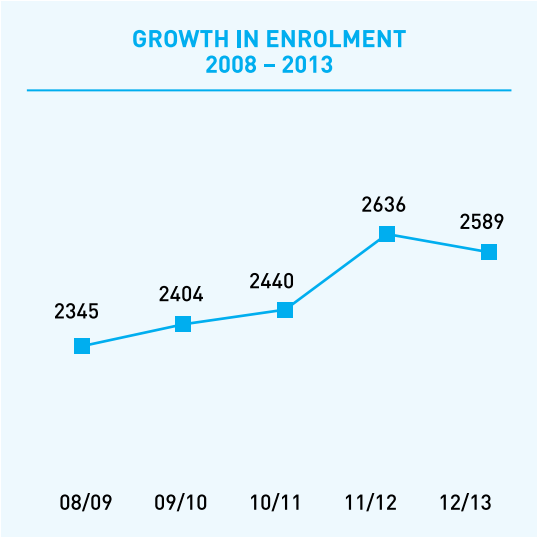
**Kuarlal Rampersad,**  
PSTLE International

**Mike J. Short,**  
President,  
IET

**Indarjit Singh,**  
PowerGen

**Rudsel Sophia,**  
University of the Netherlands Antilles

**Peter Williams,**  
Barbados Light and Power Company Ltd.  
and Chairman/CARILEC





**DR CARLISLE PEMBERTON**  
DEAN, FACULTY OF FOOD & AGRICULTURE

# FACULTY OF FOOD & AGRICULTURE

Formerly the **SCHOOL OF AGRICULTURE** in the **FACULTY OF SCIENCE & AGRICULTURE**

## Executive Summary

On August 1, 2012, the Faculty of Science and Agriculture converted into two new faculties: the Faculty of Science & Technology (FST) and the Faculty of Food & Agriculture (FFA).

The staff of the new Faculty of Food & Agriculture remains committed to making a significant contribution to the sustainable development of the region and to the provision of regional needs and security in food, nutrition, housing and clothing (including fashion). To achieve this, the focus has been on the continuous development of relevant programmes in Food Production, Agribusiness, Geography, Nutrition and Dietetics, Human Ecology and by graduating a relevant and distinctive cadre of well-trained professionals.

This report is based on the activities of the School of Agriculture within the former Faculty of Science and Agriculture.

### **Expansion of Access**

The trend of increasing student numbers continued in 2011/2012, with the Faculty of Science and Agriculture retaining its position as the second largest faculty at the St Augustine Campus. A total of 574 undergraduate students, 16% of the undergraduate students in the FSA, registered in the School of Agriculture. Graduate registration in the School of Agriculture stood at 190 students for the reporting year.

### **New Programmes**

Two new programmes were introduced during the reporting year: the **MPhil/PhD in Human Sciences** was approved for offering in the 2012/2013 academic year and the **Major in Entrepreneurship** was submitted and approved.

### **Research Funding**

A main thrust has been the sourcing of adequate funding for research. During the reporting period, the Faculty was able to secure significant external and internal funding. **Dr. Isabella Granderson**, Principal Investigator from UWI for the IDRC McGill –CARICOM Food Security proposal, was able to secure a grant of Can \$5 million from the International Development Research Centre (IDRC), Canada. The UWI received Can \$2 million with the official launch of the project in June 2011. Also, **Dr. Govind Seepersad** received funding of TT\$600,000 from The UWI-Trinidad & Tobago Research and Development Impact Fund (RDIFUND) for his proposal to re-engineer the Trinidad & Tobago Citrus Industry. **Professor Neela Badrie** also secured external funding of US \$39,000 by from the Caribbean EcoHealth Programme and Pan American Health Organisation (CEHP/PAHO).

### **Publications**

There were 29 publications in peer-reviewed international journals, 31 refereed conference proceedings and 10 book chapters. Two staff members, **Dr. Wayne Ganpat** and **Dr. Wendy-Ann Isaac**, edited a book "**Sustainable Food Production Practices in the Caribbean**". Several members of the Faculty also contributed chapters.

### **Department of Agricultural Economics & Extension Enrolment**

Compared to 2010/2011, the Department of Agricultural Economics and Extension (D.A.E.E.) saw an almost 10% drop in overall enrolment. The proposed Majors in Entrepreneurship and Sports Nutrition, BSc in Entrepreneurship and Innovation, and the MPhil/PhD in Human Ecology, are intended to drive an increase the overall number of enrolled students. An increase in the numbers of students enrolled in the Diploma in Institutional Community Nutrition and Dietetics would see a boost in revenue generation from tuition fees.

### **Student Achievements**

**Anisa Ramcharitar-Bourne** – (PhD Human Ecology) - won the 2nd place prize at the Third International Food & Nutrition Conference in October 2011 at Tuskegee University for her oral presentation on feeding practices among preschool children in Trinidad. Professor N. Badrie and Dr. S. Nichols are jointly supervising Ms. Ramcharitar-Bourne.

**Brent Theophile** was awarded the MPhil in Agricultural Economics.

**Marlon Francis** (BSc Human Ecology Nutrition and Dietetics 2009) - National Scholarship awardee - completed the MSc degree in Public Health at the London School of Hygiene and Tropical Medicine, UK with a distinction in his research project. He serves as a part-time lecturer at the DAEE.

**Michelle Ash** (BSc Nutrition and Dietetics 2008) - 2010 OAS Scholarship awardee - successfully completed the MSc in Public Health at the University of St. Georges, Grenada. She is employed with the Policy Unit in the Ministry of Health.

**Rachel Brathwaite** (BSc Human Ecology 2008 - Nutritional Sciences major) - National Scholarship awardee - successfully completed the MSc. in Epidemiology at the University of Nottingham, UK with a distinction in the theory component. She has been awarded another National Scholarship to pursue the PhD in Epidemiology at the London School of Hygiene and Tropical Medicine, UK.

**Rhonda Arthur** (BSc Nutrition and Dietetics 2010) - 2011 National Scholarship awardee - successfully completed the MSc in Modern Epidemiology at the School of Public Health, Faculty of Medicine, Imperial College London with Merit.

**The Agribusiness Society (ABS) of The UWI** – won the first edition of the Technical Centre for Agriculture and Rural Cooperation's (CTA) Yobloco Awards (Youth in Agriculture Blog Competition).

**Keron Bascome** (MSc Agribusiness and Marketing student) collected the prize at the 3rd International Association of Agricultural Information

Specialist (IAALD) Africa Chapter Conference in Johannesburg in May.

## Department of Food Production

### Students

There were 606 students registered in the Department of Food Production, 203 of whom were registered to pursue the Geography Major. The top undergraduate students for the year were **Kiron Neal** and **Nekelia Gregoire**. The top postgraduate students for the year were **Cameedra Ram** (Tropical Animal Science and Production), **Dion Ramoutar** (Crop Production) and **Sherrae Franklyn** (Agri-Food Safety and Quality Assurance).

## Teaching & Learning

### Department of Agricultural Economics & Extension

Although no new programmes were introduced in the 2011/2012 academic year, the Department undertook the development of a **Major in Entrepreneurship**, a **BSc in Entrepreneurship and Innovation**, an **MPhil/PhD in Human Ecology** and a **Master Degree Programme in Institutional Community Nutrition** and Dietetics.

The **MPhil/PhD in Human Sciences** was approved for offering in the 2012/2013 academic year. The **Major in Entrepreneurship** was submitted and approved by Faculty board, the IDU and AQAC. Two of the courses from this programme are currently being offered as part of the Minor in Entrepreneurship. The **MSc Institutional Community Nutrition and Dietetics** has been presented to the Faculty Curriculum committee. This committee recommended several changes

to be made to the scheduling of courses and the number of credits as the new programme would have to be self-financing in keeping with University policy of new taught master's programmes. Over the next year, this programme will be refined with a view to making it operational by the 2015/2016 academic year. Also on the cards are the creation of an **online Diploma in Tropical Agricultural Extension** and an area of specialization in Food Security as an added option for students taking the **MSc Agribusiness and Marketing**. An upgrade from a minor to a major will be sought in **Sports Nutrition**.

### *Revision of existing programmes*

The DAEE will continually revise all its programmes to ensure quality of content and delivery. These revisions would consider course content and competencies that are congruent with the production of the desired UWI graduate. The Department is also considering reducing the total number of credits to around 90. The programmes for consideration over the next two years are:

- BSc Agribusiness Management
- BSc Agribusiness Major
- BSc Human Nutrition and Dietetics
- BSc Human Ecology

### **Department of Food Production**

During the review period, an innovative teaching/learning initiative adopted during the review period was the first annual showcase of the work produced by students of the Tropical Landscaping Major in February 2012.

### **Research in Progress**

Ongoing projects are in the areas of:

**Crop Science** (Production of tropical food crops and creation of protected agriculture production systems)

**Horticulture** (Tropical landscaping and tree crop production systems)

**Livestock Science** (Livestock production/neo-tropical animal production and Forage production)

**Soil Science** (Soil fertility and conservation, composting and waste management, natural resource management)

**Food Safety and Quality** (Food Safety Management Systems, application of project management approach to quality assurance)

**Post-Production Technology** (Postharvest Physiology/Technology and Product Development)

**Geography** (Climate Change and climate adaptation)

## **Graduate Studies**

### **Department of Agricultural Economics & Extension**

Efforts continue to upgrade the **Diploma, Institutional and Community Nutrition and Dietetics** Programme to a Master's level programme. The **MPhil and PhD in Human Sciences** were approved for offering in the 2012/2013 academic year.

During the reporting period, revisions were conducted on the **BSc Agribusiness Management**; the **BSc Agribusiness Major**; the **MSc Marketing and Agribusiness**; the **BSc Human Nutrition and Dietetics** and the **Diploma in Institutional and Community Dietetics and Nutrition**.

The Department finalised the **Major in Entrepreneurship and Innovation** during this last financial year. Two courses from this Major were approved for offering in the 2012/2013 academic year.

### Department of Food Production

The **Postgraduate Diploma in Crop Protection** was introduced and the **MSc in Tropical Crop Protection** was revised in 2011/2012.

## Research & Innovation

### Department of Agricultural Economics & Extension Research Foci

The Department has identified **Nutrition Education** and **Food Security**; the **Impact of Climate Change on Food Systems**; and **Natural Resource and Environmental Management** as specific research areas of focus.

Research was also done on access to, and control of, resources for agricultural productivity by Gender; Improving classroom teaching through action research in the classroom (group learning and engaging students in the learning processes) and the use of Farmer Field Schools in Extension programmes in the Caribbean.

Students were engaged beyond the classroom through regional study tours and the development of Reusable Learning Objects with specific focal points on various aspects of agribusiness, international trade policy, food safety, quality assurance and food systems.

Management of Sanitary Disasters and Natural Disasters in both **Belize** and **Grenada** are also major areas of focus.

### *Research Partnerships and Collaboration CARIWATNet Project*

This is a project to strengthen the Caribbean scientific community in natural resources management and develop integrated watershed management plans. With a focus on Haiti and Trinidad & Tobago and funded by the European Union, it is well on the way to fulfilling its objectives. **Professor Carlisle Pemberton** leads the DAEE and UWI participation and **Dr. Hazel Patterson-Andrews** serves as Secretary.

### *IDRC McGill –CARICOM Food Security Project*

This collaborative project obtained grant funding of Can \$5 million from the International Development Research Council of Canada (IDRC), of which Can \$2 million was received at its official launch in June 2011. Data collection for this project has begun and **Dr. Isabella Granderson** is the DAEE / UWI Principal Investigator.

### *Childhood Obesity*

The Department, through **Dr. Marquitta Webb** has initiated talks on addressing issues related to research on childhood obesity with collaborators at the **Texas A&M University** and colleagues at The UWI Cave Hill Campus.

# Faculty Outreach

## Department of Agricultural Economics & Extension

### *Service to UWI-12 Countries and Other Underserved Communities*

During the period under review, **Dr. Wayne Ganpat** has been collaborating with colleagues with CARICOM to improve the training of an Extension Officer at Ministries of Agriculture.

**Dr. Govind Seepersad**, working closely with the Citrus Industry in **Belize** completed a video on the management of IAS for the Citrus Growers Association (CGA) to use in Belize. Under the CACHE project, Dr Seepersad conducted training in Agribusiness Management and Risks in **five CARIFORUM countries**. He also participated as part of a UWI Team in a project entitled ***The Way Forward for St. Lucia Agriculture - Perspectives and Recommendations*** and was part of a team appointed by the Ministry of Food Production for the evaluation of large farm parcels for distribution.

### **Caribbean Agro-Economic Society Conference**

The 29<sup>th</sup> West Indies Agricultural Economics Conference was held in **St. Vincent and the Grenadines**, from July 17-22, 2011 in collaboration with the Ministry of Agriculture there. The conference theme, ***'Agribusiness as the Path to Sustainable Agricultural Development in the Caribbean'***, highlighted subthemes of curriculum reform for agribusiness development; value chain analysis; trade policy for agribusiness development; human resource development for agribusiness; agribusiness and the environment

and Agriculture in St. Vincent and the Grenadines- sustainable agricultural development and agribusiness.

**The Lewis Beckford Memorial lecture** was given by Professor Curtis Jolly at Auburn University, Alabama on the topic, ***'Can agribusiness serve as the catalyst for economic development in small nation states? Myths and realities'***. Six graduate students and four lecturers from the department attended the conference.

## Department of Food Production *Strengthening Regionality*

The Department's contribution to activities undertaken to strengthen the regionality of The University included staff involvement in numerous workshops. **Dr. Wendy-Ann Isaac** facilitated a number of these workshops with some aimed at starting a protected agriculture project with farmers in **St. Vincent**; and Improving Rural Livelihoods: Using ICTs to promote Sustainable Production of Fair-trade banana, Food Crop and Alternative Markets and Agro-tourism. Dr. Isaac also facilitated training workshops in St. Vincent using Skype, mobile technology as well as a two-day workshop on the Virtual Outreach Project with farmers at Langley Park.

Dr. Isaac also accompanied **Dr. Laura Roberts-Nkrumah** (team leader), **Dr. Govind Seepersad**, **Dr. Paula Tenant**, and **Dr. Gaius Eudoxie** on a Technical 4-day visit in January 2012 to **St. Lucia** on matters pertaining to the Agricultural Sector.

***National Engagement Processes***

At the national level, departmental contributions included discussion on mixed integrated farming with livestock, feed and other crops, Interaction with the **International Rice Research Institute** (IRRI), Philippines and collaboration with the Department of Plant Agriculture, University of Guelph, Canada to initiate a collaborative project for genetic improvement of Bananas.

The Department was represented in a number of ways at a national and regional level with the professional service of its staff. **Dr. Lynda Wickham** served on the Advisory Committee, Young Professionals Training Programme out of the **Ministry of Food Production, Land and Marine Affairs** while **Professor Harjit Singh Rekhi** represented the UWI at Rice Farmers' Field Day and participated in the activities of the Rice Committee, Ministry of Food Production, Government of Trinidad & Tobago to revive the interest of rice farmers.

Staff was also in attendance at meetings, symposia and workshops as part of the engagement process. The Partnership for Canada-Caribbean Community Climate Change Adaptation (ParCA) project was attended by **Dr. Matthew Wilson**; the workshop for the Determination of Persistent Organic Pollutants (POPs) and the Identification and Quantification of Unintentional POPs Sources and Loads was attended by **Dr. Gregory Gouveia** and the symposium to discuss Development Plans for a Feed Mill in Tobago (Feed Production Facility) was attended by **Mr. C.H.O. Lallo**. **Professor Neela Badrie** also lead the food safety and post-harvest CARICom/IDRC Mc Gill Food Security project.

***International Collaboration and Outreach***

At the international level, departmental contributions included training by the **Israeli Agency for International Development Cooperation** from November to December 2011, This was attended by **Dr. Gaius Eudoxie** and **Dr. Mark Wuddivira**. **Professor Gary Garcia** did an evaluation of the Undergraduate Livestock Agriculture Programme and taught an undergraduate course in Agro-tourism at **Anton de Kom University of Suriname**.

The Department was also successful in getting The UWI and UTT to host the XICIMFAUNA in Trinidad & Tobago in August 2014 as well as facilitating a visit to Argentina by **Professor Gary Garcia** and a Trinidad & Tobago team in May 2012. **Professor Neela Badrie** represented the Department as co-principal of the Caribbean Eco-Health Programme meetings at the Teasdale Corti/Global Health Research/International Development Research Centre, Canada in Dominica and Barbados.

## Revenue Generating/ Cost Containment Activities

**Professor Neela Badrie** received external funding for the Caribbean EcoHealth Programme and Pan American Health Organisation (CEHP/PAHO) of US \$39,000.

***Graduate Studies Research Grants Approved***

**Professor Neela Badrie** - Grant awarded (Oct 11 2011 – TT\$8,642.32) on behalf of Anisa Ramcharitar-Bourne – PhD Crop Science – to

attend and present a paper at the 29<sup>th</sup> Annual Scientific Meeting of the Obesity Society, Orlando, Florida, (October 2 to 5, 2011).

Grant awarded (November 1 2011 – TT\$53,000) on behalf of Carelene Lakhan – MPhil Crop Science - Area of research: Estimating the Burden of Illness (BOI) for Acute Gastroenteritis, Foodborne Diseases commonly transmitted by Foods in Trinidad & Tobago, (December 1, 2011).

**Professor Neela Badrie and Dr. Selby Nichols**

- CRP 1 Grant awarded (October 10, 2011 - TT\$8,642.32 ) on behalf of Anisa Ramcharitar-Bourne – PhD Crop Science –to present a paper on parental feeding styles and practices in relation to preschoolers’ dietary behaviors and weight status in a Trinidadian population. 3<sup>rd</sup> International Food and Nutrition Conference, Tuskegee University, Alabama USA. (October. 9 to 11, 2011)

**Professor Neela Badrie, Dr. Aweeda Newaj-Fyzul and Dr. Adash Ramsuhag** - Grant awarded (July 4 2012 – TT\$3,200.00) on behalf of Marsha Singh for publishing article entitled: *“A Prevalence Study of Histamine and Histamine Producing Bacteria in Two Commercial Tropical Marine Fish Sold in Trinidad, West Indies.”*

**Prof Neela Badrie and Carelene Lakhan PhD Food Safety and Quality** - Grant awarded (July 2, 2012 – TT\$14,000.00) to present at the 16<sup>th</sup> IUFOST World Congress of Food Science & Technology, Foz de Iguacu, Brazil (August 5-9, 2012).

**Dr. Mark Wuddivira** - Grant awarded (October 13 2011 – TT\$43,000.00 ) for influence of biotic and abiotic stress on the profile, biosynthesis and *in vitro* ruminal bioactivity of secondary plant metabolites of phenolic origin in tropical legume forages project.

**Dr. Gaius Eudoxie and Dr. Mark Wuddivira** - Grant awarded (November 2011 – TT\$16,000.00) each to attend course *“Crop Production under Saline Stress as a Result of Climatic Changes”*. Israel (Nov 13-22, 2011).

**Dr. Gaius Eudoxie** - Grant awarded (April 2012 - TT\$75,000.00). Improving greenhouse productivity through plant nutrition monitoring.

**Dr. Gaius Eudoxie and Professor William Hickey** - Grant awarded (July 4, 2012 – TT\$11,211.60) on behalf of Vidya de Gannes – PhD Soil Science – To travel to University of Wisconsin-Madison to receive training in the area of quantitative PRC technique, (August 2 to 11, 2012).

**Dr. Gaius Eudoxie and Professor Emer. Richard A.I. Brathwaite** - Grant awarded (May 2012 – TT\$34,912.39) on behalf of Chaney St. Martin – PhD Crop Science – Consumables and Field work: Area of Research *“Composts and composts teas as substrates and biocontrol agents for the management of damping-off (Pythium ultimum) in tomato.*

**Dr. Wendy-Ann Isaac** - CRP Grant (March 2012 - \$60,000.00) – *Improving Rural Livelihoods: Using ICTs to promote Sustainable Production of Food Crop in Rural Farming Communities in Selected Islands*. Towards the purchase of a Mobile Laboratory for pest diagnostics.

**Professor Gary Garcia et al.** - Grant awarded (April 2012 – TT\$20,000.00) on behalf of Michele Singh – MPhil Livestock Science – to attend workshop at 10<sup>th</sup> International Conference on Wildlife management in Amazonia and Latin America, Argentina.

**Cicero Lallo and Dr. Victor Mlambo** - Grant awarded (May 2012 – TT\$3,125.00) on behalf of Andell Edwards – MPhil Livestock Science – for publication of article entitled “*In vitro* ruminal fermentation of leaves from three tree forages in response to incremental levels of polyethylene glycol”, Open Journal of Animal Sciences (OJAS).

**Professor Paul Shaw** - Grant awarded (February 2012 – TT\$14,000) on behalf of Cleveon Ash – MPhil Geography – to attend 2012 Annual Meeting of the Association of American Geographers, Hilton New York, USA.

Grant awarded (February 2012 – TT\$14,000) on behalf of Alana Joseph – MPhil Geography – to attend 2012 Annual Meeting of the Association of American Geographers, Hilton New York, USA.

**Dr. Marisa Wilson** - Grant awarded (May 2012 – TT\$14,000.00) on behalf of Kara Roopsingh – MPhil Geography – to attend and present a paper entitled “*We are Arima: The role of memory in the validation of a cultural landscape*”, Sweden. (June 5-8)

## Projected Activities for 2012-2013

The Faculty intends to pursue the formation of a **Geography Department** for the 2012/2013 Academic year. A number of proposed academic programmes, including the **Postgraduate Diploma and MSc in Tropical Crop Protection** and a new course in Research and Statistical Skills for Food & Agriculture, are projected to start in the 2012/2013 academic year.

A significant amount of research is expected to be pursued (and in some cases continued) during the next academic year. Some of the areas of research under the purview of academic staff are as follows:

**Professor Neela Badrie** (Food Microbiology, Consumer food safety, Tropical Food Processing, Obesity and Nutritional Evaluation of Foods)

**Dr. Isaac Bekele** (Cadmium in cocoa, participatory research design and analysis and optimal fee to attain desired enrollment proportions in various programmes)

**Dr. Clare Bowen-O'Connor** (Micro-propagation of woody plants (coconut and breadfruit), environmental management and crop growth in low-cost tropical greenhouses, eco-physiology and stress tolerance in plants (Capsicum))

**Dr. Romain Cruse** (Geopolitical dimensions of crime and urban violence in the Caribbean).

**Dr. Gaius Eudoxie** (Improving soil quality through appropriate soil management, Crop nutrition under protected systems, Composting and biological waste management)

**Dr. Gary Garcia** (Neo-tropical Animal Wildlife Conservation, Production, Utilization and Cuisine, Livestock production Systems, Carnival Ecology)

**Dr. Wendy-Ann Isaac** (Sustainable production practices, Using modern Information and Communication Technologies (ICTs) for outreach and extension in the region, Protected Agriculture production systems).

**Dr. Priya Kissoon** (Integration and risk amongst urban illegal immigrants, Refugees, asylum seekers and housing status).

**Cicero Lallo** (Small ruminant production and evaluating reproductive performance in CARICOM, Evaluation of the quality of goat milk sold to consumers in Trinidad, Carcass yield and Meat quality in Tropical Hair sheep and goats)

**Dr. Victor Mlambo** (Forage Evaluation, Meat Quality, Polyphenolic Chemistry in Non-conventional feedstuffs).

**Dr. Majeed Mohammed** (Postharvest, physiology and biochemistry, Product Development (Sensory evaluations on value added products)

**Professor Harjit Singh Rekhi** (Evaluation of rice germplasm in Caribbean conditions, Genetic improvement of Banana with emphasis on resistance to black sigatoka disease).

**Professor Paul Shaw** (Palaeoenvironmental change in tropical regions, Techniques of measuring long-term climate change, The caves of Trinidad & Tobago).

**Dr. Reynold Stone** (Climate Change Monitoring and Assessment, Hydrology of Agricultural Watersheds/Wetlands, Impact of El Ni-o Southern Oscillation on Trinidad rainfall).

**Dr. Lynda Wickham** (Agronomic studies on tropical root crops: yam minisett production, Product development, value addition and sensory evaluation of tropical commodities).

**Dr. Matthew Wilson** (flood risk, wetland and floodplain hydrodynamics, computational Modeling of hydrodynamics)

**Dr. Marisa Wilson** (Transnational flows of commodities, Political and moral economies of food production).

**Dr. Mark Wuddivira** (Soil properties and plant zonation in tropical wetlands using electromagnetic induction, CARIWATNET Project: Strengthening the Caribbean Scientific Community in Natural Resource Management and developing integrated watershed management plans).

# Distinguished Visitors

**Department of Agricultural Economics & Extension**

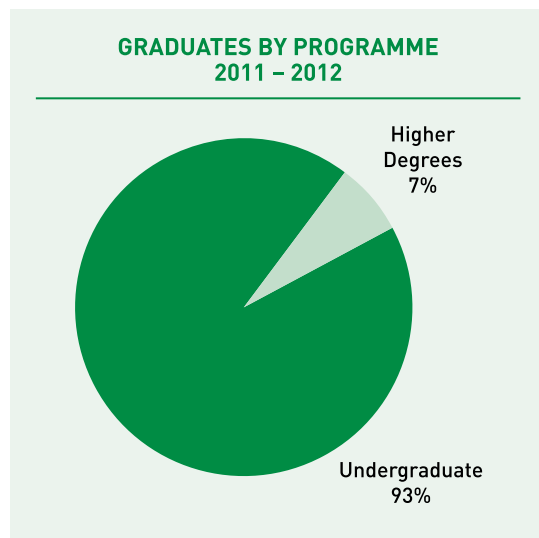
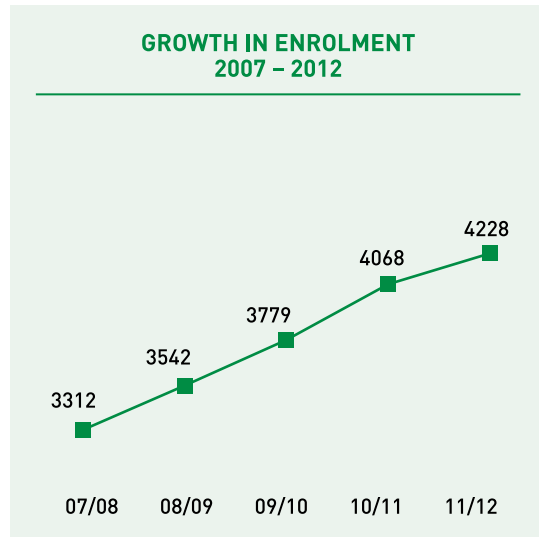
**Professor James Lindner and team,**  
Texas A&M University

**Leroy Phillip,**  
Associate Professor,  
Animal Science and Associate Director,  
McGill Nutrition and Food Science Centre,  
Faculty of Agricultural and Environmental Sciences,  
McGill University,  
Canada

**Department of Food Production**

**Dr. William Hickey,**  
Department of Soil Science,  
University of Wisconsin-Madison

**Professor Harjit Singh Rekhi,**  
Canadian Food Inspection Agency (CFIA),  
Canada



Data shown is for the combined Faculty of Science & Agriculture 2012. In 2013 there was a total of 1110 students registered in the Faculty of Food & Agriculture

Graduates from the School of Agriculture accounted for 14% of all graduates in the faculty.



**PROFESSOR FUNSO AIYEJINA**  
DEAN, FACULTY OF HUMANITIES AND EDUCATION

# FACULTY OF HUMANITIES & EDUCATION

## Executive Summary

In the academic year 2011/2012, the Faculty of Humanities and Education (FHE) had many accomplishments to celebrate. The Department of Creative and Festival Arts celebrated its 25<sup>th</sup> anniversary so that many of its exhibitions, productions and workshops were centred on this milestone. The Department of History joined in the country's commemoration of 50 years of Independence with a year-long schedule of events culminating in an international conference titled, *In the Fires of Hope: 50 Years of Independence in Trinidad & Tobago*.

After years of strategic planning and organizing, The University approved the division of the Department of Liberal Arts, which managed twelve programmes. The Faculty welcomed its restructure on August 1, 2012, into the following two new Departments:

Department of Literary,  
Cultural and Communication Studies

Department of Modern Languages and Linguistics

This restructure was celebrated by the former Department of Liberal Arts in its final *Dialogues* event. In the period under review, the Faculty celebrated the retirement of three of its Professors – Professors Barbara Lalla, Bridget Brereton and Ian E. Robertson. The Professors’ work and contribution to the Faculty, Campus, University and to academia were celebrated by the Faculty in a conference titled ‘**Re-assembling the Fragments: Interdisciplinary Conference in Honour of Retired Professors- Barbara Lalla, Bridget Brereton and Ian Robertson.**’

In spite of gross staff and space constraints, the Faculty of Humanities and Education continued to fulfil its objectives in line with the University’s Strategic Plan in the key areas of Teaching and Learning, Graduate Studies, Research and Innovation, and Open Campus. The Faculty also remained committed to its outreach goals and objectives.

In its focus on **Teaching and Learning**, the Faculty continued its rationalization of its undergraduate and graduate programme and course offerings in an effort to ensure that its offerings remained current and relevant. The Faculty successfully delivered an Undergraduate **Certificate in Journalism** in response to industry demands, a **BEd Primary (General)** degree and a **Postgraduate Pre-Service Diploma** in keeping with the **Ministry of Education’s** (MOE) closure of the state-run Teachers’ Training Colleges and the MOE’s directive that only persons with professional qualifications would be employed in the teaching service. It also offered for the first

time, an English Foundation course for Certificate level students and obtained approvals for an undergraduate **Certificate in Carnival Studies**.

A dedication to designing courses for different modes of delivery led to the introduction of e-learning on a higher scale in all departments and units.

FHE also is focussed on expanding its **Graduate Studies** programmes and offered an MA in Creative Design as well as the aforementioned Pre-Service Postgraduate Diploma in Education and an In-Service Postgraduate Diploma in Education.

With respect to **Research and Innovation**, a number of staff members in the Faculty engaged in collaborative research with local, regional and international partners including the **University of Twente in the Netherlands, University of Victoria in British Columbia, Canada, Syracuse University and Huanggang Normal University in the People’s Republic of China**. Grants/funding were obtained for some seven research projects.

FHE hosted and/or was involved in a number of **outreach activities** and hosted four major conferences in 2011/2012 and a number of workshops and seminars. The Department of Creative and Festival Arts successfully held approximately 28 productions and exhibitions, many of which focussed on the Department’s 25<sup>th</sup> anniversary. The Film programme successfully held film screenings and was an active collaborator in the Trinidad & Tobago Film Festival.

Some FHE staff members received higher qualifications as well as training from the IDU to enhance their teaching performance while five staff members received distinguished awards in the academic year 2011/2012.

The highest enrolments in the FHE were in the following programmes: Communication Studies, English Language and Literature with Education (ELLE), Literatures in English and B.Ed (Educational Administration). FHE graduated 115 Certificate level students; it awarded 416 undergraduate degrees, of which 367 were Honours degrees with 47 of these being First Class Honours degrees. The Faculty awarded 313 postgraduate degrees, of which five were MPhil degrees and eight were doctorates.

## 2011/2012 Publications

FHE staff produced a number of publications in the review period. They included 10 books; 25 Chapters in books; three Conference proceedings; 52 articles; four Translations; 76 Presentation of papers at Conferences as well as four reviews, two online databases and three other publications.

## Enrolment

The areas of Communication Studies, English Language and Literature with Education (ELLE), Film and B.Ed (Educational Administration) continued to be the most popular programmes.

## Graduation

FHE awarded 115 undergraduate certificates and 416 undergraduate degrees, of which 367 were Bachelor degrees. Of these, 47 were First Class Honours degrees.

### *Undergraduate*

The top Bachelor of Arts degree graduating student was **Matthew Vidia Ragbir** who majored in Theology.

The top Bachelor of Education degree graduating student was **Serah Ramoutar** who majored in Primary Education: Educational Administration.

### *Postgraduate*

#### ***Graduating Students: Postgraduate Degrees***

The Faculty awarded 313 postgraduate degrees, of which five were MPhil degrees and eight were doctorates. The eight doctoral degrees were as follows:

**Lester E. Wilkinson** - Cultural studies

**Patrick Q. Kep** - Education

**Moyia K. Rowtham-Francis** – Education

**Sharon R. Mansingh-Dubay** – French

**Lovell M. Francis** – History

**Loverne Jacobs-Browne** – History

**Keren M. Cumberbatch** – Linguistics

**Keisha S. Evans** – Linguistics

### *Student Achievements*

Six students from the Film Programme showed films at the 2010 Trinidad & Tobago Film Festival (TTFF) at MovieTowne Port of Spain. **Nadissa Haynes**' film *Pashan of the Froot* was selected to open TTFF 2011 while **Renee Pollonais**' film *Sweet Fries* won Best Local Short Film. In February 2012 *The Jouvay Ayiti* project - The band's presentation '*50 Years: Mud, Fete and Tears*', which served as a compulsory mas-in/as-research-and-education project for all 'Critical Readings' students and offered as well to the Carnival and Contemporary Spectacle (Certificate) students, placed 1st in both the Downtown and Uptown J'ouvert small band categories. Additionally, DCFA students were commissioned to produce 12 paintings for CITI 200<sup>th</sup> Anniversary celebrations. The students' work was displayed internationally.

## Teaching & Learning

### *Introduction of New Programmes and Courses*

The first of students in the **BEd Primary (General)** degree and the **UG Certificate in Journalism** were admitted in July/August 2011. In addition, the first cohort of students to the **Pre-Service BEd Programme** was admitted in 2011/2012 in response to the closure of state-run Teachers' Colleges and a new directive from the Ministry of Education that only persons with professional qualifications would be employed in the teaching service.

The **Certificate in ICT Curriculum Integration** was offered in 2011/2012 for the first time. The **Certificate in Dance and Dance Education**, and the **Practitioners Certificate in Drama/Theatre-in-Education** programmes continued to be offered in **Tobago** for a second year in 2011/2012. This initiative was funded by The **Tobago House of Assembly**. New programme designs and approvals included, the **Practitioner's Certificate in Carnival Studies, Digital History**, and a new academic writing course for **Certificate in Music**. Approval was obtained to offer CLL **Mandarin Chinese** and **Japanese** Language courses for credit and classes in **Yoruba** were re-introduced after a hiatus. Review and modification of some DCFA courses increased student enrolment significantly.

The School of Education began delivery of the in-service **Diploma in Education** programme in **Tobago** in 2009 and expanded delivery of three curriculum areas during 2011/2012, introducing Social Studies in 2011/2012. In the Department of Liberal Arts, a **Minor in Brazilian Studies** was approved in 2011/2012.

### *Improving programme and Course Quality*

Reviews were conducted in all departments and units and recommendations from the Quality Assurance reviews were implemented in the following areas:

- BEd programmes
- Film Studies and Film Production programmes
- Visual Arts
- Foundation English courses

An initial self-assessment report was completed for the Department of History in preparation for a formal review of the Department. A proposal to re-structure the Linguistics programme to include six credits in the structure of a Caribbean Language was approved. The Literatures in English programme was also re-structured with two first-year courses, LITS 1001 Introduction to Poetry and LITS 1002 Introduction to Prose Fiction, being team-taught.

## Design of New Programmes and Courses

### Cross-Departmental and Cross Faculty

**Programmes** – the School of Education has continued discussions with various departments in the Faculty and other Faculties regarding the development and design of double major programmes. The intention is to have programmes attract and interest new university students to the possibility of a career in teaching by providing them with the opportunity to enhance their knowledge and skills in the respective content areas while at the same time exploring educational theory and practice. The students will also be involved in planning for teaching, observing classroom teaching and some degree of classroom practice. Discussion for a new design of Foundation English courses for Certificate programmes continued as well as work on a *Self-Preparatory Handbook for the English Language Proficiency Test*, which has reached its final stages.

The Faculty has identified courses with low intake for review and possible withdrawal and modified, where applicable, existing courses in all departments and units.

### Improving Learning Effectiveness

The DCFA Library documented all Final Year students' Final Year Practical and Theoretical Projects and Examinations and updated all requisite texts for courses offered in the Department. The Festival Library at DCFA also offered advice regarding Copyright issues. Staff was encouraged to attend workshops on blended delivery and use of MOODLE, the online course instruction tool.

During 2011/2012, the School of Education (SOE) continued its BEd online programme and designed courses for blended modes of delivery (online and face to face). The SOE offered the **Dip Ed Social Sciences** option for the first time to teachers on site at the Tobago Hospitality and Tourism Institute in **Tobago**. The ECCE three-year BEd programme, which began in 2009, continued with Level 3 course offerings. The face-to-face mode was used for delivery of both programmes. In addition, the SOE expanded its offerings in Tobago by offering two MEd programmes (**MEd Curriculum Option** and **MEd Youth Guidance Option**) on site in Tobago for the first time. The delivery of the programmes for 2011/2012 was made possible with technology- the myeLearning platform and the videoconferencing facilities at both sites. Students were required to attend a few classes at UWI, St. Augustine

Lecturers in the Departments of History and Liberal Arts continued to design courses for blended modes of delivery (online and face to face). Staff was trained in the use of myeLearning allowing E-learning to be introduced on a wider scale in all departments and units.

Decisions were taken to offer shared courses with Mona Campus on the **Caribbean Sign Language Minor** programme and the **Diploma in Caribbean Sign Language** Interpreting programme via face-to-face mode due to the technical difficulties experienced to offer the courses via video conferencing in 2011/2012.

Opportunities for internships through industry linkages were maximised. The Film Programme collaborated with several companies to create internship/on-the-job training for its students and three Communication Studies students who were referred by Roddy Batchasingh were placed as interns with **WIN TV** from June to August 2012.

The French Section of the Department of Liberal Arts provided opportunities for students to teach English in French Primary and Secondary Schools. In 2011/2012, 17 students spent the academic year teaching in French Primary and Secondary Schools and nine of those students returned in September 2012 to complete their **BA French** degrees at UWI. Fifteen current or past UWI students have received postings for the next academic year (2012/2013) in French Schools.

Study Abroad programmes in the French and Spanish Sections of the Department of Liberal Arts with Universities in France, Guadeloupe, Martinique, Montreal, Brazil and Colombia were increased during the period under review. Other students in the FHE such as four students in the Film Programme also participated in Student Exchange Programmes with international universities. The Film programme formed a partnership with **Trinity College** in the United States.

### Teacher Quality

Humanities and Education staff received Higher Qualifications and Training and participated in numerous international and regional workshops as well as those held at the IDU on Writing for Publication, Reviewing Literature and the Plagiarism Proof Thesis webcast. Notable mention can be made of those members who received higher qualification:

### Centre for Language Learning

**Maria Landa Buil** successfully completed examiner certification from Instituto Cervantes, Spain. She is now certified to examine the official test of Spanish language proficiency (DELE) at all levels.

**Amina Ibrahim-Ali** completed training on the new fully automated application and registration system for the International English Language Testing (IELTS).

### Department of Liberal Arts

**Tyrone Ali** was awarded the MPhil in Literatures in English degree.

### School of Education

The in-house continuing professional development programme for academic staff of the School continued during 2011/2012. The focus on implementing courses using a blended learning approach was maintained and facilitated by the SOE blended learning committee comprising staff members Professor Christopher Fowler, Dr. Margaret Cain, Dr. Debra Ferdinand and Sandra Figaro-Henry.

## Graduate Studies

The Faculty has expanded its Graduate Studies through the introduction of the following graduate programmes: **MA Creative Design: Entrepreneurship** (DCFA); **Pre-service Post-graduate Diploma in Education**. There was also the introduction of two new courses during the period under review: **Interrogating Society through Literature, Philosophy and Film**; and **Intersections – Literature and Film**. In addition, the Year 3 of **Human Communication Studies** graduate programmes and the **MEd in Reading** were expanded.

### Graduate Programmes

A number of postgraduate programmes are being considered for approval or are currently under review. The **Postgraduate Diploma in Animation** is under consideration (DCFA), while the **Diploma in Arts & Cultural Enterprise Management (ACEM)** is under review by the Coordinator, Dr. Suzanne Burke, who is to submit a proposal to upgrade the Diploma to a MA degree.

Work done on the design of the **Master of Arts in Heritage Studies** continued as well as the **Master in Educational Leadership** continued in 2011/2012 while the design and approval of a **Master in Education in Inclusive and Special Education** programme was completed in during the same period.

A **Master in Education in Measurement, Evaluation, Research and Assessment** was designed in 2011/2012 and approvals are to be sought in 2012/2013. Work on the design postgraduate programmes in Film has begun.

The Faculty continued to work closely to enhance the linkages it has made throughout Latin America and the Caribbean as is evident by the close work of the Department of History to assist **Anton de Kom University of Suriname** in the design, development and delivery of an **MA History** programme. The Spanish Section of the Department of Liberal Arts also continued discussions with the **Universidad Nacional de Costa Rica** and The UWI with a view to offer a joint **MA Latin American Studies**.

Revisions to the **Cultural Studies programme** were successfully passed at Faculty Board in May 2012. These revisions include the support of a research workshop for the MA, MPhil and PhD programmes which the students attend after completing their coursework as well as a requirement for PhD students with a Master's level degree in Cultural Studies to attend a year-long, 4-credit seminar.

### **Quality Enhancement of Graduate Programmes**

A proposal for embedding **Information Literacy** in the programmes of the School of Education was continued in 2011/2012 by delivering the sessions to Postgraduate Diploma in Education students. The sessions focussed on Understanding Information Literacy, Understanding Academic Research and Ethical Issues in Academic Research.

Students in Graduate programmes in History benefited from the Department of History's close relationship with the **National Archives** and continuous engagement through public lectures and discussions.

### **Student Support**

The FHE's **Postgraduate Staff/Student Liaison Committee** met a minimum of three times during the 2011/2012 period and the issues raised are currently before Departments for consideration. As part of ongoing efforts to increase enrolment in Graduate Studies, the FHE continued to identify promising students in first-degree programmes and encourage them to return to undertake graduate studies.

## **Research & Innovation**

### **Research Clusters**

The FHE engaged in a number of interesting research projects surrounding two major research clusters, namely: Arts, Cultures and Theories of the Caribbean and Improvement and Effectiveness of Public Education at the Early Childhood, Primary School and Secondary School level.

### **Research Discussion Groups**

In February 2011 the School of Education established a discussion group committee. The purpose of the committee was to facilitate intellectual interactions among staff by organizing fora for staff to share their research work and/or discuss issues of educational significance. Sessions delivered in 2011/2012 included, **Maori approaches to research; The challenge of driving assessment reform in Trinidad & Tobago; Findings of the Dip Ed Evaluation Research; Collecting social identity data in standardized assessments: Implications for addressing gaps in student achievement;** and **Copyright for Educators at the SOE.**

## **Research Collaboration**

### **School of Education**

**Jerome DeLisle** was the lead researcher (Trinidad & Tobago) in an international project on **Data Driven Decision Making**. This international comparative data use study involves 10 countries, including the USA, Canada, Britain, Belgium, South Africa, and Trinidad & Tobago. The Principal Investigator is Kim Schildkamp of the University of Twente (Netherlands).

**June George** worked on large-scale assessment in Trinidad & Tobago with Professor John Anderson of the Department of Educational Psychology and Leadership Studies of the University of Victoria, British Columbia, Canada.

**Freddy James** worked on Collaborative Research Project - *International Perspectives on School Leadership Preparation and Development: A BELMAS-UCEA* as well as the Women in Higher Educational Leadership Project.

**Carol Logie** was lead researcher in collaborative research projects involving The University of the West Indies, Early Childhood Care and Education Project and Syracuse University, College of Human Ecology and Family Studies. The projects, which continued in 2009/2010, are national surveys on (i) *Childrearing beliefs and practices in Trinidad & Tobago*, and (ii) *Health, wellness and parenting practices in Trinidad and Tobago*. Dr. Logie is also involved in continuing projects including, *An examination of the inclusion of elements of nature in the Early Childhood Curriculum, the impact of In-Service Training on Early childhood Teachers - A comparative Study*. (Participating countries are Trinidad & Tobago (Carol Logie), The Commonwealth of Bahamas (Agatha Archer), China/Hong Kong (Dr. Maria Wan Lai Lee) and Australia (Dr. Sharon Russo); **OECS project** (in collaboration with Dr. Rose Davies), as well as **Voices-** (in collaboration with Professor Lilian Katz and Kenisha Ballantyne ) and **Transitions-** (in collaboration with Professor Jaipaul Roopnarine).

**Sharon Phillip** and **Desiree Augustin** represented the SOE, St. Augustine on a Caribbean poetry project. This was a collaboration between the University of Cambridge, UWI, Mona and UWI, St. Augustine.

#### Department of Liberal Arts

**Dr. Maarit Forde** of St. Augustine Campus and **Dr. Yanique Hume** of Cave Hill Campus jointly researched *Anthropological Perspectives on Death and Mortuary Rituals in the Caribbean* and are co-editing a collection of essays with selected papers presented at a 3-day workshop held in June 2011 in Barbados

## Research Projects

#### Department of History

Staff of the **Department of History** engaged in research on topics including: Gender and sexuality in the 18<sup>th</sup> Century Caribbean (**J. Campbell**); Enslavement Systems in the Caribbean and North America (**H. Cateau**); Revolutionary Emancipationism and Abolitionism: The Dilemmas of Slavery (**C. Fergus**); The West Indianisation of Caribbean History: A Renewed Call to Arms (**L. Francis**) and 19<sup>th</sup> Century Cuban Independence & José Martí's Relations with African Diaspora Global Perspectives (**A. Garcia**).

Other research areas include; Law in Plural Societies; The Caribbean and International Trade; Globalization in theory and practice (**K. Haraksingh**); Sex Across the Colour Line: Interracial Sexual experiences of White women in the servile West Indies (**G. Matthews**), Public Health and Alternative Medicine in the West Indies (**D. McCollin**), Constitutional History of Tobago (**R. Pemberton**), Health and Medicine in Trinidad & Tobago Since the 20<sup>th</sup> Century (**R. Pemberton and D. McCollin**) and Caribbean Time (5000 B.C. to the 21<sup>st</sup> Century) (**B. Reid**).

Social, Religious, Cultural Reconstruction in the Indian Diaspora in the Caribbean (*S.A. Singh*); The Impact of Marcus Garvey on Trinidad during the 1920s (*J. Teelucksingh*); The History of the P.N.M. in the Constituency of San Fernando West, 1956-2007 (*P. Timothy*) and The Black Power Movement in Trinidad & Tobago (*M. Toussaint*) are also being researched.

### Department of Liberal Arts

Examples of on-going staff research projects in the **Department of Liberal Arts** are:

**Jean Antoine-Dunne:** Archival research at the Fisher Rare Books Library at the University of Toronto and continuing research on the relationship between the postcolonial literatures of Ireland and the Caribbean. He is also involved in research of the Walcott archive and Samuel Beckett.

**Lancelot Cowie:** Continued work on *Narcotrafficking in Latin America* from a multi-disciplinary perspective and on *La ficcionalización de Simón Bolívar en la narrativa latinoamericana contemporánea (1990-2004)*. He is also working on several books: *Los tiempos de la agonía. Ensayos de terrorismo y violencia. Un enfoque literario. Mérida, Venezuela: El Otro El Mismo / CENLAC, La ficción del narcotráfico en América Latina and La Guerra del Olvido: Insurgencia y novela en México 1965-1992*

**Rómulo Guédez:** Continued research on Second Language listening comprehension progress and the learning strategies used by a group of Haitian university students.

**Elizabeth Jackson:** Ongoing research in Gender and cultural identity in Indian and Indian diasporic writing, Muslim women's writing in India and Transnational and cosmopolitan fictional writing.

**Diego Mideros:** Two publications forthcoming - a book chapter *Meeting the autonomy challenge in an advanced listening comprehension class* co-authored with PhD supervisor, Dr. Beverly-Anne Carter, in *Social Dimensions of Autonomy in Language Learning* edited by Garold Murray and Richard Smith, Palgrave Macmillan.

**Guillermo Molina:** In collaboration with Teresa Navarro Mart', working on a translation of *José Mart' y las conexiones globales de la construcción nacional cubana* by Dr. Armando García de la Torre.

**Anne-Marie Pouchet:** Continued research on religion and Hispanic Literature and the Baroque as a sign of crisis in Spanish Literature.

**Jennifer Rahim:** Ongoing research on Caribbean Literature, Caribbean Literary Theory and Creative Writing.

**Giselle Rampaul:** Involved in "The Spaces between Words: Conversations with Writers" podcast and research on Caribbean Appropriations of Shakespeare, Representations of the child in Caribbean Literature and Samuel Selvon.

**Louis Regis:** Involved in research in Trinidad Calypso, West Indian Literature and West Indian theatre. Completed the first phase of a massive database of calypso Tents 1946-2012 and competitions and working on a comprehensive database of past and present calypsonians, their brief bios and careers.

**Nicole Roberts:** Continued work on the project: *Research Methods in Caribbean Literary and Discourse Culture*. The editors included: Barbara Lalla, Nicole Roberts, Elizabeth Walcott-Hackshaw, and Valerie Youssef. The manuscript has been accepted for publication by the UWI Press. Submission deadline date: August 1, 2012.

**Jairo Sánchez:** Continued work in translation studies.

**Geraldine Skeete:** Ongoing research in Literary Linguistics, Change and Development in Caribbean Literary Discourse, Gender and Sexuality and Scholarship of Teaching and Learning.

**Shilpa Venkatachalam:** Continuing research in Literature and Philosophy, Modern Literature and Literary Theory. Currently working on a manuscript in the area of postcolonial and globalization studies for Cambridge Scholars Press, co-authored with Dr. Tia Cooper. Also working on a special edition of a bi-lingual edition of selected papers along with other members of the organizing committee of the New Geographies Conference.

## Research Grants/Funding

Research grants from the Campus Research and Publication Fund were secured for both the **Centre for Language Learning (CLL)** and the **School of Education (SOE)** via their students. **Maria Landa-Buil** (CLL) was able to secure a research grant for her research titled, "*The translation to English and revision for publication of the Summa Cum Laude PhD "the Determinant Phrase in the Spanish Inter-language of Native Speakers of Swahili"*", while **Rawatee Maharaj-Sharma (SOE)** secured one for her research titled, "What are upper primary school students' perceptions of science? The Trinidad & Tobago context".

The Department of Liberal Arts also received Research Grants and Funds from various benefactors. **Jean Antoine-Dunne** received two Campus Research and Publications Grants for a research project on Derek Walcott, while **Benjamin Braithwaite** received a grant from the Graduate Research and Publications (GRP) to continue to document Trinidad & Tobago Sign Language. Also receiving research grants under the Department are **Kathy-Ann Drayton** (grant from GRP), to develop a corpus of Child Language in Trinidad & Tobago and **Barbara Lalla, Nicole Roberts, Elizabeth Walcott-Hackshaw, and Valerie Youssef** received a grant from the University's Research and Publication Fund to continue work on the project: *Research Methods in Caribbean Literary and Discourse Culture*.

## Faculty Outreach

The Faculty either hosted or was involved in the following events during 2011/2012:

### Conferences

The Cultural Studies programme co-organised the **Annual conference of the Caribbean Philosophical Association (CPA)**. The conference took place at the Institute of Critical Thinking, UWI St. Augustine, July 19 to 21, 2012. This gathering of intellectuals working on philosophy that emerges in the Caribbean and its diaspora focused on the theme "**Racial Capitalism**".

The Literatures in English Section of the Department of Liberal Arts, under the Coordination of **Dr. Geraldine Skeete**, hosted the **30<sup>th</sup> Anniversary West Indian Literature Conference** October 13 to 15, 2011. Theme of the conference was "**I Dream to Change the World: Literature and Social Transformation.**"

The Department of History, Department of Liberal Arts and the Dean's Office hosted a conference titled **Re-assembling the Fragments: Interdisciplinary Conference in Honour of Retired Professors- Barbara Lalla, Bridget Brereton and Ian Robertson**, UWI, St. Augustine. (August 2011). The Department also hosted the conference, **In the Fires of Hope: 50 Years of Independence in Trinidad & Tobago**, to commemorate the 50<sup>th</sup> Anniversary of the Independence of the Republic of Trinidad & Tobago.

## Lectures, Seminars, Forums, Workshops, Camps & Open Days Department of History

The central focus of the History Department for the year under review has been the development and execution of a yearlong series of events/public lectures, themed '**In the Fires of Hope**', to commemorate the 50<sup>th</sup> Anniversary of the Independence of Trinidad & Tobago. The Department took the flame from "The Fires of Hope" to Port of Spain, Arima, Caroni, San Fernando and Tobago. Topics were wide ranging: **50 Years of Mas –How Yuh Feel?, Arima's History, The Last Train to San Fernando, Caroni Revisited, The Military Speaks** and **The Tobago Independence Experience**. These sessions were recorded and there is now a rich oral collection as well as several papers that will form the basis for the publication of the histories of these communities.

### Department of Creative and Festival Arts

Every July and August **Discovery Camp**, coordinated by Arts-in-Action, allows some 200 children to explore a holistic arts experience during the school vacation.

**Community School of the Arts**, coordinated by alumnus Cheryl-Anne Broomes, provides Saturday classes during each semester for children to discover their artistic natures, with classes in Music, Dance, Drama and Visual Arts and is held at the DCFA on Gordon Street.

Festival Projects (CANV 3499) challenged students in their final year to develop and implement an **Arts-based community intervention project**. This provides exciting community interfacing on the ground as does THEA 3301: Theory & Practice of Educative Theatre; THE 0510: Final Projects; and CANV 2012: Enterprise Internship in the Arts. These courses, in both Trinidad and in Tobago, stipulated full community involvement in practical as well as theoretical ways.

**Jazz Day**, a student-guided project, drew diverse practitioners for an all-day event of seminars and performances at DCFA, Gordon Street. This event will be held annually.

#### School of Education

The Continuing Professional Development and Outreach Unit successfully implemented an **academic consultancy in Adult Literacy** for the **Tobago Institute of Literacy**. The Unit was contracted to develop an adult literacy curriculum and an assessment-screening tool, train a group of tutors in implementing the curriculum and conduct a pilot study to determine the effectiveness of implementation. The Unit delivered an ICT Curriculum Integration Programme to 15 teachers, eight primary and seven secondary, in St. Vincent.

The training programme sought to equip teachers to provide well-structured and systematically planned integration of a range of technologies to enhance their teaching. The programme was delivered over a four-month period, between October 2011 and February 2012.

The following workshops were also facilitated by the School of Education:

- September 19 to 22, 2011- ***Building Capacity in Health and Family Life Education***
- February 6, 2012- ***Effective Classroom Management*** for 42 teachers at Providence Girls' Catholic School

The School of Education hosted its first **Open Day** on November 17, 2011. The newly established research clusters were highlighted along with the programmes offered. Among the research clusters are the following: Evaluation of the In-service Diploma in Education programme; Culture and Schooling; ICT in education; and Parental involvement in Education. The **pre-Service Diploma in Education**, a new programme, was launched.

The **Family Development and Children Research Centre (FDCRC)** hosted two **International Study Visits**. The first was held in Trinidad in September 2011 and the second in Tobago in April 2012. A seminar, "**Combatting Childhood Obesity**", was held at the School of Education on April 12, 2012. Dr. Bernice Dyer-Regis, coordinator of MEd Health Promotion programme, organised the seminar in collaboration with the Ministry of Health, the Faculty of Medical Sciences, PAHO/WHO and Faculty of Sciences and Agriculture.

A mathematics symposium, "**Mathematics in the 21<sup>st</sup> century: Embracing possibilities**", was held during the period June 21-23, 2012. The Symposium was organized by the Continuing Professional Development and Outreach Unit under the leadership of Dr. Maria Byron and allowed

attendees to experience the power and possibilities of mathematics in a friendly, collegial environment.

### Department of Liberal Arts

**Break the Silence Campaign: Flash Mob:** Seventy Communication students, six part time staff and three full time staff members participated in a flash mob to raise awareness of child sexual abuse. Students gathered in Tunapuna Market, Trincity Mall and Price Plaza and “disturbed space” with an impromptu flash mob where they held signs informing onlookers about child sexual abuse and how to seek assistance.

**Communication Studies Research Week:** This is a weeklong activity held annually in April. The theme this year was “*(Re)ConnectING*”, which acknowledges the relationship with technology and interpersonal communication. The week’s events included *Minute Mentoring* with local communication industry professionals; *Chalk writing*, where students wrote messages about how they are reconnecting and a *Media fast* – abstaining from using mediated technology for 24 hours and reflecting on experiences. *Research Day* saw Year 3 student thesis presentations, *Open Day* when Years 1 and 2 student coursework made presentations and *Spoken Word* poetry night with special invited guest, Dr. Traci Currie of the University of Michigan, Flint Campus were also part of the weeklong event schedule. Other student engagements within the early part of the year included the “*Career Options for Cultural Studies Graduates*” workshop by the Cultural Studies section on February 23, 2012.

**Dialogues 2011/2012:** On May 23, 2012, the Department of Liberal Arts hosted its final *Dialogues* event, which celebrated the achievements of its Faculty over 2011/2012. The work of **Drs. Nicole Roberts and Elizabeth Walcott-Hackshaw** on their co-edited book, *Border Crossings: A Trilingual Anthology of Caribbean Women Writers* was celebrated.

**Campus literature week:** Campus Literature Week ran from March 26 to 29, 2012. There were daily lunchtime readings which featured the work of published writers from the Department of Liberal Arts, MFA students, past and present UWI students, and guest readers. Campus Literature Week culminated with an evening of readings that featured Paul Keens-Douglas.

The Spanish and Portuguese **Second Annual Research Seminar** took place on January 20, 2012 at the Centre for Language Learning. Participants included members of the Section, Faculty from COSTAATT and Visiting Lecturer Dr. Elissa Lister from the UNAL, Colombia. Several postgraduate and undergraduate students as well as some from COSTAATT attended. Topics included language teaching, Latin American History, Hispanic Literature, Film and Culture.

The Spanish and Portuguese Section worked in conjunction with the CLL to host **two workshops on language teaching and learning** given by Faculty of the **Universidad de Buenos Aires**. These workshops “*Evaluación en la clase de ELE*” and “*Diseño de Materiales Didácticos para el Uso Efectivo del Español*” were held from May 14 to 18,

2012 and were well attended by members of the Section and other educators from the University of the Southern Caribbean.

### **Film Programme**

The Film Programme hosted a workshop with Jamaican filmmaker **Chris Browne** as well as a workshop exclusively for our students hosted by Surinamese filmmaker **Pim de la Parra**.

### **Productions And Exhibitions (DCFA)**

The major theme or focus of many of the events/ productions from the Department of Creative and Festival Arts in 2011/2012 was centred on the 25<sup>th</sup> anniversary of the Department of Creative and Festival Arts. Some of the main events/ productions included the following:

#### **June/July 2011**

Must Come See Productions (UWI Arts Chorale) performed **Peter Pan** at Queen's Hall. Jessel Murray, co-producer and music director/ conductor; Louis Mc Williams, director.

#### **September 2011**

UWI Arts Chorale performed at UWI Matriculation Ceremony at the UWI Quadrangle Jessel Murray, Conductor.

#### **December 2011**

UWI Arts Chorale and the UWI Steel presented **Go Tell It** – a concert in honour of the **Year of People of African Descent** with readings by **Dean Funso Aiyejina, Dr. Dani Lyndersay** and others. Performances broadcast nationally on Channel 4 during the Christmas Season.

#### **February 2012**

**The Old Yard** (formerly **Viey La Cou**) at DCFA, UWI, St. Augustine which featured traditional mas characters. Organised by L. Mc Williams and R. Quarless.

**The Jouvay Ayiti** project - The band's presentation '**50 Years: Mud, Fete and Tears**'. Rawle Gibbons, Laurence Richardson and Anthea Octave were the principal organisers.

#### **March/April 2012**

Theatre Arts Production: **Nation Dance – The Pilgrimage**, directed by Rawle Gibbons and Louis McWilliams. Nationwide venues and DCFA, Gordon Street.

#### **April 2012**

UWI Arts Chorale and UWI Steel presented **Cry Freedom** on tour in Barbados at The UWI Cave Hill Campus, the Oistins Fish Festival and other venues. This concert was repeated in May for the Child Welfare League at Arima Methodist Church. Engineering Auditorium, **TH?NK** Symposium -- the **Value of Culture** (organized by Dr. Suzanne Burke, ACEM programme).

**Music of the Diaspora** - UWI Intermediate Steelpan Ensemble, UWI Classical Ensemble and Caribbean Contemporary Ensemble at Daaga Auditorium. Directors: Deryck Nurse, Satnarine Baboolal and Superintendent Enrique Moore.

## May 2012

**Sole to Sole** - Showcase Dance Production featuring staff and students with contemporary works of Dr. Jorge Morejon, part-time lecturer Andre Largen and a number of school and community dance companies at Little Carib Theatre.

**BA Visual Arts Student Exhibition**, DCFA Gordon Street. The body of work on display by the graduating students of the BA degree and Certificate in Visual Arts programme was completed over a rigorous multi-disciplinary foundation programme and represents some of their experiences from the programme.

**Theatre for Children:** a student-led Theatre Arts production primarily for viewing by children ages 6 to 12, Centre for Language Learning Auditorium.

## June/July 2012

The second **Biddeau Drum Festival**, Coordinated by Rawle Gibbons, comprised of The Saraka Drumming Workshops, Saraka Feast and Drum Symposium: '**Honouring our Ancestors**' at Open Campus, UWI.

Must Come See Productions (UWI Arts Chorale) performed **Hairspray** at Queen's Hall. Jessel Murray, co-producer and music director/ conductor; Louis Mc Williams, director.

## July 2012

The UWI Arts Chorale performed with the National Steel Symphony Orchestra in **Pan on a Higher Note** – a concert for the 50<sup>th</sup> Anniversary Celebration. Arts in Action's **Discovery Camp**. With its focus on the 50th Anniversary of Independence, Arts in Action facilitated the Discovery Camp's 2-cycle run (July and August) themed 'Hearts of Gold' at the Senior Common Room, UWI.

### **Film Festivals And Screenings (Film Programme)**

Six students showed films at the 2011 Trinidad & Tobago Film Festival (TTFF/11). These included **Nadissa Haynes'** film **Pashan of the Froot**, which was given the honour of being selected to open the Festival as well as **Renee Pollonais'** student film **Sweet Fries** which won Best Local Short Film at the TTFF/11. Additionally, Staff members and film alumni **Francesca Hawkins** and **Oyetayo Ojoade** screened their films **Rooted in Dreams** (co-directed with **Professor Patricia Mohammed**) and **The Madonna Murti** respectively at the TTFF/11.

The Film Programme screened a number of the films from the TTFF/11 on Campus at the Institute of Critical Thinking and Centre for Language Learning and the open air **Cinema Under the Stars** screenings at the Arcon 2 School of Education. The Film Programme, in association with the High Commission of India and the Mahatma Gandhi Institute for Cultural Cooperation, hosted a film series in May 2012 to commemorate the life and work of Rabindranath Tagore.

**Other**

The Inaugural Foreign Language Film Festival, a joint initiative of the Centre for Language Learning and the Department of Liberal Arts, was held at the CLL, March 22 to April 15, 2012. The festival drew on support from nine diplomatic missions to showcase 26 films to over 700 patrons during the three weeks of screenings.

The Modern Languages Section of the Department of Liberal Arts hosted a St. Augustine Foreign Languages Theatre Festival from May 21 to 22, 2012, where French and Spanish students showcased their talent. There were also several short plays put on by students of the University of Trinidad & Tobago who collaborated in the event.

## Administrative Transformation and Funding

In order to more effectively administrate the Faculty, discussions across Schools, Departments, Centres and units in the Faculty are to be held to ensure an effective Faculty Budget is put forward for approval. Additionally, both Academic and Administrative staff have been asked to multitask different responsibilities.

An administrative manual outlining the duties and responsibilities of the various administrative posts in the Faculty to facilitate administrative efficiency is being developed. Staff is also working on the design, development and delivery of a more effective orientation programme for all new and returning students and the development of strong academic advising programmes for both undergraduate and graduate students. These programmes include academic advising workshops to train academic advisers.

A rental policy and a policy with respect to film services (filming and editing) were implemented in 2010/2011 for Film Programme equipment and services. The programme raised a total of TT\$43,095.05 from film projects and equipment rentals.

## Projected Activities for 2012-2013

The Faculty's projected activities for 2012/2013 and beyond will reference specific Departments including two new departments that became operational on August 1, 2012: the Department of Literary, Cultural and Communication Studies (LCCS) and the Department of Modern Languages and Linguistics (MLL).

Projected activities for 2012/2013 and 2013/2014 and beyond are set out in accordance with the Strategic Perspectives, Goals and Objectives of the next five year Strategic Plan 2012 to 2017.

### *Income Source Diversification*

The Faculty aims to design self-financing programmes in collaboration with private and Government institutions and ministries: a joint **Certificate in Technical Vocational Education and Training** between the School of Education (SOE) and **National Training Association** (to be designed, approved and offered in 2012/2013) and programmes to provide the **Ministry of Education** with the necessary skills within the discipline for the qualification of teachers with respect to the new CAPE syllabus (Department of History).

Under the Department of Creative and Festival Arts (DCFA), the FHE plans to develop "The Ole Yard" as a vehicle for Alternative Entertainment for the Carnival and to attract local and international

audiences. It can also act as a tool for CSEC and CAPE Theatre Arts Education and to partner with the **National Carnival Committee** to develop a **Pre-Certificate programme in Carnival** to certify Mas practitioners with the target population being those practitioners who desire certification but may lack academic credentials. Initiatives include the development of a joint international programme in the examination of Steelpan with the ABRSM of the UK (sharing of human capital, training and educational material) and of an **Arts Policy for the St. Augustine Campus** working group which will then guide the Department in the formation of a set of programmes to enhance financial viability, are some of the DCFA's future activities.

### *Increase income from increased enrolment of international students*

There will be a review of the mid-year Festival Arts Courses for International students to be possibly offered during the Carnival season as well as the development of "niche" marketing programmes (the 'Caribbean Experience') specifically aimed at international students and leveraging areas of expertise of UWI are some of the income generating ideas coming out of the Faculty. Additionally, there are plans to form collaborative links with organisations like the **National Museum of Trinidad & Tobago** for heritage research, supervision and other programmes; identify and target international markets with special interest in Caribbean literature and heritage as well as increase the student participation in Study Abroad programmes.

***Increase philanthropic giving,  
external grant funding and sponsored research***

The Faculty has intentions of increasing grant funding and sponsored research as well as partnering with the School of Education for Faculty to benefit from specialists in proposal and grant writing.

***Employee Engagement and Development***

The Faculty intends to develop an employee competency framework to inform recruitment and talent management, training, promotion, compensation and succession planning for staff development and to support the attributes of the UWI employee.

This will be achieved through the development of an Administration Manual to document and track job descriptions and job requirements to inform recruitment and talent management, training, promotion, compensation and succession planning for staff development and to support the attributes of the UWI employee. Additionally, FHE plans to introduce training in leadership and management for all levels of staff as part of talent management and career development planning through the reorganisation of workloads or weekend training for Staff re Leadership and Supervisor Management training (all Faculty Offices), linking training needs/requirements to Staff Appraisal System (all Faculty Offices) and by hosting of staff retreats (CLL).

***Internal Operational Processes***

Enable cutting-edge technology to drive the re-engineering of all relevant administrative and academic processes across all campuses using university-wide systems through the use of **Learning Content Management Systems (LCMS)** for all courses in the Department. This will allow the speedy, effective and collaborative nature of Departmental teaching and learning. The LCMS will also act as a repository for all History produced teaching items thereby creating more effective teaching aids and reducing wasteful resource redundancies across all courses. This will be done in collaboration with CITS to establish one virtual laboratory in a selected area by the end of academic year 2013/2014.

***Teaching, Learning and Student Development***

Improve and harmonise quality assurance practices and processes across campuses by establishing a management committee to oversee academic programmes. The Faculty plans to identify, collate and formalize academic processes, promote staff awareness of academic processes. Intentions also include providing in-house staff development programmes to meet specific identified needs and identify staff development programmes to meet specific needs.

Increase accredited undergraduate and postgraduate programmes across all campuses by designing and rolling out a new **BA in Journalism, a Cultural Studies/ Media Studies minor** as well as an **Organizational Communication minor**.

Additional plans include designing History courses (History of Health in the Caribbean and Women and Gender: Pre-Colonial Africa), development of a **Master's programme in Music Education** and **upgrade the Diploma in Arts and Cultural Enterprise Management to a Master's programme**. The Faculty also hopes to design and mount new programmes such as a **BA in Cultural Studies, Advanced Certificate in Drama/Theatre-in-Education** (through a request from the Ministry of Education to facilitate more Theatre Arts Teachers in Secondary Schools). **Diplomas in Animation, Indian Music, Carnival Aesthetics, and Design and Carnival in Education**, a 4-year BA/BSc with Education, **BEd and Master's in Mathematics with Education** (Interfaculty collaboration with FSA), Programme in **Product/Industrial Design** and BA degree in **Arts Education** will also be designed.

The Faculty plans to promote competency-based activities linked to the attributes of the UWI graduate to the needs of the workplace and society by developing necessary critical thinking skills through the teaching of Philosophy at the St. Augustine Campus as a basis for strengthening critical thinking.

#### ***Student Engagement and Experience***

Academic, administrative, financial and other student support services will be strengthened by a robust approach to Academic Advising, continuing the work of the Faculty Post Graduate Staff/ Student Liaison Committee and by reactivating the Faculty Undergraduate Staff/Student Liaison Committee.

## **Research and Innovation**

The Faculty will develop and implement supportive policies, processes and incentives for research by establishing an online weekly staff Newsletter with highlights of research work and creation of a mentorship programme for new staff. A Faculty Committee will seek to identify products in the Faculty that have commercial value.

#### ***Graduate Studies and Research***

The Faculty aims to increase enrolment of graduate students and improve on throughput of graduate students through the introduction of an **MA Heritage Studies** in the Department of History in line with Cave Hill and Mona as well as revise the current **MA History**. There will be supervisory staff attendance at IDU supervision workshops, standardisation of graduate seminars across faculty departments as well as ensure compliance with existing postgraduate research instruments such as progress, seminar and thesis reports.

## Outreach

UWI expertise to enhance the knowledge-base capacity of major governmental agencies, regional private sector organisations, boards of regional organisations and governing bodies of TLLs will make the Faculty the consultancy standard for regulation of downstream knowledge sites e.g. CXC, CAPE.

The Faculty seeks to be the leader in local areas of secondary, tertiary and industrial level of expertise that will include not only Heritage studies but sustainability and eco-tourism aspects.

### *Internationalisation*

Quality international students and faculty will be attracted by conducting preparatory work for the establishment of a Confucius Institute at UWI St. Augustine to serve as the principal source for cultural, economic, trade and academic information on China. The DCFA also intends to develop a system of exchanges between individual students and performance groups of the DCFA to enhance experiences for both parties. The scope of Study Abroad programmes will be widened, both for credit and not for credit.

## Distinguished Visitors

### Department of Creative and Festival Arts

#### **Dr. Lincoln Douglas,**

Minister of Arts and Multiculturalism,  
Republic of Trinidad & Tobago

#### **Drums of Cabildo,**

Colombia

#### **Eduardo Roca Salazar,**

Artist,  
Cuba

#### **Her Excellency Fidelia Graand-Galon,**

Surinamese Ambassador to Trinidad & Tobago

#### **Professor Harry Price,**

Percussion,  
University of Delaware,  
USA

#### **Ray Funk,**

Carnival Studies,  
Alaska

### Department of Liberal Arts

#### **Opal Palmer Adisa,**

Guest Reader,  
Jamaica/USA

#### **Ms. Erna Brodber,**

Invited Guest,  
Jamaica

#### **Ms. Vahni Capildeo,**

Invited Guest,

#### **Professor Myriam Chancy,**

Writer-in-Residence,  
Haiti and Canada

**Ms. Merle Collins,**

Invited Guest,  
Grenada/USA

**Ms. Traci Currie,**

Guest Lecturer, Communication Studies,  
University of Michigan, Flint Campus

**Professor Michael Dash,**

Guest Lecturer,  
New York University

**Mr. Silvero Da Silva,**

Invited Guest,

**Mr. Anson Gonzales,**

Invited Guest,  
Trinidad and Tobago

**Mr. Paul Keens-Douglas,**

Featured Writer, Campus Literature Week,  
Republic of Trinidad & Tobago

**Ms. Nalo Hopkinson,**

Invited Guest,

**Ms. Paula Lucie-Smith,**

Invited Guest,  
Trinidad and Tobago

**Mr. Anthony Texeira,**

Invited Guest,

**Mr. Mark Wilson,**

Invited Guest,

**School of Education**

**Dr. Camille Nakhid,**

Senior Lecturer, Department of Social Sciences,  
Auckland University of Technology,  
New Zealand

Film Programme

**Chris Browne,**

Director,  
Jamaica

**James P. Younger,**

Assistant Professor in Film,  
Trinity College,  
USA

**Juan Francisco Pardo,**

Director,  
Aruba

**Miriel Cejas,**

Actress,  
Cuba

**Noble Fox,**

Director,  
Zimbabwe

**Pim de la Parra,**

Director,  
Suriname

**Storm Saulter,**

Director,  
Jamaica  
Mr. Chris Browne,  
Director,  
Jamaica

**Ms. Miriel Cejas,**  
Actress,  
Cuba

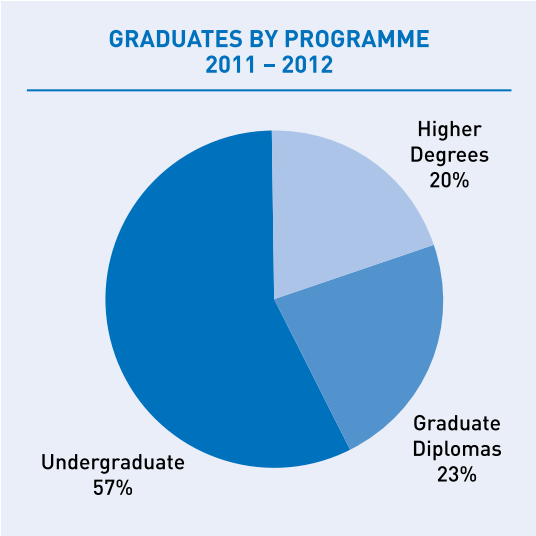
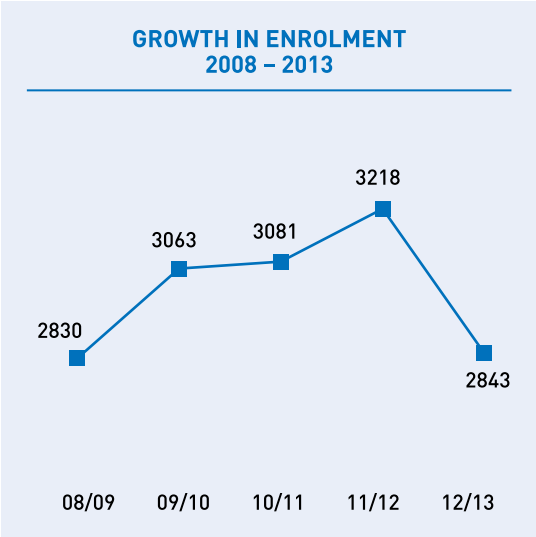
**Mr. Noble Fox,**  
Director,  
Zimbabwe

**Mr. Juan Francisco Pardo,**  
Director,  
Aruba

**Mr. Pim de la Parra,**  
Director,  
Suriname

**Mr. Storm Saulter,**  
Director,  
Jamaica

**Dr. James P. Younger,**  
Assistant Professor in Film,  
Trinity College,  
USA





**PROFESSOR SAMUEL RAMSEWAK**  
DEAN, FACULTY OF MEDICAL SCIENCES

# FACULTY OF MEDICAL SCIENCES

## Executive Summary

There is a lot of which to be proud for the academic year 2011/2012.

### *Accreditation*

The School of Medicine (MBBS programme) underwent the statutory accreditation exercise (a joint effort of all UWI Campuses) by CAAM-HP and was granted an extension of accreditation for five years, from 2012 to 2017 - the first time that CAAM-HP has awarded this duration of accreditation.

The School of Veterinary Medicine's accreditation was extended for an additional two years without the need for a site visit and the School of Dentistry's accreditation was extended for an additional one year without the need for a site visit.

The Faculty continues to offer its students a quality experience, one that is internationally recognized, evident by the fact that the World Federation of Medical Education (WFME) has officially recognized the CAAM-HP. The School of Veterinary Medicine has begun the process of seeking accreditation by the AVMA (American Veterinary Medicine Association) and, should this be successful, the School will be in a better position to attract more international students.

### *Physical Facilities*

The **Students' Accommodation Facility at the San-Fernando General Hospital** was officially opened by the Honourable Prime Minister, Kamla Persad-Bissessar, and has been providing much needed accommodation, lecture and study areas for students in clinical clerkships at San-Fernando General Hospital. An official sod-turning ceremony was held for the **Students' Recreation Centre at Mt. Hope** and construction is in progress. The building is expected to be completed in the next academic year.

Renovations began at the former El Dorado Girls' Youth Camp to accommodate the Academy of Nursing which will comprise the UWI (SANE) and COSTAATT.

The Faculty has been allocated the entire second floor of the Chancery Lane Complex in San-Fernando. The space is being outfitted by Austrian contractors and is estimated to be ready for occupation in the second half of the next academic year. At the School of Veterinary Medicine, the award of contracts was approved for the construction of new offices, a students' lounge (for students in Small Animal Medicine/Surgery clinical rotation) and the supply of Linatex padding for the equine recovery room.

### *Staffing*

The improved financial status of the Faculty has meant that several posts/ vacancies were advertised and filled and staff members continue to access courses and workshops offered by the IDU, namely, CUTL, which augurs well for

improvements in teaching and learning in the Faculty.

### *New Programmes*

Approvals were received for the following new programmes:

- BSc Nursing (generic)
- BSc Dental Hygiene/ Dental Therapy
- MSc Palliative Care
- Diploma HIV Management
- DM Otorhinolaryngology

The BSc Optometry was transferred from the Faculty of Science and Agriculture.

A successful photo exhibition, 'Meds-Eye 2012', was held and gave a visual display of the teaching, learning and research at the Faculty. A Faculty Fun and Family Day saw a large turnout of staff and family members.

The Faculty of Medical Sciences looks forward to 2012/2013 and the continuation of all the positives of this academic year.

### *Department of Para-Clinical Sciences - Summary*

The Department of Paraclinical Sciences bridges the preclinical and clinical sciences. It is the first introduction of the student to actual clinical material, taught particularly in the disciplines of Pathology and Pharmacology. A third discipline of Public Health and Primary Care is interwoven in the teaching objectives in Paraclinical Sciences. Teaching in all these disciplines is integrated and forms three Integrated Paraclinical Sciences courses.

Administratively three Units comprise the Department: Pathology and Microbiology, Pharmacology and Public Health and Primary Care. In Pathology and Microbiology, the five sub-disciplines taught are Anatomical Pathology and Histology, Haematology, Chemical Pathology, Microbiology and Immunology. The assessments from the clerkships in these disciplines together with those of Pharmacology comprise the continuous assessment mark of the Applied Paraclinical Sciences course. Training in clinical skills is taught in the Applied Paraclinical Sciences course. Teaching in Public Health and Primary Care is scattered over the five years of the medical curriculum.

Graduate student registration and activities have increased and become structured in the past year, so that weekly presentations and research critique are compulsory for graduate students. The Department introduced a structured approach to examinations by instituting a core committee to increase the efficiency of the examination process.

***Activities Aimed at Changing Culture/Process, Quality Assurance etc.***

The Department has instituted a core committee, with a Chairperson to pro-actively screen all examination questions for the final and the continuous assessment examinations. The Department made keen efforts to introduce Public Health and Primary Care in more courses throughout the Pre-clinical and Paraclinical phase. This effort will be enhanced in the coming academic year.

***Efforts to Improve Recruitment and Retention***

Efforts to recruit an Immunologist were successful though it has been difficult to recruit academic staff in Public Health and Primary Care as well as in Anatomical Pathology. Recruitment is vigorously being pursued and the Department is optimistic that these vacancies will be filled within the next academic year. Recruitment of an academic in Molecular Biology, which would be an asset for research efforts in several of the sub-disciplines in the Paraclinical Sciences, is also being pursued.

***Developments over the last academic year***

The Department completed and submitted, in co-ordination with the IDU and the Clinical Sciences, a modified programme for Year 3 of the MBBS curriculum to harmonize with the Mona/ Cave Hill curriculum to allow for easier student transfers between sister campuses. The graduate programme in MSc Microbiology has been approved. Further, developmental efforts to formalize a course in Infection Control for medical and paramedical staff with emphasis on Epidemiology, Microbiology and Pharmacology have all been initiated.

***Department of Clinical Medical Sciences - Summary***

The Department of Clinical Medical Sciences comprises the Units of Adult Medicine, Child Health, Psychiatry and Radiology and, in the year under review, was involved in a quality assurance review and the accreditation process for the entire School of Medicine.

Both these reviews pointed to the expanding student numbers and the relative lack of human and physical resources in the fulfilment of the academic and developmental goals of the Department. Greater organizational rigour was recommended. Notwithstanding, the Department delivered 100% pass rates for Medicine and Therapeutics at the two examination sittings covered by this report. On a sad note, the Department lost one of its academic staff, Professor Harinath Maharajh. The Department also saw Dr Maria Herrarra de Rios resign during the period in review.

Two new programmes were approved for introduction in the 2012-2013 academic year: the **MSc in Palliative Care** and a **Diploma in HIV Intervention**. A very good student uptake for these two programmes augurs well for their long-term sustainability. Postgraduate training continued as a priority and there continues to be a large number of students entering the various DM programmes in the Department as well as the MSc in Clinical Psychology, resulting in more than 80 students being enrolled in postgraduate programmes during this academic year.

### *Training initiatives*

*The following workshops were conducted in collaboration with the Trinidad & Tobago Health Training Centre (TTHTC)*

- PLHIV: Dealing with Psychosocial and Emotional Issues, 2-day Workshop
- Conflict Management and Resolution, 3-day Workshop
- Monitoring, Evaluation and Surveillance, 2-day Workshop in collaboration with HIV/AIDS Coordinating Unit, Ministry of Health
- HIV and Nutrition: A Workshop for community workers, To be piloted as a module within the Diploma in the Management of HIV Infection
- Training of Associate Lecturers Staff in Item Writing, Key Feature Problem (KFP)
- Workshop Seminar on Child Protection

### *School of Dentistry - Summary*

The School has done well during the period 2011/2012 with 35 new students admitted into the Year 1 DDS degree programme. Statistics reveal that 66% are from Trinidad & Tobago; 3% from the Caribbean and 31% from outside the region. Each class is brimming with students, revealing the need to pursue expansion plans. In the previous year 27 graduates completed their Vocational Training Certificate Programme and nine of these, who also enrolled into the UWI-LMC Residency Programme, have successfully completed the programme obtaining Residency Certificates.

The Caribbean Accreditation Authority for Medicine and other Health Professions (CAAM-HP) site visit occurred during October 4 to 9, 2010. The School was accredited for two years, 2010-2012, with conditions and in June 2012 the accreditation status was extended for a further 2 years to 2014 after consideration of two satisfactory annual progress reports. There has also been an initiative to pursue the expansion of the Dental School. It is the vision of the School that at least 50 new students will be accommodated by September 2013 and the results have thus far been very positive. The School acknowledges the support of Campus Principal Professor Clement Sankat and the Dean of the Faculty of Medical Sciences, Professor Samuel Ramsewak, in both endeavours.

Overall, the School has done well in the calibre of its graduates, research output increase, accreditation approvals and quality assurance initiatives. The School is also successfully running the Special Needs Dental Clinic and increased its income generating activities during the period.

The **Bachelor of Science (BSc) in the Dental Hygienist/ Therapist** course has been approved by the Board of Undergraduate Studies (BUS) and will commence in 2013. Success would not have been possible without the Dean and our dedicated team of both Academic and Administrative and Technical Staff. Thank you!

### **School of Advanced Nursing - Summary**

The 2011/2012 academic year has been successful - 16 students graduating from the Master's in Nursing programme and 23 students graduating from the BSc in Nursing programme.

The School participated in a number of special projects and community outreach activities with external partners and communities in Trinidad & Tobago. These include participation in health education in different communities and in a project led by the Fulbright Regional Nexus Scholar on '*Social Determinants of Health Internship for Caribbean Secondary School Students*'.

During Nurses Week a workshop was delivered on *Conflict Management for Health Care Personnel* and a presentation made on diabetes for non-governmental organisations. The School is working on the development of new programmes of study at both the undergraduate and post graduate levels and on the development of a more strategic plan for research enterprise and research programmes, possibly a research institute for nursing and health care.

### **Enrolment Department of Para-Clinical Sciences**

A total of 216 Undergraduate students enrolled in the Year 3(MDSC 3311-14) Programme.

Enrolment in postgraduate programmes were as follows: three in the MPhil in Pharmacology, two in the PhD in Pharmacology, MPhil in Public Health and PhD Public Health. Nine students enrolled in the MPhil in Microbiology, 10 students in the MPH (MSc Public Health). Both the PhD in Public Health and MPhil in Haematology enrolled one student.

### School of Dentistry

Thirty- five new students have been admitted into Year 1 of the DDS degree programme: 66% are from Trinidad & Tobago, 3% from the Caribbean and 31% from outside the region. Each class is brimming with students, revealing the need to pursue with expansion plans.

### School of Veterinary Medicine

A total of 196 undergraduate students enrolled in the School of Veterinary Medicine. Enrolment in postgraduate programmes were as follows: Five students in the MPhil in Vet Medicine, two students in the MPhil in Veterinary Parasitology and three in the MPhil in Vet Anatomy. One student enrolled in the MPhil in Veterinary Physiology/ Reproduction, the MPhil in Public Health, the PhD in Vet Anatomy and the PhD in Veterinary Medicine.

### Graduation

#### Department of Pre-Clinical Sciences

#### Higher Degrees Awarded (Graduation 2011)

**Albert Auguste:** PhD Molecular Genetics (with high commendation)

**Camille Mitchell:** PhD Anatomy

**Carol Esther McEwen:** MPhil Anatomy

**Neetu Mohan:** PhD Biochemistry

#### Outstanding Postgraduate Students

**Albert Auguste,** PhD Molecular Genetics won the award for Most Outstanding PhD thesis in Sciences at the University of the West Indies, St. Augustine Campus (2010/ 2011).

**Janine Seetahal,** PhD Molecular Genetics candidate, was the winner of the 2011 George Baer Latin American Investigator Award, which is given to a researcher from a Latin American country for outstanding work in the field of rabies research.

#### Student Success in Academic Competitions and Awards Received

A Year II Students' Research group, supervised by Prof J. Addae, won the best poster award on the Faculty Research Day for medical students.

**Nikita Sahadeo,** PhD Molecular Genetics candidate, won a US\$6000 grant from the International Society for Infectious Diseases for her study entitled '*A high-throughput next-generation molecular study of viruses associated with suspected dengue cases in Trinidad & Tobago.*'

### School of Dentistry

#### Outstanding Undergraduate Students (2011)

Best overall performance - **Krystal Nisha Singh**

Best performance in clinical examinations

(Restorative Dentistry) - **Zaheer Mohammed**

- Best performance in Dent 5320 (Restorative Dentistry) - **Anna Kay Bishop**
- Best performance in Dent 5330 (Child Dental Health) - **Janelle Ramona Nurse**
- Best performance in clinical examinations (Child Dental Health) - **Julien Edwards**
- Best performance in clinical examinations (Oral Diseases) - **Krystal Nisha Singh**
- Best performance in Human Disease (Year 3 student) - **Kimberly Ella-Tang**

### School of Advanced Nursing

**Kamla Sambrano** and **Roxanne Moore Seaforth** were Valedictorian and Salutatorian respectively for the class of 2011-2012.

### School of Pharmacy

Fifty-four students were awarded the BSc Pharmacy degree: 6 first class honours, 19 upper second class, 24 lower second class and five (5) pass.

## Teaching & Learning

### Department of Pre-Clinical Sciences

The format of Problem Based Learning (PBL) has been changed to include written explanations of issues arising from the clinical problem. In a pilot project involving two of the seven courses, students received group marks toward their final course assessment.

### Department of Para-Clinical Sciences

The Department uses a multimodal methodology for course delivery and assessment to achieve the goal of preparing students for clinical sciences in the most comprehensive and effective manner. The methods of approach include didactic lectures, Problem Based Learning, patient interface seminars, laboratory activities and learning from, museum specimens. Clerkships, clinical teaching in wards and patient interactions are used by certain disciplines. Course information, lecture material and examples of assessment measures are made available on the University Faculty website - myeLearning.

### Department of Clinical Medical Sciences

The Department implemented small group teaching by lecturers in Year 5 for undergraduate students and started using tutors for small groups in Year 4. Additionally, undergraduate teaching began in Paediatrics at the San Fernando General Hospital and at the Sangre Grande Hospital. Substantive changes were made to the Regulations of the DM Paediatrics programme and steps were taken to convert the MSc Palliative Care to a part time evening programme.

### School of Dentistry

The School held a retreat in October 2011 to start a review of the Curriculum. A draft schedule was developed for regular review of course content. This is currently in progress and has included all full-time staff and the part-time instructors looking at learning objectives and teaching philosophy. Also, part-time instructor meetings have been scheduled for regular review and reinforcement of teaching in the School's Polyclinic Manual.

### School of Veterinary Medicine

Most courses in the SVM are now on myeLearning and five academic staff members (three in the Department of Basic Veterinary Sciences and two in the Department of Clinical Veterinary Sciences) attended the Certificate for Teaching and Learning (CUTL) course organized by the Instructional Development Unit (IDU).

### School of Advanced Nursing Education

Mid-semester evaluations were closely looked at and a review of teaching and learning approaches made for enhancement of teaching and learning and the students' experience.

### School of Pharmacy

A WIKI project was created for course PHAR 3106 to ensure student participation in the course. Students interacted with community pharmacists and Chemistry, Food and Drug Division personnel to confirm the availability of OTC drugs in Trinidad & Tobago, and will also help to enumerate the OTC drugs in the country. The part-time BSc Pharmacy mixed-mode delivery programme was introduced in accordance with our commitment to upgrade the qualifications of practicing Pharmacists who hold a Diploma/Associate degree to the level of BSc degree. Keeping this objective in mind, the School has decided to offer this programme once in every two years to have a larger class and to also improve the economic viability.

The School successfully completed the Self Assessment Report in March 2012 and subsequently underwent its Quality Assurance Review in April 2012.

## Graduate Studies

### Department of Pre-Clinical Sciences

The departmental seminar series was reformatted to ensure greater participation by academic staff and students.

### School of Pharmacy

Discussions were held at the School's Annual Retreat with respect to the introduction of new postgraduate programmes, **MSc Pharmaceutics** and **MSc Clinical Pharmacy**. Preliminary developmental work of the proposals for these programmes has started.

## Research & Innovation

### Department of Pre-Clinical Sciences

Research on mechanisms of chronic non-communicable diseases (e.g. diabetes, hypertension, stroke, epilepsy migraine, dementia and anxiety) and exploring new modalities of diagnosis and treatment are a major part of the Department's research agenda. The studies involve identification of molecular biomarkers for diseases and the use of novel compounds and extracts of Caribbean foods & plants for treatment. Molecular Epidemiology of dengue and other acute undifferentiated febrile illnesses are underway as is the evaluation of the wound-healing activity of selected plants from Trinidad & Tobago.

### Department of Para-Clinical Sciences

The following are some of the major projects completed:

**Vaillant A.J.**, Akpaka PE, McFarlane-Anderson N, Smikle M, Wisdom B. "The chicken and egg system for the development of anti-idotypic vaccines". *J Vaccines Vaccin* 2012, 3:2. The research demonstrates that the hyper-immune egg can be used as an anti-idotypic vaccine for the treatment of bacterial and viral infections.

**Clement Y.N.**, Ali S, Harripaulsingh S, Lacaille K, Mohammed O, Mohammed S, Ragbir T, Ramirez E, Tshiamo K. (2012) Drug prescribing for hypertension at primary healthcare facilities in Trinidad. *West Indian Medical Journal* 61(1):43-48. This work highlighted the current state of drug prescribing in the country to determine the adherence to established guidelines for treatment.

Balkaran R, Naidu R, Teelucksingh S, Seemungal T, **Pinto Pereira L**, Prayman E, Bissoon A. "A preliminary investigation of periodontal disease and diabetes in Trinidad." *West Ind Med J*. 2011; 60(1): 86-90. This project was funded by a GORTT Research award. The research identified the high prevalence of the metabolic syndrome in diabetics, provided non-invasive markers of systemic inflammation in diabetes and demonstrated poor lung function in suboptimally controlled diabetics.

**Pooransingh, S.**, Teelucksingh, S. Dengue in Trinidad - a review of deaths over a 10 year period (2001 – 2010). Findings will be used to update national dengue guidelines.

### Research in Progress

Some of the research projects in progress are listed below:

**Dr. Angel Justiz Vaillant** - Association of IL-17, IL-23 and IL-33 in patients with Systemic Lupus Erythematosus. The research aimed to clarify the role of those cytokines in SLE for future therapy.

**Dr. Yuri Clement** - Drug prescribing for hypertension at primary healthcare facilities in Trinidad. This work highlighted the current state of drug prescribing in the country to determine the adherence to established guidelines for treatment.

**Dr. Shalini Pooransingh**, Dr. Rasheed Adam, Professor Lexley Pinto Pereira - Emergency preparedness and response capacity of healthcare systems in Trinidad & Tobago. This project will provide evidence on the status of progress with capacity building of the healthcare system, including the 5 hospitals for handling major acute public health events where mass casualties may be involved. Achievements and gaps will be identified at national, sub national and health facility level. The information obtained will be used to identify areas for improvement in emergency management and to make recommendations for implementation by 2015. This work will contribute to fulfilment of member states' obligations under the International Health Regulations 2005 and the Framework for Action 2005-2015: Building the Resilience of Nations and Communities to Disasters.

**Dr. Shalini Pooransingh**, Professor Lexley Pinto Pereira, Professor Surujpal Teelucksingh, Professor Terence Seemungal - Body mass index (BMI) and its association with health effects and educational achievement in secondary school age students in Trinidad & Tobago. This project will collect annual data on BMI and associated health and educational effects in secondary school students from Forms 1 to 5. This project will lead to increased awareness of increased BMI and adverse health effects among students, parents and teachers; the role of public health (preventive medicine) will be highlighted - the effects of the health education intervention on students found to be overweight/obese will be studied; an increased index of suspicion among clinicians leading to early detection of insulin resistance, asthma and menstrual disorders thereby improving morbidity for patients; a healthier secondary school population and hence a healthier future generation of adults.

**Dr. Shalini Pooransingh**, Professor Terence Seemungal, Professor Lexley Pinto Pereira Epidemiology of sarcoidosis. Understanding the clinical and epidemiological factors associated with sarcoidosis can lead to raised awareness among clinicians leading to earlier diagnosis and hence treatment and therefore improved morbidity for patients. Public health physicians along with respiratory physicians may use the findings to plan appropriate services and care pathways/ guidelines for managing patients with a diagnosis of sarcoidosis.

Postgraduate student: **Arlene Villarroel Stuart** - A preliminary survey has identified a generic anti-diabetic drug as having the worst perception of efficacy by both patients and healthcare practitioners. The innovator and five generic formulations were analysed in the laboratory for content and other characteristics. One of the formulations showed significant deviation from the innovator. This project is significant as it could potentially influence government's policy of drug procurement for public health facilities and the CDAP.

### Department of Clinical Medical Sciences

The Department has been trying to improve and encourage research with the monthly research focus meetings and by providing assistance for research efforts by Academics.

The Child Health Unit, through **Drs. Beni Balkaran, Jasmine Ramcharan, and Virendra Singh**, in collaboration with the **North Central Regional Health Authority**, pioneered the **Children's Healthy Lifestyle Clinic** at the EWMSC. This Clinic is engaged in research in childhood obesity.

The Unit is interested in pursuing the following areas:

- Nutrition - Childhood Obesity, Body Fat, Anthropometry
- Neonatology - Perinatal Infection, Substance use in Pregnancy
- Childhood Cancer
- Diabetes in Children
- Urinary Tract Infection
- Child Development and Abuse
- HIV

## Major Projects Completed

**Z. Ali** - The use of acute phase reactants (Interleukin 6, Tumour Necrosis Factor, Procalcitonin and C-Reactive Protein) as early markers of neonatal infection at the Mount Hope Women's Hospital Trinidad.

**Z. Ali** - Learner-centred design of health-oriented distance learning.

**Z. Ali** - Usability-oriented research and development in TTHTC and Caribbean's first usability lab.

### Major research in progress

**V. Singh** - Use of phase contrast microscopy in the diagnosis of UTI.

Maharaj, P. E., **Ramcharan, J.** & Descartes, C. An exploration of the co-occurrence of child abuse and neglect in Trinidad and the Utility of a Public Health Model. *Child Abuse and Neglect*.

Maharaj, P. E. & **Ramcharan, J.** Voices of Child Sexual Abuse Survivors in Trinidad. *Journal of Family Violence*.

**Dr. Balkaran B.,** Dr. Ramcharan J & Dr. Singh V. *Obesity in Primary Schools in St. George East*. Campus Research Grant.

### School of Veterinary Medicine

Researchers in the School continue to work on a project with the primary objective being to develop an efficacious vaccine for prevention of leptospirosis in dogs. Additionally, vaccine trials in Beagle dogs using serovars isolated locally, continued during the year.

### Major research completed

**Professor A.A. Adesiyun:** Quantitative microbial risk assessment for the Caribbean sub-region on the occurrence of salmonellosis due to consumption of *Salmonella* spp. in imported eggs into the sub-region. A regional Pan American Health Organization (PAHO) funded project.

**Dr. Asoke Basu:** Prevalence of gastrointestinal helminths of ruminants & chickens in Trinidad and the effect of treatment with anthelmintics.

**Dr. Karla Georges:** Haemopathogens of dogs in Trinidad & Tobago using a commercial ELISA and PCR and RLB and Epidemiology Consultant for FAO Swine Influenza Project.

### Major research in progress

**Professor A.A. Adesiyun:** Studies on sequence type (ST 398) strains of methicillin resistant *Staphylococcus aureus* (MRSA) in pigs and their handlers in Trinidad.

**Dr. Asoke Basu:** Studies on Giardiasis, a zoonotic disease of dogs in Trinidad.

**Dr. Karla Georges:** Investigating the incidence of transplacental transmission of equine piroplasmiasis and Molecularly characterizing *Sarcoptes scabiei* of domestic animals in Trinidad & Tobago.

**Dr. C. Oura:** Identification of the reservoirs of animal influenza viruses in Trinidad & Tobago.

**Dr. Candice Sant:** Determining the incidence of transplacental transmission of equine piroplasmiasis in thoroughbred foals in Trinidad.

### School of Advanced Nursing Education

The School has partnered with the Department of Modern Language and Linguistics, Faculty of Humanities and Education and the School of Dentistry to engage in a research project, 'Investigating Communication between Health Care Professionals and Deaf Patients.' The principal investigator is Dr. Benjamin Braithwaite from the Department of Modern Languages and Linguistics, co-investigators are Dr. Sally Barclay from the School of Dentistry, Dr. Jacqueline Comerasamy from the School of Advanced Nursing Education and Mr. Bryan Rodrigues, President of the Deaf Empowerment Organisation of Trinidad & Tobago.

### School of Pharmacy

Dr. P. Sealy and Dr. D. Ignacio received a grant of US\$7,000 from the Caribbean Health Research Council to fund the project, Evaluative Research on Pharmacist Managed (Directed) Diabetes Care: Focus on Self Monitoring of Blood Glucose – Chronic Disease Assistance Programme (CDAP), Trinidad & Tobago Ministry of Health. otherwise called PHARMERS (Pharmacist Evaluative Research Study).

## Faculty Outreach

### Department of Pre-Clinical Sciences

**C. V. Carrington** delivered two seminars on emerging viruses. One was for the benefit of high school science students from throughout the Caribbean region (Caribbean Youth Sciences Forum, August 9, 2011 (UWI, St. Augustine, Trinidad) and the second was presented to staff of the Aripo Savannah Scientific Reserve Management Committee, Cumuto, Trinidad.

### Department of Clinical Medical Sciences

This Department continues to provide services to the public through partnership with the Trinidad & Tobago Health Training Centre (THTC), paying particular attention to HIV education, training and counselling programmes. Some of the programmes undertaken with this partnership include: HIV Sensitization for Support Staff of the SWRHA, Pharmacy Issues: Barriers in HIV Care, HIV Sensitization (Generic Training), Maternal-Child HIV Care and Management of Patients on L-T-D Therapy with reference to HIV and Diabetes Complications.

Linkages have also been established with other universities and organisations including the Hospital for Sick Kids, Toronto, Canada; University of Washington, Seattle; University of Miami; University of Florida and the University of British Columbia. International Training and Education Centre in Health (ITECH), Washington, USA; Royal College of Paediatrics and Child Health; Partner member of the Consortium of Universities for Global Health (CUGH).

### School of Dentistry

The Dental Students Association of Trinidad & Tobago, together with the group **Share Goodness**, took part in a blood drive in March 2012. Students also helped give a facelift to the Paediatric Clinic.

### School of Veterinary Medicine

The School has numerous outreach activities which include the provision of diagnostic services to the food industry and individuals, regular

counselling to members of the public on problems with their pet animals and livestock, as well as counselling of secondary school students through school visits/ presentations on opportunities in veterinary medicine as well as the subject requirements. Additional activities include on-going assistance to **Nestle (Trinidad & Tobago) Limited** in implementing a bovine fertility programme in the dairy industry in the country.

### School of Advanced Nursing Education

The School, (in particular **D. Richardson** and **Dr. P. Onuoha**) collaborated with the Fulbright Regional Nexus Scholar, Dr. Ruth C. Brown on a project, 'The Social Determinants of Health Internship for Caribbean Secondary School Students.' Several lectures and workshops were hosted which included topics that focussed on the Introduction to health equity and social determinants: Internship Overview; Clinical overview of chronic disease, its management and prevention; intersecting lifestyle choice and Environment Factors; Managing epidemics and contagion: Clinical overview of acute disease/ epidemic HIV/AIDS: Environment, resources and options and Gender roles, race and cultural competence in access and health seeking.

### School of Pharmacy

Pharmacy students in their final year clerkships (Class of 2012) presented public education seminars at public health institutions. In community pharmacies, students designed brochures outlining the safe and effective use of medicines and had discussion booths for additional questioning. Both outreach activities were supervised by the site preceptor and the

brochures were reviewed by the Faculty preceptor before distribution to the public. Topics such as use of insulin, asthma medications, management of diabetes, hypertension and minor illnesses such as cough and cold were presented.

## Strengthening Regionality

The Department of Clinical Medical Sciences continued to partner with the Ministry of Health, Dominica for continued training of psychiatrists. Two students were enrolled in the DM Psychiatry programme. At the School of Dentistry Dr. Naidu has initiated collaboration between the Guyana Dental School and School of Dentistry, UWI, St. Augustine.

## External Linkages with Industry Partners

Drs. S. Marchan and W. Smith attended the Lutheran Medical Centre (LMC) Advanced Education in General Dentistry (AEGD) USA. Training of the Dental Interns continued in collaboration with the Ministry of Health and the North Central Regional Health Authority (NCRHA).

## Revenue Generating/ Cost Containment Activities

The Faculty has collaborated with the Trinidad & Tobago Health Training Centre (TTHTC) and the Government of Trinidad & Tobago.

### School of Dentistry

The Special Needs Clinic at the School now generates funds for the School. The Oral Histopathology Diagnostic Services (H.F. Al-Bayaty) and the Fixed Orthodontic Appliance Programme (Dr. Trudee Hoyte) continues to generate a modest income, and more than that, a sound professional reputation for the School and the UWI. Clinical crown and bridge work now generates income into a self financing research project account.

Income for the School is being generated from the fabrication of dentures by the Technical Laboratory of the School. The MFDSRCS training programme will be conducted at the School as an ongoing program. This is expected to generate income by way of fees paid by candidates registering for the MFDS examinations.

### School of Veterinary Medicine

The six business units in the School recorded net revenue of TT\$296,000 during the academic year.

### School of Advanced Nursing Education

The School conducted Summer School and offered a total of 24 nursing courses including electives. There was a registration of 118 students in both the BSc and MSc programmes for these courses.

### School of Pharmacy

The Summer Programme for the School of Pharmacy generated a gross sum of TT\$147,572.76 for the period under review.

## Projected Activities for 2012/2013

The **Department of Clinical Medical Sciences** plans to introduce new academic programmes (a BDC Public Health and Diploma in Monitoring and Evaluation) in collaboration with the Trinidad & Tobago Health Training Centre (TTHTC).

Proposed research or existing areas expected to present significant outcomes or enter a key phase include: assessment of Oncology training; Outcome evaluation of training health care workers in HIV stigma and discrimination and Impact evaluation – the impact of training health care workers in HIV stigma and discrimination on the quality of HIV service delivery in Trinidad & Tobago.

A number of conferences and seminars are also projected for the Department including the Trinidad & Tobago Medical Association 19<sup>th</sup> Medical Update and Research Conference, July/August 2013 and the CCAS-CHART-CMLF Joint Meeting and 10<sup>th</sup> CCAS HIV/AIDS Workshop, August 2013.

The **School of Veterinary Medicine** plans to increase the number of visiting lecturers/ professors to deliver parts of the curriculum where the expertise does not exist in the SVM. Additionally the School intends to develop programmes in MSc and Diploma/Certificate in Veterinary Epidemiology in response to the request of regional Chief Veterinary Officers.

The focus of the **School of Advanced Nursing Education** includes and is not limited to the implementation of the BSc in Nursing (Generic) programme, development of a Midwifery programme (Post registration) as well as reviewing and possibly restructuring of the current undergraduate programme offerings. Fostering collaboration with other units within the University, with other Universities and health care systems is also on the agenda for the School for future activities.

The School of Pharmacy plans to push the University's research agenda forward, revise their current curriculum as well as seek staffing for the School.

## Distinguished Visitors

### Department of Preclinical Sciences

#### Dr. Vincent Munster

NIH/NIAID Rocky Mountain Laboratories,  
Montana, USA.

#### Dr. Tony Schountz

University of Northern Colorado,  
USA

#### Professor Christopher Yeo

Professor of Anatomy  
University of London, UK

### Department of Clinical Medical Sciences

#### Professor Jeffrey P Brosco

Behaviour Paediatrician,  
University of Miami Child Health Department

#### Professor Stan Kutcher

Professor, Department of Psychiatry  
Dalhousie University

#### Professor Owen Morgan

Internal Academic, Emeritus  
Professor of Medicine  
UWI, Mona,  
Jamaica

#### Dr Frank Ramlackhansingh

President – General Practitioners' Association  
St Augustine, Trinidad

#### David Barron

Ph D student in Psychology,  
University of Westminster,  
England

#### Dr. Christopher Behrens

Medical Director, University of Washington,  
I-TECH  
Seattle, Washington, USA

#### Professor Victor Blanchette

Professor/ Chief of the Division of Haematology/Oncology  
Sick Kids International  
Ontario, Canada

#### Dr Aggrey Burke

Senior Lecturer,  
St George's Hospital,  
University of London

#### Professor Thomas Craig

Institute of Psychiatry,  
University of London

#### Curvelle David

Monitoring and Evaluation Officer,  
PANCAP  
Georgetown, Guyana

#### Dr. Jose Davy

General Practitioner/Infectious Disease Specialist and  
HIV Clinical Care Coordinator  
St. Vincent and the Grenadines

#### Dr. Tracey Gibson

Senior Lecturer  
Department of Pathology,  
UWI, Mona,  
Jamaica

**Dr. Ted Gerrard**

President & CEO, Sick Kids Foundation  
Toronto, Canada

**Cheryl Green**

President of Green Resource Group,  
LLC, Bethesda, Maryland, USA

**Professor Robert Grossman**

Neurologist/ Dean of New York University and  
Chairman  
New York University Hospital

**Colin Hennigar**

Associate Director, Major Gifts at Sick Kids  
Foundation  
Toronto, Canada

**Dr. David Jamadar**

Clinical Professor of Radiology,  
Department of Radiology,  
University of Michigan

**Clive Landis**

Senior Lecturer  
Department of Chronic Disease Research Centre  
Faculty of Medical Sciences,  
UWI, Cavehill,  
Barbados

**Dr. Gillian Mason**

Lecturer  
UWI, Mona,  
Jamaica

**Paul Mihelcic**

Senior Project Manager,  
Sick Kids International,  
Ontario, Canada

**Amaka Nwankwo-Igomu**

Public Health Analyst, HRSA HIV/AIDS Bureau  
Global HIV/AIDS Program  
Washington D.C., USA

**Dr. Kamla Sharma**

Director, International Affairs,  
Sick Kids International  
Ontario, Canada

**Dr. Gupta Sumit**

CIHR Doctoral Fellow (Hematology/Oncology),  
Department of Paediatrics,  
Sick Kids International  
Ontario, Canada

**Professor Brian Steele**

Prof. of Paediatrics in Neonatology  
University of Mc. Master, Canada

**School of Dentistry****Professor Virendra Dhuru**

Visiting Professor  
Marquette University  
USA

**School of Veterinary Medicine****Dr. Andy Allen**

Professor of Veterinary Pathology,  
Department of Pathology,  
University of Saskatchewan, Canada

**Professor Gert Breur**

Companion Animal Surgeon (Orthopaedic)  
Purdue State University College of Veterinary  
Medicine,  
West Lafayette, USA

**Dr. James Casey**

Equine Medicine Sports Medicine Specialist,  
Madison, USA

**Professor Lionel Dawson**

Theriogenologist,  
Oklahoma State University College of Veterinary  
Medicine,  
USA

**Professor Stefan Deleuze**

Theriogenologist,  
Veterinary Faculty,  
University of Liege,  
Belgium

**Dr. Christian Gibbs**

Consultant Veterinary Radiologist,  
United Kingdom

**Dr. Paige Jackson**

Large Animal Internal Medicine,  
New Albuquerque, New Mexico,  
USA

**Dr. Simon Kenyon**

Professor of Equine Medicine,  
Ross University School of Veterinary Medicine,  
St. Kitts

**Professor A. van Nes**

Department of Farm Animal Health,  
Faculty of Veterinary Medicine,  
Utrecht University, The Netherlands

**School of Advanced Nursing Education**

Stacy Johnson  
Lecturer,  
School of Nursing, University of Nottingham,  
UK

**Sarah Lister**

Head of Pastoral Care and Psychological Support/  
Assistant Chief Nurse,  
The Royal Marsden,  
NHS Foundation Trust, England

**School of Pharmacy**

Rabidatt Bhagga  
Director/Pharmacist,  
Bonanza Drugs Limited

**Dr Eugenie Brown-Myrie**

Associate Professor and Dean,  
College of Health Sciences,  
University of Technology, Jamaica

**Professor Martin D'Souza**

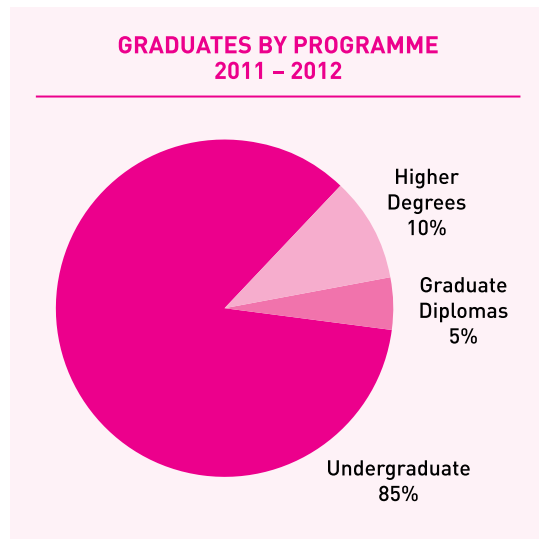
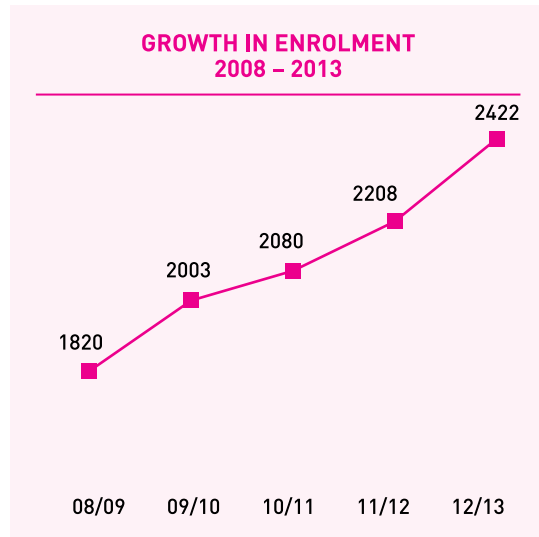
Dean of Graduate Studies,  
College of Pharmacy, Mercer University,  
USA

**Dr Wanda Keahey**

Pain Management Specialist  
USA

**Dr Yashwant Pathak**

Associate Dean for Faculty Affairs,  
College of Pharmacy,  
University of South Florida Health,  
Tampa, Florida



# FACULTY OF SCIENCE & TECHNOLOGY

Formerly the **SCHOOL OF SCIENCE** in the **FACULTY OF SCIENCE & AGRICULTURE**

## Executive Summary

The Faculty of Science & Agriculture (FSA) was abolished on July 31, 2012 and two new faculties were created on August 1, 2012: the Faculty of Science & Technology (FST) and the Faculty of Food & Agriculture (FFA). This major decision was taken to more efficiently and rapidly respond to the needs of the Caribbean region, especially in the critical area of food security. This development, which will allow both faculties to grow in their respective areas, has received overwhelming support from all stakeholders. In addition, the BSc Optometry was moved from the FSA to the Faculty of Medical Sciences. Since there was no FST in 2011/2012, this report is based on the activities of the School of Science within the former Faculty of Science & Agriculture.



**PROFESSOR INDAR W. RAMNARINE**  
DEAN, FACULTY OF SCIENCE & TECHNOLOGY

### **Expansion Of Access**

The trend in increasing student numbers continued in 2011/2012, with the FSA retaining its position as the second largest faculty at the St Augustine Campus. A total of 3,030 Undergraduate students were registered in the School of Science which represented an increase of 4.25 % over the previous year and accounted for 84% of the Undergraduate students in the FSA. In terms of Postgraduate students, 462 students were registered and this represented an increase of 24% over the previous year, and accounted for 70% of the Postgraduate students in the FSA. The increase in Postgraduate numbers was due largely to the highly successful MSc in Biodiversity Conservation and Sustainable Development in the Caribbean (run by the Department of Life Sciences) and the MSc in Occupational and Environmental Safety and Health (run by the Department of Chemistry).

### **Curriculum Reform**

The entire list of undergraduate programmes within the School of Science was reformed during the year under review. The Special Options were re-examined and the number of credits required to graduate was reduced. The BSc in Information Technology was reduced from 109 to 93 credits, the BSc Actuarial Science was reduced from 110 to 104 credits, the BSc Chemistry and Management was reduced from 102 to 96 credits, the BSc in Computer Science was reduced from 109 to 93 credits and the BSc in Computer Science and Management was reduced from 105 to 99 credits. The BSc (General) was reduced from 101 credits to 93 credits. This was done in order to align the

credit requirements for a degree in the FST to that required by other faculties (usually around 90 credits). Part of the curriculum reform involved the revamping of all of the level 1 courses in the FST. All 6-credit courses were reduced to more palatable 3-credit courses. The failure rate is highest at level 1 and one hopes that by having 3-credit courses rather than 6-credit courses, there would be greater understanding of the material being covered.

### **Graduation 2011**

A total of 331 students graduated with BSc degrees which represented a decrease of 24% over the 2010/2011 number of graduates. Nineteen students graduated with first class honours, 50 with second-class honours, 155 with lower second-class honours and 107 students with pass degrees. A comparison of the class of degrees over the past five years indicate that the number of students with first class and upper second class honours is on the decline, the number of students achieving lower second-class honours is stable while those achieving pass degrees is on the increase. It is envisaged that the effort expended on curriculum reform will address this problem.

The time taken to complete the BSc degree is also instructive. For the 2011/2012 graduating class, 38% of the graduates took 3 years to complete their degrees while 43% took 3.5 years. Those requiring 4 years numbered 4%, and those who took 4.5 years accounted for 2% of the graduates. Thirteen percent of the graduates took 5 years to complete.

The number of students graduating with higher degrees was 65, which comprised 53 MSc, 8 MPhil and 4 PhD degrees. This was slightly less than in 2010/2011 and there is the need to increase the throughput especially in the research degrees.

### *Research Funding*

The Department of Life Sciences attracted TT\$21.2million in external research grants mainly in the areas of ecosystem services, disease management and biodiversity. The FST was able to win 4 out of 11 grants from the UWI-Government Research and Development Impact Fund that were awarded to the St Augustine Campus. TT\$1 million went to the Department of Chemistry (Impact of emissions from the Guanapo Landfill to the surrounding environment), TT\$800,000 to the Department of Computing and Information Technology (AgriNett: An Agricultural knowledge e-portal: research on intelligent decision support for enhancing crop and livestock enterprise management), TT\$954,854 to the Department of Life Sciences (Evaluation of the economic value of Caroni Swamp: Implications of climate change using the UNEP TEEB protocol) and TT\$1.5 million (Leveraging the International Cocoa Gene Bank to improve competitiveness of the cocoa sector in the Caribbean, using modern genomics).

### *Major Projects Initiated*

There have been six major projects: Impact of emissions from the Guanapo landfill; Commercialization of analytical services; Evaluation of the economic value of the Caroni Swamp; Development of an agriculture knowledge e-portal; Dengue epidemiology and control; and Renewable energy technologies.

### *Publications*

There were 106 publications in peer-reviewed international journals, 1 book, 17 book chapters, 30 refereed conference proceedings, 6 non-refereed publications, 2 book reviews, 2 patents and 1 documentary. The average number of journal articles per academic staff was 1.33 which is still below the expected 2 journal articles per academic staff.

### *Conclusion*

Curriculum reform will continue in the new Faculty of Science & Technology, strengthening science programmes and expanding technology offerings. New majors and special options are being developed: major in Electronics, major in ICT, BSc Biomedical Technology, BSc Environmental Science & Technology, MSc in Renewable Energy Technology, MSc in Biotechnology, MSc in Medical Physics and Bioengineering and expansion of the BSc Actuarial Science degree. There is also the intention of increasing our outreach programmes, offering of short courses to the public, and commercialization of our research through the establishment of a Business Unit.

## **Students**

### *Department of Chemistry*

There was a slight decline (6%) in the enrolment of the undergraduate students for the Level 1 programme from 380 in Semester I, 2010/11 to 357 for the same semester in 2011/12. The failure rate for the Level I programme remains at an average of 56%. It is hoped that the new curriculum for the Level I programme would help to address this problem as well as other shortcomings

in the programme. This new programme was implemented in September 2012/13 with the former Level I chemistry courses CHEM1060 and CHEM1061 (6 credits each) being revamped and three new theory courses and one lab course (3 credits each) introduced. The students' performance in these new courses and the new curriculum will be evaluated at the end of the academic year.

#### *Most outstanding undergraduate/postgraduate students*

**Avalon Ramkissoon** was the top performing student in Chemistry for 2011/12. She was awarded the Industrial Gases Prize for the best Year III performance in Chemistry and the Southern Systems Limited Prize for the best graduating student in Chemistry, at the 17<sup>th</sup> Annual Prizes Award Ceremony 2011/12.

#### *Undergraduate degrees awarded in the review year:*

A total of 79 students graduated with a major in Chemistry over the academic year 2011/12 with 15 in Semester 1; 40 in Semester 2; and 24 in the Summer semester.

#### *Postgraduate enrolment and graduation:*

The enrolment of postgraduate students for the academic year 2011/12 was 46 (31 full-time and 15 part-time). Four students graduated in 2011/12 and some six new students were accepted to the postgraduate programme for 2012/13.

#### *Higher degrees awarded in the review year:*

The Department graduated 4 research students: **Jillian Roberts** and **Gideon Ramtahal** (with High Commendation) were awarded the PhD in Chemistry and **Miranda Williams** and **Sandra Latchman** the MPhil in Chemistry.

Twenty-five students from the second cohort of the **Master of Science in Occupational, Environmental and Safety and Health Programme** graduated in 2011/12, with 11 of these students graduating *with Distinction*.

#### *Student success in academic competitions and awards received:*

MPhil student **Sandra Latchman** was awarded first place for the Poster Competition held at the 24<sup>th</sup> Meeting of the Mona Symposium Natural Products and Medicinal Chemistry on January 3 to 6, 2012 in Jamaica. Her presentation was entitled: "*Phytochemical Investigation of Pimenta racemosa var. racemosa*".

#### **Department of Computing and Information Technology Enrolment & Graduation 2011**

The Department graduated 62 undergraduate students (inclusive of Semester I, Semester II and Summer of 2010/2011): 35 from BSc Information Technology; 7 from BSc Computer Science and Management Option; 20 from BSc General (Computer Science). The class of honours were: 1 First Class; 13 Upper Second Class, 27 Lower Second Class and 21 Pass.

## Awards

The Most outstanding undergraduate students were:

**Shinelle S. Bovell:** Recipient of the **Digi-Data Systems Ltd Prize** for the Best Year 3 Performance in Information Technology. (Only First-Class Honour student).

**Natalie A. Gill:** Recipient of the Atlantic LNG Co. of Trinidad & Tobago Prize for the Most Outstanding Graduate, BSc General (Major: Computer Science).

**Sterling Ramroach:** Recipient of the **Medullan Inc. Prize** for the graduate with the highest GPA BSc General (Major: Computer Science).

The Department graduated twelve postgraduate students, four of whom graduated **with distinction**: **Darrell Marcus Bartholomew, Kyle Edward De Freitas, Ricardo Assing (Recipient of the TELEIOS SYSTEMS LTD. prize for the best MSc Project in Computer Science) and Kris Manohar (Recipient of the Trinidad & Tobago Network Information Centre Prize (TTNIC) prize for the MSc (Computer Science) graduate with the Highest Examination Average).**

### Winners' Row

**Microsoft 'Imagine Cup' Competition:** International student competition sponsored by Microsoft. Five teams from the department took part in different categories including Software Design, Windows Phone, Windows Azure, Windows 8 and Visual Studio, and IT Challenge.

**Teleios 'Code Jam' Competition (21st October 2011):** A local competition for tertiary level students in which students build mobile apps. Three teams from the department took part this year and we won 1st, 2nd, and 3rd places.

First team:

**Jeneela Maraj, Nabeel Mohammed, Javid Ali, Greg Moolchan**

Second team:

**Roger Gajraj, Karleen Lall, Amit Ramkissoon**

Third team: **Edward Ramkissoon,**

**Nicholas Chamansingh, Lonell Liburd.**

Teams were mentored by the following members of staff/postgraduate student: Kris. Manohar, Kyle De Freitas and Eshwar Bachu.

**2012 DCIT Runtime:** Coding Competition run by the Department. Under the mentorship of Dr. Noel Kalicharan the following students planned and executed the 1<sup>st</sup> DCIT Runtime programming competition: Nicholas Chamansingh, Edward Ramkissoon, Lonell Liburd, Keshav Bahadoor, Jeneela Maraj, Sterling Ramroach, Cherlton Millette, Sudesh Lutchman. Students from the Department of Electrical and Computer Engineering also participated.

**Canto Competition:** The following students placed 4<sup>th</sup> in the 'Canto competition: Nicholas Chamansingh, Edward Ramkissoon, Lonell Liburd.

### Department of Life Sciences

There were 19 PhD, 31 MPhil and 46 MSc students registered in the Department during the 2011/2012 academic year.

#### *PhDs awarded*

**Dr. Nigel Austin** (With High Commendation)

**Dr. Karen Pierre**

#### *Master of Philosophy degrees awarded*

**Sarah Bharath**

### Department of Mathematics and Statistics

The most outstanding undergraduate student was **Victor Job**. He received the Harold Ramkissoon Prize for the best year 2 and 3 performance in Mathematics, the TATIL group prize for the best year 3 performance in Mathematics, and First Class Honours Award.

The Department awarded 29 majors and 11 minors (inclusive of Semester 1, Semester 2 and Summer of 2011/2012). For the BSc General (Mathematics): 27 Single Majors, 2 Double Majors, 11 Minors and 3 First Class. Two were awarded for the BA Mathematics.

The Department graduated two postgraduate MSc students: **Reginald Ash** (with Distinction) and **Wendell Phillips**.

### Department of Physics

The enrolment of Level 1 students has declined. As such, the Department restructured courses with the aim of increasing student enrolment. Thirty undergraduate degrees were awarded in the review year.

There were 16 MPhils and 6 PhD students registered in the Department during the 2011/2012 academic year.

## Teaching & Learning

### Department of Chemistry

**Innovative teaching/learning initiatives** adopted during the review period included the introduction of PBL (Problem Based Learning) work group sessions in the lab component of the Level I course CHEM 1060. This teaching method was introduced to illustrate to students how to problem solve and to learn by discovery as well as help them understand the course content. The Department also reduced the size of the Level 1 tutorial groups to ensure more individual attention for students.

### Department of Computing and Information Technology

All BSc degree programmes were reviewed to keep them up to international standards. All Level I courses were also reviewed and changed to 3-credit courses.

### Department of Mathematics and Statistics

All lecturers submitted their office hours which were posted on the notice boards to facilitate one on one consultation. New programmes were introduced which included the **BSc in Actuarial Science**, two service courses in Mathematics and a new course in Mathematical Software.

### Department of Physics

Levels I, II and III Physics courses were all reviewed, as well as both Majors and Minors. Additionally, two six-credit level I courses, PHYS1110 and PHYS1111 were restructured into two laboratory courses and four theory courses.

## Graduate Studies

### Postgraduate Students – Training

**Gina Jaggernauth** (postgraduate student with Dr. Richard Fairman) presented a poster at the **ICREA Workshop on Bio-materials and their Interactions with Biological and Model Membranes, 2011**. The Workshop was held in Spain at Hotel Magnolia, Salou (Costa Dorado) from September 19 to 23, 2011. Ms. Jaggernauth's poster was entitled ***The Characterisation of a Novel Family of Metallosurfactants***.

**Lorale Lalgee** (postgraduate student with Dr. Lebert Grierson and Dr. Richard Fairman) presented a poster entitled ***Synthetic ion transporters: Membrane activity of amphiphilic cobalt – cage complexes with aza crown spacer*** at the **ICREA Workshop on Bio-materials and their Interactions with Biological and Model Membranes, 2011**. The Workshop was held in Spain at Hotel Magnolia, Salou (Costa Dorado) from September 19 to 23, 2011.

**Simone Walcott; Tahirah Sanderson; and Tresha Dobson** (postgraduate students with Professor Anderson Maxwell); **Sajidah Ali and Famida Ali** (postgraduate students with Professor Anderson Maxwell, and Drs. Ramish Pingal and Adesh Ramsubhag), and **Amanda Rampersad and Sandra Latchman** (postgraduate students with Dr. Russel Ramsewak) received funding from the Campus Research and Publication Fund Committee to attend the 24<sup>th</sup> Meeting of the Mona Symposium Natural Products and Medicinal Chemistry from January 3 to 6, 2012 where they were able to participate in the conference and workshop, and to present posters.

**Ashaki Andrews, Alisha Hamid, Sheldon Pilgrim and Gideon Ramtahal** from the Analytical postgraduate research group supervised by Dr. Ivan Chan Yen participated in the 48<sup>th</sup> Annual Meeting of the Caribbean Food Crops Society held in Mexico from May 20 to 26, 2012.

**Rajendra Singh** attended the 15<sup>th</sup> IASTED International Conference on Computers and Advanced Technology in Education (CATE 2012) Greece July 2012.

**Eshwar Bachu** attended The 11<sup>th</sup> International Conference on e-Learning, e-Business, Enterprise Information Systems, and e-Government, EEE'12, USA, July 2012.

**Diana Ragbir-Shripat** attended The XII IEEE International Conference on Advanced Learning Technologies (ICALT2012) - Rome, July 4 to 6, 2012 Doctoral consortium – (accepted as 1 in 11 persons worldwide) and the Post-ICALT: Advanced School on Frontier of Technology Enhanced Learning (Front-TEL) - Rome July 7 to 10, 2012.

### Department of Chemistry

Postgraduate students **Simone Walcott; Tahirah Sanderson; Tresha Dobson, Sajidah Ali, Famida Ali, Amanda Rampersad and Sandra Latchman** received financial support from the Campus Research and Publication Fund Committee to attend the **24<sup>th</sup> Meeting of the Mona Symposium Natural Products and Medicinal Chemistry** from January 3 to 6, 2012. All together, they received the sum of TT\$93,851.00 to cover the costs of airfare, poster presentations, workshop fees, registration, subsistence and accommodation.

### Department of Life Sciences

The Department introduced an online **MSc Biodiversity Conservation and Sustainable Development in the Caribbean**.

### Department of Computing and Information Technology Administration

The Department formalized systems to streamline the administration of MPhil and PhD students. This included organizing half-day sessions for postgraduate seminars as well as monitoring meetings of Advisory Committees.

### Graduate Students' Seminars

#### PhD Seminars

**Phaedra Mohammed: "A Computational Approach Towards Enculturating Content in Interactive Educational Environments"**

**Diana Ragbir: "Using Social Networking and Virtual Reality to Harness Creativity in Students in E-learning Situations"**

**Anil Ramnanan: "Building an Accessibility Evaluation Tool For Trinidad & Tobago"**

#### MPhil Seminars

**Andre Thompson: "An e-Agriculture system for strengthening Agriculture for Food Security in Trinidad & Tobago"**

**Rajnath Singh: "A Poverty Monitoring Information System For Trinidad & Tobago"**

**Eshwar Bachu: "A Novel Approach to Teaching Problem Solving and Programming using Collaboration and Computer Games"**

**Roger Gajraj: "Transforming Source Code Examples into Programming Tutorials"**

**Machel Higgins: "Optimizing Placement of Seismic Sensors using Self-Organizing Maps"**

### Department of Mathematics and Statistics

The Department graduated two postgraduate students in 2011/2012 compared to 10 students in 2010/2011. The Department has been engaged in the curriculum reform of its postgraduate programme, resulting in the revision of a number of courses.

### Department of Physics

A number of new programmes were proposed. The **MSc Renewable Energy Technology** is being reviewed by IDU to be started in the academic year 2013/2014 and the **MSc Biomedical Physics** is carded to be started in the academic year 2013/2014.

## Research & Innovation

### Department of Chemistry

The Department's research efforts are focussed in three main areas: **discovery of new materials** for use in a host of important applications e.g. in devices for renewable energy production such as solar energy conversion, in liquid crystal displays and as catalysts in various industrial processes; **discovery of natural and synthetic compounds** for use in the treatment and diagnosis of disease, in agriculture and in other areas of human need; and **environmental studies** including Environmental Protection and Remediation and Food Safety and Security.

## Major Research Completed

### *Characterisation of endocrine disruption in aquatic systems in Trinidad & Tobago*

The presence and impact of a group of endocrine disrupting chemicals (found in artificial contraceptives) was studied in a variety of sewage treatment plant effluents in Trinidad. The presence of estrone and 17- $\beta$  estradiol was confirmed, while no conclusion could be made on the presence of 17- $\alpha$  ethinylestradiol. The morphological and histological impact on wild guppies at the sites were noted, and it was found that in 10% of the population, there were significant changes in body structure and gonad development.

Lead researchers: **Dr. Dawn Phillip** and **Dr. Denise Beckles**; MPhil Student: **Warren Thomas**.

### *Minimization of Ochratoxins in Cocoa and Cocoa Products.* To maximise cocoa bean quality for export and local consumption.

Lead Researcher: **Dr. Ivan Chang Yen**; MPhil Student: **Jillian Roberts**

### *Investigation of Heavy Metals of Cocoa Bean in Trinidad & Tobago. To maximise cocoa bean quality for export and local consumption.*

Lead Researcher: **Dr. Ivan Chang Yen**; MPhil Student: **Gideon Ramtahal**

***The Characterization of Immobilized Papain and Pepsin on to a Chitosan Support and their use in the Fragmentation and Separation of Immunoglobulin G on A Synthetic Affinity Column.***

Lead Researcher: **Professor Dyer Narinesingh**;

MPhil Student: **Miranda Williams**

***Phytochemical Investigation of Pimenta racemosa leaves and stems.***

In the leaves, thirteen compounds were isolated and their structures elucidated. Five of these compounds were novel. Seven compounds were isolated from stems of *Pimenta racemosa*. Three of these compounds were also found in the leaves of *Pimenta racemosa*, four compounds that were isolated were unique to the stems of *Pimenta racemosa*.

Lead Researcher: **Dr. Russel Ramsewak**; MPhil

Student: **Sandra Latchman**

## Major Research in Progress

**Denise Beckles**

***The impact of emissions from the Guanapo Landfill on the surrounding environment.***

Landfill emissions can have a severe impact on the surrounding environment, particularly as these emissions can be readily transported long distances. This project will produce a comprehensive description of the current state of the environment around and emissions from the Guanapo Landfill. Model studies of the landfill, air and water will be conducted to allow for predictive studies that can be utilised to study other landfills in Trinidad & Tobago and the region.

**Grace-Anne Bent**

Investigations into the analysis and quantification of the food and environmental related toxins: furan, acrylamide, pesticides, polychlorinated biphenyls (PCBs), polychlorinated dibenzodioxins (PCDDs), and polychlorinated dibenzofurans (PCDFs) in an effort to minimize human exposure by understanding their mechanisms of interaction both *in vivo* and *in vitro*.

**Richard Fairman**

Divergent synthesis of dendrimers with paramagnetic lanthanide cores for use as MRI contrast enhancement agents.

**Lebert Grierson**

Waste/Virgin plastic recycling (in collaboration with BPUK/BPTT) for Environmental Waste Management (with PhD students Jason Toney and Nigel John).

**Adil Hosein**

Synthesis of novel main group and transition metal organometallics for intended applications as reagents in Organic synthesis and Polymerisation catalysts.

**Nigel K. Jalsa**

Development of a protocol to selectively remove the anomeric *O*-benzyl from a diverse array of protected carbohydrate derivatives. This affords access to the facile synthesis of an array of biologically important oligosaccharide targets.

**Nicole John-Thomas**

Science education researchers indicate that many novice learners in chemistry are able to apply algorithms without significant conceptual understanding. Research aims to use conceptual methodology to study problem. This data will then be used to identify specific gaps in student conceptual understanding of particular Chemistry concepts.

**Arvind Kumar**

Metal - directed macrocyclic self-assembly and used as probes for molecular recognition/sensing, encapsulation, optical fibers, catalysis and also of biological importance. In this project the target is to design macrocyclic supramolecular complexes of Schiff base ligands and amine ligands of above mentioned importance.

**Anderson Maxwell**

Study of the Chemistry of Trinidadian *Rubiaceae* and *Euphorbiaceae* species

**Dyer Narinesingh**

Development of novel sensitive devices for analysis of clinical, environmental and other samples. These studies, utilizing immobilized enzymes, are geared to produce microdevices that may be implanted into patients, for monitoring on a continuous basis the levels of particular metabolites in the body critical to the patient's health.

**Ramish Pingal**

Antibacterial metabolites active against MRSA produced by *Apergillus Sclerotiorum* from Trinidad:

Lead Researcher: **Ramish Pingal**;  
MPhil. Student: **Sajidah Ali**.

**Russel Ramsewak**

Discovery of biologically active compounds with varying structural diversity from terrestrial plants and marine organisms. Specimens are collected and extracted exhaustively to yield crude extracts. Structural elucidation of the pure compounds utilizes various spectroscopic techniques.

**Gurdial Singh**

Synthesis of TB Epitopes for the development of new vaccines

**David Stephenson**

NMR Studies of the kinetics of dynamic equilibria. These types of studies are used for characterizing narcotic drugs and understanding food systems.

**Richard Taylor**

The Study of Lanthanide/Transition Metal Doped Ternary and Quaternary Chalcopyrite Semiconducting Nanocrystals (Quantum Dots) and Thin films for Solar Cell Applications.

**Ann Wilson**

***An Evaluation of the effect of surface and surface preparation on the adhesion of hydrogel films.***

In order for the electroactive material to be fully characterized it must remain attached to the conductive surface for a prolonged period under conditions of electrical perturbation. Historically these materials have disbonded before complete characterization could be achieved under these conditions. An investigation of the surface treatment protocols to enhance material adhesion is proposed.

**Department of Life Sciences**

The Department focusses on two main areas:

**Biodiversity and Ecosystem Services** - Research students are working on modeling a range of ecosystem services such as soil retention and nutrient retention by hillside forest in the Northern Range, coastal erosion protection by coral reefs and seagrass beds in Tobago, carbon sequestration and insect pollination services to crop production in Nariva wetland. This project is led by a Steering Committee, chaired by the Deputy Permanent Secretary of the Ministry of Planning and Sustainable Development.

**Biotechnology and Molecular Biology** for plant and human health - work is proceeding on developing genetically improved anthurium, hot pepper, cacao and papaya. Research also involves developing rapid and accurate diagnostic tools for plant diseases of bananas, tomatoes and papaya among others.

## Major Research in Progress

Major research areas under the Department include:

**Development and proof of efficacy of a lethal ovitrap for dengue prevention:** The goal of this research is to effect a reduction in the number of new human infections. This is expected to be achieved through the use of a novel invention – the Attractant-Bait Lethal Ovitrap (ALOT). The trap is intended to be a key component of community-based dengue – management programs.

**Development of protocols for in vitro conservation of terrestrial Aripo Savanna orchids** Assessment of the status and ecology of plant species of conservation concern in the Aripo Savannas Environmentally Sensitive Area in north central Trinidad.

**Development of methodology for remote sensing of methane emissions from a tropical wetland.**

**Department of Computing and Information Technology**

The Department won a grant from **The UWI Trinidad & Tobago Research and Development Impact Fund (RDIFUND)** to fund a project entitled **“Agricultural Knowledge ePortal: Research on Intelligent Decision Support for Enhancing Crop and Livestock Enterprise Management (AgriNeT)”**. This project is in collaboration with the Faculty of Food & Agriculture, the Ministry of Food Production, Land and Marine Affairs and the Agricultural Society of Trinidad & Tobago, under the category -Technology and Society Enhancing Efficiency

Competiveness and Social Well-being. A proposal was also sent for a grant under the European Union –ACP call for proposals.

**Dr. P. Mohan** was engaged as a Mobile Technology Consultant for the IDB-funded project, "**Regional Non-Communicable Diseases Surveillance System**". In particular, he was involved in the development of a Stroke Registry using mobile phone and Web technologies. The project recently concluded and was undertaken at the Faculty of Medical Sciences with **Professor Surujpal Teelucksingh** as the Principal Investigator. Testing of the Stroke Registry started in August 2012 with several health facilities North Trinidad participating.

The Department of Computing and Information Technology hosted its **2<sup>nd</sup> Annual Computing Forum**, titled "**Fostering Collaboration through Awareness for Research and Technological Development**," on February 2, 2012. The DCIT Computing Forum is an avenue for researchers within the University and the Computer/IT Industry to share current research within the context of collaboration, future development and innovation.

### Department of Physics

The Department focussed on a number of areas of research in the Applied Physics and Interdisciplinary Fields which included **Renewable Energy & Environmental Physics, Materials Science & Fuel Cell and Lithium Battery, Medical Physics & Bioengineering, Electronics, Fiber-Optics, Optoelectronics, and Quantum Physics & Astronomy**.

## Major Research Completed

*MPhils submitted:*

**Anastasia Baboolal:** "*Experimental Petrophysical and Rock Mechanics Characterization of some formation in the Northern Range and Southern Basin*" Supervisors: R. Clarke and J.C. Knight

**Sharlene Beharry:** "*Analyses of Rainfall, Temperature and Related Extreme Events for Trinidad & Tobago*" Supervisors: R. Clarke and K. Kumarsingh

**Simeon Cornwall:** "*Design and Application of a Biomedical Sensor used to measure Blood Volume Pulsations*" Supervisors: R. Saunders and K. De Souza

## Major Research in Progress

**H. Missan:** "*Modeling of Proton Exchange Membrane Fuel Cell*". Synthesis of Polymers; Synthesis of binary and ternary polymer electrolyte membranes; Synthesis of Nanocomposite materials; and Characterization techniques, namely electrical impedance studies and fuel cell characterization techniques.

**D. Sharma:** "*Robust Automatic Speech Recognition in the Presence of Babble*."

## Faculty Outreach

### Department of Chemistry

The Departments of Chemistry engaged in a cross-disciplinary project to **asses the impact of the contaminants produced by the Guanapo Landfill on the surrounding environment**. This RDI-funded project is the most comprehensive assessment in decades (if not the first of its kind) of contaminants - including air, water, soil and public health - that has been conducted in the Guanapo area, relying solely on regional capacity.

**Dr. Azad Mohammed** of the Department of Life Sciences; **Dr. Vincent Cooper** of the Department of Civil and Environmental Engineering and **Dr. E. Monica Davis**, Faculty of Medical Sciences and Chemistry faculty collaborated on the project. Industry partners include the **Caribbean Institute for Metrology and Hydrology** in Barbados, the **Water and Sewerage Authority (WASA)** and the **Solid Waste Management Company Limited (SWMCOL)**. This project represents an important strategic partnership with landfill managers and important industry stakeholders.

### Department of Life Sciences

#### *External linkages with industry partners*

The Department's MSc team renewed the Memorandum of Understanding (MOU) between The UWI and **Repsol** to continue conducting research on **"The Marine Ecosystem Mapping Project"** under the wider Repsol Biodiversity Management programme. Additionally, **Acadian Sea Plants Ltd.**, Dartmouth, Nova Scotia, Canada, renewed the research partnership and funding for 2011-2012, with **Dr. Jayaraj Jayaraman** to

investigate the bioelicitor activities of brown seaweed derived products.

#### *Cross Faculty relationships*

The Department's MSc team is currently working together with **Professor Gurmohan Kochhar** of the Faculty of Engineering and **Dr. Denise Beckles** of the Department of Chemistry in developing and delivering a UNEP funded postgraduate course.

#### *Links with other universities and local and/or international organisations*

The Department's MSc team endorsed an MOU between the UWI and the UNEP-ROLAC Ozone Division to co-host the Main Meeting of the National Ozone Officers from Latin America and the Caribbean, and the training of Ozone officer for the English Speaking Caribbean and Haiti. It also developed a postgraduate course titled "The Science and Management of Ozone Depleting Substances". The Department's MSc team continues to maintain its partnership with the **University of Belize**, **Anton de Kom Universiteit Van Suriname** and the **University of Guyana** with the launch of **the department's first online MSc**.

#### *Conferences and Seminars hosted*

The Department's MSc team, together with the then **Ministry of Housing and the Environment (Forestry Division)**, (now the Ministry of Environment and Water Resources), held its second National Biodiversity Research Symposium- February 8 to 9, 2012, celebrating the **Year of the Forests**. This was dedicated to **Dr John Stanley Beard** and **Prof Julien Kenny** and funded by the Ministry's Forestry Division.

The Department held its second Annual Research Symposium entitled “Science in the Real World” on April 19, 2012 involving undergraduates, postgraduates and faculty. The presentations were judged and prizes were awarded for the best poster and oral presentations.

#### **Department of Computing and Information Technology Boot Camp**

From July 23 to 27, 2012 the Department of Computing and Information Technology (DCIT) hosted its Second Annual Computer Science and IT Boot Camp for secondary school students. Thirty-six students from 18 secondary schools throughout Trinidad participated this year. The organizing committee comprised of **Dr. Permanand Mohan** (Chair), **Ms. Phaedra Mohammed** (Co-Chair), several members of staff and postgraduate students from DCIT. The DCIT Boot Camp is a non-profit initiative.

#### ***Links with other universities***

The Department continued to strengthen links with the Computer Science Department of the University of Central Florida. Professor Sheau Lang from University of Central Florida lectures COMP 6560 (Computer Forensics), one of the courses in the MSc programme. Several of their professors serve as external examiners for our courses.

#### ***Scholarship Opportunities***

**Karleen Lall** was selected in June 2012 to participate in the CARPIMS (Caribbean-Pacific Island Mobility Scheme) staff mobility scholarship to participate in a one-month long programme in the upcoming academic year 2012-2013 at the National University of Samoa (NUS). It is an opportunity to strengthen departmental and institutional links between UWI and NUS and is a means of developing the quality of education and research at both universities.

## **Collaborative Links with the Industry**

Starting with entities that already sponsor prizes for the annual Faculty awards, the Department entered into discussions with industry representatives on curriculum based improvements and the development of the Internship Programme.

#### ***Website***

A new website for the Department was created. The site has a new look and feel and contains a lot more information about the Department. In particular, it provides detailed information on our academic programmes, staff research and publications and computing facilities.

### Department of Physics

**Dr. Shirin Haque** continued the promotion and popularisation of Astronomy and Science by bringing the science of the stars to the public. She championed a number of initiatives including the IMAX Hubble 3D launch – “***From Stonehenge to Hubble***” and the IMAX lecture series (January - March 2012 ) “***Reach for the stars***”.

In addition, she has maintained the connection to the wider public, locally and internationally, through her participation in science forums and expos. Most notably, Dr. Haque was an invited guest to the Centre for Global Peace and Citizenship, Haverford College to present, “***The Lesser travelled path – making a difference with Science documentaries in the Caribbean***”; at the India Science Expo/NIHERST to present, “***2012: Science fiction or fact?***” and was the feature speaker at the RBC Young Leaders Awards Ceremony, presenting “***Losing Paradise?***”.

Dr. Haque also presented “***Science Fiction or fact?***” at the Caribbean Youth Science Forum and participated in Hardtalk – Higgs boson. She judged at the NIHERST Science Video Competition (2011 and 2012) and presented a public lecture at the office of the Member of Parliament for Tunapuna on the “***God particle***” in August 2012.

## Revenue Generation / Cost Containment

### Department of Chemistry

The Institution of the Research Consultancy and Analytical Services (NFM, FM Group Caribbean Trinidad, WASA, Continental Biscuits) provided TT\$10,000 in analytical services in May 2011. The sum of TT\$300,000 was budgeted for chemical analyses and research in the RDI Guanapo project.

### Department of Computing and Information Technology

The Department, in collaboration with the Ministry of Education (Curriculum Planning and Development Division), mounted one of their Level I courses, COMP 1200 – Computer Programming II, to Secondary School Teachers during the period July 23 to August 17, 2012. This course attracted 30 Teachers and generated an income of TT\$48,000. The Department continued to run several courses in the FSA Summer School and also offered students the opportunity to register for the courses offered in the Evening University programme.

### Department of Mathematics and Statistics

The Department ran several courses in the FSA Summer School as well as a training course in Analysis and Mathematics Methods I for secondary school teachers, generating TT\$32,920.

### Department of Physics

Income was generated from the following activities, Preliminary Physics Laboratory component: Open Campus; Summer Programmes; Services of the Electron Microscope; Services of the Electronics workshop and Solar Timber Drying Services.

## Projected Activities for 2012-2013

### Department of Chemistry

The Department received RDI funding for project entitled: 'The impact of emissions from the Guanapo Landfill on the surrounding environment' in the sum of TT\$1 million. The project is expected to be completed by June 30, 2014. This project will produce a comprehensive description of the current state of the environment around and emissions from the Guanapo Landfill. Model studies of the landfill, air and water will be conducted to allow for predictive studies that can be utilised to study other landfills in Trinidad & Tobago and the region.

A Research Consultancy and Analytical Services Unit has been established with its objective being to harness the intellectual and instrumental resources within the department to increase revenue generation through fund-raising and grant winning, improve employee engagement, as well as position the UWI to internal and external stakeholders as a service-oriented institution focussed on problem-solving and demand-led research.

Work on revising the Level II courses in Chemistry is in progress with the implementation period set for 2013/14. Plans are underway to launch a postgraduate Research Day in February 2014.

### Department of Life Sciences

The Department intends to pursue final BUS approval of new 93 credit BSc Biology.

### Department of Mathematics and Statistics

The Department intends to introduce a new postgraduate course in Discrete Mathematics.

### Department of Computing and Information Technology

The DCIT BOOT CAMP 2013- The DCIT Boot Camp 2012 continued to be a great success and intentions are to continue running this Camp. The Computing Forum continues to be a major success and a similar activity will be pursued to run on January 26, 2013. The Department will be reviewing the MSc Computer Science degree programmes and looking to offer a Major in Information Technology under the current BSc General degree. DCIT has appointed Coordinators for the different academic programmes to review the programmes in alignment with the curriculum review and strategic goals and to handle student matters. Additionally, a DCIT Management Committee comprising of the Head of Department and the various programme Coordinators was introduced. This committee would ensure that the goals and objectives from the Departmental Operational Plan are achieved.

### Department of Physics

The Department will pursue approval of the proposed Academic Programmes, MSc in Renewable Energy Technology and MSc in Biomedical Physics. Plans also exist to create a new, restructured Physics Major and Minors with new and revised courses.

## Distinguished Visitors

### Department of Chemistry

#### **Dr. Linda Forst,**

Director, Division of Environmental and Occupational Health Sciences  
Minsk, Belarus.

#### **Stephen Fulwell,**

Consultant – Health, Safety and Environment Auditor,  
Magnolia House,  
Nantwich, England.

#### **Professor Keith O. Pascoe,**

Professor in the Department of Chemistry,  
Georgia State University,  
Atlanta, Georgia, USA.

#### **Professor Winston Tinto,**

Professor in the Department of Chemistry,  
The University of the West Indies,  
Cave Hill, Barbados.

#### **Dr. Irina Zastenskaya,**

Deputy Director, Republic Scientific Practical Centre of Hygiene

### Department of Life Sciences

#### **Dr. Grant Brown,**

Concordia University

#### **Dr. Suely Carvalho,**

Head, UNDP Montreal Protocol and Chemicals Unit

#### **Dr. Darren Croft,**

University of Exeter

#### **Dr. Jean-Guy Godin,**

Carlton University

#### **Marco González,**

Executive Secretary,  
Secretariat for the Vienna Convention and the Montreal Protocol (Ozone Secretariat)

#### **Paul Horwitz,**

Deputy Executive Secretary,  
Secretariat for the Vienna Convention and the Montreal Protocol (Ozone Secretariat)

#### **Professor Jens Krause,**

Humboldt University,  
Germany

#### **Professor Anne Magurran,**

St. Andrews University

### Department of Mathematics and Statistics

#### **Rishi Nath,**

Associate Professor and  
Director of Undergraduate Research  
Department of Mathematics,  
York College,  
City University of New York

**Department of Physics**

**Professor Donald Gabriels,**

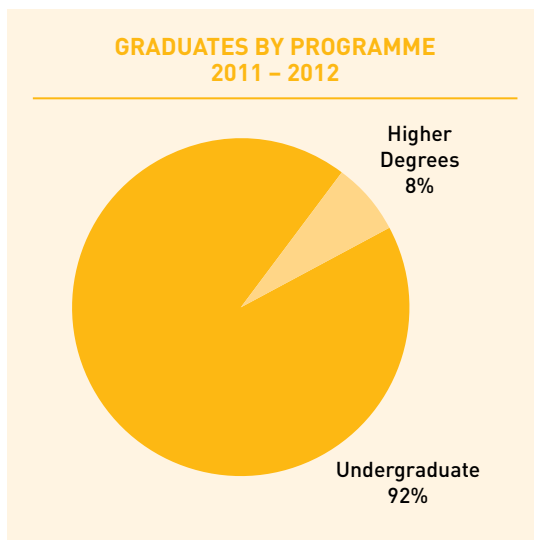
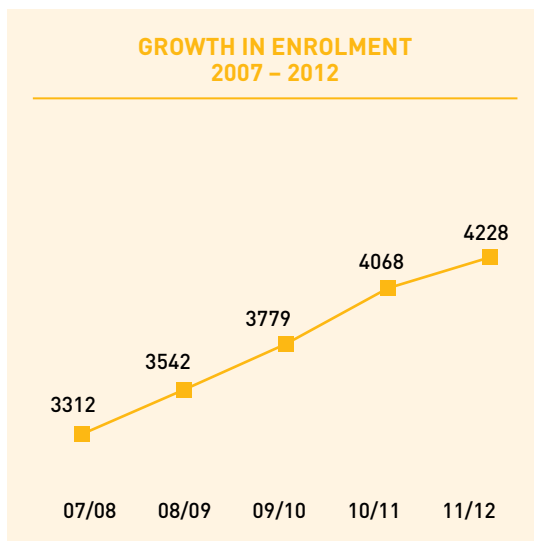
Professor of Soil Physics, UNESCO Chair on Eremology, University of Ghents, Belgium.

**Dr. Dirk Schulze-Makuch,**

University of Wisconsin-Milwaukee (Geosciences), USA

**Professor Satpal S. Sekhon,**

Professor in Physics, Guru Nanak Dev University, Amritsar, India.



Data shown is for the combined Faculty of Science & Agriculture 2012. In 2013 there was a total of 2924 students registered in the Faculty of Science & Technology.

Graduates from the School of Science accounted for 86% of all graduates in the faculty.

# FACULTY OF SOCIAL SCIENCES

## **Executive Summary**

In the year under review, 2011/2012, the Faculty of Social Sciences continued to make progress towards achieving its goals consistent with the strategic themes identified in the 2007-2012 Strategic Plan.

### ***Student Enrolment***

During the year, student enrolment continued to be robust at just under 6000 students. Sixty-five percent were enrolled in undergraduate programmes and 35% in postgraduate offerings. Noteworthy in this regard is the fact that 1,462 of the undergraduate students were enrolled in Evening University programmes offered by the Faculty. Thus, the Faculty continued to provide access to tertiary education in a significant way to working adults who were desirous of furthering their education while pursuing their careers.



**MR. ERROL SIMMS**  
DEAN, FACULTY OF SOCIAL SCIENCES

### *January Intake*

The Faculty of Social Sciences, for the first time, accepted students to pursue BSc degree programmes in January 2012 in addition to the normal student intake in August of each academic year. Students were admitted to the BSc programmes in Accounting, Management Studies, Leadership and Management, Economics, and Insurance and Risk Management.

### *South Campus Initiative*

The Faculty of Social Sciences was the leading contributor in the South Campus Initiative in 2011/2012. This entailed the offering of Level I courses from the Department of Management Studies, the Department of Economics and the Department of Behavioural Sciences to students registered in several Evening University programmes.

### *National Engagement*

The Trade and Economic Development Unit successfully partnered with ATLANTIC LNG and the IADB to design and initiate a Localised Economic Development Study in the South West Peninsula of Trinidad. Funding for this project amounts to TT\$2.1 million over three years.

### *Regional Engagement*

In 2011/2012, the Faculty continued to make monitoring visits to the franchised colleges in St. Lucia, St. Kitts and St. Vincent to meet with staff, students and Open Campus representatives. During one of these visits to the Clarence Fitzroy Bryant College in St. Kitts, the Faculty also conducted an open-air session in Basseterre to

highlight its programmes in collaboration with the Open Campus, St. Kitts. The **Prime Minister of St. Kitts-Nevis, Dr. the Honourable Denzil Douglas** and the **Deputy Prime Minister, the Honourable Sam Condor**, were among the visitors to the open-air session.

Through a pilot Summer Programme with the Open Campus sites in St. Kitts and in Nevis, lectures conducted at St. Augustine in ECON 1003 – Introduction to Mathematics and ECON 1005 – Introduction to Statistics were simultaneously streamed to fee-paying students in St. Kitts and in Nevis by live videoconference. It is intended to broaden this initiative to include St. Lucia, St. Vincent and other countries and to increase the number of classes delivered via videoconferencing in the near future.

### *Curriculum Review*

Two new programmes were introduced in response to stakeholder needs in 2011/2012, namely, the BSc Insurance and Risk Management, and the BSc Criminology and Criminal Justice. A Minor in Environmental Economics was also introduced. In addition, three new courses were introduced, namely, Ethics, Integrity and Corruption in the Public Sector; Anti-corruption Strategies in Developing Countries; and, Social Development Policy. Amendments were made to the assessment components in several courses across the Departments in keeping with the directive from the Instructional Development Unit (IDU) to increase and broaden the coursework component in the assessment of all courses offered by the Faculty.

### *First-time Graduates*

The Department of Management Studies registered the first two graduates from its PhD in Business Administration programme. The individuals who graduated are **Dr. Meena Rambocas** with high commendation and **Dr. Ramchand Rampersad**. The MSc Sports Management programme also registered its first two graduates in 2011/2012.

### *Upgrade of Physical Facilities*

In an effort to upgrade the physical facilities with up-to-date technology, the Faculty equipped Room 103, located on the Ground Floor of the Faculty of Social Sciences/Faculty of Humanities and Education building, as a "Smart Classroom". This is to facilitate the streaming of lectures to the South Campus and to the franchised sites in St. Kitts, St. Lucia and St. Vincent. The Faculty also embarked on the upgrading of the Management Lecture Theatre with the purchase of audio-visual and other electronic aids for the delivery of courses utilising internet technology.

### *Cross-Campus Social Sciences Conference*

The Faculties of Social Sciences across the three Campuses held the third biennial Cross-campus Conference at the Mona Campus during the period January 16-18, 2012. The theme of the conference was "***The Strategic Plan and the Social Sciences: Making it Better for 2012-2017***". Several initiatives were agreed upon at the Conference for implementation over the next two years including the harmonisation of Curriculum and Faculty Regulations and the fostering of collaborative research among staff on all three Campuses.

### *International Conferences*

The Faculty hosted a number of international conferences in 2011/2012. **The Annual Conference on the Economy** entitled ***Managing for Development in a Volatile Economic Environment: Addressing the Challenges Before Us*** was held October 6 to 8, 2011. **The Conference on Gangs, Violence and Governance** was held November 3 and 4, 2011 and the **Conference on Poverty Alleviation** on October 20 to 21, 2011. **The 2<sup>nd</sup> International Tourism Conference** entitled ***Tourism, Culture and the Creative Industries: Exploring the Linkages*** took place January 2012 in collaboration with Ryerson University, Canada and London Metropolitan University, United Kingdom. **The 14<sup>th</sup> International Conference on Penal Abolition** was held from June 12 to 15, 2012.

## **New Strategic Plan Initiatives**

As we enter the new Strategic Plan period, 2012-2017, the Faculty will be implementing several initiatives. Among other things, it plans to introduce several new programmes including a BSc in Local Government Studies, a MSc in Financial Economics, a MSc in Health Services Management (to be offered jointly with the Faculty of Medical Sciences), a Postgraduate Diploma in Sports Science and Coaching and a Minor in Labour Economics. In addition, a new course in International Social Work will be introduced to strengthen the current BSc Social Work major. A course in the Economics of Education and Manpower Planning will also be introduced in response to stakeholder needs. The very serious

physical space constraints confronting the Faculty will also be accorded priority attention.

### **Department of Behavioural Sciences**

This is a multidisciplinary department comprising a number of disciplines. The Criminology, Mediation Studies, Political Science (Government), Psychology, Social Work, and Sociology Units currently fall under the purview of the Department. A number of self-financed Units are also attached to the Department and include the Governance Unit, Social Disability Unit, and the Unit for Social Problem Analysis and Policy. The Department was headed by Professor Ann Marie Bissessar during the 2011/2012 academic year.

Over the period August 2011 to July 2012, the Department published the inaugural issue of the ***Department of Behavioural Sciences E-Journal*** and hosted a number of staff and student-led conferences and workshops, foremost of which was the ***International Conference on Gangs, Violence and Governance*** held November 3 to 4-2011 at the St. Augustine Campus. The faculty of the Department have also been instrumental in a number of local and international research projects. The international research collaboration ***Analysis of Intervention and Counselling of at-risk Youth to Reduce Crime, Violence, and to Improve Outcomes for the Individual, School, and the Family*** has been accepted for funding by the UWI Research and Development Impact Fund. Other international collaboration with the United Nations Development Programme yielded a decisive report on citizen security in Trinidad & Tobago.

The Department has also seen a positive growth rate of 32.46% in the number of graduate student enrolments for the period 2010-2012, while a marginal decline in the new enrolment for undergraduate degrees and certificates has been observed for the same period. However, there have been a number of undergraduate and graduate students completing their degree options within the Department.

Several members of faculty continue to serve on editorial boards of several internationally recognized journals and publication houses. Staff has also maintained or established memberships on several public, professional, and academic boards. The Department has articulated a number of plans for the upcoming academic year, including the introduction of new undergraduate and graduate-level courses and programmes, as well the establishment and continuation of graduate seminar series across all academic units.

### **Department of Management Studies**

In spite of severe infrastructural, financial and human resource constraints, the Department of Management Studies (DMS) continues to improve and excel in a number of key areas (teaching, research & publications, service and other outreach activities) that promoted the University's mission.

The DMS hosted the second International Tourism Conference in January 2012 on Tourism, Culture and the Creative Industries: Exploring the Linkages jointly with Ryerson University, Canada and London Metropolitan University, UK.

The DMS also had its first PhD Business Administration (Dr. Meena Rambocas and Dr. Ramchand Rampersad) and MSc Sports Management graduates. The BSc Hospitality and Tourism and MSc Aviation Management students participated in internships in Jamaica and Vaughn College of Aeronautics and Technology in New York, respectively.

The DMS hosted two ACP MUNDUS scholars from Dresden University, Germany.

In collaboration with the Ministry of Labour, Small and Micro Enterprises (MOLSME) and the Office of Research Management & Knowledge Transfer (ORD&KT), the DMS developed and implemented a Professional Certificate in Entrepreneurship and Innovation that is being delivered to micro, small and medium-size entrepreneurs in various communities in Trinidad & Tobago.

## Students

### Department of Behavioural Sciences

A general decrease in new undergraduate enrolments has been noted across degree options, with a negative growth rate of 3% from 2010/2011 to 2011/2012. However, the BSc Psychology Special, BSc Social Work, and BSc Government were found to have higher enrolment figures in 2011/2012 than the preceding academic year. The data shows a general increase in the number of postgraduate enrolments across academic units, with the exception of the MSc Criminology and Criminal Justice programme. The Department experienced a positive growth rate of 32% in new postgraduate enrolments from 2010/2011 to 2011/2012.

A total of 254 graduates of the Department were awarded undergraduate degrees, with the BSc Sociology programme accounting for the largest number of awarded degrees. This represented a 54% increase in the number of undergraduate degrees awarded by the Department. A total of 101 higher degrees were also awarded for the period 2011/2012 including four doctoral degrees. This represents a 53% growth in the number of higher degrees awarded.

### Department of Economics

The Economics Student Union (ESU) organised a youth debate in 2011 and a career day in 2012. They also participated in the planning process for **COTE 2011**.

The De La Rue Scholarship went to MSc Economics student, **Timothy Woolford**, while MPhil Economics students, **Ranita Seecharan** and **Whitney Cupidore** were both awarded a UWI Post Graduate Scholarship. **Sean Scott** became the first Evening University student to complete the MSc Economics.

## Teaching & Learning

### Department of Economics

The Department introduced a new Minor in Environmental Economics and delivered undergraduate courses of Remedial mathematics and Introduction to Mathematics in the Evening University's South Campus Initiative.

### Department of Management Studies

Professor Surendra Arjoon utilized and adapted the **Student Learning and Portfolio approach** for teaching Professional Ethics, while Dr. ChandraShekhar Bhatnagar developed more than 100 podcasts in Finance.

## Graduate Studies

### Department of Economics

Three UWI Scholarships and the Elsa Govia Scholarship were awarded to MPhil/PhD students in the Department. MSc students completed internships at the Central Bank of Barbados, the Caribbean Centre for Money and Finance, the Regulatory Industries Commission and the Ministry of Planning and Sustainable Development. Two graduate students benefitted from training programmes in Canada, Costa Rica and Italy and three Research Students presented papers at regional conferences.

### Department of Behavioural Sciences

#### *Improving Delivery of Graduate Studies*

**The Psychology Seminar Series** which is organized by the graduate students of the Psychology Unit – was restructured in the 2011/2012 academic year, to consist of weekly seminar presentations by graduate students; faculty; undergraduate students; and UWI alumni across a variety of topics of applied psychological research. The series has also featured a seminar presentation on **Transport Psychology** by visiting academic, Angela Francke (Dresden University of Technology – Germany). This restructuring of the seminar series allowed for greater participation by graduate students, and facilitated meaningful interchange across the faculty and student body of the Psychology Unit.

### Department of Management Studies

The Department has incorporated a fully blended teaching//learning approach in the FIFA/CIES Postgraduate Diploma in Sports Management.

## Research & Innovation

### Department of Economics

The Research Units led the Departmental effort in the area of Research and Innovation. The Trade and Economic Development Unit (TEDU) successfully partnered with ATLANTIC LNG and the IADB to design and initiate a Localised Economic Development Study in the South West Peninsula of Trinidad; funding amounts to TT\$2.1million over 3 years.

The Sustainable Economic Development Unit (SEDU) secured the REGATTA Regional Gateway for Technology Transfer and Climate Change Action in Latin America and the Caribbean Project, which was commissioned by the UNEP. The Labour Market and Poverty Studies Unit (LMPSU), in collaboration with extra regional and national partners, facilitated training in the Multidimensional Measurement of Poverty. The Department's research primarily includes, but is not limited to:

- Labour Markets Structure in the Caribbean. The importance of the Informal Sector: **Dr. Ewan Scott / Labour Market and Poverty Studies Unit (LMPSU)**
- Microeconomic Aspects of the Labour Market in T&T: **Dr. Roger Hosein/ Trade and Economic Development Unit (TEDU)**
- Climate change and small countries – the issues at stake: **Dr. Marlene Attzs/ Sustainable Economic Development Unit (SEDU)**

- Mathematical Finance – Theory of Derivatives, Fixed Income: **Dr. Moawia Alghalith**
- Measuring the Status & Impact of ICT Plans of Caribbean Countries: **Martin Franklin**
- Issues in Financial regulation and Monetary Policy: **Dr. Lester Henry**
- Equity and Health: The Situation of People Living with HIV/AIDS: **Dr. Althea La Foucade**
- Economics of Crime – Tourism and Crime – its impact on economies. Fear of Crime and Victimization – its impact on economies: **Dr. Anne-Marie Mohammed**
- Choice and poverty in the Caribbean – an unholy alliance?: **Professor Karl Theodore.**

### Department of Behavioural Sciences

#### Research Agenda

Within the Department of Behavioural Sciences, several areas of applied research is being conducted in psychology, criminology, sociology, social work, and political science. Core areas include: Crime in Trinidad & Tobago: fear of crime; spatial distribution of crime; gang involvement, Violence in secondary schools, Capacity for forensic science laboratories in the Caribbean and Directive memory and psychological well being.

## Major Research Projects Completed

**Dr. Randy Seepersad** completed a country report on citizen security in Trinidad & Tobago, which was prepared for publication in the United Nations Development Programme, Human Development Report on Citizen Security. This paper was co-authored by **Dr. Dianne Williams** (Criminology Unit). An expansion report on citizen insecurity was also prepared for the Ministry of National Security.

Dr. Seepersad also functioned as part of consultative team for the CARICOM Implementation Agency for Crime and Security, and co-authored the publication *Capacity Assessment of Forensic Laboratories in CARICOM Member States*.

## Major Research Projects in Progress

**Dr. Sandra Celestine** is the principal investigator of a multidisciplinary research team that includes colleagues from New York University. Of the two research proposals which were prepared by the team, Dr. Celestine received a UWI Research Development Impact (RDI) Grant for the proposal *Analysis of Intervention and Counselling for at-risk Youth to Reduce Crime, Violence, and to Improve Outcomes for the Individual, School, and the Family*.

**Dr. Emmanuel Janagan Johnson** continues to undertake cross-cultural research on domestic violence and family life in Trinidad and India samples, as well as on the global trends in leadership in Christian higher education institutions.

## National Engagement and International Partnerships

### Department of Economics

The Trade and Economic Development Unit (TEDU) organised a *Revenue Management in Small Hydrocarbon Rich Economies Conference* in June 2012 with sponsorship from **BpTT**. Additionally, the *Conference on the Economy (COTE) 2011* was organised with sponsorship from the **Caribbean Development Bank** and local companies.

As part of its commitment to strategies for developing the ideal UWI graduate, the Department of Economics organised its *Post Budget Forum 2011*. The Department also participated in the selection panel for the Trinidad & Tobago Nominees for PAHO/WHO Leaders in International Health Program (LHIP) 2012, PAHO, Port of Spain. February 2012.

Links were developed with the **University of Suriname, University of Guyana** and maintained with the Mona Campus, UWI that facilitated their participation in COTE 2011.

The Department hosted the Demas Rampersad Series of Seminars/Special Lectures in 2011. A workshop on the *State of Civil Society and Volunteering Research in Trinidad & Tobago* hosted by SEDU was held on January 11, 2012.

## National Engagement

### Department of Behavioural Studies

The Department organised a series of conferences through the Criminology Unit: *"Gangs, Violence and Governance"*; the Sociology Unit, *"International Conference in Poverty Alleviation"* and *"Women, Children, and the Economy: A Sociological Perspective"*. The Department also introduced Mediation Week under the theme *"Building Confidence in Mediation"* which entailed a series of events from November 4 to 11, 2011, and culminated with a symposium.

## Revenue Generation/ Cost Containment

### Programmes

Self-financing and Summer programmes provide a source of revenue for the Faculty. Revenue is also generated through partnerships with public and private entities to devise and run programmes targeting specific groups with particular needs. This year, in collaboration with the **Ministry of Labour, Small and Micro Enterprises** (MOLSME) and the Office of Research Management & Knowledge Transfer (ORD&KT), the Department of Management Studies developed and implemented a **Professional Certificate in Entrepreneurship**

**and Innovation** that is being delivered to micro, small and medium-size entrepreneurs in various communities in Trinidad & Tobago.

### Mathematics Proficiency Test (MPT)

The MPT was administered to students who were required to read the course ECON 1003 - Introduction to Mathematics that is students pursuing the BSc. Economics (Major and Special), BSc. Management (Major and Special), BSc. Banking and Finance (Special), BSc. Insurance Risk Management (Special) and BSc. Sports Management (Major).

### Conference on the Economy (COTE)

The Department of Economics' annual conference highlights and addresses the key economic issues facing Trinidad & Tobago, in particular, and the wider Caribbean region by extension in light of the present global environment. The conference targets academics, technocrats, policy makers and tertiary level students at a cost of TT\$1,500 per participant with special rates for students.

### Summer Programme 2012

For the year under review the Department of Economics generated revenue from student enrolment in 16 Economics courses offered by the Departmental during the Summer period.

## Service to UWI-12 Countries and Other Underserved Communities

The Faculty continues to provide support for the delivery of undergraduate Level I and Level II courses under the franchise agreements with the Clarence Fitzroy Bryant College (CFBC) in St Kitts and Nevis; the Sir Arthur Lewis Community College (SALCC) in St Lucia and the St Vincent and the Grenadines Community College (SVGCC) in St Vincent.

## Community Outreach

In December 2011, the Department organized a Christmas Party for the children of the St. Mary's Children's Home in Tacarigua. A donation of toys, food, clothing, and other items were also presented to the Home. This event was organized by Professor Ann Marie Bissessar, former Head of Department of Behavioural Sciences.

## Projected Activities for 2012-2013

### *RESEARCH UNITS*

**Sustainable Development Unit (SEDU):** The Caribbean Economy Reader 2<sup>nd</sup> edition and International workshop on Sustainable Energy in the Caribbean Context.

**Trade and Economic Development Unit (TEDU):** Localized Economic Development in Southwest Peninsula.

**Labour Market and Poverty Studies Unit:** A comprehensive study on the response to poverty in the Caribbean and collaboration with the UNICEF, UNECLAC, World Bank and the Ministry of the People and Social Development on facilitating and hosting training on the Multidimensional Measurement of Poverty.

### **Department of Behavioural Sciences**

The Department has proposed a number of activities for the 2012/2013 academic year. These include, (but are not limited to): the establishment (and continuation) of a Graduate Seminar Series within each academic unit, RDI-funded research collaboration with New York University on intervention and counselling for at-risk youth to reduce crime and research collaboration with Huddersfield University on developing innovative interventions with child sexual abuse survivors in Grenada.

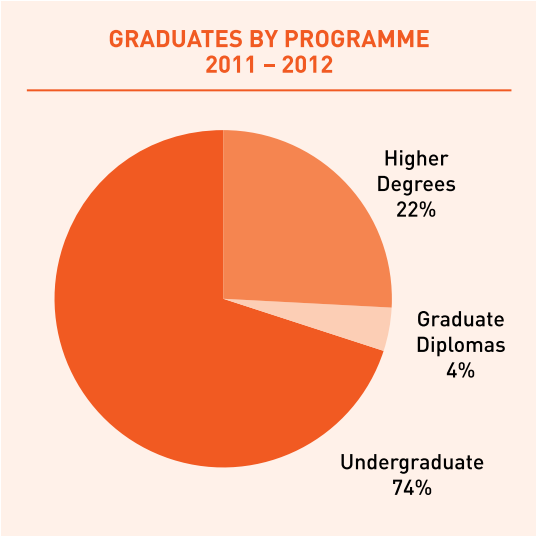
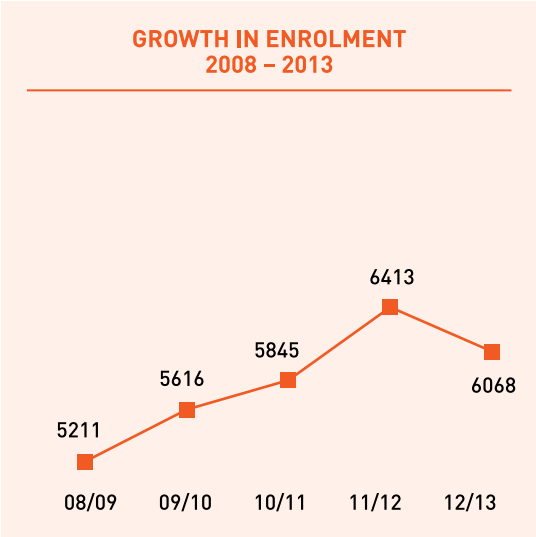
**Department of Management Studies**

The focus of the Department would be in the establishment of the Advisory Board for the Department, curriculum review for all programme offerings; the establishment of the Sports and Tourism Unit and the development of Professional Diplomas.

**Distinguished Visitors**

**Professor Charles Negy,**  
Professor, Psychology,  
University of Central Florida, USA

**Professor Jaipaul Roopnarine,**  
Director, Jack Reilly Institute of Early Childhood  
and Provider Education,  
Syracuse University, USA



# CENTRES & INSTITUTES

# ANSA McAL

# PSYCHOLOGICAL

# RESEARCH CENTRE

In the 2011/12 academic year, the ANSA McAL Psychological Research Centre submitted a report to the Ministry of the People and Social Development on a nationwide study on the effects of gambling in Trinidad & Tobago. This report represents baseline national data on patterns of gambling, attitudes towards gamblers and implications for the family, workplace and state.

Work has also continued on a number of other research projects, with journal manuscripts on general fear, time perspective, and personality being prepared for academic publication. A new book on *Social Psychological Dynamics* has been published by The UWI Press, while a book manuscript on nonverbal behaviours is being prepared with Palgrave Macmillan. An application has also been prepared and approved for the establishment of a Psi Chi Chapter at the UWI St. Augustine Campus. The Centre maintains active ties with a number of international academic affiliates, with joint research projects and student/faculty exchanges being developed.

## Research

### *Personality and Fear of Crime*

The study of personal and individual differences has been vigorously pursued in psychological research. However, few researchers have considered the implications of temperamental dynamics of personal reactions to actual or perceived environmental threats. In building a model of vulnerability to explain responses of criminal victimization, the “big five” personality characteristics – extraversion, agreeableness, conscientiousness, neuroticism, and openness – have been simultaneously explored with global fear and rational calculations of risk.

A sample of 318 respondents has been obtained. The results of structural equation modelling revealed a significant linkage between neuroticism and fear and risk estimations. In particular, fear of ambiguous contexts and events was found to have a strong relationship with the propensity toward negative emotionality. Personality profiles (as determined by cluster analysis) show the relative vulnerability of personality clusters based on their unique variations across the big five factors. A manuscript is currently being prepared on these research findings.

### *Emotional Generalization in Fear of Crime*

An examination of the fear of crime literature, both locally and internationally, reveals the traditional emphasis of researchers on the relationship between perceptions of victimization risk and the fear response to crime. However, outside of these explanations of fear of crime lies other intrinsic factors not directly related to crime, but have

the potential to influence the tenor of emotional responses toward the possibility of criminal victimization. The concept of general (global) fear was introduced to provide some explanation to the variability in fear of crime levels across various groups and social conditions. Presumably, due to a lack of personal direct experience with the crime context, individuals were found to rely more on proximal emotional experiences than rational assessments of risk to guide their response to the threat of criminal victimization. General fear, and not perceived risk of victimization, was found to be the greater predictor of fear of crime. The findings of this research have been accepted for publication in a forthcoming issue of the *Journal of Applied Social Psychology*.

### *Time Perspective and Criminal Victimization*

Cognitive and emotion processing of crime has been the centre of much discourse, with fear of crime, in particular, emerging as an important construct in observing patterns of vulnerability. While several macro-perspectives have been put forward to explain the nature of fear of crime, few researchers have considered other personal, intrinsic factors that have come to constitute important predictors of fear of crime. Building on inaugural findings on the relationship of emotional generalization (global fear) on fear of crime, research has been undertaken on time perspective, which represents cognitive generalization of life events.

The findings of this research study revealed that individuals who maintain a balanced time orientation (an adaptive combination of positive and negative time perspectives) had significantly

lower levels of fear of crime than respondents who showed a more negative temporal profile. A model of fear of crime was tested and showed that pragmatic fears shared a strong direct relationship with fear of crime more so than perceived risk of victimization, which the literature has consistently identified as the best predictor of fear of crime. Furthermore, negatively oriented time perspectives were found to have a significant direct relationship with pragmatic fears and perceived risk, which play a mediating role between temporal perspective and fear of crime. A journal manuscript has been prepared and is currently under review with the journal *Social Psychology Quarterly*.

#### *The Impact of Emotion Modulation on Psychological Reactance*

Psychological reactance refers to the motivational response of an individual to actual or anticipated threats to freedom. It is based on the premise that individuals are motivated to regain a sense of freedom in response to a direct or implied threat by another to remove or restrict their engagement in free behaviours or decision making. The reactance response can be viewed as a state of high arousal and, as such, is presumed to intensify or attenuate in light of the emotional context facing an individual. The captioned study examines the degree to which the elicitation of specific emotion states can impact the strength of individuals' reactance response to perceived threats to freedom. In particular, the study focuses on calm and anger inductions, as these emotion states are of disparate valence (positive versus negative) and levels of arousal (low versus high).

Baseline measures (T1) of reactance proneness as well as a personality profile were attained from participants prior to emotion induction. For the experimental period (T2), participants were exposed to either anger or calm emotion induction via recall (thinking/ imagining a situation in which the targeted emotion has been/can be experienced). Psychological reactance was then induced using a vignette.

Preliminary results of this study revealed that, contrary to predictions, perceived threat to freedom (which is a necessary component of state reactance), was found to be significantly higher for the calm mood induction group than participants who underwent anger induction. Within-subject factors such as personality and levels of reactive autonomy are also being used to conceptualize these findings.

#### *Newspaper Depiction on Crime: Social Psychological Consequences*

The media, an important source of information, description of events, explanations and interpretations, often capture the imaginations of their readers rather than the facts. However, the public needs the media to know as well as to understand day-to-day events. The competition for media space, timelines and delivery of "good" stories results in a kind of impressionistic and seductive representation of the truth to the public – a limbo between fiction and reality quite often with little regard for accuracy, objectivity and factual reporting.

This public information is seductive “infotainment” - a mix between entertainment and news, a distortion of the facts to entertain the masses which finally leads to sensationalism. The news that finally appears on the newspaper is just one version of a story, a version selected with newsworthy criteria determined by a filtration process involving the news’ gatekeepers (reporters, editors, producers). The media greatly influence the public’s perceptions on issues related to crime. This study is undertaking a content analysis of crime reports on the daily newspapers for the period January 1, 2003 to December 31, 2010. The data from crime reported to the police during the content analyzed period will be assessed.

#### *Copycat Behaviour: Expansion of Research*

Prior research in a number of fields suggests that copycat crime is a common phenomenon (Comstock, 1980; Pease & Love, 1984b; Schmid & de Graaf, 1982; Surette, 2011, 2012; Wilson & Herrnstein, 1985). Copycat crime research has roots in the study of two social concerns, suicide and terrorism. A media-generated copycat effect on imitation suicides, termed a “*Werther Effect*”, has resulted in the impact of media coverage and entertainment portrayals of suicide being recognised as significant (O’Carroll & Potter, 1994; Phillips, Lesyna, & Paight, 1992; Stack, 1987).

Similarly, in the research literature about terrorism there are few doubts expressed about the media’s ability to motivate copycat terrorism (Poland, 1988, p. 47; Tuman, 2010). In addition to

a growing number of anecdotal reports of copycat crimes, surveys of offenders have shown that copycat histories are found in about one in four offenders (Surette, 2012). Irrespective of the view that copycat crime is persistent and substantial, the study of media crime models has lagged.

This study assesses the cognitive processing of information, levels of empathy and copycat behaviour among juveniles in high and low risk institutions. The exploration of the mediating effects of the media in determining behaviour has been limited in showing causation. Where findings have been suggestive, there are no conclusive results to demonstrate causation. The study has completed the collection of data and a report has been prepared and a paper is to be submitted to a journal. Further research will qualitatively explore copycat behaviour in juveniles.

#### *A Nationwide Study on the Effects of Gambling in Trinidad & Tobago*

The captioned study was commissioned by the **Ministry of the People and Social Development**, with the aim of obtaining a reliable estimate of the proportion of society that engages in gambling activities, and evaluating the social and economic impacts of compulsive gambling on individuals, their relationships, and productivity. This study represents the first of its kind to be conducted in Trinidad. A sample of 1,008 was obtained in 2011 through the use of household surveys.

The data collected focused on five areas: problem gambling and treatment; frequency of gambling activity; public perceptions of gambling; gambling

and the family; and the impact of gambling on workplace productivity. Among the specific measures taken were the Problem Gambling Severity Index (Ferris & Wynne, 2001), comparative levels of discrimination against gamblers versus other stigmatized groups, and treatment and support services for problem gamblers. Differences in public perceptions and participation across a number of demographic groups, and recommendations for future research and programme development were suggested based on these findings. Data was collected and analysed, and a first draft of the report was submitted to the Ministry in October 2011. The final report for this study was reviewed in July 2012, and has been forwarded to the Ministry for publication.

### ***Trinidad & Tobago Guardian Survey***

For the past 14 years, the Centre has been commissioned to undertake the **Trinidad Guardian Opinion Poll**. These polls have become a widely cited source of public opinion on the social and political landscape of Trinidad & Tobago. Over the past year, the Centre continued to maintain this commitment with the Trinidad Guardian, and published several reports on government/ministerial performance, current debates, social issues, and public opinions on the matter of national crime. These results appeared in a series of weekly publications in the Sunday Guardian.

## **Graduate Studies**

### ***PhD Students***

#### **Jannel Philip**

***“Healthcare students’ willingness to interact with patients living with HIV/AIDS (PLHIV): The Influence of attributions, emotions, prejudice and perception of occupational risk”. The research examined the factors that influence health-care practitioners’*** (i.e. student: nurses, dentists and doctors) willingness to interact with PLHIV. The findings indicated that blaming patients for contracting HIV, fear, and prejudices towards HIV patients were some key factors hindering positive patient-provider interaction. Conversely, empathy towards patients and close contact with HIV patients and their families, enhanced the patient-provider relationship.

Emotional regulation, reduction of biases and sustained social contact are some recommendations for best practice. Specifically, the results indicate that information-driven approaches and interventions for stigma reduction must incorporate what HIV/AIDS means to health professionals from an emotional perspective. Furthermore, the data suggests that it would be advisable to revise patients’ sexual history form to reflect discreet but useful information about patients. This should be done in an effort to reduce the potential for blaming, biases and prejudices. Additionally, the findings suggest that training programs which include sustained social contact with PLHIV should be factored into the curriculum for training healthcare professionals, since it would enhance the patient-provider interaction. Jannel Philip successfully defended her doctoral thesis in the 2011-2012 academic year, and was awarded a PhD Psychology with High Commendation.

**Rosanna Yearwood**

***“Stigma towards PLHIV and intentions to be HIV tested: Examining the impact of fear of HIV/AIDS and perception of risk”*** Stigma reduction and promotion of HIV testing are among key priority areas for prevention and control of the HIV/AIDS epidemic. The research examined attitudes towards persons living with HIV/AIDS (PLHIV) and HIV testing, among residents in a community in Trinidad. The findings offered several valuable insights, some with implications for policy and programme development.

For example, stigma reduction interventions should be designed with social and psychological considerations, which aim at raising levels of consciousness of prejudices towards and stereotypes about PLHIV. Further, that a revised approach to HIV testing should be adopted. That is promotion of HIV testing as a routine medical requirement, similar to screening for other health conditions would reduce fear of testing and delink HIV testing from some of the negative associations with HIV/AIDS.

#### **MPhil Students**

**Victor Grandison**

***“Attribution of blame to the victims of crime: the role of ambiguous information, just world beliefs, and empathy.”*** The phenomenon of blaming the victim has often been explained by the Just World Theory. The core argument is that people have a need to believe that the world is a fair and just place where people get what they deserve and deserve what they get. Innocent victimization challenges this belief and thereby forces observers of such suffering to derogate the victim.

This study raises the point that there might be additional variables that predict derogation (other than the belief in a just world). The hypotheses of the study are centred on the argument that ambiguous background information about the perpetrators of crime, inhibits discounting of the role of the victim in criminal acts. Additionally, unambiguous information might facilitate the formation of defensive attributions (empathetic responses) in favour of the victim as certain characteristics and behaviours of perpetrators highlight the resourcefulness and sophistication of criminal operations.

To date, two pilot studies and one major study have been done. The results of this study are now under analysis and a research proposal in fulfilment of an upgrade from MPhil to PhD is being prepared.

**Dionne Brewster**

***“Adolescent risky decision making: Examining the influence of decision making style, parental and peer attachment, emotion regulation, sensation seeking, and self-efficacy.”*** Research has suggested that adolescence is also the stage most associated with reckless and risk taking behaviour (Spear, 2000). Unfortunately, risk behaviours can jeopardize the healthy transition through the psychosocial phases of adolescent development such as the successful transition into adulthood (Jessor, 1991). This study approaches adolescent risk taking from a decision-making perspective which assumes that risk taking involves choosing among alternative actions and the risky decision is the action that entails a chance of loss (Furby & Beth-Marom, 1992).

The proposed model explores the extent the psychological variables; decision making style, sensation seeking, parental and peer attachment, emotion regulation and self-efficacy predicts risky decision making in adolescents. This study would utilise random sample of adolescents attending secondary schools in Trinidad. Vignettes would be used to measure risk taking. The findings of this study can provide a unique contribution to social programmes directed at adolescents. Policies and programmes that consider risk taking during adolescents as a phase of development may approach the issue from a perspective that focuses on guiding appropriate behaviours.

### ***New Programme***

A proposal for a new taught **Masters in Applied Psychological Studies** was developed with the aim of providing students with a sound awareness of the utility of psychological principles and research to real-life applications across health, organizational, community, and other contemporary intra- and interpersonal settings. Emphasis is also placed on the relevance and practice of psychological study in a Caribbean context. The programme is designed to develop competencies in research, assessment and evaluation skills at a graduate level. There is a heavy emphasis on research with some opportunities for experiential learning. Moreover, this degree option can be used to successfully bridge the gap between undergraduate studies and applied doctoral research. With courses in health psychology; developmental psychology; industrial psychology; and assessment and testing, the scope of influence of the MSc Applied Psychological

Studies allows for greater marketability of graduates, and facilitates a successful transference of skills across academic and professional domains.

The programme is being evaluated by the UWI Board of Graduate Studies and Research for final approval, and is scheduled to begin in the 2013-2014 academic year. This programme is to be offered through the Department of Behavioural Sciences UWI St. Augustine Main Campus.

## **International Collaboration**

The ANSA McAL Psychological Research Centre continues to support the strategic objectives of strengthening regionality and building international partnerships (*UWI Strategic Plan 2007-2012*), and has established a number of international linkages within the United States, United Kingdom and Europe. Among the collaboration maintained by the Centre were with colleagues from the University of Central Florida, Hunter College, CUNY, New York, University of Florida, University of Nis, Serbia and Middlesex University, University College London.

### **Psi Chi: International Honour Society in Psychology**

In March 2012, the Psychological Research Centre assisted in the preparation of an e-charter application to the *Psi Chi International Honor Society in Psychology*. This application was submitted to establish a local chapter of the internationally renowned student society at The UWI St. Augustine Campus. This organization, which is affiliated with the American Psychological Association and the Association for Psychological Science, was established in 1929 for the purposes of encouraging, stimulating, and

maintaining excellence in scholarship, and in advancing the science of psychology. Attaining membership in Psi Chi can be of considerable benefit to students, since the Society:

- ***Creates opportunities for promoting student research and for providing international recognition for these works.***
- ***Provides a local, regional, and international forum for obtaining information and developing perspectives in the field of psychology.***
- ***Facilitates leadership development, and staff-student interchange.***
- ***Supports and encourages student research through international conferences, awards, and research grants.***

This UWI St. Augustine Campus e-charter application was approved in June 2012, with a formal chapter installation ceremony to be held in the 2012-2013 academic year. The St. Augustine Campus would become the second to UWI Campus to establish a local Psi Chi chapter (Cave Hill Campus being the first).

Dr. Derek Chadee visited the Department of Psychology at Middlesex University from April 4 to 12, 2012. During this institutional visit, discussions were held with Dr. Camille Alexia-Garsee and Dr. Joan Adler regarding the preparation of an application for a joint British Award from the British Academy to facilitate the undertaking of collaborative work between The University of the West Indies St. Augustine Campus, and Middlesex University on the psychology of fear of crime. A meeting was also arranged with Dr. Richard Beaumont (Business Office, Middlesex University),

and discussions were held on possible sources of funding to support collaborations between the two universities. European Research Funds and British Academy funding were suggested. A tour was also given of the experimental and computer facilities used by students of Middlesex. Relevant teaching and research materials were also obtained.

### ***New Publication***

Dr. Derek Chadee is currently developing a book on nonverbal behaviour in collaboration with Dr. Aleksandra Kostic, University of Nis. This proposal has been accepted by the academic publisher, Palgrave Macmillan.

## **Internal collaboration**

The Centre continues to maintain linkages with researchers at the Faculty of Medical Sciences in nationwide research chronic non-communicable diseases. Cross-cultural research on the fear of criminal victimization continues in collaboration with the Psychology Unit of the UWI Cave Hill Campus.

## **Distinguished Visitors**

### **Professor Charles Negy,**

Professor – Clinical Psychology,  
University of Central Florida,  
USA

### **Professor Jaipaul Roopnarine,**

Professor - Child and Family Studies,  
Director – Jack Reilly Institute of Early Childhood  
and Provider Education,  
University of Syracuse,  
USA

## CENTRES & INSTITUTES

# ARTHUR LOK JACK GRADUATE SCHOOL OF BUSINESS

### *Students*

Over the last five years, due to the expansion of number of programmes offered and the diversification of markets, the number of enrolled students has been trending steeply upward. Between September 2007 and January 2012, the student population doubled with September 2011 marking the largest intake, 213 students. With a current student population of 1,232, significant student growth is not projected rather efforts will be directed at sustaining the current size of the population through either the creation of new programmes and/or the pioneering of new markets. In the academic year 2011/2012, 644 students were admitted to programmes at the Lok Jack GSB.

### *Degrees Awarded*

A total of 189 degrees were awarded for the period under review with the breakdown per programme as follows: PGDHRM:1, PGDMIS:1, MHRM:38, MKTG:19, MIF:14, EMBA:26 and IMBA: 90.

### *Student Achievement*

During the Academic year 2011/2012, 147 of ALJGSB's MBA students engaged in an online simulation known as 'Globalsym Euro' which required them to operate manufacturing and/or retailing operations out of three countries in Europe (Italy, Poland and Austria), with head offices located in Monaco. Companies comprised three to four students each. In trimester 1, there were 57 students; all from the International MBA whose companies competed against those of students from five Chilean universities. In trimester 3, the simulation was limited to 90 internal students from the EMBA and IMBA cohorts. This was the first time since the beginning of 2010, when ALJGSB started using the simulation, that the school was unable to secure foreign university involvement.

Since the Lok Jack GSB started using the simulation as part of the Management Accounting module, the companies of the ALJGSB students have dominated those of the students from the foreign universities which, over the last two years, included the University of Texas, Brigham Young University, Universidad Francisco Marroquin Guatemala, National University of Ireland and five universities from Chile. The simulation game forced the students to utilize other management disciplines such as Marketing, Economics, Strategy, Organization Behaviour/HR management that they would have studied earlier in the MBA programme or will be studying subsequent to the Management Accounting module.

The students got exposure to good negotiation techniques, establishing corporate relationships and alliances, came face to face with the risk-reward concept, and also saw the value of planning properly and utilizing the appropriate loan capital for expansion purposes.

### *Top students:*

**Nicole De Freitas**- EMBA

**Wilson Henderson**- IMBA

**Shane Seepersad**- MSc IF

**Donna Nicole Thomas**- MM

**Angela Laquis-Sobrian**- MHRM

### *Student Service & Outreach*

Structured outreach to the business sector is built into the curricula of each programme delivered at the Lok Jack GSB in keeping with the authentic teaching and learning philosophy practiced at the school. In chief, the student practica requires each student having to explicitly apply the body of knowledge garnered over their programme experience to real organizational problems identified in industry. Further to this, the MBA Sustainable Energy Management Students made formal presentations to the UWI Revenue Management Conference (June 2012) at the Hyatt Regency Hotel.

## Teaching and Learning

The Lok Jack GSB formalized a teaching and learning philosophy and framework that will guide all faculty in their teaching, research, business development and public education services undertaken as members of faculty of the Lok Jack GSB.

The design of academic programmes and courses is underpinned by the philosophy of the school. Faculty develop courses that include knowledge of both the science and practice in the field. Courses build on the fundamental disciplines and engage students in learning experiences that allow for the development of knowledge, skills and attitudes

in the area of study. Courses must include scientific and behavioral fundamentals as well as technological innovations related to the work processes.

## Graduate Studies

During the 2011/2012 academic year, the **MBA Sustainable Energy Management** was launched in September 2011 with 35 registered students and the **Master of Small & Medium Enterprise Management** was launched in January 2012. This is the first Lok Jack GSB programme being delivered primarily online.

### Improving Graduate Studies

Over the 2011/2012 academic year, the Lok Jack GSB introduced Programme Directors to manage the academic life of the programme. The role of the Programme Director is primarily the assurance of quality. This involves management of the programme, faculty and students to ensure students learn at the defined standards of quality. The Programme Director is required to ensure the School's quality standards are maintained and enhanced in the design, delivery and evaluation of the programme. The goal is to provide a high quality and relevant learning experience in each course. Each Programme Director is supported by a Learning Assurance Officer and one or more Programme Coordinators who provide administrative and programme management support. The Lok Jack GSB will continue to monitor and refine the Learning Assurance Model going forward.

## Research and Innovation

The **Centre for Entrepreneurship & Innovation** (Leader: Prof Abhijit Bhattacharya) completed the Global Entrepreneurship Monitor (GEM) report for 2011 and data collection for 2012 for Trinidad & Tobago. In January 2012, the head of the Centre visited India as part of the Prime Minister's official delegation. To prepare for this, contact was made and relationships established with key Indian organizations with a view to undertake research on 'Comparative analysis of entrepreneurship development process among the Indian population living in different parts of the world and regional variation of the process in different regions within India.' The Centre also launched a Business Incubator, **BIZBOOSTER**, in May 2012 to provide an opportunity for entrepreneurs with innovative ideas to start growth-oriented businesses.

The **Centre for Corporate Responsibility** (Leader: Dr. Ron Sookram) submitted a funding proposal to the IADB for project on promoting sustainable SMEs in Trinidad & Tobago. The **Centre for Business Analytics and Business Intelligence** (Leader: Prof Gour Saha) managed to secure funding for BA/BI research and industry support program from the IADB.

**Cluster Development** (Leader: Richard Ramsawak) Proposals were developed and submitted in the following areas: Food and Beverage and Printing

and Packaging. The project is being funded by the Inter- American Development Bank (IADB), and managed by the Trinidad & Tobago Manufacturers Association (TTMA). Proposals were also prepared and submitted to Alutrint and the Ministry of Energy and Energy Industries, for the development of an Aluminum Industrial cluster in Trinidad & Tobago as well aso CARICOM, Inter-American Development Bank and International Institute for Cooperation in Agriculture for a Regional Cluster Activation project.

**Solar Industry** – The team has been approached by Solar Industries Technologies Limited (Si Teck) to objectively evaluate the feasibility of establishing a Solar Industry Cluster in Trinidad & Tobago. A proposal has been prepared and submitted to Si Teck.

## Service to UWI 12 Countries and Other Underserved Communities

In Guyana the EMBA and IMBA academic programmes and Executive Education Programmes were introduced successfully. In **Suriname**, an Agreement of Cooperation with **Lim a Po Institute for Social Studies** was signed and facilitated the introduction of online MSMEM programme as well as customized Executive Education programs. In addition, an initiative to enter **Haiti** to conduct the **Global Entrepreneurship Monitor Research** to potentially extend scholarships to allow Haitians to access Lok Jack GSB programs is also being explored.

In March 2012, a **Supply Chain Forum** was organised and held in Miami in partnership with the **Florida International University**. This initiative is significant in that it allowed local knowledge to be exported to a developed economy within the framework of partnership in contrast to the established pattern of importing knowledge.

## Outreach

International links in the 2011/2012 academic year were formalized through the signing of renewal agreements with international universities or agencies across all continents. These included **Florida International University** – USA; **George Washington University** – USA; **PMI College** – USA; **World Economic Forum** – Geneva; **Education Travel Business** - China and **SPAIN** - India. With Florida International University, the Dual Degree agreement was renewed.

Several new alliances were inaugurated through the signing of Memoranda of Understanding or Letters of Intent with companies such as **Microsoft**, **Invest TT** and **NEDCO**. These partnerships endorse the competitiveness, corporate responsibility and innovation and entrepreneurship projects proposed by the Lok Jack GSB. Stronger institutional links also generated with **Inter American Development Bank, United Nations Development Programme, The World Bank, Compete Caribbean** and the **International Finance Corporation**.

In the 2011/2012 academic year students enjoyed study trips to **China** and **Panama**. Delegates to China comprised 33 students across our Executive MBA, International MBA and Master of Marketing, 14 alumni and four faculty members. The study trip to Panama included eight **Master of Port and Maritime Management**, four **MSc International Finance** students and three faculty members. The following are some of the conferences and seminars hosted over the 2011/2012 period:

#### 2011

- College Fair, September 30th 2011.
- IMBA Recruitment Event – Business Simulation Game, November 13, 2011.
- MSMEM Panel Discussion “Overcoming Challenges in Running a Family Business”, November 30, 2011.

#### 2012

- 3rd Biennial SME Conference, January 18, 2012.
- UWI Symposium on Women in Family Business, March 20, 2012.
- MSc IF Panel – Financing Possibilities for New Ventures and Established Companies, July 18, 2012.

## Revenue Generation / Cost Containment

In addition to revenue generated through academic products, the 2011/2012 academic year was marked by the significant generation of facilities rental revenue and the transformation of the Assessment Centre and Institutional Effectiveness from a cost centre to a revenue generating centre. Over TT\$1 million of revenue was generated.

## Projected Activities for 2012/2013

The focus for the Graduate School of Business is on gaining approval for an **MBA in International Trade, Logistics and Procurement**, a **Master of Strategic Human Resource Management**, an **International Master of Strategic Management** and a **Master of Institutional Innovation**.

## Distinguished Visitors

**Mr. Malcolm Gladwell**,  
Fiction writer, Journalist

# CENTRES & INSTITUTES

# CENTRE FOR HEALTH ECONOMICS (HEU)

The Centre for Health Economics (HEU) began the academic year 2011/2012 by identifying a specific set of objectives so as to fulfil its mission of ***Making a Difference.***

During the academic year, the Centre continued steadfastly with its research and training agenda in spite of some challenges. The Centre's focussed approach to accomplishing its annual work programme culminated with the publication of research papers, completion of significant other pieces of research, production of several technical reports, development and delivery of training programmes and participation at a number of national, regional and international conferences.

The HEU's contributions to national and regional development were evident by its key advisory roles and collaboration with various Governments and agencies in Trinidad & Tobago and throughout the wider Caribbean.

A major project undertaken by the Centre was the continued ***Costing of Health Services*** Delivered at health facilities in Trinidad & Tobago. The cost of services at two tertiary level hospitals, one secondary level hospital, two vertical service

facilities, three district health facilities, all health centres and one private sector facility were estimated. The project's main objectives were to provide managers and policymakers with the information needed to analyse resource utilization, identify and investigate gaps and plan resource needs based on projected level of service delivery. Additionally, an analysis of the accounting systems of primary, secondary and tertiary health care institutions in the public sector was conducted in order to assess their readiness to implement an IT driven cost centre based accounting system.

The HEU continued its work on a major project with the **Government of the British Virgin Islands** (BVI) as the territory sought to implement a National Health Insurance System (NHIS) for its population. In this particular case, the development of the NHIS is country-specific, however the value-gains are regional in scope since they present other Caribbean countries on the pathway to health financing reform with a framework from which country-models can be developed and from which experiences can be shared. The opportunities for capacity development, skills and knowledge transfer and resource efficiencies determination among a small cluster of developing countries are significant. For these reasons, among others, the HEU is committed to making a positive and impactful difference to the region's health financing landscape.

The Centre saw the completion of a major study on *The Situation and Response Analysis of Children and Women in Trinidad & Tobago (SITAN)*. The study was commissioned by the **United Nations**

**Children's Fund (UNICEF)** and sought to identify—to the greatest extent possible—the progress made by Trinidad & Tobago in the legal and policy framework of the Millennium Development Goals (MDGs), the Convention on the Rights of the Child (CRC) and the Convention on the Elimination of all forms of Discrimination Against Women (CEDAW).

We note with some measure of satisfaction, the launch of the *Situation Analysis of Children and Women in Trinidad & Tobago*. This took place on June 4, 2012 at the HEU Auditorium and was a collaboration between the Government of the Republic of Trinidad & Tobago, UNICEF and the HEU, Centre for Health Economics.

The Centre's overall activities included the execution of a number of technical reports, the conducting of training workshops on the Costing of Health Services, National Health Accounts and Health Financing and some small strides were made at Curricula Development. Academic staff at the Centre continued in their efforts to support the teaching programmes in the Department of Economics and the Faculty of Medical Sciences. In fulfilling its responsibility for the Health Economics component of the Masters in Public Health programme the HEU arranged for a number of presentations by professionals from regional and international health agencies. In addition, the HEU staff continued to support the **Masters in Health Administration** at the UTT and one member of staff provided academic support including curriculum guidance on Health Economics to the **Master of Health Administration** programme at the University of Technology in Jamaica.

## Research

Some of the major projects and technical reports completed by the HEU during the period under review include the *Situation Analysis of Children and Women in Trinidad & Tobago*: A study commissioned by the UNICEF; the *UNICEF SITAN Report*: Final Report of the Situation Analysis of children and Women in Trinidad & Tobago; and *Costing of Health Services in Trinidad & Tobago Reports*.

Reports were also submitted to the Ministry of Health under the project entitled, *Provision of Consulting Services to Undertake a Comprehensive Costing of Health Services throughout Health Institutions in Trinidad & Tobago*. Additional reports were also submitted to the Government of the British Virgin Islands under the project entitled, *“Completion of the Design and Implementation Support of a National Health Insurance System in the British Virgin Islands”*.

## Research Completed

A number of research projects were completed during the period under review. These include research done on violence against children in Trinidad & Tobago, (K. Theodore); assessments of the HIV services in the Caribbean (R. McLean); and Sexual behaviour in St. Kitts and Nevis (C. Laptiste). Other research completed included research on managing the Fruits of Migrant Workers, examination of formal Care Institutions in Trinidad & Tobago and analysis of the health and social services available to children with disabilities.

## Research in Progress as a Centre

Research is currently ongoing at the centre, specifically the *Costing of Health Services in Trinidad & Tobago* project undertaken on behalf of the Ministry of Health to provide an estimate of the cost of health services delivered at facilities managed by the various Regional Health Authorities and selected Private Sector Hospitals. Also ongoing is research on the *Design and Implementation Support of a National Health Insurance System in the British Virgin Islands*, a regional *HIV Resource Mapping Study* and *HIV Application of Prioritization Framework*.

## Research in Progress by staff

Research in progress by staff members include, ‘A Comparative Analysis of the Working Poor in the Caribbean’ With Ewan Scott and Althea La Foucade (K. Theodore); An Economic Investigation of the Causal Pathway between Socioeconomic Status and Health in Trinidad & Tobago (K. Gittens-Baynes); Cost and Benefits of HIV/AIDS Response Programmes in the Caribbean. With Althea La Foucade, Ewan Scott, Christine Laptiste and Patricia Edwards-Wescott (V. Beharry) and The Impact of Remittances on Poverty and Income Distribution in Grenada (P. Edwards-Wescott).

### *Teaching Programmes*

The Centre continues to offer training in Health Economics at the PhD level and also delivers the Health Economics courses and supervises Health Economics research that are components of the Masters in Public Health offered by the Faculty of Medical Sciences.

## Strategy Appraisal Teaching and Learning

The HEU hosted **Deneal Walters**, MPhil student, SALISES Mona for a period of approximately two weeks. Ms. Walters' research on health financing was supported by the HEU Centre.

## Graduate Studies

HEU staff members currently supervise ongoing research (MSc, MPhil and PhD) with topics that range from HIV/AIDS and mobility, regulation of credit unions in Trinidad & Tobago to assessments of the impact of population health on the national wealth.

## Strengthening Regionality

During the reporting period the HEU provided technical expertise to assist countries in developing solutions to health care delivery and financing. Support took the form of visits to Grenada for a prefeasibility study on Health Financing Reform and the provision of Technical support to the design and implementation of a

National Health Insurance System for the British Virgin Islands. Additional services to the region also included a collection of National Health Accounts Training and Analysis of data in St. Kitts and Nevis and Dominica as part of a larger Caribbean study on National Health Accounts.

### *Strengthening National Engagement Processes*

The Centre conducted collaborative work with the aim of strengthening engagement across the region. It has facilitated training workshops on Costing of Health Services for health sector employees. The workshops were aimed at building the capacity of employees in the health sector in the area of costing of health services. Collaborative research work with chronic disease specialists from the Eric Williams Medical Sciences Complex has also been continuing. Collaboration with **Professor Amanda Mc Rae, Dr. Gershwin Davis and Dr. Nelleen Baboolal** from the Faculty of Medical Sciences on the cost of Alzheimer's disease in Trinidad & Tobago is also continuing. A research initiative with the Ministry of Health (Harry Smith) on Costs/Benefits of managing a diabetic person is also one of the collaborative ventures of the HEU.

The Centre has continued to participate in the work of The University of the West Indies HIV/AIDS Response Programme (UWIHARP). This programme covers all four campuses (Open Campus included) and is represented on the Pan Caribbean Partnership on HIV/AIDS with active involvement on a number of sub-committees.

## Faculty/Departmental Outreach

Staff at the Centre continued to collaborate in many initiatives of outreach, which included the launch of the *Situation Analysis of Children and Women in Trinidad & Tobago* (collaboration between the Government of the Republic of Trinidad & Tobago and UNICEF) and the launch of *“The Prevalence and Economic Cost of Dementia in Trinidad & Tobago Project”* A collaboration between the Dementia Awareness and Research Group of Trinidad & Tobago (DARTT).

Workshops and seminars were also facilitated and included the seminar and workshop on *“Tackling Non-Communicable Diseases in Trinidad & Tobago - Going Beyond the Biomedical Model of Health - Type 2 Diabetes Mellitus as a case study”* by Dr. May Moonan as well as a workshop on *“The Prevalence and Economic Cost of Dementia in Trinidad & Tobago Project”*.

## Revenue Generating Activities

The HEU's academic staff was directly involved in endeavours to secure financing for its operations. This was done through ventures of consultancy provision, research projects and proposal writing in selected work/research areas that are in accordance with the organization's strategic objectives and skills

## Projected Activities for the 2012/2013 Academic Year

Both the centre and individual staff members have proposed a number of research areas for future focus. As a Centre there are intentions to complete the Design and Implementation Support of a National Health Insurance System in the British Virgin Islands as well as the Costing of Health Services in Trinidad & Tobago. Continued research will be done on Alzheimer's Disease in Trinidad & Tobago as well as on the National Health Accounts and Health Financing in the OECS countries as part of project activity with Abt Associates-US Agency for International Development.

Other future research projects include research on Children and Women in Trinidad & Tobago over the Five Year Period 2012-2016 and a regional study on Adolescent Pregnancy for the English and Dutch-Speaking Caribbean.

Individual staff members plan a number areas for future research which include, the Evaluation of Cost Effective Models for Prevention and Control of HIV & Non-communicable Diseases in the Caribbean – An Integrated Primary Health Care Based Approach (**Roger McLean**); the Economic Impact of Climate Change in the Caribbean (**Karl Theodore**); Estimating the Intangible cost of Illness (**Christine Laptiste**) and An Examination of Special Education in Trinidad & Tobago: Policy Implications (**Kimberly- Ann Gittens-Baynes**).

## Publications

**Stanley Lalta**, editor of 'Re-shaping Health Financing Systems in the Caribbean: Patterns and Case Studies'. Article on 'Chronic Disease Prescription Drug Programmes: Lessons from the Caribbean', 'Health Financing in Jamaica, 1962-2062'. Article on 'Controlling Health Care Costs in the Caribbean and 'Stakeholder Mapping and Design of an NHI Plan' Article on 'Implications of Fiscal Space for Health Financing in the Caribbean'. **Roger McLean**, HIV Vulnerabilities in the Islands of Sand, Sea and Sex? **Patricia Edwards-Wescott**, Child Sexual Abuse in Trinidad & Tobago: Implications for Social Policy, Missing Children in Trinidad & Tobago and Maternal Mortality in Trinidad & Tobago. **Kimberly-Ann Gittens-Baynes**, An Examination of the Interaction between Poverty and Health Status in the Elderly Population of Jamaica. With Edwards-Wescott, Metivier C.

## Training

The HEU plans to conduct national training on multi-dimensional child poverty in Trinidad & Tobago. HEU/UWI to work in partnership with the **Ministry of the People and Social Development** in order to conduct the training workshop on multi-dimensional child poverty in Trinidad & Tobago.

## Distinguished Visitors

**Dr. Mario Aguillar**,  
Technical Advisor, Reproductive Health,  
United Nations Population Fund (UNFPA),  
Sub-Regional Office for the Caribbean,  
Jamaica

**Sir George Alleyne**,  
Chancellor,  
The University of the West Indies,  
Mona,  
Jamaica

**Jawad Aslam**,  
Economic and Policy Specialist, UNICEF,  
Trinidad & Tobago

**Dr. Rasul Baghirov**,  
Advisor, Health Systems and Services,  
PAHO/WHO,  
Barbados

**Professor Brendan C. Bain**,  
Director, CHART Regional Coordinating Unit  
and Caribbean Health Leadership Institute,  
Office of the Vice-Chancellor,  
The University of the West Indies,  
Mona  
Jamaica

**Roy Barry**,  
Director, National Health Insurance Programme,  
British Virgin Islands

**Karishmah Bhuwanee**,  
Associate, Abt. Associates,  
Maryland, USA

**Nicole Darmanie,**

Programme Assistant,  
United Nations Population Fund,  
Port-of-Spain, Trinidad & Tobago

**Dr. Marcia De Castro,**

United Nations Resident Coordinator and UNDP  
Resident Representative for Trinidad & Tobago,  
Suriname, Aruba and The Netherlands Antilles,  
Port of Spain,  
Trinidad & Tobago

**Dr. Edward Emmanuel,**

Programme Manager, PANCAP Coordinating Unit,  
CARICOM Secretariat,  
Turkeyen, Greater Georgetown,  
GUYANA

**Dr. Bernadette Theodore-Gandi,**

PAHO/WHO Representative,  
Pan American Health Organization,  
Port of Spain,  
Trinidad & Tobago

**Izola Garcia,**

County Director, UNAIDS,  
Port-of- Spain,  
Trinidad & Tobago

**Dr. Edward Greene,**

UN Special Envoy on HIV/AIDS,  
Washington D.C.,  
USA

**Dr. Laurel Hatt,**

Director, Abt. Associates,  
Maryland,  
USA

**Dr. Noreen Jack,**

Pan American Health Organization/PAHO HIV  
Caribbean Office,  
Port of Spain,  
Trinidad & Tobago

**Dr. Adele Jones,**

Professor of Childhood Studies, Director, The  
Centre for Applied Childhood Studies School of  
Human and Health Sciences  
The University of Huddersfield,  
UK

**Dr. The Honourable Fuad Khan,**

Minister of Health,  
Republic of Trinidad & Tobago

**Khin-Sandi Lwin,**

UNICEF Representative for the Eastern Caribbean

**Dr. Ernest Massiah,**

Director, UNAIDS Regional Support Team for the  
Caribbean,  
Port of Spain,  
Trinidad & Tobago

**Ken Morrison,**

Deputy Director, HIV for Health POLICY Initiative,  
Futures Group,  
Washington DC,  
USA

**Sharon Nakhimovsky,**

Senior Analyst, Abt. Associates,  
Maryland,  
USA

**Kendra Phillips,**  
Health Team Leader,  
USAID/Barbados & The Eastern Caribbean,  
US Embassy,  
Barbados

**Dr. Irad Potter,**  
Chief Medical Officer,  
Ministry of Health,  
British Virgin Islands

**Dr. The Honourable Glen Ramadharsingh,**  
Minister of the People and Social Development,  
Ministry of the People and Social Development,  
Republic of Trinidad & Tobago

**Aurora Noguera-Ramkisson,**  
Officer in Charge,  
United Nations Population Fund (UNFPA),  
Port-of-Spain,  
Trinidad & Tobago

**Dr. Carlos E. Rodriguez-Diaz**  
**PhD, MPHE, MCHES, CCHP,**  
Assistant Professor Coordinator,  
Doctoral Programme In Public Health with  
Specialty in Social Determinants of Health,  
Department of Social Sciences, University of  
Puerto Rico – School of Public Health,  
Puerto Rico

**Karin Sham Poo,**  
Former UNICEF Deputy Executive To New York,  
Turkey and Beijing

**Dr. Rob Stewart**  
**MD MRCPsych,**  
Reader, Head of Section of Epidemiology,  
Honorary Consultation in Liaison Old Age  
Psychiatry (South London & Maudsley NHS Trust),  
Joint Lead, BRC Analytic Methods Theme,  
UK

**Tammy Yates,**  
Assistant Representative,  
United Nations Population Fund,  
Port-of-Spain,  
Trinidad & Tobago

**Darwin Young,**  
Associate, Abt. Associates,  
Maryland,  
USA

# CENTRES & INSTITUTES CENTRE FOR LANGUAGE LEARNING (CLL)

## Executive Summary

The Centre of Language Learning continued to make great strides in its core areas of teaching, learning, testing and outreach. Classes in Yoruba were re-introduced after a hiatus. Enthusiasm and enrolment in Mandarin remained high. Academic and ATS staff performed with distinction. Special mention must be made of Marsha Gibson, Accounting and Clerical Assistant, who won the Inaugural UWI Staff Award for Excellence in Entrepreneurship. The CLL successfully assumed responsibility as the Trinidad & Tobago and southern Caribbean Centre for IELTS under the leadership of Amina Ibrahim-Ali, the IELTS Administrator. The Centre hosted two Spanish workshops for tertiary-level Spanish educators, in collaboration with the Department of Liberal Arts. The workshops were funded through an MOU with the Embassy of Argentina and the Universidad de Buenos Aires. The Inaugural Foreign Language Film Festival, also in collaboration with the Department of Liberal Arts, was very well received.

## Teaching, Learning & Standardised Testing

The language courses at CLL have been widely subscribed during the period under review. Foreign language subscription saw about 1769 persons registered from semesters one to three and the English as a Foreign language programme saw 64 people subscribed from semesters on to three.

### *Special Course: Jet Conversation Course*

In July 2012, the CLL mounted a conversation course at the request of the Japanese Embassy. Participants in the course were Trinidad & Tobago nationals selected for the 2012/2013 Japan Exchange and Teaching Programme (JET) programme. The course was designed and delivered by Tsubura Kawaski-Tull, who recently returned to the CLL as a Japanese tutor after the completion of her MA in the teaching of Japanese as a foreign language at JF Oberlin University in Tokyo, Japan.

The Spanish DELE programme saw nine candidates tested in November 2011 and 13 candidates tested in May 2012. The English IELTS saw 132 candidates tested during the March to July 2012 period.

## Outreach & Public/ Professional Service

### *Foreign Language Film Festival 2012*

The Inaugural Foreign Language Film Festival, a joint initiative of the Centre for Language Learning and the Department of Liberal Arts, was held at the CLL from March 22 to April 15, 2012. The festival drew on support from nine diplomatic missions to showcase 26 films to over 700 patrons during the three weeks of screenings.

### *CLL as International English Language Testing System (IELTS) centre*

The CLL was awarded the tender to be the IELTS centre for Trinidad & Tobago and the southern Caribbean, replacing the British Council in this role. The IELTS, a standardised examination, tests candidates' English language proficiency in professional and academic contexts. The test is a requirement for those wishing to enter the medical professions in several Commonwealth countries, for emigration to Canada and for entry into higher education institutions worldwide. The CLL has been responsible for the administration and marking of the IELTS on a monthly basis since March 2012.

## Distinguished Visitors

**Marta Blanco,**

Executive Director,  
Costa Rica Multilingual Initiative

**Josiane Chatony,**

Coordonnatrice du Programme,  
CARIFORM (responsibility for Martinique)

**Marcel Clodion,**

Consultant,  
CARIFORM (responsibility for Martinique)

**Liu Guangyu,**

Vice Chairman of the  
China Musicians' Erhu Association,  
President of the Chongqing Opera Theatrical  
Troupe

**Seong Hoon Kim**

(First Secretary),  
Embassy of the Korean  
Republic to Trinidad & Tobago

**Ji-Young Kim**

(Third Secretary),  
Embassy of the Korean  
Republic to Trinidad & Tobago

**M Fily Kouadio,**

Inspecteur Pédagogique Régional d'Anglais  
CARIFORM (responsibility for Martinique)

**Gabriela F Krickeberg,**

Lecturer and Researcher,  
University of Buenos Aires and Universidad  
Nacional de General Sarmiento

**Claudia López Camelo,**

Lecturer in Spanish,  
Faculty of Philosophy and Letters,  
University of Buenos Aires

**Ana Maria Martinez,**

IELTS Administrator,  
Colombia

**His Excellency Ricardo Patino,**

Minister of Foreign Affairs  
Ecuador and delegation

# CENTRES & INSTITUTES

# COCOA RESEARCH CENTRE (CRC)

## Highlights for the Academic Year - 2011/12

During the academic year 2011/2012, the Cocoa Research Unit of the Faculty of Science and Agriculture was elevated into an autonomous campus centre known as the '**Cocoa Research Centre**.' A business plan has been developed to transition the centre into a world leader in the area of Conservation, Research and Outreach. It is also planning to develop MSc, MPhil and PhD programmes in the area of Cocoa Genetic Resources Management and Utilisation and Cocoa Science.

The Cocoa Research Centre celebrated its **50<sup>th</sup> Anniversary** with three commemorative events – referred to as the 'Spirit of Chocolate' Festival.

The first was the '***Spirit of Chocolate Signature Gala Event***' held at the Grand Ball Room, Trinidad Hilton. The Festival provided a delectable taste experience pairing chocolates made from Trinidad & Tobago's finest cacao beans with our local rums, beer, wine and cuisine; and highlighted the potential of cocoa and chocolates in Trinidad & Tobago. This was facilitated by the expert direction of the well-known Belgian Chocolatier and World Chocolate Ambassador, Chef Bart Van Cauwenberghe.

The second signature event was the Launch of the '*Spirit of Chocolate: Partnership in Conservation*' programme at the Institute of Critical Thinking, UWI, St. Augustine on Friday, July 27, 2012. 'Partnership in Conservation' brings awareness of and participation in the conservation and utilization of genetic resources by the society at large, with particular reference to cocoa genetic resources. The third signature event was the '*Spirit of Chocolate-Fête de la cacao*' – a two-day cacao and chocolate exhibition open to the public at the JFK auditorium and its surroundings. This event included an exhibition which featured 'a pictorial depiction of the chocolate story of Trinidad & Tobago presented by the Cocoa Research Centre', stakeholder exhibits; NIHERST puppet show and Jeopardy highlighting cocoa information, innovation in Chocolate Cuisine competition sponsored by CARIRI, germplasm tours and fun and games.

The Cocoa Research Centre also launched its *first edition signature dark chocolate*, aptly named the 'Spirit of Chocolate.' It also served as a portal to market cocoa products developed by its stakeholders to the campus community.

## Research Highlights Completed Projects

### Quality attributes of the Imperial College

#### Selections – Funded by Dutch LNV

The project evaluated 30 clones of the Imperial College Selections (ICS) for economically important traits such as pod size, pod index, organoleptic attributes (including butterfat content), as well as, other interesting and potentially valuable attributes such as antioxidant potential, spectral and aroma volatile fingerprints, purines, polyphenols, amino acid profiles, reducing sugars, acidity (including organic acids).

#### Identification and promotion of ancient cocoa diversity through modern genomics to benefit small-scale farmers – World Bank Development Market Place project.

The project was a collaborative project between the Bioversity International, University of British Columbia, Ministry of Food Production of the Government of Trinidad & Tobago and the Cocoa Research Centre of the University of the West Indies. The project identified 120 high yielding relic Trinitario landraces from farmers fields, which were subjected to morphological characterization, molecular characterization using both nuclear and chloroplast specific SNPs and evaluated for flavor characteristics.

### **Improvement of resistance to Black Pod Disease in the Trinidad Selected Hybrids**

The work represents a joint project between the Ministry of Food Production of the Government of Trinidad & Tobago and the Cocoa Research Centre of the University of the West Indies with the objective of widening the genetic base of Trinidad & Tobago and improving the level of resistance to black pod disease in the Trinidad Selected Hybrids (TSH).

## **On-Going Projects**

**Research Development Impact Fund:** Leveraging the International Cocoa Gene Bank to Improve Competitiveness of the Cocoa Sector in the Caribbean, Using Modern Genomics.

The project seeks to identify candidate genes using genome-wide association studies (GWAS) by phenotyping the core collection of around 350 accessions for several traits. These traits include yield components, resistance to blackpod and witches' broom diseases, cadmium uptake rate, and traits that affect market acceptability such as flavour. The study also seeks to identify differences in flavour attributes between various phylogenetic groups of cocoa.

### **Collaborative Research with CIRAD, France**

Development of Cleaved Amplified Polymorphic Sequence (CAPS) Markers based on highly polymorphic SNP markers, with the objective of reducing the cost of verification of trees within the genebank. This also will provide a cost-effective option for stakeholders across the world. This work began in September 2011 and is continuing.

### **Research on mitigation of Cadmium**

This is being addressed on several fronts through collaboration with MFPLMA, CCIB and Departments of Chemistry to understand the distribution of cadmium in Trinidad & Tobago and to develop mitigation measures and collaboration with the Department of Life Sciences to understand the molecular mechanisms associated with differences in cadmium uptake and bioaccumulation.

### **Stanford/ Mars 150 genomes project**

CRU is collaborating with Stanford University and Mars (Global) Ltd. with regard to completely sequencing 150 cocoa genomes. This will be a landmark project for the cocoa world, and will allow the employment of comparative genomics methods to identifying and validating candidate genes for important traits.

### **Resistance to witches' broom disease**

Funding from the World Cocoa Foundation to support screening germplasm for resistance to the Witches' Broom disease has been renewed for 2012 and 2013. In addition, a project to identify candidate genes for witches' broom resistance has been initiated.

### **USDA DNA fingerprinting project**

USDA-ARS project on DNA fingerprinting was extended, where USDA/ARS will reimburse costs to CRU to a maximum of US\$40,000 per year for the next five years to support DNA fingerprinting, and marker assisted selection.

**Sponsored Research: JHB International**

A survey has been conducted in Ugandan farms and the DNA obtained from top trees from the farms are being subjected to SNP analysis to understand the origin of these trees. The results will be used to set up a clonal garden in Uganda. Passport data for each tree was also obtained.

## New Proposals Submitted

### Improving Marketing Competitiveness of Fine or Flavour Cocoa

This proposal was developed by the Cocoa Research Centre, UWI in collaboration with CIRAD, Dominican Republic, Ecuador, Nicaragua, Papua New Guinea, Trinidad & Tobago and Venezuela. (Project Executing Agency –CRC). The project hopes to improve the traceability of cocoa in trade using NIRS and provide opportunities for local signatures that would allow branding of cocoa. Application submitted to Common Fund for Commodities through the International Cocoa Organisation (ICCO)

### A Participatory Approach to Sustainable Cocoa Genetic Resource Management: A national model for agrobiodiversity conservation

Developed for submission to the Green Fund, the proposal seeks to reduce the risk of genetic erosion in the International Cocoa Genebank, Trinidad and duplicate the collection with stakeholders under a novel partnership in conservation programme. This will serve as a model for genetic resource management, and improve Trinidad & Tobago's capacity for conservation of genetic resources.

### Sustainable Economic Model for a Competitive Export Driven Cocoa Industry in CARIFORUM Countries: A best practices Approach

A pre-proposal has been submitted to Regional Public Goods Call of the IDB to the tune of US\$3.53 million. The project seeks to improve the profitability of the local industry by developing and branding clusters. Submitted in collaboration with the Caribbean Centre for Competitiveness and Department of Agricultural Economics and Extension.

## Highlights – Conservation

The Cocoa Research Centre is the custodian of the International Cocoa Genebank, Trinidad. It is regarded as the largest and most diverse collection internationally. The germplasm is conserved in a 100 acre field station at Las Chaguramas. The Cocoa Research Centre is involved in maintaining the genebank, characterizing the accessions, sharing information internationally through a database and providing germplasm to support international cocoa breeding programmes, as part of its core function.

A comprehensive survey the germplasm collection was carried out this year to determine the level of genetic erosion among germplasm plots within the genebank. The Agronomy team, headed by Annette Holder, spearheaded the survey.

Members of the Cocoa Research Centre led by the Director also worked on supporting the development of the CACAONET, an international mechanism developed to sustain important cocoa germplasm collections. This was introduced at the June 2012 meeting of the World Cocoa

Foundation and launched at the International Cocoa Conference held in Cameroun, (October, 2012). The Director presented two international papers on the status and role of the collection in the genomics era – The Plant and Animal Genome Conference in San Diego in January 2012 and the World Cocoa Foundation Meeting in Washington DC in June, 2012.

## Outreach

### **CDE Train-the-Trainer workshop**

#### **and Farmer Field Schools in the Caribbean.**

Cocoa Research Centre conducted a train-the-trainer workshop in December 2011 to provide support for the Caribbean region towards improving productivity and quality of cocoa. The intervention was facilitated with funding from the Centre for Development of Enterprise (ACP/EU). The workshop provided training to local coordinators and expert farmers from seven countries in the region including Belize, Jamaica, Dominican Republic, Dominica, St. Vincent, Grenada and Trinidad & Tobago. This resulted in a best practices document which provided the basis for the conduct of farmer field schools in the region. The document covered planning an estate, propagation of planting material, planting, rehabilitation, care of young plants, pruning, fertilization, harvesting, postharvest processing etc. Farmer field schools were coordinated by Frances Bekele and Naailah Ali of the Cocoa Research Centre. They provided technical assistance and logistic support for the farmer field schools in respective countries.

### **CDE food safety and quality management**

Cocoa Research Centre also provided support to the region to improve food safety and quality with assistance from the Centre for Development of Enterprise (ACP/EU). In this project over 50 postharvest, manufacturing facilities were subjected to gap assessment for food safety and quality. Based on the reports a generic manual on food safety for the region was developed and specific reports for each facility generated and supplied. This formed the basis for customized food safety training in six countries in the region. This is the most comprehensive study of the food safety situation with regard to cocoa in the Caribbean.

### **Launch of the first edition premium dark chocolate bar**

The Cocoa Research Centre launched its first edition signature chocolate bar. The bar is made exclusively from the International Cocoa Genebank, Trinidad. It is being marketed as a green bar, with the proceeds of the sale of the bar going into a fund that will be used for the sustainable conservation of the cocoa.

## Partnership in conservation

The cocoa Research Centre launched a partnership in conservation programme. Under this programme small subsets of genetic resources in the International Cocoa Genebank are duplicated with 50 partners across Trinidad & Tobago. Partnership in Conservation brings awareness of and participation in the conservation and utilization of genetic resources by the society-at-large, with particular reference to cocoa genetic resources.

### *Germplasm tours*

As part of an educational and agrotourism experience for children, public and tourists, CRC launched the germplasm tour programme. Persons are taken on a tour of the genebank, given a talk on the value of conservation and information on the cocoa industry and its future.

### *Individual training/ technical assistance to stakeholders*

The centre also supported more individualized training to stakeholders throughout the year. Montserrat Cocoa Farmers Cooperative, Woodblock Chocolate, Stollmeyer Estate, Santa Cruz, Prism Estates, Tamana, Rausch Plantagen-Schokolade and Guittard Chocolates were some of the organisations that receive support.

### *Student internships*

The centre provided internship for four students from the Department of Food Production during the summer semester and three trainees from Uganda.

## Teaching and Postgraduate Supervision

The centre also supports undergraduate and postgraduate research projects in cocoa. A number of MSc projects from the Faculties of Engineering, Food & Agriculture, Science & Technology from MSc programmes in Food technology, Crop Protection, Biodiversity Conservation were hosted and were supervised or co-supervised by centre staff. Undergraduate student projects were also hosted and supervised by centre staff.

## Distinguished Visitors

### **Richard Aching**

Intellectual Property Office,  
Ministry of Legal Affairs,  
Trinidad

### **Jenson Alexandar**

Board of Director,  
Cocoa & Coffee Industry Board

### **Sekoo Alleyne**

eTek Don Miguel Rd ext El Socorro

### **Marikis N Alvarez**

IICA,  
Nassau,  
Bahamas

### **Regan Asgarali**

Intellectual Property Office, Ministry of Legal Affairs, Trinidad

### **Janielle Bacchus**

Arima

**Vernon Baret**

Newer Worlds,  
Consultant, UK

**Philippe Bastide**

CIRAD, Montpellier

**Eddy Van Belle**

Belgium

**Van Belle**

Belcolade/Puratos,  
Belgium

**Bohmade Benson**

EP Investments,  
Uganda

**Maria Blair**

Ministry of Agriculture & Fisheries,  
Jamaica

**Uwe Bornemann**

Island Chocolate Ltd.,  
Switzerland

**Julie Van Borin**

Chocolatier,  
Belgium

**Mathew Brees**

Mexico

**Oscar Cadet**

Board of Director,  
Cocoa & Coffee Industry Board

**Tony Canino**

Miami,  
Florida

**Carlos R Castro**

Venezuelan Cocoa Corporation

**Bart Van Van Cauwenberghe**

Chocolatier,  
Belgium

**Christian Cilas**

CIRAD, Montpellier,  
France

**Jeanelle Clarke**

Cavehill Campus,  
UWI, Barbados

**Jacqueline Collins**

Arouca

**Shade Nyack Compton**

Belmont Estate,  
St Patrick,  
Grenada

**Raja Danban**

Dunia Treasures Corp.,  
UK

**Shanskon Danban**

Dunia Treasure Corp.,  
UK.

**Soi Danban**

Duni Treasure Corp., UK

**Danielle Delon**

Glencoe, Trinidad

**Solange Devinesh**

Economic Development Board

**Leslie- Ann Dillon**

Greenfund Secretariat,  
Ministry of Housing & The Environment

**Lyle Donawa**

Freeport

**Motuaki Doi**

Hotpepper researchers, Japan

**Pat Donahue**

Kraft Foods, USA.

**Graeme Dow**

Tucker Energy Services

**Michelle End**

CRA Ltd, UK

**Harriet Polly Etang**

Sunshine Agro Product Ltd., Uganda

**David Foley**

Vancouver, Canada

**Richard Foley**

Irvine CA. USA

**Gerad Fourny**

CIRAD-Montpellier France

**Mark Ford**

USDA-FAS, Miami, Florida

**Kenroy Forteau**

Cocoa Propagation General, Grenada

**Patricia Ganase**

Atlantic LNG

**Salisha Gafoor**

Chaguanas

**Gino Dalla Gasperina**

Woodblock Chocolate, Portland

**Martin Gilmour**

Mars-UK, Dundee Rd, UK

**Alison Godwin**

Grande Tourism,  
Sangre Grande, Trinidad

**Augustine & Tegoi Golindo**

Mexico

**Vigi Hachamoff**

JHB, International, Belgium

**Andrew Hadley**

St. Vincent and Grenadines Cocoa Company

**Rodney Harrinarine**

Faculty of Engineering UWI

**Paul Hadley**

University of Reading, Reading, UK.

**Winthrop Harewood**

School of Veterinary Medicine, UWI

**Terrence Haywood**

Board of Director, Cocoa and Coffee Industry  
Board (Caura)

**Angella Heath**

Consultant, UK

**Wendy Hollingsworth**

Policy networks International, Barbados

**Floyd Homer**

Trust for Sustainable Livelihood, Freeport

**Martin ten Hooper**

CIRAD, Cameroun

**Gudrun Ivey**

Next Corporation

**Vertote Jacques**

Belgium

**Manfred Jantzen**

Arthur Lok Jack Graduate School of Business

**Lawerence John**

Todds Rd Citrus Farmers Association

**Danielle Kadow**

University of Hamburg, Germany

**Sota Koeda**

Kyoto University,  
Graduate School of Agriculture, Japan,  
Agricultural Plant Science and Horticulture

**David Kuhn**

USDA-ARS-SHRS, Miami

**V. Kumar**

National Resource Centre for Banana,  
Trichy, India

**Heidi Nobie & Henry Kumar**

eTek, Don Miguel Rd ext El Socorro

**Gethdis C Lambrano**

Venezuela

**Claire Lanaud**

CIRAD-UMR AGAP, Montpellier, France

**Vidanand Latchman**

Freeport, Caroni

**Ellen Ligterningen**

Chocolate producer, Suriname

**R. Daniel Lineberger**

Dept of Horticultural Science, Texas

**Felix Linderbitrin**

Switzerland

**Leonardo Lombardini**

Dept of Horticultural Science,  
University of Texas, Texas

**Bernard & Katherine Long**

Avondale Estate Brasso Seco

**Raymond Loure**

Blanseisseuse Farmers' Association

**Stefan Maard**

Senior Manager, Novozymes, Copenhagen,  
Denmark

**Ragis-Kumar Maharaj**

University of Suriname, Suriname

**Sunity Maharaj**

Lloyd Best Institute of W.I.

**Carlos Mazal**

Director, LAC Bureau,  
World Intellectual Property Organisation

**Wayne McLaughlin**

Dept Pre-medical Sciences, Jamaica

**Charles Merry**

Manager, Stollmeyer Estate, Santa Cruz

**Bernard Mitchell**

eTeck, El Socorro

**Lucita Moeniralam**

Ambassador of the Netherlands in Trinidad.

**Juan Francisco Mollinedo**

Chairman of the Board, Differentiated Cocoa and  
Chocolate Committee, Guatemala

**Francisca Moses**

San Juan

**Joseph A Mureen**

Pepper Village, Gran Couva

**Katherine Nishiura**

Director, Caribbean Basin & Trade, Miami

**Nyahuma Obika**

Amdassador to Abuja

**Ariko James Otex**

Sunshine Agro Product Ltd.,  
Uganda

**Roger Packer**

Tucker Energy Services

**Neil Parsan**

Ambassador to the USA

**Carlisle. A Pemberton**

Chairman, Cocoa and Coffee Industry Board

**Rikkhi Permanand**

Economic Development Board

**Pamela Anyoti Peronaci**

JHB International,  
24 Ave. Toison D' or Business Belgium

**Cynthia Persad**

Board of Director,  
Cocoa and Coffee Industry Board

**Dominique Persoone**

Brugge, Belgium

**Wilbert Phillips**

Genebank Manager, CATIE, Costa Rica

**Jerome Poon Tip**

Maraval

**Zakiya Pope**

Valencia

**Andre Power**

eTek

**David Preece**

CRA Ltd..UK

**Michael Presig**

Island Cocoa Ltd. Switzerland

**Elodio Rash**

Indian Creek village, Belize

**Lillawatti Rastogi**

Ministry of Food Production

**Rupert Reece**

San Fernando

**Max Reynes**

CIRAD, Montpellier, France

**Soraya M Rib**

Cluster Manager de Cacao y sus Derivados, AIRD,  
Dominica Republic

**Bruno Rivas**

Board of Director, Cocoa and Coffee Industry  
Board, Lopinot /La Pastara Cocoa Farmers

**Olando Rodriguez**

eTek Don Miguel Rd ext El Socorro

**Winston Romany**

Cocoa and Coffee entrepreneur, Santa Cruz

**Ramgopaul Roop**

Tucker Energy/TTABA

**Eric Rosenquist**

World Cocoa Foundation, Washington

**Gour C. Saha**

Arthur Lok Jack Graduate School of Business

**Indera Sajeewan Ali**

Caribbean centre for Competitiveness

**Miranda Sandlin**

Texas University, Texas, USA.

**Astrida Saunders**

Exotic Mountain Pride, Santa Cruz

**Stephan Saunders**

Four Roads, Tamana

**Pierpont Scott**

Scott Drive, Maraval

**Vaughn Scott**

Blanchisseuse Farmers Association

**Kavish Seetahal**

Intellectual Property Office, Ministry of Legal  
Affairs, Trinidad

**Ed Seguire**

Mars Chocolate North America

**Clause Severine**

Sunshine Agro Product Ltd., Uganda

**Virginia Sopyla**

World Cocoa Foundation, Washington

**Jason St John**

Chaguaramas

**Charley Wheelock**

Woodblock Chocolate, Portland, USA.

# CENTRES & INSTITUTES

# INSTITUTE FOR GENDER & DEVELOPMENT (IGDS)

## Executive Summary

Significant changes were made to the staffing arrangements at the Institute. Dr. Jeanne Roach-Baptiste successfully defended her PhD Thesis, Women and Gender Studies and was appointed an Assistant Lecturer effective August 2012. The year also saw the addition of new academic and support staff: Sommer Hunte – Part-Time Graduate Research Assistant; Natasha Richards-Isaac joined the Secretariat. The IGDS also bid farewell to Dr. Charleston Thomas - Assistant Lecturer. Dr. Kishi Animashaun-Ducre and Dr. Keith McNeal also joined IGDS as Visiting US Fulbright Scholars.

## Strategy Appraisal Graduate Studies

The STA Unit staff continues supervision of postgraduate students for the IGDS RCU, IGDS Cave Hill as well as for other UWI Departments at St. Augustine. The IGDS has had 2 Diploma students, 14 MSc, 3 MPhil and 10 PhD candidates. The Institute's commitment to flexibility and support, which it considers an important part of the programme, has enabled high student retention.

## Research and Innovation

The IGDS staff and individual staff members have been engaged in a number of research projects on: women and trade, Caribbean feminisms, global democracy, gender, development and empowerment, gender, labour, migration and environmental issues, gender, ethnicity, and identify gender-based differentials in secondary and tertiary education systems in Trinidad & Tobago and gender, sexuality and the implications for HIV/AIDS.

### *IGDS Reading Room*

The resources of the Reading Room have recently been augmented with gifts of 21 books from Dr. Keith McNeal (Fulbright Scholar) and 14 from School of Women's Studies, York University (Canada).

In addition, a number of electronic publications have been retrieved, recorded and archived. The materials in the Reading Room continue to be a useful resource for students' projects and reports. An electronic copy of 'Gender and Natural Resource Use in Kernahan and Cascadoux' by S Durbal was dispatched to The UWI, Mona for their use in a Gender course.

The book collection is now computerized; the card catalogue has been discarded. The database used is WINISIS, the Windows version of CDS-ISIS. This computerization has both simplified and

improved information gathering for students and others looking for information on specific topics. The number of items in this database stands at 2488; 84 digital books, mostly reports on pertinent subjects from international and national bodies. A database of readings used by students in postgraduate and undergraduate courses has been set up; to date it contains 1,103 items. A database of audio-visual items has also been constructed. About 20 students have utilized the services of the IGDS for information and photocopying for the Semester.

## Research in Progress

G. Hosein, **Politics, Power and Gender Justice in the Anglophone Caribbean: Women's Understanding of Politics, Experiences of Political Contestation and the Possibilities for Gender Transformation.**

This research project examines four strategies to promote democratic governance, women's rights and gender equality. **Project Team: Dr. Gabrielle Hosein (Project Director), Prof Jane Parpart (Lead Researcher), Tisha Nickenig (Research Project Coordinator).** CND\$250,000.00 in funding was received from the IDRC for this two-year research project.

P. Pangsapa, **Environment and Citizenship in the Caribbean**

Dr. Pangsapa was awarded TT\$40,000 from the Campus Research and Publication Fund in January 2011 (until June 2012) towards a research project to explore the connections between questions of social and environmental injustice in the context of ten island-nation states.

**J. Roach-Baptiste, *Islam and the Atlantic World: New Paradigms from Latin American and the Caribbean*** edited by Aisha Khan to be published by the University of Florida Press. Doctoral Dissertation (Rutgers University. *Gender Practices among African Trinidadian Muslims: A Case Study at the Jamaat al Muslimeen, Trinidad.*

**Expanding the Model of the Sexual Safety Initiative Programme** - A project funded by the Ford Foundation, contract with SAU in November 2011. The purpose of the study is to improve the understanding of critical issues affecting sexual risk among university students at UWI including most-at-risk populations (MARPS), determine how students form relationships and to clarify at-risk sexual relationship behaviours among UWI students and in-school to create an enabling environment for safer sex within the UWI and its immediate environs. Researchers: Sommer Hunte, Keshan Latchman and Renelle White.

**Conceptualizing Global Democracy** - Project of the Centre for Study of Globalisation and Regionalisation, The University of Warwick, Coventry. This is a five-year TT\$1.5 million initiative to explore how 'rule by and for the people' can operate when addressing global challenges of the present age. The theme being covered in this project by Prof. Mohammed is 'Gender and Global Democracy' ([www.buildingglobaldemocracy.org](http://www.buildingglobaldemocracy.org)).

**Researcher involved:** Prof. Patricia Mohammed

## Service to UWI-12 Countries and Other Underserved Communities

### **Break the Silence Workshops: 2010-2011**

The IGDS in collaboration with the Trinidad & Tobago Coalition Against Domestic Violence and Arts in Action implemented a series of workshops in 2010/2011 throughout Trinidad & Tobago aimed at educating community members and service providers about the effects of Child Sexual Abuse (CSA)/incest and HIV. Funding and technical support came from UNICEF and the UN Trust Fund to End Violence Against Women.

### **Development of a National Gender Policy for the British Virgin Islands**

The final draft of the BVI National Policy for Gender Equity and Equality was submitted in April 2012. Lead Authors/Consultants – Prof. Patricia Mohammed, Prof. Jane Parpart, Deborah McFee, and Gaietry Pargass.

### **Bermuda Department of Human Affairs, Government of Bermuda**

In March 2011, the Bermudian Government, Department of Human Affairs approached the Unit to secure support/collaboration in establishing a Gender Bureau or Department of Women's Affairs. Lead Consultants are Prof. Patricia Mohammed, Prof. Jane Parpart and Deborah McFee.

### **Belize Gender and Development Training in Belize**

The IGDS in collaboration with the UNDP hosted a Capacity Building Workshop for the Women's Bureau, Belize City, Belize, September 26 to 30, 2011. The Lead Consultant for this training workshop was Deborah Mc Fee.

### **University of Quesqeya, Haiti**

The Institute was represented by Sommer Hunte on the UNIFEM/Haiti project which involved curriculum development of gender mainstreaming curricula with the Regional Coordinating Unit, Mona, Jamaica to support the training efforts of the University of Quesqeya, Haiti. The project team held meetings in Port-au-Prince, July 2012.

## **Faculty/Departmental Outreach**

### ***Strengthening Regionality***

#### **Belize Gender and Development Training in Belize**

The IGDS in collaboration with the UNDP hosted a Capacity Building Workshop for the Women's Bureau, Belize City, Belize, September 26 to 30, 2011. The Lead Consultant for this training workshop was Deborah Mc Fee.

#### **Development of a National Gender Policy for the British Virgin Islands**

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#### **IGDS Public Lecture by Sir George Alleyne**

##### ***"Health Degendered is Health Denied"***

On October 25, 2011 the IGDS collaborated with the Faculty of Medical Sciences, The University of the West Indies St. Augustine Campus to host a Public Lecture by Sir George Alleyne, Chancellor, The University of the West Indies.

### **Lunchtime Seminars**

The IGDS Lunchtime Seminars Series for the 2011/2012 Academic Year focussed on the eight UN Millennium Development Goals whose close approaching target date falls in 2015. Presenters from UN, PAHO/WHO, ILO and FAO, specialized in treating with these goals and meeting specified targets, discussed the background of their work, the progress they have made in the Caribbean and Latin America regions and the ongoing challenges. The atmosphere of the LTS remains very informal and open to the public.

### **International Women's Day**

The IGDS commemorated International Women's Day 2012 with a Public Lecture by Dr. Martina Reiker, Director of the Institute for Gender and Women's Studies, American University, Cairo, *The Gender Justice Project: Revisiting the Democratic Toolkit in Egypt*.

### **Strengthening National Engagement Processes Women Gender Water Network**

The Children's Water Vacation Camp 2011 won the Atlantic CEO's Sustainability Award in the category of Corporate Social Responsibility on April 14, 2012. The children's vacation camp was one of the 48 projects nominated and the winner out of the three final projects in its category. An important component of these camps is the Train the Trainers Orientation Workshop which was facilitated by Deborah McFee from July 12 to 15, 2011. This was a facilitated workshop for all camp resource persons and related personnel to reacquaint themselves with the thematic areas which frame the camp activities and general logistics of the camp experience.

In commemoration of World Water Day (March 22), the WGWN held an Educational River Lime at the Matelot Community School, Matelot Village on Saturday, March 26, 2011 as part of the Water for Life Initiative which was done with the children of the school to celebrate World Water Day 2011. As part of this activity, a gender and water game was developed by the Outreach Desk of the IGDS in collaboration with Dr. Freddi Deare and Keizel Kidd entitled, 'Who Does What? An interactive group exercise exploring gender roles and responsibilities around water use in different communities for ages 8 – 12.

### ***Breaking the Silence: A Multi-Sectoral Approach to Preventing and Addressing Child Sexual Abuse in Trinidad & Tobago***

*Rhoda Reddock, Sandra Reid, Jane Parpart, Tisha Nickenig, Kathryn Chan, Keshan Latchman*

*Project Partners: Caribbean Health Research Council (CHRC) and Arts in Action (UWI Department of Creative and Festival Arts).*

*Funded and Supported by: The UN Trust Fund to End Violence Against Women and the UN International Children's Emergency Fund (UNICEF), Trinidad & Tobago.*

In October 2011 the Citizen Security Programme of the Ministry of National Security awarded IGDS with approximately US \$15,500 to support the BTS Campaign expansion into other communities throughout Trinidad & Tobago. Outreach walks, sign installations and wall paintings continued throughout 2012 to raise greater awareness of the BTS campaign. On January 29, 2012 IGDS collaborated with Citizens' Security Programme, Ministry of National Security, to hold an awareness walk in Arima, Trinidad to promote awareness about child sexual abuse and incest and the Break the Silence campaign.

The Project team worked with relevant subcontractors to finalise and complete communications outputs such as webisodes -mini 5-minute films designed for the internet discuss key issues related to gender, CSA/incest and implications for HIV that emerged from the research such as parenting issues, gender sensitization and sexuality and the link between CSA/incest and HIV; a Radio Soap Opera - aimed at raising awareness about CSA/incest and gender, and implications for HIV and a Documentary Film – featuring video footage of the Break the Silence education and skills building workshops, so viewers can get a better sense of how the model was implemented in communities.

**Building Responsive Policy: Gender, Sexual Culture and HIV & AIDS in the Caribbean**

**Research Team:** Prof. Rhoda Reddock, Dr. Sandra Reid, Dr. Gabrielle Hosein, Dr. Tia Cooper, Tisha Nickenig, Keshan Latchman

This project aims to produce knowledge of the sexual cultures of the Caribbean region and the implications for HIV/AIDS risk. Project research is taking place in three countries throughout the region – Barbados, Suriname and Trinidad & Tobago.

**Funded and supported by:** The International Development Research Centre (IDRC) and the United Nations Fund for Women (UNIFEM), Caribbean Office. During the reporting period, the following activities related to the Project outcome evaluation were completed: The Final Project Evaluation Report was edited and analysed by the Research Team and submitted to the UN Trust Fund to End Violence Against Women and UN Women in November 2011.

**A Caribbean Studies Virtual Museum**

Funded through the Government of Trinidad & Tobago Research Grant, this Virtual Museum intends to engage the subject matter of cultural phenomena from a contemporary perspective, while establishing trails and traces to the past. It attempts also to invert the still popular idea of musea as forgotten or outdated relics to be preserved in hard textured form and formats, and tap onto a population of users, local, regional and international who increasingly draw on web based resources to travel vicariously to other countries and cultures. **Researcher involved:** Prof. Patricia Mohammed

***Gender Sensitivity and Awareness Training  
– Civilian Conservation Corps***

Deborah McFee, Outreach and Research Officer and Tracie Rogers, PhD Social Work candidate, facilitated the Ministry of National Security with skills training programme targeting vulnerable youth between the ages of 15-24.

## Outreach with Non-UWI Institutions

### Media Interviews & Feature

The visibility of the Unit was enhanced through participation on radio programmes as well as involvement with the local press. These included appearances in the *Trinidad & Tobago Mirror*, the *Trinidad Guardian* and the *Trinidad Express* (IGDS Gender and Media Training Workshop).

Other appearances in the press included a feature on Prof. Mohammed in the ***Trinidad & Tobago Guardian*** and Elspeth Duncan (Lunchtime Seminar presenter) in the ***Trinidad & Tobago Newsday***. Additionally the Lunchtime Seminar Series (with Dr. Yitades Gebre – PAHO/WHO) was featured in the ***Trinidad & Tobago Guardian*** as well as coverage of the Public Forum on Marriage Acts. Appearances on television and radio included Dr. Hosein's appearance on ***CNMG/91.1FM*** First Up Morning Programme with Lynnette Vassell and Hazel Brown on ***CCNTV6*** Morning Edition re: IGDS IWD Public Lecture as well as coverage of the Break the Silence Walk and Campaign Launch in Scarborough, Tobago on November 18, 2011 by the ***T&T Mirror, TV6, Tobago News, Trinidad & Tobago Express*** and ***CTV***.

## Revenue Generation / Cost Containment

The IGDS / Women Gender Water Network (IGDS/WGWN) 2012 Children's Vacation Water Camps was funded by UNDP GEF Small Grants Programme in the amount of TT\$ 146,873.54. Atlantic also donated TT\$64,000; Petrotrin sponsored TT\$5,000 and the Faculty of Social Sciences, UWI, St. Augustine TT\$3,600 to the network.

IGDS' Graduate Programme earned approximately TT\$100,000. *Politics, Power and Gender Justice in the Anglophone Caribbean: Women's Understanding of Politics, Experiences of Political Contestation and the Possibilities for Gender Transformation* was funded by the International Development Research Centre (IDRC) to the amount of CND \$250,000. Break the Silence campaign received TT\$30,000 from the Ministry of Gender, Youth & Child Development.

## Distinguished Visitors

**Jawad Aslam,**

Social and Economic Policy Specialist,  
UNICEF,  
Trinidad & Tobago

**Juan Battle,**

Professor Sociology, Public Health,  
& Urban Education,  
City University of New York,  
USA

**Kelley Crawford,**

(Masters student), MA,  
International Development,  
University of Amsterdam

**Margriet Fokken,**

(Doctoral student), Modern History,  
University of Groningen,  
The Netherlands

**Liz Griffith,**

(Masters student),  
MA in Human Rights Law LLM (Distinction),  
Queen's University Belfast

**Fatma Khan,**

Consultant,  
International Labour Organisation (ILO)  
UN Women,  
Trinidad & Tobago

**Hanna Klien,**

(Doctoral student),  
University of Vienne,  
Austria

**Leona Landers,**

Australian High Commission,  
Trinidad & Tobago

**Andrew Le,**

(Masters student),  
Master of Arts (M.A.), Sociology,  
The University of British Columbia

**Dr. Keith McNeal,**

Assistant Professor of Anthropology  
(US Fulbright Scholar),  
University of California-San Diego

**Kemi Ogunsanya,**

Adviser, Gender and Political Development at  
Commonwealth Secretariat,  
London,  
United Kingdom

**Jillian Ollivierre**

(Doctoral student),  
Faculty of Liberal Arts & Professional Studies,  
York University,  
Canada

**Adrian Thompson**

University of Texas

**Marlon Thompson,**

Presentation Consultant, UNICEF,  
Trinidad & Tobago

**Frederic Unterreiner,**

Chief of Monitoring & Evaluation, UNICEF,  
Barbados

**Alfonso Vijil,**

Owner, Libros Latinos,  
San Francisco, California,  
USA

**Penny Williams,**

Global Ambassador for Women and Girls,  
Department of Foreign Affairs and Trade,  
Australia

# CENTRES & INSTITUTES

# INSTITUTE OF INTERNATIONAL RELATIONS (IIR)

The Institute of International Relations at The University of the West Indies is a regional, autonomous academic institution at the St. Augustine Campus, with associate fellows at the Mona and Cave Hill Campuses and within other organizations. Since its founding in 1966, the Institute has been dedicated to the conduct of advanced research and teaching concerning the international challenges of the contemporary world, with special emphasis upon the Caribbean and Latin American regions. As a vital part of the infrastructure for its teaching and research, the Institute has developed a Library that constitutes the prime information resource in the world, regarding the international relations of the Caribbean. The Institute of International Relations meets related regional and national human resource development needs by offering short intensive modular training programmes for Foreign Ministry as well as private sector personnel. The Institute also offers international policy research and advisory services and business environment assessment consultancies.

The Institute of International Relations was guided through the 2011/2012 Academic Year under the experienced leadership of **Interim Director Dr. Anthony Peter Gonzales**. Dr. Gonzales was co-opted to replace Professor Timothy Shaw who returned to North America at the end of his contractual period at the Institute of International Relations.

The Interim Director ensured that the Institute was guided with a strategic plan, which worked in tandem with that of The University of the West Indies. His stringent work programme guided academic procedures ensuring productivity of all staff in all quarters of the department over the 2011/2012 academic year. The plan saw the fruition of goals being achieved throughout the period and continued the framework to the successful handing over of the Institute to the incoming successor **Professor W. Andy Knight**.

## Enrolment

During the period under review, the institute had 10 PhD students registered and 24 MPhil students registered during semesters one and two. In Semester one, 43 students were registered in the MSc in Global studies and 42 in semester two (one Barbadian student attained requirements for the MSC at the end of Semester 1). For the MSc in global studies in Guyana, 21 students were registered. For the Postgraduate Diploma in IIR, 43 students were registered in semester 1 and 41 in semester two (two attained requirements for the PG Dip at the end of Semester one).

## Graduation

The new cohort of Institute of International Relations graduates boasted one PhD graduate – Dr. Jo-Anne Michelle Patricia Tull (PhD in International Relations), 22 graduates with the MSc in Global Studies among which the Institute boasted four of these MSc graduates who fulfilled the requirements with distinction - Danielle Jodie Mangray, Adrian Thomas, Josanne Avril Rhonda Warner, and Zara Azizza Weekes-Rhyzer. The Institute's Postgraduate Diploma in International Relations was also graced with three distinctions from Amanda Alicia Badaloo, Darcyl Legall and Nikita Stephanie Pardesi.

## IIR Library

The Library commenced the academic year with the preparation of a Work Programme for the Institute, which covered areas such as Staffing, Library Outreach, the delivery of Information Literacy training and collection development with a focus on the acquisition of AV material. The Library has also contributed to the wider Strategic planning exercise by outlining goals and objectives for the way forward, 2012 to 2017. The filling of three Library positions, the drafting of the Strategic Plan for the Institute and the Campus Libraries 2012-2017 and the hosting of Library Day on March 29<sup>th</sup>, 2012 were the key highlights of activity during the academic year.

In celebration of the 45<sup>th</sup> anniversary of the founding of the Institute of International Relations, the Library hosted a week of activities which culminated with Library Day on March 29, 2012. Using the theme, "The IIR Library: A source of Sustenance", the event was used to highlight the many services which are offered to staff and students of the Institute and the wider University community. Displays were mounted in the Library portraying a timeline of Library services over the 45 years while an inaugural can drive was mounted with the items being donated to the UWI endorsed charity, Sashamane Sunrise.

The Library placed increased focus on the collection development of multimedia and featured the screening of several films. In observance of Disarmament Week, film shorts were shown to heighten the awareness of the issue of guns and war. This was followed by the pre-screening of **Forward Home** a documentary on Caribbean migrants, and patrons also enjoyed the screening of **Maria Full of Grace**, which culminated the UN and IIR Film Seminar series.

The Library's budgetary allocation for the year stood at \$900,000. This was spent to acquire 746 monographs, renew 60 periodical titles comprising both print and electronic journal subscriptions and purchase 51 DVDs. The Library has received an upgrade of the Toshiba copier following the renewal of the last lease agreement and has made a requisition for DVD case protectors and a CD/DVD media storage tower in light of the growing acquisition of AV material.

## Activities for the year in review 2011/2012

An emphasis on the collection development of AV material has resulted in the acquisition of multimedia for the Library. In keeping with the mission of the Campus Libraries, The IIR Library has agreed to develop its collection of Student Seminar and Masters Research papers in the digital repository UWISpace.

The Library introduced the rental of clear plastic laptop bags as a pilot project in the first instance and training in the use of Aleph continued and included a session on the cataloguing of ebooks.

It also participated in discussions on the standardization of circulations procedures among the St. Augustine Campus Libraries. The Library continued with its offering of a ten week information literacy programme from September to November. A session on **UWILinC** was added to the information literacy modules following its launch in October 2011.

Facilities upgrades within the library include the acquisition of 100 periodical boxes to replace existing stock, renewal of the service agreement for the book theft detection system; the replacement of non-functioning computers is being addressed with the purchase of two stand alone machines for searching **the UWLinC**.

### ***Detailed account of the core activities of the section***

- Budgetary allocation: \$900, 000
- Expenditure to date: \$920,177.77
- Books purchased: 746
- Multimedia acquired: 51
- Donations received: 38
- Subscriptions renewals: 60
- Items sent for binding: 166
- Theses checked: 1 (Pre-examination)

### **Overall contribution of the section to the overall efficiency of The University and to achieving the goals outlined in the Strategic Plan.**

The Institute facilitated the release of Librarian II Tamara Brathwaite to serve as Information Literacy Coordinator of the St. Augustine Campus Libraries for one year with effect from April 1, 2012.

## **Strategy Appraisal**

The IIR Library Staff developed a plan of action for increasing the levels of user satisfaction and enhancing service quality. This plan of action was submitted to the Deputy Campus Librarian on September 30, 2011.

The Library's inputs into the Institute's Work Programme for the year covered areas such as staffing, collection development with an emphasis on AV material, Information literacy instruction, thesis support, issues of space constraints, safety and Library Outreach. The Library was able to achieve most of the objectives set during this period.

Library Staff also engaged in strategic planning exercises defining operational objectives with regard to staffing, service delivery, collection development, infrastructure, outreach and special projects, to feed into both the Institute's and the Campus Libraries' Strategic Plans, 2012-2017.

## **Department Outreach**

A COSTAATT Intern was hosted and trained by the Library for the period February 27 to March 14, 2012.

### ***IIR / UN Information Centre, Film Seminar Series***

The Library participated in the hosting of one of the Institute's Human Rights Film Seminar Series, held in association with the UN Information Centre. This showcased the screening of the movie "Maria Full of Grace" shown in commemoration of International Women's Day.

### ***Library Day***

Library Day on Thursday March 29, 2012 was the culmination of a week of activities. The event highlighted the many services offered to Staff and students of the Institute and the wider University. Items collected in the inaugural can drive were donated to the UWI endorsed charity, Sashamane Sunrise.

## **Revenue Generation / Cost Containment**

With the advent of Aleph and the online circulations environment, an income generating account has been set up for the Library for the receipt of fines, lost book replacement charges and the receipt of monetary gifts. With effect from August 2011 to

July 2012, the Library has accrued deposits to the sum of \$21,048.15 to this account.

## Projected Activities for the 2012/2013 Academic Year

Proposed activities for the year ahead include the collaboration with the Alma Jordan Library in developing and hosting the IIR Library's collection of student papers (digitized) in the institutional repository, UWISpace. Input of the IIR Library's webpages on the Institute's redesigned website must also be done as well as liaising with the Alma Jordan Library in creating standardized website templates and making the IIR Library an integral part of the Campus Libraries portal.

Additional future activities include the planned restructuring of functions/activities, the introduction of Aleph Serials and Acquisitions procedures and the standardization of circulation procedures among the St. Augustine Campus Libraries.

## Distinguished Visitors

### **Jeremy Browne,**

FCO Minister,  
United Kingdom

### **Anthony Bryan,**

Professor Emeritus, University of Miami  
Centre for Strategic and International Studies (CSIS), Washington

### **Arthur L. Dowers,**

Ministry of Justice and Education,  
Aruba

### **Howard Drake,**

British High Commission, United Kingdom

### **Luella N. S. Emerencia,**

Legal Adviser, Ministry of Justice and Education,  
Government of Aruba,  
The Netherlands Antilles

### **Heinrich Hessen,**

Aruba

### **Professor Andy Knight,**

Chair, Department of Political Science  
/Professor of International Relations,  
University of Alberta, Canada

### **Anthony Maingot,**

Professor Emeritus,  
Florida International University (FIU),  
United States of America

### **M. Thomas Mudau,**

South Africa High Commission,  
South Africa

### **Ambassador Albert Ramdin,**

Assistant Secretary General,  
Organization of American States (OAS),  
Washington, D.C.,  
United States of America

### **Renad Sandis,**

Commonwealth Eminent Persons Group

### **Hugh Segal,**

Senate of Canada, Canada

### **His Excellency Arthur Snell,**

British High Commissioner to Trinidad & Tobago

# CENTRES & INSTITUTES

# SEISMIC RESEARCH

# CENTRE (SRC)

The Seismic Research Centre monitors earthquakes, volcanoes and tsunamis in the English-speaking Eastern Caribbean countries. The Centre also manages a public education programme to raise awareness on geo-hazards.

During the period under review, the TRN network stations recorded a minimum of **1591 earthquakes** in the area of responsibility, of which a total of 1194 events were located (75%), using our own data and the data contributions from Martinique, Guadeloupe, Puerto Rico and Venezuela. This represents a 6% decrease in the events located when compared with the previous reporting period, but an **81% increase in the recorded earthquakes** in relation to those of last year. The pattern of seismicity seen in the Eastern Caribbean has been changing in recent years from the distribution of previous decades. The elevated seismicity being observed in the Antigua-Barbuda area, noted in the last report, has persisted and includes several small events recorded by a single station, which would have contributed to the lowering of the percentage of located events. There were 26 events reported felt for the period.

### Volcanic Activity

With the exception of the Soufrière Hills Volcano (SHV) in Montserrat, the volcanic centres of the Eastern Caribbean exhibited low levels of activity throughout the review period.

## Education & Outreach

During the reporting period the Centre continued to conduct lectures and workshops with students, teachers and stakeholders to raise awareness on earthquakes, volcanoes and tsunamis.

This included collaboration with the National Emergency Management Office of St. Vincent for Volcano Awareness Week and with the Office of Disaster Preparedness and Management in Trinidad for a teacher workshop on geo-hazards.

The Centre also celebrated **Earth Science Week 2011** with a week-long photo exhibition and series of student workshops at the University of Trinidad & Tobago National Academy for Performing Arts (NAPA) from October 10-15th. The exhibition was themed “*Our Ever Changing Earth*” and highlighted the impact of earthquakes, volcanoes and tsunamis in the Eastern Caribbean and around the Globe. The exhibition was opened for public viewing and student workshop activities provided over 400 students with insight and information on the importance of understanding geological hazards and ways to preserve life, property and reduce risks.

During Earth Science Week the SRC and the Montserrat Volcano Observatory (MVO) also launched the book, *Island of Fire: The Natural Spectacle of the Soufrière Hills Volcano Montserrat*, at the National Academy for the Performing Arts in Port of Spain, Trinidad. The book features photographs that the public rarely gets to see, such as close views of the lava dome and the devastation of Plymouth in the exclusion zone. As well as being a photographic book, *Island of Fire* is an educational resource to whet the appetite of future geoscientists.

## Courses & Workshops

On the initiative of the Embassy of Chile, and the **Ambassador, His Excellency Patricio Pradel**, the Centre collaborated to host a Stakeholders Workshop titled, “*Lessons drawn from the seismological experience in Chile and its implications to Trinidad & Tobago*”. The primary objective of the workshop was to draw on the Chilean experience of dealing with earthquakes and the building codes developed and enforced as a consequence of these natural catastrophes. **Dr. Sergio Barrientos** and **Professor Jorge Crempien** of the **Universidad de Chile** were feature speakers at the workshop.

In December, SRC hosted a TSUAREG (TSUunami Alert REgional) workshop to discuss technical matters associated with equipment installation under the project, which is a collaborative project with and funded by the **Institut de Physique du Globe de Paris** (IPGP) through their observatories in Martinique and Guadeloupe for the installation of four VSAT stations in Antigua, Carriacou, Dominica and Saint Lucia.

## Collaborations

The SRC continues to collaborate with regional and extra-regional researchers. Following are the names and institutions of those currently engaged in projects:

**Dr. Willy Aspinall,**

Aspinall & Associates,  
Cleveland House, U.K.

**Dr. Jenni Barclay,**

Dept of Environmental Studies,  
University of East Anglia  
[STREVA, Soufriere St Vincent dating]

**Dr. Sergio Barrientos,**

Director, Seismological Service,  
Universidad de Chile, Santiago, Chile.

**Winston Bennett,**

Chief Executive Officer,  
Caricom Regional Organisation  
for Standards and Quality

**Professor Jon Blundy,**

University of Bristol [Caribbean Petrology]

**Dr. Robin Crockett,**

Senior Lecturer in Mathematics,  
School of Applied Sciences,  
University of Northampton, U.K.

**Dr. Nicolas Fournier,**

Volcano Geodesist, GNS Science,  
Taupo, New Zealand

**Mike Kendal,**

Head of School of Earth Sciences,  
University of Bristol

**Dr. Sue Loughlin,**

Head of Volcanology  
British Geological Survey,  
England [GEM]

**Dr. Elena Melekhova,**

Department of Earth Sciences,  
University of Bristol

**Professor X. Quidelleur,**

Equipe Geochronologie et Volcanologie,  
Université Paris-Sud 11,  
FRANCE [age dating of volcanic centres in  
northern St. Vincent]

**Dr. Cassandra Rogers,**

Team leader and specialist in risk reduction and  
disaster management at the IDB, Barbados

**Professor Steve Sparks,**

School of Earth Sciences,  
University of Bristol [GEM, VOGRIPA, MVO]

**Professor Geoff Wadge,**

University of Reading [GSL Special Issue –  
Montserrat Memoir II, MVO]

**Dr. Simon Young,**

Facility Manager,  
Caribbean Catastrophe Risk Insurance Facility  
(CCRIF) [Strong Studies in the Caribbean]

# CENTRES & INSTITUTES

# SIR ARTHUR LEWIS

# INSTITUTE OF SOCIAL

# & ECONOMIC STUDIES

# (SALISES)

## Introduction and Overview

The mission of the Sir Arthur Lewis Institute of Social & Economic Studies (SALISES) is “to undertake high-quality research and graduate teaching in the areas of social and economic development policy, governance and public policy with special reference to small developing countries” and a major thrust of its vision is to become “an internationally renowned institution for development policy analysis”. This work carried out in 2011/2012 is in keeping with the mission and vision of the SALISES and with the core objectives of the University’s Strategic Plan 2007-2012.

The SALISES enjoyed a relatively successful academic year 2011-2012. Once again, its staff participated in the teaching programmes of the wider Institute and Faculty and continued supervision of MSc, MPhil and PhD students. This year, six new students were admitted into the MPhil/PhD programme, one student upgraded

from the MPhil to the PhD degree and it is expected that more shall follow in the 2012-2013 academic year. The Institute continued delivery of the MSc in Development Statistics with a cohort of 16 new students and graduated seven persons. The programme continues to be targeted at the Caribbean region and serious efforts are to be undertaken in 2012-2013 to make it available online.

The Institute continued its scholarly, professional and outreach activity, which resulted in the publication of journal articles, technical reports and Caribbean Dialogue, the conduct of consulting and executive training programmes and the continuation of the public discussion series, the SALISES Forum. It co-hosted an international conference on the *Trinidad & Tobago at 50: a model nation?* over the period April 25 to 27, 2012. The Institute has also received major research funding; worth close to 500,000 Euros over two years, that funding should begin in the 2012/2013 academic year. It is the Institute's intention to go even further, in the 2012/2013 and later academic years, in these and other ventures.

### **Students Enrolment**

The SALISES (SA) continued its drive to recruit more students at the MPhil/Phd level with an intake of six such students in the 2011/2012 academic year. Sixteen new students entered to read for the MSc in Development Statistics in 2011/2012, compared to 20 the previous year.

### **Most Outstanding Students**

**Sherry Katwaroo-Ragbir** upgraded from the MPhil to the PhD and presented a paper at the Conference *Trinidad & Tobago at 50: A Model Nation?* in April 2012.

**Chiedozie Osuala**, candidate for the PhD, received a scholarship award to attend the Latin American and Caribbean Environmental Economics Programme's VI Environmental and Resource Economics training course held at the CATIE's headquarters in Turrialba, Costa Rica and presented a paper at the *UCCI/UWI/ICCI Caribbean Conference* in the Grand Cayman.

**Raynata Wiggins**, candidate for the PhD, was awarded a Commonwealth Split-Site Scholarship to attend the University of Leicester. and made a presentation at the *2nd UNESCO Management of Social Transformations (MOST) Regional Forum* in May, 2012.

**Victor Mlambo and Dana Gibson** graduated with Distinction from the MSc Development Statistics programme.

### **Graduation and Awards**

During the academic year, seven students successfully completed the MSc in Development Statistics. The research projects submitted by five of these students were supervised by **Dr. Godfrey St. Bernard**.

**Chiedozie Dickson Osuala** was awarded a **C-Change ICURA Scholarship** to pursue the PhD in Economic Development Policy.

## Graduate Studies

Teaching at the SALISES is strictly at the Graduate level so all teaching and learning outcomes are related to Graduate studies. MPhil / PhD students continued to make strides through making seminar presentations, attending conferences and presenting papers there.

To date, 12 of the 16 students from the 2011-2012 cohort of the **MSc Developmental Statistics** programme are still in the programme. From the cohort of 2010/2011, 11 students completed their course requirements and are preparing research reports for graduating. Of the seven students left from the cohort of 2009/2010, six are working toward completing their research report during 2012/2013.

## Research and Innovation

The SALISES research programme continued resulting in the publication of articles in regional and international and Technical Reports. These covered areas, all related to the Caribbean, such as **climate change, tourism, crime and violence** and **migration**. The Institute carried out surveys in **Grande Rivière (Trinidad)** and **San Pedro (Belize)** as part of the IDRC/SSHRC CAN\$2million funded programme on climate change. A similar survey in **Bequia (St Vincent and the Grenadines)** could not be carried out because of a Census-taking exercise in that island but will be carried out early in the 2012/2013 academic year.

The SALISES (SA) received formal notification that its bid for funding of project **CASCADE** (Climate Change Adaptation Strategies for Water Resources and Human Livelihoods in the Coastal Zones of Small Island Developing States) for close to 500,000 was successful. The bid was done in partnership with the **Euro-Mediterranean Centre for Climate Change** (CMCC) and the Caribbean Community Climate Change Centre (CCCCC). The programme shall begin in earnest in the 2012/2013 academic year.

The Institute began or continued work on a number of research areas including The establishment of a **Domestic Violence Registry** for Trinidad & Tobago, Climate change and its impact on coastal regions in the Caribbean; Poverty and Health care provision. Additional areas of research also incorporate, Energy efficiency; Ageing; Sport tourism; Elderly victimization, the financial sector in the Caribbean, Caribbean growth and development, Injury Prevention and Safety Promotion, Population Dynamics in the Caribbean and Social Measurement in developing countries.

## Service to UWI-12 Countries And Other Underserved Communities

Some of the Institute's teaching and research activity are geared toward service to the UWI-12 countries. The IDRC/SSHRC funded project on climate change pays special attention to the island of Bequia in St Vincent and the Grenadines and to San Pedro in Belize. One student from each of these countries was offered an undergraduate scholarship from the funds available and started their programmes of study in the 2011/2012 academic year. The CASCADE project involves investigations in **St Vincent and the Grenadines, Grenada and St Lucia**. One MPhil thesis is devoted partly to disaster management in **Grenada** and fieldwork has already been conducted there.

Students in MSc Development Statistics have been encouraged to pursue and have actually pursued research catering to the needs of UWI-13 countries, in particular, **St. Lucia and Montserrat**. This research continues as prospective joint publications are being prepared with Dr. St. Bernard and specific graduate students as authors. Dr. St. Bernard continues to pursue the development of research programmes in demography in **Grenada, Dominica, Montserrat and St. Lucia**. He continues to provide assistance to the Government of Dominica data collection activities related to domestic violence and violence against women in Dominica.

## Faculty Outreach

The SALISES continued its very popular and informative Forum, a public education exercise which deals with topics of national, regional and international interest. Topics treated during the 2011-2012 academic year included: ***The State of Emergency: A Necessary Evil?***, ***The Commonwealth: its Relevance, its Future*** and ***The Caribbean Court of Justice: an idea whose time has come?*** The panelists were all distinguished personalities in their own fields and the fora themselves were always extremely well attended.

The Institute also co-hosted an International Conference on the theme ***Trinidad & Tobago at 50: a model nation?*** over the period April 25-27, 2012. Participants came from all over the world and about 30 papers were presented. The Acting President of the Republic of Trinidad & Tobago opened the conference and presented a paper.

## Activities for the 2012-2013 Academic Year

The SALISES (SA) intends in the coming years to strengthen itself in the following areas: by pursuing means of offering MSc Development Statistics Online, conducting specialist training in specific subject-matter areas based on selected course offerings from the MSc Development Statistics and continuing the implementation of the ICURA Climate Change project.

The Institute also intends to begin project CASCADE, an IDRC-funded project on Sustainable Water Management under Climate Change in Small Island States of the Caribbean (in collaboration with CERMES) and continue the implementation of the recommendations of the Quality Assurance Review Exercise conducted in 2010.

SALISES also plans on focussing on the supervision of research students through stricter adherence to regular meetings between the student, the supervisor and the advisory committee, seeking funding through commissioned research and from grant agencies with a view to increasing staff complement and financing graduate study, thereby increasing the number of full-time research students.

The Institute will also be engaged in the following: Recruiting more graduate students from the UWI-13 countries and promoting greater research on these countries, fostering greater interdisciplinary research involving, if necessary, scholars from outside of the Institute and the UWI, boosting the outreach program of the Institute and contributing to national and regional policy discussions through research and publications.

## Distinguished Visitors

### **Senator Terrence Deyalsingh,**

Opposition Senator,  
Government of Trinidad & Tobago

### **Dr. Kusha Haraksingh,**

Dean, Faculty of Law, UWI and  
Chairman, CARICOM Competition Commission,  
Trinidad & Tobago

### **Dr. Lester Henry,**

Lecturer in Economics, UWI,  
Opposition Senator,  
Government of Trinidad & Tobago

### **Merle Hodge,**

Former Senior Lecturer in Linguistics, UWI and  
Member, Women Working For Social Progress

### **John Jeremie,**

Senior Lecturer in Law,  
UWI and Former Attorney General,  
Government of Trinidad & Tobago

### **Honourable Surujrattan Rambachan,**

Minister of Foreign Affairs and Communication,  
Government of Trinidad & Tobago

### **Dr. Raymond Ramcharitar,**

Cultural Critic and Historian,  
Trinidad & Tobago

# CENTRES & INSTITUTES SPORT & PHYSICAL EDUCATION CENTRE (SPEC)

## **Executive Summary**

The UWI SPEC International Half-Marathon attracted 1,000 participants comprising of local, regional and international athletes. First Citizens was the Presenting Sponsor and other category sponsorship was solicited from many well-positioned corporate bodies in Trinidad & Tobago. During the period under review, the first issue of the "SPECTator" race day magazine was published. On the field - the UWI Men's Football Team won the UTT Tertiary Football League for the third consecutive time. Additional achievements include the capturing of the titles in the UTT Tertiary Netball League and the Courts All Sectors League (Alternate Division) by the Netball and the placement of first in the mixed category competition in Fusion by the UWI SPEC Endurance Team. The track and field team produced medal winners at the Hampton International Games and the NAAA National Cross Country Championship and the Women's Tennis Team also captured the East Zone Club Championship title.

### ***Academic Programmes***

The Centre continues to offer the following academic programmes:

- Certificate in The Art & Science of Coaching (under the aegis of the School of Education)
- Minor in Sport Management (under the aegis of the Department of Management Studies)
- BSc in Sport Management (under the aegis of the Department of Management Studies)
- Post Graduate Diploma and a Masters degree in Sport Management (under the aegis of the Department of Management Studies)

### ***Contribution to the Overall Efficiency of The University***

SPEC assisted with the drive to encourage the holistic development of students and faculty / staff by providing an avenue that facilitated an aspect of the work-life balance. Research done by the Society for Human Resource Management (SHRM) in 2003 concludes that "Work/life programmes have the potential to significantly improve employee morale, reduce absenteeism and retain organizational knowledge, particularly during difficult economic times" (Lockwood, Nancy R. "Work/Life Balance, Challenges and Solutions." 2003 SHRM Research Quarterly (2003): 1-10.).

### ***Staff & Student Services***

SPEC has seen a growth in organized sporting activities in addition to the options provided by the Centre. As such, SPEC has assisted the Guild of Students, various campus clubs and faculties with staging sporting events for their members. Most notable are the Guild of Students' Interfaculty and Halls Sports Week and the GUADIY Football

League. This year the Guild of Students dedicated their Orientation Week of Sporting Activities to Jesse Blackman (DEC), Sports Coordinator - SPEC.

The UWI St. Augustine Human Resource Department, in collaboration with SPEC continued to offer a number of activities to members of the Wellness Programme that promoted healthy lifestyles.

SPEC's indoor court operations were expanded to seven days to cater for competitive teams and campus usage. Gym hours were expanded to seven days per week to facilitate student and staff usage on weekends; outdoor grounds usage continued as per usual (seven days per week) with daily team practices / games and open recreation periods. The pool operations were extended to facilitate team practices (with specific emphasis on our Swim Team) and other aqua fitness classes for the staff and students. Opportunities were realized for student assistants based on these extended hours. Coaching programmes, led by part-time coaches, in excess of ten disciplines, have also continued. These disciplines include Core Training, Aerobics, Aqua Aerobics, Badminton, Basketball, Cricket, Football (Men & Women), Hockey, Karate, Netball, Rugby, Stretch and Relaxation Classes, Spin Classes, Table Tennis, Taekwondo, Track & Field, Volleyball. Free Massages also continued to be offered to students. Additionally, three new fitness classes were introduced: Yoga, Aqua Training and Aqua Power Training. An attempt was made to start dragon boat racing, the student response was very good but inadequate financial resources made it difficult to see this project through fruition.

SPEC's competitive sports programmes for students continued to see many successes locally and regionally. Seven athletes participated in the UWI Mona Invitational in March 2012. The Men's and Women's Volleyball Teams also saw success in the UTT Tertiary Leagues attaining the first and second place titles.

Students continue to be awarded credits for participation in the **MINDING SPEC** co-curricular module.

## Commercial Activities

Commercial activity on the indoor court has been restricted as the campus' demand for use has increased. Additionally, our ability to host simultaneous activities (a possible avenue for commercial realization) has been adversely affected because of the closure of the outdoor court for resurfacing.

### *SPEC Concessions*

The concession area continues to attract students and staff and contributed to a diversification in interactions at SPEC.

### *UWI Activities*

The UWI has found several uses for this multi-purpose facility. These include end of Semester examinations; University Graduations (Open Campus, Roytec and Sir Hugh Wooding Law School Graduations); Research Days; Open Days and Career Fairs. The facility has also been utilised for Campus Based Functions, Residence Halls Valedictory Functions and Seminars and Workshops.

## Strategy Appraisal

UWI SPEC has positioned the University of the West Indies on the international sporting stage through the successful staging of the annual UWI SPEC International Half-Marathon.

## Departmental Outreach

UWI SPEC has been working with the Community on a number of initiatives, which include the hosting of the Protective Services of Trinidad & Tobago's Physical Training Instructors programme, working with several National Sporting Organisations on Administrative initiatives and providing technical support and a training facility for several national elite athletes. In addition to those initiatives, the Trinidad & Tobago Senior Cricket Team has used the Sir Frank Worrell Cricket Pitch as part of their training and competitions and UWI SPEC has partnered with the University School to offer programmes in Cheerleading, Netball, and Tennis to their students.

UWI SPEC has allowed Lucia's Private Primary School to use the sporting facilities for Tennis, Cricket and Football, facilitated practice sessions for the National Women's Basketball Team and National Women's Volleyball Teams; provided sporting facilities for various UWI affiliated summer camps and facilitated the St. Francois Girls' College world-of-work Internship programme and the UTT Service Learning Interns. In addition, UWI SPEC provided sponsorship of MILAT/MYPART runners in the UWI SPEC International Half-Marathon

## Revenue Generating Activities

SPEC's major undertaking continue to yield financial results with the International Half-Marathon grossing an average of \$768,500 in revenue; the rental of facilities bringing in net revenue of \$154,165.37 and Gym Fees grossing \$534,360.21 in revenue. The Tennis Courts also gross an average of \$84,900 in revenue although the Swimming Pool showed a loss with revenue of \$65,387.04.

## Distinguished Visitors

### **Kelly-Ann Baptiste,**

Trinidad & Tobago World Track and Field Bronze Medalist

### **Vern Gambetta**

Athletic trainer and Founder of the Gambetta Method

# PUBLICATIONS AND CONFERENCES

## FACULTY OF ENGINEERING

### Journal Publications

#### Department of Chemical Engineering

Atherley-Ikechi, M., W.A. Mellowes and Hamid Farabi (2012). Optimal Sequencing Batch Reactor Conditions for Greywater Nitrogen Removal. *WIJE* Vol. 33: Numbers 1 & 2, January 2011.

Campbell, T.F., W.A. Mellowes and C. Lindsay (2012). Amino Acid Profiling and Nucleic Acid Determination of Single Cell Protein. *WIJE* Volume 35 No 1 July 2012.

Chakrabarti, D.P. and G. Das (2012). Experimental studies on three-layer flow pattern in oil-water horizontal flow. *International Journal of Transport Phenomena*, Vol. 13, pp 1-14.

Dawe, R.A., R. Hosein and J. Marcelle-De Silva (2012). The Contribution of the Petroleum Studies Programmes at the UWI to the Oil and Gas Industry of Trinidad & Tobago. *The West Indian Journal of Engineering* Vol.34, Nos.1/2, January, pp. 4-15.

Figueira, B., W. DeLandro-Clarke, J. Marcelle-De Silva and W. Bertrand (2012). Delineation of an Oceanic Gas Hydrate Deposit. *Petroleum Science & Technology*. 30:15, 1562-1570.

Marcelle-De Silva, J., and R. Dawe (2011). Towards Commercial Gas Production from Hydrate Deposits. *Energies* 4, No. 2: p. 215-238.

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- Marcelle-De Silva, J. and S. Mohammed (2012). Edge Water Drive Detection and Movement from Buildup Data in a Gas Reservoir. *The West Indian Journal of Engineering* Vol.35, No.1, July.
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- Marcelle-De Silva, Jill, Adrian Thomas, Wanda Lee De Landro Clarke and Michelle Allum. (2012). Evidence of Gas Hydrates in Block 26—Offshore Trinidad. *Energies* 5, no. 5: 1309-1320.
- Riverol, C. and M.V. Pilipovik (2012). Forecasting the Effect of Seasonal Parameters on Fouling Deposition: A Single Effect Thermal-Vapor Compression Desalination Unit as Study Case Desalination and Water Treatment, Volume 39 Issues 1-3, pp 51-54.
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### Department of Mechanical and Manufacturing Engineering

**Naganathan, A.** (2011), Total quality approach – A challenge to Industries, Paper presented in a *Seminar on Challenges and Issues to World Class Manufacturing* held in Annamalai University, India during July 15-16.

**Pun, K.F.** (ed) (2011), *Supply Chain Management: Supplementary Reading*, The University of the West Indies, St Augustine, Trinidad & Tobago, February.

**Pun, K.F.** (ed) (2011), *Value Engineering and Management: Supplementary Reading 2000-2011*, The University of the West Indies, St Augustine, Trinidad & Tobago, September.

**Pun, K.F.** (ed.) (2012), *The West Indian Journal of Engineering*, The University of the West Indies, St Augustine, Trinidad & Tobago, ISBN 0511-5728, Vol.34, Nos.1&2, 123 pages

**Pun, K.F.** and M. Sastry (ed.) (2011). *The Journal of The Associations of Professional Engineers of Trinidad & Tobago*, Special Issue on 'Capstone Projects in Engineering and Technology Programmes', ISSN 1000-7924, Vol.40, No.2, October/November, 82 pages.

# FACULTY OF FOOD & AGRICULTURE

(Formerly the SCHOOL OF AGRICULTURE  
in the Faculty of Science & Agriculture)

## Journal Publications

**Roopnarine, R., G. Eudoxie**, and D. Gay (2011). Soil Physical Properties as Predictors of Soil Strength Indices: Trinidad Case Study. *Geomaterials*, 2012, 2, 1-9.

Forde, M., K. Morrison, **N. Badrie** and E. Dewailly (2012). Policy implications of the Caribbean EcoHealth Programme research findings. Caribbean Health and Research Council (CHRC) *CHRC News*. Issue 26 April 2012. p.4

**Dean, A., P. Thomas, R. Warner, G. Bourne and C.H.O. Lallo** (2011). The effect of climatic season on pre-weaning performance of Barbados blackbelly and West African hair sheep in Tobago West Indies. *Tropical Agriculture* (Trinidad) 88:232-243.

**De Gannes, V., G. Eudoxie**, D.H. Dyer, W.J. Hickey (2012). Diversity of Ammonia Oxidizing Archaea in Tropical Compost Systems published in *Frontiers in Terrestrial Microbiology*. Ed.: Lisa Y. Stein. *Front. Microb.* 3:244. doi: 10.3389/fmicb.2012.00244.

**Eudoxie, G.** and D. Nagassar 2012. Influence of cricket pitch preparation on resulting pitch surface hardness. *Trop. Agri.* 89 (1), 1-6

**Eudoxie, G.** and S. Hittal 2012. Efficiency of polyacrylamide polymers in settling aggregate mining tailwater. *West Indian J Eng.* 35 (1),

De Gannes, V., **G. Eudoxie** and W.J. Hickey 2012. Diversity of Ammonia Oxidizing Archaea in Tropical Compost Systems. *Front. in Microbio.* 3:244

**Eudoxie, G.** and D. Phillips. 2012 Surface hardness as an indicator of soil strength of agricultural soils. *Open J. Soil Sci.* 2 (4)

Fearon, A, **C.H.O. Lallo**, O. Dennis and F. Asiedu (2011). The prewean performance of kids of different goat breeds and crosses in Jamaica. *Tropical Agriculture (Trinidad)* 88:149-157.

**Hughes, M.P.**, P.G.A. Jennings, **V. Mlambo** and **C.H.O. Lallo** (2011). Exploring seasonal variation in sward characteristics and nutritive value of tropical pasture grazed by beef and dairy cattle on commercial farms in Jamaica. *J. Anim Sci. Adv.* 1:47-60.

**Isaac, W.A** M. Joseph, W. G. Ganpat, **M. Wilson** and **R.A.I. Brathwaite**, (2012). The Caribbean's Windward Islands Banana Industry: A Heritage of Dependency. *The Journal of Rural and Community Development*, 7(2), 98-117.

Ives, L. **R.A.I Brathwaite**, G. Barclay, **W.A. Isaac**, C. Bowen-O'Connor and I. Bekele (2012). Graft compatibility of scotch bonnet (*Capsicum chinense* Jacq) with selected salt-tolerant Solanaceous. *Journal of Agricultural Science & Technology* B2: 81-92

**Isaac, W.A.**, **R.A.I. Brathwaite**, and A. Khan, (2012), "Com-melina diffusa Population Dynamics in Banana and Ruderal Habitats under Mechanical and Herbicide Management Regimes," *International Journal of Agronomy*, vol. 2012, Article ID 605745, 7 pages, 2012. doi:10.1155/2012/605745. <http://www.hindawi.com/journals/ija/2012/605745/cta>

**Lallo, C.H.O.**, I. Paul and G. Bourne (2011). Thermoregulation and performance of British Anglo-Nubian and Saanen goats reared in an intensive system in Trinidad. *Trop. Anim. Health Prod.* DOI 10.1007/s11250-011-9924-z

**Mollineau, W.M.**, A.O. Adogwa and **G.W. Garcia** (2011). An evaluation of the mating behaviour of the adult male agouti (*Dasyprocta leporina*) using a service cage. *Trop. Agric.* Vol. 88, No. 3 July 2011, 158.

Edwards, A., **V. Mlambo**, **C.H.O. Lallo**, **G.W. Garcia** and M. Diptee (2012). *In vitro* ruminal protein degradability of leaves from three tree species harvested at two cutting intervals. *Online J. Anim. Feed Res.*, 2(2): 224-230. Science-line/Journal homepages: <http://www.science-line.com/index/>; <http://www.ojafri.ir>.

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Edwards, A., **V. Mlambo**, **C.H.O. Lallo** and **G.W. Garcia** (2012). Yield, Chemical Composition and *In Vitro* Ruminant Fermentation of the leaves of *Leucaena leucocephala*, *Gliricidia sepium* and *Trichanthera gigantea* as influenced by Harvesting Frequency. *J. Anim Sci. Adv.* 2: 321-331.

**Mollineau, W.M.**, T. Sampson, A.O. Adogwa and **G.W. Garcia** (2012). Anatomical stages of penile erection in the Agouti (*Dasyprocta leporina*) induced by electro-ejaculation. *J. of Veterinary Medicine, Anat. Histol. Embryol.* Blackwell Verlag CmbH.

**St. Martin, C.C.G.** and **R.A.I. Brathwaite** 2012. Compost and compost tea: Principles and prospects as substrates and soil-borne disease management strategies in soil-less vegetable production.

## Books & Book Chapters

**Isaac, W.A.** Richard A. I. Brathwaite and Wayne G. Ganpat, (2012). Weed Management Challenges in Fair trade banana systems in the Windward Islands of the Caribbean, *In: Herbicides – Environmental Impact Studies and Management Approaches*, R. Alvarez-Fernandez (Ed.). InTech, Croatia, pp. 209-222. (ISBN 978-953-307-892-2) pp. 209-222 (open access - downloaded 1216 times)

**Garcia, G.W.** (2012) A Conceptual Framework for the Development of Intensive Production Systems for Neo-tropical Animals: The Collared Peccary (*Pecari tajacu*, *Tayassu tajacu*) and the Agouti (*Dasyprocta leporina*) as examples to the book *Sustainable Food Production Practices in the Caribbean*, Eds. Wayne Ganpat and Wendy-Ann Isaac. Ian Randel Publishers, Jamaica.

**Bekele, I.** and Ganpat, W. [2012]. Participatory On-Farm Trials - A Useful Tool. Eds. Wayne Ganpat and Wendy-Ann Isaac, Chapter 13, Ian Randle Publishers, Jamaica.

## Conference Presentations

### Department of Food Production

A. Ramcharitar-Bourne, S. Nichols and **N. Badrie**  
*'Diagnostic performance of recommended anthropometric indices in predicting excess adiposity in a Caribbean pre-school population'*.

Annual Scientific Meeting of North American Association for the Study of Obesity (NAASO).

29<sup>th</sup> Annual Scientific Meeting of the Obesity Society, Orlando World Center Marriott, Orlando, Florida, October 2-5<sup>th</sup>, 2011.

**N. Badrie**, N. Browne and A. Ramcharitar  
*'Abdominal Risk and Useful Indicators of Risk in Diabetes mellitus Patients in St. Vincent'*.  
Third International Food and Nutrition Conference: Sustainable Approaches in Food and Nutrition to Combat Disparities in Childhood Obesity, Chronic Diseases and Food Insecurity, Kellogg Hotel & Conference Center, October 9 – 11<sup>th</sup>, 2011.

M. Forde, E. Dewailly, K. Morrison and **N. Badrie**  
*'The Caribbean EcoHealth Programme (CEHP): a collaborative research and capacity development methodology for addressing environmental health issues in the Caribbean'*. Caribbean Environment and Health Institute Sixth Caribbean Environmental Forum and Exhibition, St. Kitts & Nevis, May 21<sup>st</sup> -25<sup>th</sup>, 2012.

**N. Badrie**  
*'Utilisation and Some Bioactive Compounds of Mango'*.  
Trinidad & Tobago Mango Conference: From Seed to Table. Conference Room B, The UWI St. Augustine, July 6<sup>th</sup> 2012.

**E.S. Bartholomew, R.A.I. Brathwaite, and W-A. Isaac.**  
Effects of botanical nematicides (Azadirachtin and *Allium sativum* L. extracts) on banana plants infested with *Radopholus similis*.  
48<sup>th</sup> Annual Meeting of the Caribbean Food Crops Society Quintana Roo, Mexico. May 2012.

**G. Garcia**  
Feeding and Nutrition of the Agouti (*Dasyprocta leporina*) in Captivity.  
10<sup>th</sup> International Congress of Wildlife Management in Amazonia and Latin America (XCIMFAUNA)  
Argentina, May 2012

**G. Garcia**  
Future Vision and Innovative Pillars for "Agricultural Extension" and "Agricultural Policy" in support of Food Security and Farmers Wealth in Caricom with implications for the African, Caribbean and Pacific (ACP) States: 2012 to 2033. Caribbean Food Crops Society (CFCS) meeting. Mexico, May 2012.

G. Garcia  
*Neo-tropical Animals*.  
Caribbean Food Crops Society (CFCS) meeting, Mexico, May 2012.

**W-A. Isaac**  
*"Weed suppression potential of new and improved cowpea cover crop varieties"*.  
International Weed Science Congress.  
Hangzhou, China, June 2012.

D. Lecky, **Cicero H.O. Lallo**, O'Connor-Dennie, K. Dawkins and D. McKie.  
*Reproductive performance of purebred Boer, graded Boer and Graded Anglo Nubian goats and thermoregulation of purebred Boer goats at the Bodles Research Station Jamaica. Climate Change and Its Effects on Agriculture*.  
21<sup>st</sup> Annual Conference The Jamaican Society for Agricultural Sciences in Collaboration with The Agricultural Research and Development Division, Ministry of Agriculture and Fisheries.  
Jamaica, June 2012.

Ash. C., **P. Shaw**, and R. Richardson 2012.  
Earthquake perception and preparedness amongst the populace of Tobago.  
Association of American Geographers Annual Conference. New York February 2012.

Joseph, A., **P. Shaw, P.** and **M. Wilson** 2012.  
*The Potential Impacts of Seasonal Beach Morphology on the nests of Dermochelys coriacea in Trinidad*.  
Association of American Geographers Annual Conference. New York February 2012.

Joseph, A., **P. Shaw** and **M. Wilson** 2011  
*The Potential Impacts of Seasonal Beach Morphology on the nests of Dermochelys coriacea at Grande Rivière Beach.*  
SALISES Conference on the Sustainable Development of Coastal Communities.  
Trinidad, June 2011.

Boyd, M., K. Holmgren, **P. Shaw**, A. Mangini and C. Spott 2011  
*A high resolution speleothem record gives new insights into Younger Dryas and 8.2 k conditions in the Caribbean.*  
KR6 Conference,  
Birmingham UK, June 2011.

#### **L.D. Wickham**

*Threats and challenges facing the development of a sustainable mango industry in the Region.*  
Trinidad & Tobago Mango Conference: From Seed to Table.  
The UWI St. Augustine,  
Trinidad & Tobago, July 6<sup>th</sup> 2012.

Kamaldeo Maharaj, Frances L. Bekele, Davinan Ramnath, Reishma Sankar, **Isaac Bekele**, Krysta Jennings, G.G Bidaisee<sup>2</sup>, Patricia Maharaj.  
*Superior Criollo-like and Trinitario Clones in Farmers' Fields in Trinidad & Tobago: Selection of Putative Relic Genotype.*  
17th International Cocoa Research Conference,  
Hilton Hotel, Yaounde, Cameroon 15-20 October 2012

### Other Presentations

**N. Badrie**, N. Browne and A. Ramcharitar-Bourne  
*'Obesity in the Caribbean and its association to diabetes'.*  
(Feature Address)  
Third International Conference on Food and Nutrition,  
Kellogg Hotel and Conference Center, Session in Disparities in Childhood Obesity, Session B.  
Tuskegee University, Alabama, USA, October 10<sup>th</sup>, 2011.

#### **N. Badrie**

*'Agro-Processing Potential for Breadfruit and Breadnut in St. Kitts and Nevis – WayForward -Mission 3'* Bread fruit and Breadnut Stakeholder Meeting  
Ocean Terrace Inn Conference Centre,  
St. Kitts and Nevis. December 12<sup>th</sup>, 2011.

#### **N. Badrie**

*'Food Safety Teaching and Research'*, Food and Beverage Industry Development Committee,  
Ministry of Trade, Nicolas Towers,  
Port-of-Spain, Trinidad. Jan 25<sup>th</sup>, 2012.

#### **N. Badrie**

*The Caribbean Academy of Sciences – Focus on Women in Science & Technology.*  
Interamerican Network of Academies of Sciences (IANAS): Women for Science Program.  
Panama, February 2012

### Conference Papers/Proceedings

#### **N. Badrie**

*Overweight/Obesity Risk Indicators of Diabetic Patients in St. Vincent.*  
Feature Speaker at the Third International Food and Nutrition Conference (IFNC),  
Alabama, USA, October 2011

#### **N. Badrie**

*The Caribbean Academy of Sciences – Focus on Women in Science & Technology.* Interamerican Network of Academies of Sciences (IANAS): Women for Science Program.  
Panama, February 2012

St. Martin, C.C.G. and Brathwaite, R.A.I. 2012.  
Compost and compost tea: Principles and prospects as substrates and soil-borne disease management strategies in soil-less vegetable production. *Biological Agriculture & Horticulture* 28:1-33.

#### W-A. Isaac

"Weed suppression potential of new and improved cowpea cover crop varieties".  
International Weed Science Congress.  
Hangzhou, China, June 2012.

C. Ash., **Shaw, P.** and Richardson, R.  
Earthquake perception and preparedness amongst the populace of Tobago.  
Association of American Geographers Annual Conference.  
New York, February 2012.

Joseph, A., **P. Shaw** and **M. Wilson**

The potential impacts of seasonal beach morphology on the nests of *Dermochelys coriacea* in Trinidad. Association of American Geographers Annual Conference New York February 2012.

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*The potential impacts of seasonal beach morphology on the nests of *Dermochelys coriacea* at Grande Rivière Beach.* SALISES Conference on the Sustainable Development of Coastal Communities. Trinidad, June 2011.

Boyd, M., K. Holmgren, **P. Shaw**, A. Mangini and C. Spott. *A high resolution speleothem record gives new insights into Younger Dryas and 8.2 k conditions in the Caribbean.* KR6 Conference, Birmingham UK, June 2011.

## Exhibitions

Ramcharitar-Bourne, A., S. Nichols and **N. Badrie** (2011) Poster presentation: 'Disparities in Childhood Obesity'. Parental feeding styles and practices in relation to preschoolers' dietary behaviors and weight status in a Trinidadian population. Third International Food and Nutrition Conference (IFNC), entitled: Sustainable Approaches in Food and Nutrition to Combat Disparities in Childhood Obesity, Chronic Diseases and Food Insecurity, Kellogg Hotel & Conference Center October 9<sup>th</sup> -11<sup>th</sup>, 2011.

Ramcharitar-Bourne, A. S. Nichols and **N. Badrie** (2011) Poster presentation: Anthropometric characteristics and predictors of adiposity among preschool children in a multiethnic population. Third International Food and Nutrition Conference (IFNC), entitled: Sustainable Approaches in Food and Nutrition to Combat Disparities in Childhood Obesity, Chronic Diseases and Food Insecurity, Kellogg Hotel & Conference Center October 9<sup>th</sup> -11<sup>th</sup>, 2011.

**Badrie, N.** Poster presentation: Food Safety awareness, handling practices and training of cooks and supervising teaching in the primary school feeding program of St. Vincent and the Grenadines. 57<sup>th</sup> Caribbean Health Research Council/CARPHA Scientific Conference, Grand Cayman Marriott Beach Resort, Cayman Islands, April 19-21 2012.

**Mollineau, W.** and **G. Garcia.** "Mating behaviour of the male agouti (*Dasyprocta leporina*) reared in an intensive production system". Poster presentation: 10<sup>th</sup> International Conference on Wildlife Management in the Amazon and Latin America (XCIMFAUNA), Argentina, May 2012

Hospedales R., F. Davis, Z. Inniss and **W. Mollineau.** A Neo-Tropical Curriculum Innovation at the University of Trinidad & Tobago: A Case Study Poster presentation.

## Other Publications

### Monographs

Robinson, A. K. Campo, **W.A. Isaac**, W. G. Ganpat and T. Sampson. [March, 2012]. Virtual outreach: connecting farmers in the Caribbean. *New Agriculturist* pp.4-7 <http://www.new-ag.info/en/research/innovationItem.php?a=2487>

Thesis - MPhil Crop Science

**Lilieth Ives**, Grafting for improved salt tolerance in *Capsicum chinense* Jacq. Cultivar Scotch Bonnet

MPhil Food Safety and Quality Assurance

**Marsha Singh.** The presence of Scombroid toxin and factors influencing its presence in two popularly consumed marine fish in Trinidad.

MSc Crop Protection

**Julia Parris**, Non-Chemical strategies for weed control in hot pepper (*Capsicum chinense* at the Tucker Valley Farm

CDA

**Kenia Campo**, A study of the pathogenicity and variability of *Moniliophthora perniciosa* in Trinidad

MSc Tropical Animal Science and Production

**Kirk Williams**, Physico-chemical, sensory and nutritional characteristics of breadnut (*Artocarpus camansi* Blanco) seed juice yoghurt.

### Technical Reports

**Lallo, C.H.O.** and V. Mlambo. 2011. The utilization of dried cassava by-product from TTABA cassava chips processing in growing-finishing pig diets. Technical Report submitted to TTABA., 2011.

# FACULTY OF HUMANITIES & EDUCATION

## Journal Publications

**Abdul-Majied, S.** (2012) Kitab Bhai: A case study of multi-cultural schooling in Trinidad. *Journal of the Department of Behavioural Sciences* 1(1), 71- 79.

**Ali, S.,** Augustin, D., Herbert, S., James, F., Phillip, S., Rampersad, J., & Yamin-Ali, J. (2012) Is anyone listening? Stakeholders' perspectives on the in-service Diploma in Education programme at the UWI St. Augustine Campus. *Caribbean Curriculum*, 19 (1), 171-194.

**Augustin, D.,** Ali, S., Herbert, S., James, F., Phillip, S., Rampersad, J., & Yamin-Ali, J. (2012). Is anyone listening? Stakeholders' perspectives on the in-service Diploma in Education programme at the UWI St. Augustine Campus. *Caribbean Curriculum*, 19 (1), 171-194.

**Barrow, D.** and Lochan, S. (2012) Supplementary Tutoring in Trinidad & Tobago: Implications for policy decision making. *International Review of Education*, Vol. 2, p. 1-18.

**Barrow, D.** (2012) Students Image of the Eleven Plus: Implications for Identity, Motivation and Education Policy. *Caribbean Curriculum*, 19, 1-41.

**Boufoy-Bastick, B.** (2012) A Culturometric assessment of affective language attainments of modern language undergraduates in Trinidad. *Language, Society and Culture*, 34, 13-25.

**Cain, M.** (2012) Beliefs about classroom practice: A study of primary teacher trainees in Trinidad & Tobago. *International Journal of Humanities and Social Science*. 2 (3), 96-105.

**Chinien, S.** (2011) La déconstruction de l'Histoire dans *Le Passage du Milieu* de Guy Deslauriers", *Interculturel* N 15, Alliance Française, Lecce, Italy, 227- 252.

**Cowie, L.** (2011) Database Autorités Sudoc. IdREF Identifiants et référents Sudoc pur l'enseignement supérieur et la recherche. *Agence Bibliographique de l'enseignement supérieur* (ABES). Web. [Reference to *Voces y letras del Caribe*].

**Cowie, L.** (2011) Cuevas Delgadillo, José Miguel. "Re-descubriendo: recuento histórico del terrorismo." *Diario Crítica: periodismo profesional de Nayarit*. Web. [Reference to "Terrorismo y literatura: una perspectiva global"].

**Dedovets, Z.** (2011) Increasing learner's level of motivation in mathematics education through the use of uncompleted situations. *The Literacy Information and Computer Education Journal* (LICEJ), 2, 2, ISSN: 2040 2589, UK.

**De Lisle, J.** (2012) Differential outcomes in high stakes eleven plus testing: Gender, assessment design, and geographic location in secondary school placement within Trinidad & Tobago. *Assessment in Education: Principles, Policy, & Practice*, 19 (1), 45-64. [Special Issue on high stakes testing].

**De Lisle, J.** (2012) Secondary school entrance examinations in the Caribbean: Legacy, policy and evidence within an era of seamless education. *Caribbean Curriculum*, 19, 109-144.

**De Lisle, J.** (2012) The complexity and paradox of gendered achievement patterns: Re-examining gender differentials on multiple outcomes at the School of Medicine, University of the West Indies, St. Augustine. *Caribbean Journal of Education*. ?

**Ferdinand, D.** (2012) Curriculum inclusiveness challenge: responding to multiculturalism among workforce education and development (WED) graduate students – a mixed methods study. *Journal of the Department of Behavioural Sciences* 1(1), 80-98.

**Fergus, C.** (2012) Abolitionism and Imperialism in Britain, Africa, and the Atlantic. *New West Indian Guide* vol. 86-3 & 4.

**Futer, M.** (2012) Estilos de aprendizagem em sala de aula de Português como Língua Estrangeira: aplicando a teoria. *Proceedings of the VIII Encontro de Português Língua Estrangeira do Rio de Janeiro*, p. 68.

- George, J.** and Lewis, T. (2011) Exploring the global/local boundary in education in developing countries: The case of the Caribbean. *Compare*, 41(6), 721-734
- Herbert, S.,** Augustin, D., Ali, S., James, F., Phillip, S., Rampersad, J., & Yamin-Ali, J. (2012). Is anyone listening? Stakeholders' perspectives on the in-service Diploma in Education programme at the UWI St. Augustine Campus. *Caribbean Curriculum*, 19 (1), 171-194.
- Hezekiah, G.** (2012) The Interior Life of Painting: Lebenswelt and Subjectivity in the Work of Roberta Stoddart. *Small axe: a Caribbean journal of criticism*, 38, 139-52.
- Jackson, E.** (2011) Gender and Communal Politics in Shama Futehally's 'Reaching Bombay Central'. *Journal of Commonwealth Literature* 46.3: 475-491.
- James, F.,** Herbert, S., Augustin, D., Ali, S., Phillip, S., Rampersad, J., & Yamin-Ali, J. (2012). Is anyone listening? Stakeholders' perspectives on the in-service Diploma in Education programme at the UWI St. Augustine Campus. *Caribbean Curriculum*, 19 (1), 171-194.
- Jameson, M.** (2012) Tourism education from a relationship management perspective. *Caribbean Curriculum* 19, 145 – 170.
- Jameson, M.** Smith, J.K, Smith, L., Gilmore, A., (2012) Students self-perception of reading Ability, enjoyment of reading and reading achievement. *Learning and Individual Differences* 22(2), 203 – 206.
- Jameson, M.,** Smith, J. K. (2011) Voices of students in competition: Health science first year at University of Otago, Dunedin. *NZ Medical Journal*, 124(1338). 55 – 67.
- Lochan, S.** and Barrow, D. A. (2012) Supplementary Tutoring in Trinidad & Tobago: Implications for policy decision making. *International Review of Education*, 2, 1-18.
- Maharaj-Sharma, R.** (2012) What are upper primary school students' perceptions of science? The Trinidad & Tobago context. *Caribbean Curriculum*, 19, 1-18.
- Maharaj-Sharma, R.** (2012) An examination of the types and usefulness of analogies generated by upperprimary school students- A case study. *Journal of the Science Teachers Association of Nigeria (JSTAN)*, 46 (2), 1-9.
- Matthews, G.** (2012) The Impact of Abolition and Emancipation in Tobago. *The R-Evolutionary* An online Publication of the History Society of The University of the West Indies, St Augustine Campus. Number 43, pp. 2 – 12.
- Matthews, G.** (2012) English-Speaking Caribbean, U.S. Relations with Anguilla; Antigua and Barbuda; Bahamas; Barbados; British Virgin Islands; Cayman Islands; Dominica; Grenada; Jamaica; Montserrat; St. Kitts and Nevis; St Lucia; St Vincent; The Grenadines; Trinidad & Tobago; Turks and Caicos Islands. *Encyclopedia of U.S. Latin American Relations*, Vol. 1, 316 – 320.
- McClish, C.** (2012) Urban Playground Antics and the Redefining of Public Spaces. *PUBLIC: Art, Culture, Ideas*, ?
- Meir, C.** (2012) Ismail Merchant, Harry Alan Towers and Post-Imperial 'British' Cinema. *The Journal of British Cinema and Television Studies*, 9:1, pp. 58-76.
- Meir, C.** (2012) On the Art of 'Making Movies Happen': An Interview with Andrea Calderwood. *The International Journal of Scottish Theatre and Screen*, 4.2, pp. 51-65.
- Morales, M.** (2012) ¿Literatura de izquierdas? El debate sobre la relación entre literatura y poder en el mundo hispano. *América Latina, globalidad e integración*. Madrid: Ediciones Clásicas pp. 1207 – 1215.
- Pemberton, R.** (2012) The Environmental Impact of Colonial Activity in Belize". *Historia Ambiental Latinoamericana y Caribeña (HALAL)* Vol. 1 No. 2, 180-192.
- Phillip, S.,** James, F., Herbert, S., Augustin, D., Ali, S., Rampersad, J., & Yamin-Ali, J. (2012). Is anyone listening? Stakeholders' perspectives on the in-service Diploma in Education programme at the UWI St. Augustine Campus. *Caribbean Curriculum*, 19 (1), 171-194.
- Ramesar, R.** (2012) Colour, Light & Signification in the Mise-en-Scène of Sistagod. *Caribbean Intransit Arts Journal*. Volume I. Issue 2.
- Teelucksingh, J.** (2011) Marcus Garvey and the Labour Movement in Trinidad & Tobago (1920s-30s). *76 King Street-Journal of Liberty Hall: The Legacy of Marcus Garvey* vol 2, 60-80.

**Teelucksingh, J.** (2011) Charisma and Controversy in Jamaica's Dancehall Culture. *Global South* vol 7, no. 3, 37-49.

**Yamin-Ali, J.** (2012) Teacher education programme development as a metamorphic experience. *Education: Evaluation, reform and policy*, pp. 81-98.

**Yamin-Ali, J.** and Pooma, D. (2012) Honing a professional identity: The outcome of a teacher education programme. *Caribbean Curriculum*, 19, 69-92.

**Yamin-Ali, J.** (2012) Translating concerns into action in the Foreign Language classroom. *GEMA Online Journal of Language Studies*, 11 (2), 21-38.

**Yamin-Ali, J.,** Phillip, S., James, F., Herbert, S., Augustin, D., Ali, S., & Rampersad, J. (2012). Is anyone listening? Stakeholders' perspectives on the in-service Diploma in Education programme at the UWI St. Augustine Campus. *Caribbean Curriculum*, 19 (1), 171-194.

## Published Articles

**Figuera, R.** (2012) Transformation Leadership Pedagogy as Educational-Linguistic Motivation in English for Academic Purposes. The Changing Nature of Educational Leadership: Caribbean and International Perspectives. *Special Issue: Journal of the University College of the Cayman Islands (JUCCI)*.

**Maharaj, V.** (2011) Banal Violence: Abject Plantation Legacies. *Tout Moun: A Journal of Caribbean Cultural Studies* 1.1.

**Maharaj, V.** (2012) Negotiating Multiculturalism through Hybridity' in *Journal of the Department of Behavioural Sciences*, 1.1.

**Morales, M.** (2012) La poesía vanguardista en el aula de ELE", RedELE #13, 2012. *Ministry of Education (Spain)*. [http://www.educacion.gob.es/redele/Biblioteca-Virtual/2012/memoria\\_Master/Guillermo-Molina.html](http://www.educacion.gob.es/redele/Biblioteca-Virtual/2012/memoria_Master/Guillermo-Molina.html).

**Ramesar, R.** (2011) The Eye-alect of Her Second Coming *ARC Magazine – Art, Recognition, Culture*. Issue 3.

**Ramesar, R.** (2011) Haiti: Picking Up the Pieces. *STAN* April/July 2011.

**Rampaul, G.** (2011) Interview with Shani Mootoo. *UWI STAN Magazine*.

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## Reviews

**Pemberton, R.** (2012) Review of R. McNeil, *Mosquito Empires, Ecology and War in the Greater Caribbean, 1620-1914*. Cambridge University Press, 2010. In *Geschichte – Transnational Internet Forum*.

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## Conference Presentations

T. Ali

**Collaborative Peer Evaluation as a strategy to Enhance Students' Understanding and Practice of Academic Writing American University of Rome, 2012**

J. Antoine-Dunne

*Spirit Matters*

Peepal Tree Press Conference

Leeds, April 2012

J. Antoine-Dunne

*'Words Fail Me.'* *Looking at Film language in I is a Long Memoried Woman by Grace Nichols and the film adaptation by Frances Anne Solomon*

Re-assembling the Fragments: Interdisciplinary Conference in Honour of Retired Professors- Barbara Lalla, Bridget Brereton and Ian Robertson  
The University of the West Indies, Trinidad, August 2011

J. Antoine-Dunne

*Ghostly Presences in Caribbean Literature*

Afro Modernisms Conference

University of Liverpool, July 2011

B. Boufoy-Bastick

*A Culturometric revaluating of the fragments: National unity in the Caribbean – a bricolage of fragmented migration identities*

Re-assembling the Fragments: Interdisciplinary Conference in Honour of Retired Professors- Barbara Lalla, Bridget Brereton and Ian Robertson  
The University of the West Indies, Trinidad, August 2011

N. Bruni

*Denuncia y universalidad en Tlacaélel (Tragedia Histórico-Mítica) de Marcela del Río*

XXXV Simposio Internacional de Literatura: La Mujer en la Literatura del Mundo Hispánico  
California State University, Dominguez Hills, Los Angeles, California, USA, March 2012

N. Bruni

Presencia china en la literatura y en las artes de Trinidad y Tobago

VII Congreso Internacional Literatura: Memoria e Imaginación de Latinoamérica y el Caribe (por los derroteros de la oralidad y la escritura)

Pontificia Universidad Católica del Ecuador, Quito, Ecuador, August 2011

J. Bukari

*Reassembling the Fragments: A Study of Modern West African Pidgins and Creoles and their Caribbean Antecedents*

Re-assembling the Fragments: Interdisciplinary Conference in Honour of Retired Professors- Barbara Lalla, Bridget Brereton and Ian Robertson  
The University of the West Indies, Trinidad, August 2011

**J. Bukari;** Landa-Buil, M. & Carter, B.

*Technology-mediated Foreign Language Learning in one Caribbean Higher Education Context*

Accreditation Council of Trinidad & Tobago (ACTT) 1st National Conference on Quality Assurance in Higher Education  
Port of Spain, Trinidad & Tobago, November 2011

B. Carter & Mideros, D.

*Autonomy as a glocal phenomenon: a listening case study*

International Association of Applied Linguistics AILA 2011  
16th World Congress of Applied Linguistics  
Beijing, People's Republic of China, August 2011

B. Carter

*Quality assurance in a language learning centre: challenges and opportunities*

Accreditation Council of Trinidad & Tobago (ACTT) 1st National Conference on Quality Assurance in Higher Education  
Port of Spain, Trinidad & Tobago, November 2011

**B. Carter;** Bukari, J. & Landa-Buil, M.

*Technology-mediated Foreign Language Learning in one Caribbean Higher Education Context*

Accreditation Council of Trinidad & Tobago (ACTT) 1st National Conference on Quality Assurance in Higher Education  
Port of Spain, Trinidad & Tobago, November 2011

**B. Carter &** Ibrahim-Ali, A.

*Tales from the EFL classroom: educational tourism at The UWI St. Augustine Campus*

2nd International Tourism Conference: Tourism, Culture & the Creative Industries Exploring the Linkages  
St. Augustine, Trinidad & Tobago, January 2012

**B. Carter &** Williams, S.

*Multiple realities in a multilingual Caribbean: 21st century discourses on language and culture*

Language Policy and Language Teaching: Multilingualism in Society, the World of Work, and Politics. New Challenges for Teaching at Institutes of Higher Education/Universities  
University of Freiburg im Breisgau, Freiburg, Germany, April 2012

B. Carter

*Challenging the stereotypes: making a case for non-specialist language learning in Caribbean HE*

Language Futures: Languages in Higher Education, 6<sup>th</sup> Biennial Conference of the Subject Centre for Languages, Linguistics and Area Studies; The University Council of Modern Languages and the Association of University Language Centres  
University of Edinburgh, Edinburgh, Scotland, July 2012

H. Cateau

*From Enslavement to Indenture*

Neale Conference  
London, March 2012

S. Chinien

*Patrick Chamoiseau's Re-Memorising and Transfiguring of Trauma in his Works*

West Indian Literature Conference,  
The University of the West Indies, Trinidad, October 2011

- S. Chinien  
*The Transcending of Violence in Guy Deslauriers's The Middle Passage*  
American Comparative Literature Conference  
Brown University, Rhode Island, USA, March 2012
- L. Cowie  
*Perspectivas personales sobre temas universales en Como en feria de Marcela del Río*  
37th International Symposium for Hispanic Literature  
College of Arts and Humanities, Department of Modern Languages, Instituto Literario y Cultural Hispánico. California State University, Dominguez Hills, USA, March 2012
- K. Drayton  
Assessing Language Disorders in English-Creole Speaking Children  
Re-assembling the Fragments: Interdisciplinary Conference in Honour of Retired Professors- Barbara Lalla, Bridget Brereton and Ian Robertson  
The University of the West Indies, Trinidad, August 2011
- K. Drayton  
*Developing Speech-Language Pathology Programmes in the English-Speaking Caribbean*  
Council for Academic Programmes in Communication Sciences and Disorders Global Summit  
Newport Beach, CA, April 2012
- S. Evans  
*We do it ourselves: Interpreting in the Pre-Court Phases of the Legal System in St. Lucia* 2<sup>nd</sup> International Conference: Law, Language and Professional Practice  
University of Naples 2, Faculty of Law  
Santa Maria Capua Verte, Caserta, Italy, May 2012
- M. Forde  
*Obeah and the production of difference: Legacies of colonial government of religion in the Caribbean*  
Annual conference of the American Anthropological Association  
Montreal, November 2011
- M. Forde  
*Rituals and Perceptions of Death in Three Caribbean Societies*  
Annual conference of the Caribbean Studies Association  
Guadeloupe May 2012
- H. Franco  
*Community Dance: Traditions, Identity and Change - The Prime Minister's Best Village Trophy Competition*  
Global Dance Summit,  
Taipei, Taiwan,
- M. Futer  
*Focus Brazil-USA 2012*  
Encontro Mundial de Ensino de Português-EMEP –  
Fort Lauderdale, Florida, USA, May 2012
- R. Guedez  
*The GoodStart Mentorship Programme: Impact on the UWI student experience*  
2nd Annual Symposium on Student Engagement: Developing Social Responsibility  
The Institute of Critical Thinking, The University of the West Indies, Trinidad, March 2012
- A. Ibrahim-Ali & Carter, B.**  
*Tales from the EFL classroom: educational tourism at The UWI St. Augustine Campus*  
2nd International Tourism Conference: Tourism, Culture & the Creative Industries Exploring the Linkages  
St. Augustine, Trinidad & Tobago, January 2012
- E. Jackson  
*Envisioning social change in Indo-Caribbean women's writing*  
30<sup>th</sup> Annual West Indian Literature Conference  
The University of the West Indies, Trinidad, October 2011
- M. Jameson & Sealy-Tobias, V.**  
*Third year nursing students use of problem based learning: A mixed method study* AERA  
Vancouver, April 2012
- M. Jameson  
*Transition to university after completing undergraduate studies after more than a decade: Challenges and opportunities for post graduate students*  
Australasian Human Development Conference,  
Dunedin, New Zealand, July 2012
- M. Jameson  
*Post graduate students motivation and achievement in a post graduate quantitative research methods course*  
Caribbean Regional Conference of Psychology  
Nassau Bahamas, November, 2011

- M. Landa-Buil**; Bukari, J. & Carter, B.  
*Technology-mediated Foreign Language Learning in one Caribbean Higher Education Context*  
Accreditation Council of Trinidad & Tobago (ACTT) 1st National Conference on Quality Assurance in Higher Education  
Port of Spain, Trinidad & Tobago, November 2011
- S. Lochan** & Mitchell, B.  
*A search for standards in teacher education - The case of Trinidad & Tobago*  
Accreditation Council of Trinidad & Tobago (ACTT) 1st National Conference on Quality Assurance in Higher Education  
Port of Spain, Trinidad & Tobago, November 2011
- S. Lochan** & Geofroy, S.  
*Creole discourse in Trinidad & Tobago and implications for the making of minds: A challenge to educators*  
Caribbean Philosophical Association Conference, The University of the West Indies, Trinidad, July 2012
- V. Maharaj  
*Reading Caribbean Literature: Prolegomenon of a How-To Manual*  
30<sup>th</sup> WI Literature Conference – *I Dream to Change the World: Literature and Social Transformation*  
The University of the West Indies, Trinidad, October 2011
- V. Maharaj  
*An Other Epistemology: V.S. Naipaul's A Way in the World*  
NeMLA 2012 Convention  
Rochester, New York, March 2012
- V. Maharaj  
*The Nation in the Literary Imagi-Nation: A Question of Human Dignity*  
The UWI St. Augustine Campus Conference - *Trinidad & Tobago at 50: A Model Nation?*  
Faculty of Social Sciences and the Sir Arthur Lewis Institute of Social and Economic Studies (SALISES), The University of the West Indies, Trinidad, April 2012
- D. McCollin  
*The Evolution of the Trinidad & Tobago Nursing Service in the 20th Century*  
Re-assembling the Fragments: Interdisciplinary Conference in Honour of Retired Professors- Barbara Lalla, Bridget Brereton and Ian Robertson  
The University of the West Indies, Trinidad, August 2011
- D. McCollin  
*The Best and Worst of Times: World War II and Public Health in Trinidad & Tobago* American Association for the History of Medicine  
Baltimore, MD, April 2012
- D. McCollin  
*In The Pursuit of Disease: The Trinidad Regional Virus Laboratory 1953-1961*  
44<sup>th</sup> Conference of The Association of Caribbean Historians  
Curacao May 2012
- D. McCollin  
*Health Education and the Trinidadian Black Masses in the First Half of the 20<sup>th</sup> Century* Latin American Studies Association Conference  
San Francisco, May 2012
- C. Meir  
*Ismail Merchant, Harry Alan Towers and Post-Imperial 'British' Cinema*  
Accounting for Creativity: The Film Producer in British Cinema conference  
Bristol, UK, April 20, 2011
- C. Meir  
*Building Film Culture in the Anglophone Caribbean: Film Education at the University of the West Indies*  
The Education of the Film-Maker: Views from Around the World Conference  
Lignan University, Hong Kong, May 2012
- D. Mideros  
*Autonomy as a global phenomenon: a listening case study*  
AILA Research Network on Learner Autonomy symposium: "Social Dimensions of Autonomy in Language Learning"  
16<sup>th</sup> World Congress of Applied Linguistics  
Beijing, China, August 2011

- J. Morejon  
*Self Governing Through Dance: A Caribbean Model*  
SALISES Fifty-fifty Conference; Critical Reflections in a  
Time of Uncertainty  
Kingston, Jamaica August 2012
- J. Morejon  
*Performance Ritual in the Cuban Diaspora*  
54 International Congress of Americanists: Building dia-  
logues in the Americas  
Vienna, Austria, July 2012
- J. Morejon  
*Caribbean First Ritual Performance Practices: Restoring the  
Areito*  
XXX International Congress of the Latin American Studies  
Association: Toward a Third Century of Independence in  
Latin America  
Marriot Marquis Hotel, San Francisco, California May 2012
- J. Morejon  
Escuela de Teatro Cubano-Exiliada: el cultivo del absurdo  
como técnica teatral. Auditorium Alfonso Restrepo Moreno  
II Congreso de Estudios Teatrales: In-Disponer la Escena:  
Una reflexión sobre la puesta en escena ayer y hoy  
Universidad de Antioquia Facultad de Artes, Edificio  
Comfama, San Ignacio, Medellin, Colombia May 2012
- J. Morejon  
*Trinidad & Tobago: Redefining the Carnival Model*  
The UWI St. Augustine Campus Conference - *Trinidad &  
Tobago at 50: A Model Nation?*  
Faculty of Social Sciences and the Sir Arthur Lewis  
Institute of Social and Economic Studies (SALISES), The  
University of the West Indies, Trinidad, April 2012
- J. Morejon  
*Caribbean Carnivals: The Distinct Performances of Non-  
independence and Emancipation*  
Conference Surveying the Past, Mapping the Future  
The University College of the Cayman Islands and the Sir  
Arthur Lewis Institute of Social and Economic Studies,  
March 2012
- J. Morejon  
*Pan-Caribbean Cultural Legacies: Carnival Itinerant Route*  
2nd International Tourist Conference: Tourism, Culture and  
the Creative Industries: Exploring the Linkages  
The University of the West Indies, Trinidad, January 2012
- J. Morejon  
Electra Garrigó, Una caja de zapatos vacía y Aire frío: de  
esta orilla  
Congreso de Dramaturgia y Artes Escénicas: Celebrando a  
Virgilio (*Conference of Dramaturgy and the Performing Arts:  
Celebrating Virgilio*)  
Wesley Center, College of the Arts and Science, Universi-  
dad de Miami, Florida, January 2012
- J. Morejon  
*Higher Education Learning Environments and Outcomes:  
Artistic Cross-Curricular Educational Program and Policies*  
1st National Conference on Quality Assurance in Higher  
Education, National Academy for the Performing Arts  
(NAPA)  
Port of Spain. Trinidad & Tobago, November 2011.
- J. Morejon  
*Rivero's Transcultural Dramaturgy: Transcendental Dance in  
Súlkary*  
Conference on Ethnicity, Race and Indigenous Peoples in  
Latin America and the  
Caribbean (ERIP)  
Center for Iberian and Latin American Studies, University  
of California, San Diego, U.S.A. November 2011
- J. Morejon  
*The Evolution of Dance: A Caribbean Perspective*  
Symposium Decades of Dance, Dance Festival 2011,  
Ministry of the Arts and Multiculturalism, National Dance  
Association of Trinidad & Tobago (NDA) and The University  
of the West Indies  
Queen's Hall, Trinidad & Tobago, October 2011
- B. Paddington  
*The Trinidad & Tobago Film Festival*  
Society for Cinema and Media Studies  
Boston, MA, USA, March 2012
- R. Pemberton  
*Dirt, Disease and Death: Control, Resistance and Change in  
the Post Emancipation Caribbean*  
Historia Ciencia y Salud  
Meninghos, 2012

**S. Phillip**; James, F.; Herbert, S. & George, J.  
*Is Anyone Listening? Teachers' Views of their In-service Teacher Professional Development Programme*  
European Educational Research Association Conference  
Berlin, Germany, September 2011

P. Pierre  
*Addressing the non-academic needs of students in the classroom*  
Caribbean Regional Conference of Psychology  
Nassau Bahamas, November 2011

Pouchet A.  
*Huellas de orfandad en las tres primeras obras de Rosa Montero: Crónica del desamor, La Función Delta y Te trataré como a una reina*  
II Spanish and Portuguese Research Seminar: Literatura, Lengua, Historia y Cultura  
The University of the West Indies, Faculty of Humanities and Education, Department of Liberal Arts, Trinidad, January 2012

Pouchet A.  
*La verdad sobre La Plaza de Luis Spota*  
VII Congreso Internacional Literatura: Memoria e Imaginación de Latinoamérica y el Caribe (por los derroteros de la oralidad y la escritura)  
Pontificia Universidad Católica del Ecuador, Quito, Ecuador, August 2011

G. Rampaul  
*Re-Re-Reading Shakespeare: Metastance in Nalo Hopkinson's 'Shift'*  
The Islands in Between Conference  
Grenada, November 2011

G. Rampaul  
*How blest am I: Analysing Colonial Desire in Selected Poems by John Donne*  
Re-assembling the Fragments: Interdisciplinary Conference in Honour of Retired Professors- Barbara Lalla, Bridget Brereton and Ian Robertson  
The University of the West Indies, Trinidad, August 2011

G. Rampaul  
*Sam Selvon's West Indian London*  
Londonicity Conference  
London, UK, July 2011

G. Rampaul  
*An Island is a World: Reading Caribbean Literature as World Literature*  
The Rise of World Literatures Conference  
China, June 2011

J. Remy  
*Literature of the Steelpan*  
Conference on steelband: SteelFesTT  
NAPA, Trinidad, 2012

N. Roberts  
*Multiple and Meaningful Reading: Assessing University Students' Use of Technology to Enhance L2 Reading Strategies*  
Caribbean Studies Association Conference  
Le Gosier, Guadeloupe, 2012

N. Roberts  
*The Caribbean, The Land and the People: Women's Efforts, Women's Lives*  
13<sup>th</sup> Association of Caribbean Women Writers (ACWWS) conference  
Paramaribo, Suriname, May 2012

E. Sampaio Farneda  
*Português do Brasil: implementando a diversidade cultural brasileira, como ferramenta para o ensino/aprendizagem do português do Brasil língua de herança*  
IV Simpósio sobre o Ensino de Português para Falantes de Espanhol  
Georgetown University, Washington, DC, 2011

S. Sharma  
*Methodologies of teaching steelband*  
Conference on steelband: SteelFesTT  
NAPA, Trinidad, 2012

G. Skeete  
*Lit/Ling: More Than Fragments – Barbara Lalla's Pioneering of Literary Linguistics at UWI, St. Augustine*  
Re-assembling the Fragments: Interdisciplinary Conference in Honour of Retired Professors- Barbara Lalla, Bridget Brereton and Ian Robertson  
The University of the West Indies, Trinidad, August 2011

E. Walcott-Hackshaw

*Border Crossings: Confronting Issues in Publishing within the Caribbean*

The Association of Caribbean Women Writers (ACWWS) Conference  
Suriname, May 2012

J. Yamin-Ali

*Leave me alone- A study of student stress in the senior year at an all girls secondary school*

Clute conference  
Rome, June 2012

J. Yamin-Ali

*Teacher development programme development as a meta-morphic experience*

Athens Institute for Education and Research –ATINER 14<sup>th</sup> Annual International Conference on Education  
Athens, Greece, May 2011

### Conference Papers/Proceedings

**Dedovets, Z.** (2011) The organization of students' research activities for geometry learning. In *Proceeding of the International Conference "Modern educational Scientific approaches, experience, problems, prospects"*. Penza, V. G. Belinsky Penza State Pedagogical University, Russia (PSPU), V.1. p. 46-48, ISBN 978-5-94321-205-5

**Dedovets, Z.** (2012) The analysis of typical mistakes at the solution of problems of a rate of school mathematics: the equations, trigonometry, plane geometry. In *Proceeding of the Conference "Modern education: scientific approaches, experience, problems, prospects"*. Penza, V.G. Belinsky Penza State Pedagogical University Russia, Russia (PSPU).

**Maharaj-Sharma, R.** (2012) Do teachers make science learning fun and relevant? In G. Rampaul and G. E. Skeete (Eds.), *The Child and the Caribbean imagination. In Proceedings of the Cultural Studies Conference- First they must be children: The child and the Caribbean Imagination* (pp. 212-224). St. Augustine, Trinidad: UWI Press

## Other Publications

**Diego Mideros** and **Nicole Roberts**, translators: Jo-Anne Ferreira, "The history and future of Patuá in Paria: Report on initial language revitalization efforts for French Creole in Venezuela." In *Journal of Pidgin and Creole Languages* 24(1):139-158.

Translated as "La historia y el futuro del patuá en Paria: Informe de los esfuerzos iniciales en la revitalización del criollo francés en Venezuela." In *Romanitas*, Vol. 4 no. 1, May 2010.

**Diego Mideros** collaborated as a translator of the introduction into Spanish of the book *Border Crossings: A Trilingual Anthology of Caribbean Women Writers* edited by Roberts, Nicole and Elizabeth Walcott-Hackshaw.

**Nicole Roberts**, and **Elizabeth Walcott-Hackshaw** Eds., *Border Crossings: A Trilingual Anthology of Caribbean Women Writers*, Jamaica: The University of the West Indies Press, August 2011.

**Jairo Sánchez**, translator: "Short stories by James Thurber" In *Saltana: A Journal of Literature and Translation* 3 (1).

**Quamina-Aiyejina, L.** (2012) Production and Editing of Vol. 19 (2012) of *Caribbean Curriculum*

**Ramesar, R.** (2012) Invited to submit *Sistagod* for screening at Afrika Eye Film Festival, Bristol 2012

**Ramesar, R.** (2012) Invited to submit *Sistagod* to Afrykamera Film Festival, Poland 2012

# FACULTY OF MEDICAL SCIENCES

## Journal Publications

### Department of Pre-Clinical Sciences

**Addae, J. I.**, K. Walkins, R. Cruickshank, and T. W. Stone. [2012] "Effects of Ethylenediamine in Rodent Models of Seizure, Motor Coordination and Anxiety." *Brain Research* 1473: 155-60.

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**Nayak B.S.**, Ramadeen R, S. Raju S. Evaluation of Persea Americana L. leaf extract for wound healing activity- A preclinical study in rats. *World journal of Pharmaceutical research.* 2012; 1(3)

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**Nayak B.S.**, J R Marshall, D Milne, J Kanhai, S S Raju. Hypoglycaemic activity of *Chrysobalanus icaco* (Fat-pork) fruit extract in diabetes induced rats. *Asian Journal of Pharmaceutical and Biological Research.*2011; 1(4): 512-517.

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Sharma A, Charles K, Chadee D, **Teelucksingh S.** Dengue hemorrhagic fever in Trinidad & Tobago: a case for a conservative approach to platelet transfusion. *Am J Trop Med Hyg.* 2012 Mar; 86(3):531-5.

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## Publications in Refereed Journals:

### School of Dentistry

**Al-Bayaty H.F.**, Prayman E, **Naidu R.S.**, **Balkaran R.L.** Attitudes towards dentists' involvement in smoking cessation activities among patients attending health centres in Trinidad. *Caribbean Medical Journal* (2012); **73**: 14-17

**A. Bissoon**, K Pillai, C. Bourne. Dental and maxillofacial investigation of a 9-year-old thalassaemic patient. *Caribbean Medical Journal* 2011 Dec; **73**(2):18-20

**Naidu R.**, Nunn J, Forde M. Oral healthcare of preschool children in Trinidad: a qualitative study of parents and caregivers. *BMC Oral Health* (2012); **12**: 27.

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**Ramroop V.**, Wright D, **Naidu R.** Dental health knowledge and attitudes of primary school teachers toward developing dental health education. *West Indian Medical Journal* (2012); **60**: 576-580

**W. Smith**, **R. Rafeek**, **S. Marchan**, **A. Paryag**. The use of video clips as a teaching aide. *European Journal of Dental Education* .(2012); **16**(2):91-96

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### School of Veterinary Medicine

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- Edwards, A., Mlambo, V., Lallo, C.H.O., Garcia, G.W. and **Diptee, M**. (2012). *In vitro* ruminal protein degradability of leaves from three tree species harvested at two cutting intervals. *Online Journal of Animal and Feed Research*.
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Harris, R., Sankar, K., Small, Julie-Ann, **Suepaul, R.**, Stewart-Johnson, A. and **Adesiyun, A.A.** (2012). Prevalence and characteristics of enteric pathogens detected in diarrhoeic and non-diarrhoeic foals in Trinidad. *Veterinary Medicine International*:2012:724959.

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### School of Pharmacy

Bhongade B. A., N. D. Amnerkar, S. Talath, K. P. Bhusari and **A. K. Gadad.** (2012) 3D- QSAR Studies on Isocoumarin-based Urokinase-type Plasminogen Activator (uPA) Inhibitors Employing Linear and Non-linear Regression Analysis Methods. *Letters in Drug Design & Discovery* 9: 874.

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**Maharaj S.**, Roopnarine K, Maharaj V, Maraj S, Sankar E, Singh M, Ote Tayopa O, **Pandey S.**, Deshpande P. Impact of chronic disease assistance program on the retail pharmacy sector: A retrospective study. *Journal of Pharmacology & Pharmacotherapeutics*. 2011 Oct-Dec; 2(4): 244-247 [Impact Factor 0.46]

**Maharaj S.**, D'Souza M, Doodh R. Kisson N, Mohammed C, Sooklal S. Inventory Management Practices in Pharmacies Across Trinidad & Tobago. *International Journal of Universal Pharmacy and Life Sciences*, 2012 May- Jun; 2 (3):243-255

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**Maharaj S.**, Persad K, Maharaj A, Teelucksingh R, Jugmohan N, Mohammed J, Bhongade B, Talath S, **Gadad A.** Pharmacist Perception of the use of IT within the Retail Pharmacy in Two Regions in Trinidad & Tobago. *International Journal of Pharmaceutical and Biological Archives*, 2012 Jun; 3(3):565-571

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**Maharaj S, Pandey S** ,Mohammed F, Ali S, Niamath A, Persad C, Roopchansingh B, Ali F, Dialsingh I, Antoine R, Sahai A. Barriers to implementation of performance - based management practices in pharmacies in a developing country. *International Journal of Pharmaceutical Sciences and Research*. 2012 Sept.; 3881-3886

## Books & Book Chapters

**Carrington, C.V.** (2012), Viral Genomics: Implications for the Understanding and Control of Emerging Viral Diseases. In *Genomics Applications for the Developing World*, eds KE Nelson & B. Jones-Nelson (eds.), Advances in Microbial Ecology Part 3, 91-114, DOI: 10.1007/978-1-4614-2182-5-7

### School of Dentistry

Rafeek, R. Kevin Seymour and Lifong Zou (2012). Dimensional Measurement for Dentistry, Modern Metrology Concerns, Dr. Luigi Cocco (Ed.), ISBN:978-953-51-0584-8, InTech, Available from: <http://www.intechopen.com/books/modern-metrology-concerns/dimensional-measurement-for-dentistry>

### School of Veterinary Medicine

**Dziva, F.** and Christensen, H. (2011). The genus *Pasteurella*: in *Molecular detection of human bacterial pathogens*. Ed. D. Liu. CRC Press, Taylor and Francis Group. Philadelphia, USA. pp 943-955.

## Conference Presentations

### Department of Clinical Medical Sciences

D. Picou, A. Ameen, R. Maharaj, S Quesnel and **Z. Ali** *Myths and Misconceptions about HIV/AIDS in Trinidad & Tobago*  
Caribbean HIV Conference  
Nassau, Bahamas, November 2011

D. Picou, A. Ameen, R. Maharaj, S. Quesnel, D. Ramdath and **Z. Ali**  
*Knowledge, attitudes and beliefs about HIV and AIDS in 15-49 year old residents of the Republic of Trinidad & Tobago*  
Caribbean HIV Conference  
Nassau, Bahamas, November 2011

D. Picou, A. Lum Lock, B. Armour, M. Hainsworth, V. Duke and **Z. Ali**  
*Attitudes and practices among physicians towards persons living with HIV in Trinidad & Tobago*  
Caribbean HIV Conference  
Nassau, Bahamas, November 2011

- Z. Ali**, I. Rampersad, A. Lum Lock, G. Deane, J. Andall and D. Picou  
*Outcome of training health care providers in managing HIV/AIDS in Trinidad & Tobago*  
Caribbean HIV Conference  
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- Z. Ali**, A. Lum Lock, B. Armour, M. Hainsworth, V. Duke and D. Picou  
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Caribbean HIV Conference  
Nassau, Bahamas, November 2011
- Z. Ali**, G. Deane, A. Lum Lock, E. Phillip, N. Philip and D. Picou  
*A national model for up-skilling health care providers in the HIV prevention, treatment and care*  
Caribbean HIV Conference  
Nassau, Bahamas, November 2011
- Z. Ali**, D. Picou and G. Deane  
*Assessing tools and skills required for e-learning among healthcare providers in Trinidad & Tobago*  
Caribbean HIV Conference  
Nassau, Bahamas, November 2011
- G. Deane, **Z. Ali**, D. Picou, A. Lum Lock and S. Bluemer  
*Evaluation of a distance learning course on HIV Basics to train healthcare providers in Trinidad & Tobago*  
Caribbean HIV Conference  
Nassau, Bahamas, November 2011
- G. Deane, **Z. Ali** and A. Lum Lock  
*Development and experience of an e-learning course to up-skill healthcare providers in Trinidad & Tobago*  
Caribbean HIV Conference  
Nassau, Bahamas, November 2011
- A. Lum Lock, D. Picou, E. Phillip, G. Deane and **Z. Ali**  
*Using HIVsensitisation training to reduce stigma and discrimination among health care providers in Trinidad & Tobago*  
Caribbean HIV Conference  
Nassau, Bahamas, November 2011
- A. Lum Lock, **Z. Ali**, I. Rampersad, E. Phillip and G. Deane  
*Incorporation of monitoring and evaluation in HIV training programmes at the Trinidad & Tobago Health Training Centre*  
Caribbean HIV Conference  
Nassau, Bahamas, November 2011
- P. Maharaj, C. Descartes and **J. Ramcharan**  
*Framing Child Sexual Abuse as a Public Health Issue in Trinidad & Tobago*  
25th Annual Children's Mental Health and Policy Conference  
Tampa, Florida, March 2012
- P. Maharaj, C. Descartes and **J. Ramcharan**  
*The Co-occurrence of Child Abuse and Neglect in Trinidad*  
25th Annual Children's Mental Health and Policy Conference  
Tampa, Florida, March 2012
- A. Jagat, S. Bahadursingh, A. Lum Lock, M. Cruikshank, T. Nicholas and **Z. Ali**  
*Profile of domestic violence among pregnant women attending public antenatal clinics in Trinidad*  
Caribbean Health Research Council, 57th Annual CHRC/CARPHA Scientific Meeting  
Grand Cayman, Cayman Islands, April, 2012
- A. Nikov, **Z. Ali**, I. Dialsingh, A. Sahai, R. Devenish, G. Deane and N. Philip  
*Learner-Centred Assessment and Design of Health Oriented eLearning*  
Jubilee X International Scientific Conference  
Sozopol, Bulgaria, June 2012
- Z. Ali**, A. Lum Lock and S. Bahadursingh  
*Perceptions of care among persons living with HIV (PLHIV) in Trinidad & Tobago*  
Trinidad & Tobago Medical Association 18<sup>th</sup> Medical Update and Research Conference  
Port of Spain, Trinidad & Tobago, July 2012
- A. Khan and **Z. Ali**  
*Normal ranges for acute phase reactants (Interleukin-6, Tumour Necrosis Factor alpha and C-Reactive protein) in umbilical cord blood of healthy term neonates at the Mt. Hope Women's Hospital, Trinidad & Tobago*  
Trinidad & Tobago Medical Association 18<sup>th</sup> Medical Update and Research Conference  
Port of Spain, Trinidad & Tobago, July, 2012
- B. Balkaran, J. Ramcharan and V. Singh  
*Obesity in Trinidadian Children*  
Trinidad & Tobago Medical Association 18<sup>th</sup> Medical Update & Research Conference  
Port of Spain, Trinidad & Tobago, July 2012

T. Cooper, T. Nickenig, **S. Reid**  
*Media Power: Economic policy, sexuality, and transformation*  
12th Association for Women's Rights in Development  
International Forum  
Istanbul, Turkey, April 2012

#### **G. Hutchinson**

Through the looking glass of migration  
World Psychiatric Association Meeting  
Buenos Aires, September 2011

N. Brathwaite, **G. Hutchinson**, E. Clarke E and D. Simeon  
*Premature mortality in the English speaking Caribbean*  
ICHAD, Johns Hopkins University  
Baltimore, July 2012

T. Seemungal  
*Maintenance and treatment of patients with frequent  
exacerbation in COPD*  
CariCam Respiratory Master Class 2012  
**Panama City, Panama**, March/ April 2012

T. Seemungal  
*COPD and Comorbidities*  
Inspiration 2012: Exploring Frontiers in Respiratory  
Medicine  
Prague, Czech Republic, June 2012

T. Seemungal  
*Cardiac Disease in COPD*  
Inspiration 2012: Exploring Frontiers in Respiratory  
Medicine  
Prague, Czech Republic, June 2012

#### **School of Veterinary Medicine**

K. Georges  
*Detecting tick-transmitted haemopathogens of horses us-  
ing a reverse line blot assay. Tick and tick borne pathogens*  
Zaragoza, Spain, September 2011

M. Morris  
*Why are fewer oestrus periods seen after calving?*  
Workshop presentation during European Society of Do-  
mestic Animal Reproduction Congress  
Antalya, Turkey, September 2011

C. Oura  
*Bluetongue virus serotype 26 (BTV-26) – evidence for direct  
transmission in goats*  
EPIZONE Conference  
Brighton, UK, June 2012

C. Oura  
*A comparison of diagnostic assays for African Swine Fever  
virus*  
EPIZONE Conference  
Brighton, UK, June 2012

A. Phillips  
*Water quality: Criteria for aquatic animal health*  
Workshop on re-circulating aquaculture systems: Design,  
engineering and operation  
The Institute of Marine Affairs  
Chaguaramas, Trinidad, June 2011

C. Sant  
*Trans-placental transmission of equine piroplasmosis in  
thoroughbred foals in Trinidad*  
1<sup>st</sup> seminar for MPhil degree  
Mt. Hope, Trinidad, July 2012

A. Phillips  
*The role of fish health management in re-circulating aqua-  
culture systems*  
Workshop on re-circulating aquaculture systems: Design,  
engineering and operation  
The Institute of Marine Affairs  
Chaguaramas, Trinidad, June 2011

#### **School of Pharmacy**

B. A. Bhongade, S. Talath and **A. K. Gadad**  
*Quantitative structure activity relationship (QSAR) studies on  
urokinase-type plasminogen activator (uPA) inhibitors*  
Dubai International Pharmaceuticals and Technologies  
Conference and Exhibition  
Dubai, UAE, March 2012

S. Talath, B. A. Bhongade and **A. K. Gadad**  
*Synthesis and Anti-inflammatory activity of Substituted  
cycloamine derivatives of Aryl Nicotinic acid*  
Dubai International Pharmaceuticals and Technologies  
Conference and Exhibition  
Dubai, UAE, March 2012

S. Talath, B. A. Bhongade and **A. K. Gadad**  
*Synthesis and in-vitro anticancer evaluation of N-[5-benzoyl methyl sulfanyl-[1, 3, 4]thiadiazol-2yl]piperzanyl derivatives of ciprofloxacin and norfloxacin*  
 Dubai International Pharmaceuticals and Technologies Conference and Exhibition  
 Dubai, UAE, March 2011

**D. Ignacio, R. Extavour**, P. Townsend and R. Dobson  
*Pursuing additional pharmacy practice education among practicing pharmacists in the Republic of Trinidad & Tobago*  
 American Association of Colleges of Pharmacy (AACP)  
 Kissimmee, Florida, July 2012

## Conference Papers/Proceedings

Seetahal, JFR, Velasco-Villa, A, Rupprecht, CE, Allicock, O, Adesiyun, AA, Bissessar, J, Amor, K, Phillip-Hosein, A, Wharwood, C, **Carrington, C.V.** Molecular epidemiology of rabies virus in Trinidad and characteristics of the 2010 outbreak. Presented at the *XXII Rabies in the Americas meeting* held October 16 -21, 2011 (San Juan, Puerto Rico).

Cuthbert, C.E., **Foster, J.E.**, & Ramdath, D.D. FTO rs9939609 and PPARG rs1801282 genotyping in Trinidadian neonates of the major ethnic groups. *57th Annual CHEC/CARPHA Scientific Meeting, April 19-21, 2012* (Grand Cayman, Cayman Islands)

D. Brennen, S. Narine, S. Ali, R. Dilbar, S Khan, V. Lowe, A. Rampersad, J. Sinanan, R Singh, **B.S. Nayak**. The Association of C - reactive protein, Uric Acid, Lipid Profile, Gender and Age with Type II Diabetes Mellitus in Trinidad & Tobago 2005-2010. *West Indian Medical Journal* 2012; 59 (suppl 2) p37

K Gowrie, R Romano, H Bissoon, I Dipatane, N Mahabir, D Noel, R Ragbir, C Spencer, S Xavier, **BS Nayak**. Self monitoring of blood glucose and its association with better glycaemic control in Type II diabetics aged 40-75 in Trinidad. *West Indian Medical Journal* 2012; 59 (suppl 2) p37

TA Seemungal, LM Pinto Pereira, S Teelucksingh, **B.S. Nayak**. Inflammation In Diabetes Is Related Directly To Glycaemic Control And Inversely To FEV1. *Am J Respir Crit Care. Med* 183; 2011:A1326

**Davis G.**, Baboolal N and **McRae A.** Alzheimer's disease diagnosis using ELISA test to detect Antibodies to activated Microglial cells in the CSF. Poster presentation at the annual AACC meeting Los Angeles CA, July 15-19 2012

## School of Veterinary Medicine

**Dziva, F.** (2011). Avian pathogenic *Escherichia coli*: diseases, identification, pathogenesis and immunological aspects. Poultry Diseases Group Abstracts, British Poultry Council Offices, London, October 10, 2011, pp17-18.

**Dziva, F.** et al. (2011). Towards improved control of avian pathogenic *Escherichia coli* in poultry. Food Security-Challenges and Opportunities, University of Nottingham, pp.4-5.

**Dziva, F.** (2012). Unravelling the molecular basis of the virulence of avian pathogenic *Escherichia coli* in turkeys. Proceedings of the 6<sup>th</sup> Turkey Science and Production Conference, Macclesfield, March 22-23, pp 11-13.

Sadeyen, J-R. and **Dziva, F.** (2011). *Towards improved control of avian pathogenic Escherichia coli in poultry*. British Poultry Abstracts Vol 7, pp7-8.

Sadeyen, J-R, Kaiser, P., Stevens, MP and **Dziva, F.** (2012). *The role of B cells in vaccine-induced protection and clearance of avian pathogenic Escherichia coli*. Avian Immunology Research Group Meeting, Edinburgh, Scotland, August 28-31, pp. 67.

## Monographs

### School of Dentistry

Nash D., Friedman J., Mathu-Muju R., Robinson P., Satur J., Moffat S., Kardos R., Lo E. Wong A., Jaafar N., van den Heuval J., Phantumvanit P., Chu E., **Naidu R**, Naidoo L., McKenzie I., Fernando E. *A Review of the Global Literature on Dental Therapists: In the Context of the Movement to add Dental Therapists to the Oral Health Workforce in the United States*. Kellogg Foundation. Battle Creek, Michigan (April 2012). <http://www.wkkf.org/knowledge-center/resources/2012/4/Nash-Dental-Therapist-Literature-Review.aspx>

# FACULTY OF SCIENCE & TECHNOLOGY

(Formerly the SCHOOL OF SCIENCE in the  
Faculty of Science & Agriculture)

## Journal Publications

### Department of Chemistry

Wyse-Mason, R. and **D.M. Beckles**. 2012. Characterisation and alkaline catalysed transesterification of waste cooking oil collected from various types of restaurants. *Energy for Sustainable Development*, 16: 515-519.

**Bent, G-A.**; Maragh, P.; Dasgupta, T. Acrylamide in Caribbean foods – Residual levels and their relation to asparagine and reducing sugar content *Food Chem.* 2012, 133, 451 – 457.

**Hosein, A. I.**; Le Goff, X. F.; Ricard, L.; Caffyn, A. J. M. , *Reaction of Perfluoroalkyl Grignard Reagents with Phosphorus Trihalides: A New Route to Perfluoroalkyl-phosphonous and -phosphonic Acids*, *Inorg. Chem.*, 2011, 50, 1480 -1483.

**Jalsa, Nigel Kevin** (2012), *Evaluation of the utility of lanthanide salts as catalysts for the per-O-acetylation of monosaccharides*, *Catalysis Communications*, 18, 32-36.

Chanu, O.B.; **Kumar, A.**; Lemtur, A.; Lal, R. A. (2012) Synthesis and characterization of homotrimetallic copper complexes derived from bis(2-hydroxy-1-naphthaldehyde) oxaloyldihydrazone. *Spectrochimica Acta Part A*, 96, 854-861 [Elsevier]

Chanu, O.B.; **Kumar, A.**; Ahmed, A.; Lal, R. A. (2012) Synthesis and characterisation of heterometallic trinuclear copper(II) and zinc(II) complexes derived from bis(2-hydroxy-1-naphthaldehyde)oxaloyldihydrazone. *Journal of Molecular Structure* 1007 (2012) 257-274 [Elsevier]

**Kumar, Arvind**; Borthakur, Rosmita; Koch, Angira; Chanu, Oinam B.; Choudhury, Sanjesh; Lemtur, Aka; Lal, Ram A. (2011) Synthesis and characterization of heterobimetallic molybdenum and nickel complexes derived from polyfunctional disalicylaldehyde oxaloyldihydrazone. *Journal of Molecular Structure*, 999(1-3), 89-97 [Elsevier].

**Kumar, A.**; Lal, R. A.; Chanu, O. B.; Borthakur, R.; Koch, A.; Lemtur, A.; Adhikari, S.; Choudhury, S. (2011) Synthesis and characterization of a binuclear copper(II) complex [Cu(H<sub>2</sub>slox)]<sub>2</sub> from polyfunctional disalicylaldehyde oxaloyldihydrazone and its heterobinuclear copper(II) and molybdenum(VI) complexes. *Journal of Coordination Chemistry*, 64(10), 1729-1742 [Taylor & Francis].

Lal, R. A.; Chanu, O. B.; Borthakur, R.; Asthana, M.; **Kumar, A.**; De, A. K. (2011) Synthesis and characterization of molybdenum(V,VI) complexes derived from bis(2-hydroxy-1-naphthaldehyde) malonyldihydrazone. *Journal of Coordination Chemistry*, 64, 1393-1410 [Taylor & Francis].

Lal, R. A.; Basumatary, D.; Chanu, O. B.; Lemtur, A.; Asthana, M.; **Kumar, A.**; De, A. K. (2011) Synthesis, characterization, reactivity, and electrochemical studies of manganese(IV) complexes of bis(2-hydroxy-1-naphthaldehyde) adipoyldihydrazone. *Journal of Coordination Chemistry*, 64(2), 300-313 [Taylor & Francis].

Peter N. Nelson, Henry A. Ellis, **Richard A. Taylor**; Odd-even alternation in a homologous series of Zinc(II) *n*-alkanoates; *Journal of Molecular Structure* 968, 1-3), 2011, 10-15.

**Richard A. Taylor**, Henry A. Ellis; Odd-even thermotropic mesomorphic and melting behaviour of a homologous series of Zinc(II) *n*-alkanoates; *Molecular Crystals and Liquid Crystals* 548, 2011, 37-54.

Frank, J.H.; Powder-George, Y.L.; **Ramsewak, R.S.**; Reynolds, W.F. Variable-Temperature <sup>1</sup>H-NMR Studies on Two C-Glycosylflavones. *Molecules*, 2012, 17, 7914-7926.

Fowles, R.; Mootoo, B.S.; **Ramsewak, R.S.**; Khan, A. Toxicity-structure activity evaluation of limonoids from *Swietenia* species on *Artemia salina*. *Pharmaceutical Biology*, 2012, 50, 264 – 267.

Powder-George, Y.; Frank, J.; **Ramsewak, R.S.**; Reynolds, W.F. The Use of Coupled HSQC Spectra to Aid in Stereochemical Assignments of Molecules with Severe Proton Spectral Overlap. *Phytochem. Anal.* 2012, 23, 274-277.

Fowles, R.; Mootoo, B.S.; **Ramsewak, R.S.**; Reynolds, W.F.; Nair, M. Limonoids from Meliaceae with Lipid Peroxidation Inhibitory Activity. *Natural Product Communications*, 2011, 6(6), 785-787.

Kotanen CN, Wilson AN, Wilson AM, Ishihara K, Guiseppi-Elie A: Biomimetic hydrogels gate transport of calcium ions across cell culture inserts. *Biomed Microdevices*; 2012 Jun; 14(3):549-58

#### Department of Life Sciences

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M.G. Rutherford (2012) Feeding Behaviour of a Captive Giant Centipede (*Scolopendra gigantea*) in Trinidad, West Indies. *Living World - Journal of the Trinidad & Tobago Field Naturalists' Club*, 2012 p79.

S.P. Charles, P. Corcoran, J. Lukaszewicz and M.G. Rutherford (2012). First Records for Four Reptile Species from Gasparillo Island off North-Western Trinidad, Trinidad & Tobago. *Living World - Journal of the Trinidad & Tobago Field Naturalists' Club*, 2012 p81.

M.G. Rutherford and M.N.S. Charran (2012). New Locality Records for the Holothurians *Parathyone suspecta* and *Holothuria cubana* in Trinidad, West Indies. *Living World - Journal of the Trinidad & Tobago Field Naturalists' Club*, 2012 p82.

R.S. Mohammed and M.G. Rutherford (2012). New Records of Two Freshwater Gastropod Molluscs for Trinidad, West Indies. *Living World - Journal of the Trinidad & Tobago Field Naturalists' Club*, 2012 p85.

Hailey, A. (Ed.) (2011-12). The Online Guide to the Animals of Trinidad & Tobago. pp 311. St. Augustine: The University of the West Indies.

#### Department of Computing and Information Technology

Crichlow, J., Hartley, S. and **Hosein, M.**, (2012). A High-Availability Distributed System for Countable Objects like Disaster Relief, *The Computing Science & Technology International Journal*, Vol. 2, No. 2, June 2012, pp. 29-32.

Kaloo, V., and **Mohan, P.**, (2012). MobileMath: An Innovative Solution to the Problem of Poor Mathematics Performance in the Caribbean. *Caribbean Scholar Journal*, Vol.2, No.1, April 2012, pp.5-18.

Kaloo, V., and **Mohan, P.** (2012). Correlating Questionnaire Data with Actual Usage Data in a Mobile Learning Study for High School Mathematics. *Electronic Journal of e-Learning*, Vol.10, No.1, March 2012, pp.76-89.

Khan K., **Sahai S.** (2012). Swarm-Optimization-Based Affective Product Design Illustrated by a Mobile Phone Case-Study. *International Journal of Intelligent Systems and Applications*, Vol. 4, No. 5, May 2012, pp. 23 - 29.

Khan K., **Sahai S.** (2012). A comparison of BA, GA, PSO, BP and LM for training feed forward neural networks in eLearning context. *International Journal of Intelligent Systems and Applications*, Vol. 4, No. 7, June 2012, pp.23 - 29.

**Kieu, T.D.**, C.C. Chang. (2011) Reversible Watermarking Schemes Based on Expansion Embedding Using Pixel Partition Strategies - *Imaging Science Journal*. Vol. 60, No.2, Feb.2012, pp. 112 - 124.

**Sultan, S.** and **P. Mohan.** (2012). Transforming Usage Data into a Sustainable Mobile Health Solution. *The International Journal on Networked Business, Electronic Markets*. DOI10.1007/s12525-012-0090-6

#### Department of Mathematics and Statistics

**Bhatt B. S.**, D.R. Owen, R.P. Jaju (2011) On the effect of switching, predation and harvesting on system consisting of one predator and two prey species which live in different habitats. *Journal of Mathematics Research*. Vol. 3, No.3, pp12-21.

Arunaye, F.I., **B.S. Bhatt**, P. Nagarani (2011) On the solution of the convective diffusion equation. *International Journal of Pure and Applied Mathematics* Vol.68, No.1, pp 37-53.

- Sooknanan, J., B. Bhatt, D.M.G. Comissiong** [2012] Life and death in gang- a Mathematical model of gang membership. *Journal of Mathematics Research*. Vol 4, No.4, pp10-26.
- Jogie, D., B. Bhatt** [2012] Flow of immiscible fluids in a naturally permeable channel. *International Journal of Pure and Applied Mathematics* Vol.78, No.3, pp 435-449.
- Sooknanan J., B. Bhatt, D.M.G. Comissiong** [2012] Crininal treated as predators to be harvested: a two prey one predator model with group defense, prey migration and switching. *Journal of Mathematics Research*.Vol.4, No.4 pp 92-106.
- Gunakala, S. R., B.Bhatt, S. Srikanth, D.V. Krishna,** [2012] Finite element analysis on magnetohydrodynamics flow of immiscible fluids through a channel with porous beds. *International Electronic Journal of Pure and Applied Mathematics*, Vol.4, No.4, pp. 211-229.
- Singh R., **V. Tripathi**, M. Kalaivani, K.Singh, S.N. Dwivedi [2012] Determinants of Birth Intervals in Tamil Nadu in India: Developing Cox Hazard Models with Validations and Predictions. *Revista Colombiana de Estadistica* Vol.35, No.2, pp. 289-307.
- Salthan S., **V. Tripathi**, R. Singh, H.S.Gaikwad [2012]. Evaluation of Hematological Parameters in Partial exchange and Packed Cell Transfusion in Treatment of Severe Anemia in Pregnancy. *Anemia*. 7 pages , PMID: 22693662
- Singh R., **V. Tripathi** , K. Singh, R.K. Ahuja, M. Kalaivani , S.N. Dwivedi [2012] Breastfeeding as a Time Varying – Time- Dependent Factor for Birth Spacing: Multivariate Models with Validations and Predictions. *World Health and Population*, Vol.13,No.3, pp. 28-52. PMID: 22555118.
- Khan, K., **A. Sahai** [2011] A Levy-flight Neuro-biosonar Algorithm for Improving the Design of eCommerce Systems. *Journal of Artificial Intelligence*. 4(4)
- Polishetty,K., A. Raghunadh, **A. Sahai** [2012] Statistical overview of decay of glorious past of popular handloom weavers in Andhra Pradesh, India. Category: Business Administration, Management and Economics Sub-Category Financial Management. *Elixir*.
- Skrepne, G. H., E. L. Olvey, A. **Sahai** [2012] Econometric approaches in evaluating costs and outcomes within pharmaco-economic analyses. *Pharmaceuticals Policy and Law*[ISSN: 1389-2827]; 14(1).
- Khan, K., **A. Sahai** [2012] Swarm-Optimization-Based Affective Product Design Illustrated by a Mobile Phone Case-Study. *International Journal of Intelligent Systems and Applications (IJISA)*; 4(5)
- Maharaj S., S. Pandey, A. Ramdial., F. Jobe, I. Pamela Mohammed, C. Flores, G. Mathologodi, **R. M. Antoine, I. Dialsingh, A. Sahai** [2012] Pharmacists' expectations of the green economy evolution and its impact on their trade in a developing country. *International Journal Of Pharmacy&Technology* 4(2)
- Khan, K., **A. Sahai** [2012] A glowworm optimization method for the design of web services. *International Journal of Intelligent Systems and Applications* ISSN: 2074-9058, 29.
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- Khan K., **A. Sahai** [2012] Spiral dynamics optimization-based algorithm for human health improvement. *Journal of Computer Science and Telecommunications* 2044.
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### Department of Physics

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### Journal Abstracts

#### Department of Life Sciences

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Farrell AD and Gilliland TJ. 2011. Yield and quality of forage maize grown under marginal climatic conditions in Northern Ireland. *Grass and Forage Science* 62, 214-223. (Impact Factor 1.108)

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- Murphy, J.C., Henderson, R.W. and Rutherford, M.G. (2010). *Amphisbaena fuliginosa* (Reptilia:Squamata: Amphisbaeniidae) in the Lesser Antilles. *IRCF Reptiles & Amphibians* 17(3): 55-57.
- Mohammed, A., Peterman, P., Echols, K., Feltz, K., Tegerdine, G., Manoo, A., Maraj, D., Agard, J., Orazio, C., 2012. Polychlorinated biphenyls (PCBs) and organochlorine pesticides (OCPs) in harbor sediments from Sea Lots, Port-of-Spain, Trinidad & Tobago. *Marine Pollution Bulletin*, 62: 1324–1332. (Impact Factor 2.359)
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Department of Computing and Information Technology  
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### Department of Computing and Information Technology

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## Reviews

### Department of Mathematics and Statistics

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## Conference Presentations

### Department of Chemistry

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S. Latchman, R. Ramsewak and W. F. Reynolds. The 2012 MONA Symposium, University of the West Indies, Mona Jamaica, Jan 03 – Jan 06, 2012, *Phytochemical Investigation of the Leaves and Stems of Pimenta racemosa*.

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### Department of Life Sciences

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### Department of Mathematics and Statistics

J. Sooknanan and D. Comissiong

*Fighting Crime in Trinidad & Tobago with Limited Resources - via Mathematical Modelling*

11<sup>th</sup> TWAS-ROLAC Young Scientist Conference, Rio de Janeiro, Brazil, May 7-9, 2012 (invited presentation)

T. Dass, A. Sankar, D. Comissiong and S. Gunakala  
*Benard-Marangoni Instabilities in a Viscoelastic Fluid with Internal Heat Generation*  
10<sup>th</sup> TWAS-ROLAC Young Scientist Conference, Grafton Beach Resort, Tobago, December 7-9, 2011 (poster presentation)

### Conference Papers/Proceedings

#### Department of Computing and Information Technology

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## Other Publications

Department of Computing and Information Technology

### PATENTS

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### Department of Physics

**Calbio, S. S.** (2012) Using Near Infrared Photometry to Pre-select High Priority Candidates from Exoplanet Transit Search Surveys, MPhil Thesis, The University of the West Indies.

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# FACULTY OF SOCIAL SCIENCES

## Journal Publications

### Department of Behavioural Sciences

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## Books & Book Chapters

### Department of Behavioural Sciences

#### Books

**Chadee, D., A. Kost.** (2012) *Social Psychological Dynamics*. Kingston, Jamaica: University of the West Indies Press. ISBN-10: 976-640-195-0.

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#### Chapters in Books

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**Sogren, M.** (2011) Insights to the Caribbean Family: Legacy, Traditions and Culture. In *Extended Families in Africa and the African Diaspora*. Eds. Osei-Mensah Aborampah, Niara Sudarkasa. Africa World Press. ISBN-13: 978-1592218110.

## Conference Presentations

### Department of Behavioural Sciences

M. J. Arneaud and **N. Alea**  
*Who I Am and How I Relate to You: Identity Development and Social Well Being in Trinidadians* (Poster)  
Caribbean Regional Conference of Psychology  
Nassau, Bahamas, November 2011

P. Maharaj, **C. Descartes**, and J. Ramcharan  
*Framing Child Sexual Abuse as a Public Health Issue in Trinidad & Tobago*  
25th Annual Children’s Mental Health and Policy Conference  
Florida, USA, March 2012

P. Maharaj, **C. Descartes**, and J. Ramcharan  
The Co-occurrence of Child Abuse and Neglect in Trinidad  
25th Annual Children’s Mental Health and Policy Conference  
Florida, USA,  
March 2012

H. Ghany

*Fifty Years of Bicameralism in Trinidad & Tobago* Tenth Workshop of Parliamentary Scholars and Parliamentarians, Oxfordshire, U.K., July 2012

L. Hadeed

*Childhood Experiences of Abused Women in Trinidad & Tobago*  
2<sup>nd</sup> Joint World Conference on Social Work and Social Development: Action and Impact in Stockholm  
Stockholm, Sweden,  
July 2012

L. Hadeed

*Palliative Care and Terminal Illness: Issues of Grief and Loss*  
2<sup>nd</sup> Annual Palliative Care Conference  
Arkansas, USA,  
June 2012

**K.R.R., Lascelles** and R. Perreira, S. Job

*Appearance and breast cancer in Trinidad: An investigation of implicit attitudes in women using the Implicit Association Test*  
Dying to be Beautiful Symposium  
Montego Bay, Jamaica,  
January 2012

K.R.R. Lascelles

*Counter-Conditioning of Acquired Food Dislikes Using Body Shapes in Trinidad*  
Caribbean Regional Conference of Psychology  
November, 2011

**K.R.R. Lascelles**

*Media Influence, Appearance Satisfaction and Skin Bleaching Behaviour in Trinidad*  
Caribbean Regional Conference of Psychology  
Nassau, Bahamas,  
November, 2011

H., Bailey, **K.R.R. Lascelles**, and L. Chuang

*Preference Construction: Understanding the Cognitive Processes that Underpin EQ-5D Valuations*  
28<sup>th</sup> Plenary Meeting of the EuroQol Research Foundation  
Oxford, UK,  
September, 2011

**C. M. Roach** and G. Davis-Cooper

*Transient Employees or Caribbean Citizens: Evaluating Dual Citizenship and Its Intellectual Capacity and Socioeconomic Implications*  
Caribbean Studies Association 37<sup>th</sup> Annual Conference.  
Unpacking Caribbean Citizenship: Rights, Participation and Belonging  
Le Gosier, Guadeloupe,  
May 2012

**C. M. Roach** and G. Davis-Cooper

*Big Questions: Public Service Performance Management System after Fifty Years*  
UCCI/UWI/ICCI Caribbean Conference: 50-50 Surveying the Past, Mapping the Future  
Cayman Islands,  
March 2012

**R. Seepersad**

*Gangs and Violence in Trinidad & Tobago*  
International Conference on Gangs, Violence and Governance  
St. Augustine, Trinidad,  
November 2011

N. Alea

*"Bring Back De Ole Time Days" Autobiographical Memory across Adulthood.*  
Psychology Seminar Series  
St. Augustine, Trinidad,  
February 2012

**I. Cambridge**

*Promoting Doable Development in the 21<sup>st</sup> Century*  
2<sup>nd</sup> UNESCO Management of Social Transformation (MOST)  
Regional Forum of Ministers of Social and Sustainable Development  
Port of Spain, Trinidad,  
May 2012

**I. Cambridge**

*Social Development/Social Policy in post-independent Trinidad & Tobago*  
UCCI/UWI/ICCI Caribbean Conference – 50/50 Surveying the Past, Mapping the Future  
Cayman Islands,  
March 2012

### **I. Cambridge**

*Social Policy in Small Island developing states- The case of Trinidad & Tobago*

2<sup>nd</sup> International Conference on Governance for Sustainability Development in Small Island Developing States  
Curacao,  
March 2011

Esnard, T., R. Seepersad, D. Williams, (2012) *Nature nurture evaluation report energy alliance* (BGTT, BPTT and Atlantic LNG).

Seepersad, R., A. Barnes, M. Shields. (2011) *Capacity assesment of forensic laboratories in CARICOM member states* CARICOM IMPACS.

### **E. J. Johnson**

*Empowerment of Women through Self Help Groups in India: Breaking the cycle of Poverty*

International Conference on Poverty Alleviation  
St. Augustine, Trinidad,  
October 2011

K.R.R. Lascelles

*I Don't Like it Because the Obese Girl Eats it: Evaluative Learning Effects with Food and Body Shapes*

Psychology Seminar Series  
St. Augustine, Trinidad,  
February 2012

C. M. Roach

Perspectives of New Faculty Roles in the Academy:  
Strategies for Success  
Arizona State University Graduate College Preparing Future Faculty Programme, A Seminar about New Faculty  
Arizona, USA,  
November 2011

## **Monographs**

### **Department of Behavioural Sciences**

**Seepersad, R.** (2012) Citizen Security Programme Expansion Report Citizen Security Programme. Ministry of National Security, Trinidad & Tobago.

**Seepersad, R.** and D. Williams. (2011) Citizen Insecurity in Trinidad & Tobago. In *UNDP Human Development Report on Citizen Security in the Caribbean*.

## **Technical Reports**

**Cambridge, I.** (2012) Report of the Proceedings of the Think Tank Conference on *"Disability, integration and Development – The way forward: Unleashing Full potential through Full Participation"*. The University of the West Indies, Open Campus, St. Augustine, Trinidad & Tobago.

# CENTRES & UNITS

## ANSA McAl Psychological Research Centre

### Books & Book Chapters

Kosti, A., **D. Chadee**, J. Nedeljkovi. (2011) Subjective evaluation of emotional experience in two cultures: Serbia and Trinidad. In D. Chadee & A. Kostic (Eds.), *Social Psychological Dynamics* (pp. 35-52). Kingston, Jamaica: The University of the West Indies Press.

### Conference Papers/Proceedings

J. Philip and R. Yearwood  
XIX International AIDS Conference  
Washington, DC, USA, July 2012

## Centre for Health Economics (HEU)

### Journal Publications

**Theodore, K.; E. Scott; A. La Foucade; K. A. Gittens-Baynes** and Tishana Simon. 2011. Poverty, Employment and HIV/AIDS in Trinidad & Tobago. *Journal of Business and Social Science*. Vol. 2, No. 15.

**Edwards-Wescott P. and Theodore, K.** An Assessment of Primary Health Care in the Caribbean Pre and Post Alma Ata Declaration and A way Forward. *Journal of Humanities and Social Science* Vol. 1 No: 8 [2011] Pgs. 1-10.

**Edwards-Wescott P; Gittens-Baynes K and Metivier C.** An Examination of the Interaction between Poverty and Health Status in the Elderly Population of Jamaica. *International Journal of Humanities and Social Sciences* Vol. 1 No: 11 [2011] Pgs. 241-253. ISSN 2220-8488

### Books & Book Chapters

**Theodore, K. A. La Foucade;** K. A. Gittens-Baynes; P. Edwards-Wescott; R. Mc Lean and C. Laptiste,. Situation Analysis of Children and Women in Trinidad & Tobago. Christ Church, Barbados: UNICEF. [2012]. ISBN: 978-976-95258-7-0

**Theodore, K.** Reddy, M. and Siphambe, H. Developmental Changes of HIV/AIDS in Small States: Experiences from the Pacific, Southern Africa and the Caribbean, Commonwealth Secretariat, London –ISBN 978-1-84859-111-0 - September 2011,

### Conference Presentations

**Theodore, K.** Conference on Revenue Management, Hyatt Regency, Port-of-Spain Trinidad & Tobago, June 2012, *Revenue Management and Economic Transformation*

**Theodore, K.** Second UNESCO MOST Forum of Ministers of Social and Sustainable Development of the Caribbean–Promoting Equity and Social Inclusion: Pathways of Prosperity for All Hyatt Regency Hotel, Port-of-Spain, Trinidad & Tobago May 22, 2012, *Protecting the Most Venerable Children in Society: Moving from Research to Action a Socio-Economic Approach.*

**Theodore, K.** Second UNESCO MOST Forum of Ministers of Social and Sustainable Development of the Caribbean–Promoting Equity and Social Inclusion: Pathways of Prosperity for All Hyatt Regency Hotel, Port-of-Spain, Trinidad & Tobago May 21 2012, *Redefining the Blueprint of Social Policy in the Caribbean – The Role of Values in Development.*

**Theodore, K.** *The Required Financing Model for a Sustainable Caribbean Response to HIV.* HIV/AIDS Caribbean Conference, Bahamas, November, 2011,

**Theodore, K.** Bhajan R; Ali H; Gittens-Baynes K,, Beharry V.  
*Evaluating and Promoting a Child Friendly School (CFS) Model in Trinidad & Tobago: Where we are and the way forward?* Caribbean Child Research Conference (SALISES) UWI Kingston, Jamaica, October, 2011.

**Theodore, K.** Skerritt D; Gittens-Baynes K; Metivier C; Beharry V.  
*An Examination of Violence Against Children in Trinidad & Tobago*  
Caribbean Child Research Conference (SALISES) UWI, Kingston Jamaica, October, 2011,

**Theodore, K.** COTE Conference Department of Economic, Learning Resource Centre UWI, St. Augustine, October, 2011, *Climate Change And Health - "An Analysis of The Impact of Climate Variables on Selected Diseases In Trinidad & Tobago, With Economic Implications"*

**Laptiste C.** A. La Foucade; C. McKenzie; L. Ramnath; T. Simon; V. Beharry and P. Edwards-Wescott. Caribbean Child Research Conference, Jamaica, October, 2011. *The Impact of Hypertension and Diabetes in Female Caregivers on the Well-Being of Children in Western Tobago.*

**Lalta S.** and C. Metivier. 6<sup>th</sup> Caribbean Conference on National Health Financing Initiatives, Bermuda, November 22-24, 2011, *Stakeholder Mapping and Design of a National Health Insurance Plan*.

**A. La Foucade**, D. Bethelmie, Kimberly-Ann Gittens-Baynes, A. Martin, R. McLean and C. Metivier, Caribbean Child Research Conference 2011, Mona, Jamaica, October 19-20, 2011, *An Examination of Formal Care Institutions in Trinidad & Tobago*.

E. Scott, K. Theodore, A. La Foucade, Kimberly-Ann Gittens-Baynes, T. Simon., Caribbean HIV/AIDS Conference, Bahamas November, 2011, *Unemployment, Poverty and HIV/AIDS in Trinidad & Tobago*. 2011.

**Metivier C. and Lalta. S.** 6<sup>th</sup> Caribbean Conference on National Health Financing Initiatives, Bermuda, November 22-24, 2011. *Stakeholder Mapping and Design of a National Health Insurance Plan*

**McLean R.** McDonald, D. ; Babb D. ; A. Els and Ian Marryshow. 4th Caribbean Conference on HIV, Bahamas November, 2011. *An Assessment of Efforts at Integrating HIV Services into Primary Healthcare (PHC) in the Caribbean – The Case of Aruba, Barbados, Grenada and Trinidad & Tobago*. Poster presentation.

**McLean R.** 4th Caribbean Conference on HIV, Bahamas, November, 2011, *The Role of the Caribbean Conference on HIV/AIDS in the Regional Health and HIV/AIDS Planning Framework*.

**Edwards-Wescott P.** Caribbean Child Research Conference SALISES, Mona Jamaica, October, 2011. *The Impact of Hypertension and Diabetes in Female Caregivers on the Well-Being of Children in Western Tobago*.

**Edwards-Wescott P.** Conference on the Economy, Department of Economics, UWI, St. Augustine, October, 2011. *An Analysis of the Education, Health and Social Support Services available to Children with Disabilities in Tobago*.

### Conference Presentations

**Mideros, Diego and Carter B.A.** International Association of Applied Linguistics AILA 2011 16<sup>th</sup> World Congress of Applied Linguistics, August 23-28, 2011, Beijing, People's Republic of China *Autonomy as a glocal phenomenon: a listening case study*.

**Carter, Beverly-Anne** Accreditation Council of Trinidad & Tobago (ACTT) 1st National Conference on Quality Assurance in Higher Education, November 17-18, 2011, Port of Spain, Trinidad & Tobago. *Quality assurance in a language learning centre: challenges and opportunities*

**Bukari, J. K.; Landa Buil M. and Carter B.A.,** Accreditation Council of Trinidad & Tobago (ACTT) 1st National Conference on Quality Assurance in Higher Education, November 17-18, 2011, Port of Spain, Trinidad & Tobago. *Technology-mediated language learning in one Caribbean higher education context*.

**Carter, Beverly-Anne and Ibrahim-Ali A.** 2nd International Tourism Conference. Tourism, Culture & the Creative Industries. Exploring the Linkages, January 19-21, 2012, St. Augustine, Trinidad & Tobago. *Tales from the EFL classroom: educational tourism at The UWI St. Augustine Campus*

**Carter, Beverly-Anne and Williams, S.** Language Policy and Language Teaching: Multilingualism in Society, the World of Work, and Politics. New Challenges for Teaching at Institutes of Higher Education/Universities, April 18-20, 2012, University of Freiburg im Breisgau, Freiburg, Germany  
Multiple realities in a multilingual Caribbean: 21st century discourses on language and culture

**Carter, Beverly-Anne,** Language Futures: Languages in Higher Education, 6<sup>th</sup> Biennial Conference of the Subject Centre for Languages, Linguistics and Area Studies; The University Council of Modern Languages and the Association of University Language Centres, July 5-6, 2012, University of Edinburgh, Edinburgh, Scotland. *Challenging the stereotypes: making a case for non-specialist language learning in Caribbean HE*.

**Landa-Buil, M.; Bukari J. K., and Carter, Beverly-Anne,** Accreditation Council of Trinidad & Tobago (ACTT) 1st National Conference on Quality Assurance in Higher Education, November 17-18, 2011, Port of Spain, Trinidad & Tobago. *Technology-mediated Foreign Language Learning in one Caribbean Higher Education Context*.

**Bukari J. K** ,Reassembling the Fragments Conference in Honour of Professors Bridget Brereton, Barbara Lalla, and Ian Robertson, UWI-St Augustine, August 25-27, 2011. p. 10-12 . *Reassembling the Fragments: A Study of Modern West African Pidgins and Creoles and their Caribbean Antecedents*.

**Landa-Buil, M. Bukari J. K and Carter, Beverly-Anne,** Accreditation Council of Trinidad & Tobago (ACTT) 1st National Conference on Quality Assurance in Higher Education, November 17-18, 2011, Port of Spain, Trinidad & Tobago. *Technology-mediated Foreign Language Learning in one Caribbean Higher Education Context.*

**Ibrahim-Ali A and Carter, Beverly-Anne** 2nd International Tourism Conference. Tourism, Culture & the Creative Industries. Exploring the Linkages, January 19-21, 2012, St. Augustine, Trinidad & Tobago. *Tales from the EFL classroom: educational tourism at The UWI St. Augustine Campus*

## Cocoa Research Centre (CRC)

### Journal Publications

Allegre, M., Argout, X., **Boccara, M.**, Fouet, O., Roguet, Y., Be´rard, A., Thevenin, J.M., Chauveau, A., Rivalla, R., Clement, D., Courtois, B., Gramacho, K., Boland-Auge, A., Tahı, M., **Umaharan, P.**, Brunel, D., and Lanaud, C. (2012). Discovery and mapping of a new expressed sequence tag-single nucleotide polymorphism and simple sequence repeat panel for large-scale genetic studies and breeding of *Theobroma cacao* L. DNA Research 19(1): 23-35. First published online December 30, 2011 doi:10.1093/dnares/dsr039.

Avila-Rostant, O., Lennon, A.M., **Umaharan, P.** (2011). Spathe Color Variation in *Anthurium andraeanum* Hort. and its Relationship to Vacuolar pH. 45 (12): 1768-1772.

Avila-Rostant, O., Lennon, A.M., Collette, V., **Umaharan, P.** (2011). Determination of expression patterns of flavonoid biosynthetic genes in cultivars of *Anthurium andreanum* towards understanding regulatory control of spathe colour. Trop. Agric. (Trinidad) 88 (1): 10-17.

Elibox, W and **Umaharan, P.** (2012). A study of morpho-physiological descriptors of cultivated *Anthurium andraeanum* Hort HortScience September 2012 47:1234-1240.

Farrell, A.D., Evelyn, S., Lennon, A.M., **Umaharan, P.** (2012). Genotypic variation in senescence and water relations in cut flowers of *Anthurium andraeanum*. HortScience September 2012 47:1333-1337.

Hosein, F., Lennon, A.M. and **Umaharan, P.** (2012). Optimisation of an Agrobacterium-mediated transient assay for gene expression studies in *Anthurium andraeanum*. *J. Amer. Soc. Hort. Sci.* July 2012 137:263-272.

Kun, J., Zhang, D., **Motilal, L.A.**, Boccara, M., Lachenaud, P., Meinhardt, L.W. 2011. Genetic diversity and parentage in farmer varieties of cocoa (*Theobroma cacao* L.) from Honduras and Nicaragua as revealed by single nucleotide polymorphism (SNP) markers. *Genetic Resources and Crop Evolution* doi 10.1007/s10722-012-9847-1.

Lett, J.M., Péréfarres, F., Hoareau, M., Lefeuvre, P., De Bruyn, A., Dottin, M., Prior, P., Wicker, E., **Umaharan, P.** (2011). Tomatoes showing yellow leaf curl symptoms in Grenada Island exhibit an infection with Tomato yellow leaf curl virus either alone or in combination with Potato yellow mosaic virus. *New Disease Reports* 24, 19. [http://dx.doi.org/10.5197/j.2044-0588.2011.024.019.

Loor Solorzano RG, Fouet O, Lemainque A, Pavek S, **Boccara M**, et al. (2012). Insight into the Wild Origin, Migration and Domestication History of the Fine Flavour Nacional-*Theobroma cacao* L. Variety from Ecuador. PLoS ONE 7(11): e48438. doi:10.1371/journal.pone.0048438

Maharaj, K., Maharaj, P., **Bekele, F.L.**, Ramnath, D., Bidaisee, G.G., Bekele, I., Persad, C., Jennings, K., and Sankar, R. (2011) Trinidad selected hybrids: An investigation of the Phenotypic and agro-economic traits of 20 selected cacao cultivars. *Tropical Agriculture* (Trinidad) Volume 88 (4): 175-185.

Moses, M. and **Umaharan, P.** (2012). Genetic Structure and Phylogenetic Relationships of *Capsicum chinense* in the Neotropics. *J. Amer. Soc. Hort. Sci.* July 2012 137:250-262.

**Motilal, L.**, Zhang, D., **Umaharan, P.**, Mischke, S., Pinney, S. and Meinhardt, L. (2011). Microsatellite Fingerprinting in The International Cocoa Genebank, Trinidad: Accession and Plot Homogeneity Information for Germplasm Management. *Plant Genetic Resources.* 9:430-438.

**Motilal, L.**, Zhang, D., **Umaharan, P.**, Mischke, S., Pinney, S. and Meinhardt, L. (2011). Microsatellite Fingerprinting in The International Cocoa Genebank, Trinidad: Accession and Plot Homogeneity Information for Germplasm Management. *Plant Genetic Resources.* 9:430-438.

**Motilal, L.A., Sreenivasan, T.N.** 2012. Revisiting 1727: Crop failure leads to birth of Trinitario cacao. *Journal of Crop Improvement*. DOI: 10.1080/15427528.2012.663734

Muñiz, Y., Granier, M., Caruth, C., **Umaharan, P.**, Marchal, C., Pavis, C., Wicker, E., Martínez, Y. and Peterschmitt, M (2011). Extensive Settlement of the Invasive Biotype B of *Bemisia tabaci* (Hemiptera: Aleyrodidae) in the Caribbean and Rare Detection of Indigenous Populations. *Environmental Entomology* 40(5):989-998.

Ramsubhag, A., Lawrence, D., Cassie, D., Fraser, R., **Umaharan, P.**, Prior, P and Wicker, E. (2012). Wide genetic diversity of *Ralstonia solanacearum* strains affecting tomato in Trinidad, West Indies, *Plant pathology*, 61 (5) : 844-857. doi: 10.1111/j.1365-3059.2011.02572.x

Susilo, A.W., Zhang, D., Motilal, L.A., Mischke, S., and Meinhardt, L.W. 2011. Assessing genetic diversity in Java fine-flavour cocoa (*Theobroma cacao* L.) germplasm by using simple sequence repeat (SSR) markers. *Trop. Agr. Develop.* 55(2): 84-92.

Yang, J.Y., **Motilal, L.A.**, Dempewolf, H., Maharaj, K. and Cronk, Q.C.B. 2011. Chloroplast microsatellite primers for cacao (*Theobroma cacao* L.) and other Malvaceae. *AJB Primer Notes & Protocols* e372-e374. doi.10.3732/ajb.1100306.

Zhang, D., Gardini, E.A., Motilal, L.A., Baligar, V., Bailey B., Zuñiga-Cernades, L., Arevalo-Arevalo, C.E. and Meinhardt, L. 2011. Dissecting genetic structure in farmer selections of *Theobroma cacao* in the Peruvian Amazon: Implications for on farm conservation and rehabilitation. *Tropical Plant Biology* 4: 106-116.

### Books & Book Chapters

Zhang, D., Figueira, A., Motilal, L., Lachenaud, P., Meinhardt, L.W. 2011. *Theobroma*. In: *Wild Crop Relatives: Genomics and Breeding Resources* (C. Kole, ed), Springer-Verlag, Berlin. Chapter 13, doi 10.1007/978-3-642-21201-7\_13

### Conference Presentations

**Ali, N.A.**, G.S.H. Baccus-Taylor and **P. Umaharan**. TWAS-ROLAC 11th (TWAS Regional Office for Latin America and the Caribbean) Young Scientists Conference, Brazilian Academy of Sciences, Rio de Janeiro, Brazil, May 7-9, 2012. Poster entitled "A preliminary investigation of the variation of size and method of small scale cacao (*Theobroma cacao* L.) bean fermentation and its effect on quality"

**Ali N.A.**, G.S.H. Baccus-Taylor, **D.A. Sukha** and **D.R. Butler**. TWAS-ROLAC 10th (TWAS Regional Office for Latin America and the Caribbean) Young Scientists Conference, Grafton Beach Resort, Tobago, December 7-9, 2011. Poster entitled "The effect of microorganisms and fermentation time on cacao (*Theobroma cacao* L.) flavour".

**Fourny, G** and Reyne, M (2012). Small-scale fermentation for limited pod material. The 17th International Cocoa Research Conference COPAL, Yaoundé, Cameroon, 15-20 October 2012.

### Conference Papers/Proceedings

Ji, K., Zhang, D., Pinney, S., Mischke, S., **Motilal, L.**, Meinhardt, L.W. 2011. Using single nucleotide polymorphism (SNP) markers to examine population structure in farmer varieties of cacao from Honduras and Nicaragua. Poster presentation at the Mid-Atlantic Plant Molecular Biology Society 28th Annual Meeting, 15-16th August 2011, National Wildlife Visitor Center, Patuxent Research Refuge, Beltsville, Maryland

Loor Solorzano RG, Fouet O, Lemainque A, Pavek S, **Boccaro M**, et al. (2012). Origin and domestication of the Nacional cacao variety from Ecuador and collecting expedition of new related genetic resources. *Plant and Animal Genome Conference XX*. San Diego, California.

Ramtahal, G., Chang Yen, I., Ahmad, N., Bekele, I., **Bekele, F.L.** and Harrynanan, L. [2012]. Evaluation of commonly used single extraction methods for the prediction of bio-availability of cadmium in soil to cacao (*Theobroma cacao* L.) Presented at the 17th International Cocoa Research Conference, Cameroun, October 2012.

**Sukha D.A.** [2012]. El concepto de calidad en la cadena productiva de cacao. In Proceedings of: Calidad de Cacao en Centroamérica: Un vistazo a la situación en 2009. Serie técnicas/CATIE; No. 17. Turrialba, Costa Rica: CATIE 2012. 88p ISBN 978-9977-57-554-4.

**Sukha, D.A.; Bharath, S.M.; Ali N.A.** and **Umaharan, P.** [2011]. Some Quality Attributes of the Imperial College Selections. Presentation at "10th Regional Conference of Young Scientists of TWAS-ROLAC" Grafton Beach Resort, Tobago. December 7-9, 2011.

**Sukha, D.A.** [2012]. Improving the Marketing Competitiveness of Fine or Flavour Cocoa. Project proposal presentation at the 145th Meeting of the Executive Committee of the International Cocoa Organisation. Hotel Oro Verde, Guayaquil, Ecuador. March 26- 30th, 2012.

**Umaharan, P.** [2011]. Nurturing competitive agro-industries in SIDS through research and development. TWA, 2011. Grafton Beach Hotel, Tobago.

**Umaharan, P.** [2011]. Improving Food Quality through Biotechnology: Examples from African, Caribbean and Pacific Countries (ACP). Applying Biotechnology for ending world hunger. Madrid, Spain.

**Umaharan, P.** [2011]. Developing a profitable cocoa industry - leveraging the germplasm and indigenous quality. Kampo Restuarant, Chaguanas. CARIRI.

**Umaharan, P.** [2011]. Developing a competitive cocoa industry in Trinidad. Interagency Stakeholder Meeting, Principal's Lounge, June 1st 2011.

**Umaharan, P.** [2011]. Advancements in Developing Commercial Hotpepper Varieties. National Workshop on Hotpepper Industry Development, Sports Centre, Chaguanas, TTABA.

**Umaharan, P.** [2011]. Can small island developing states in the Caribbean become competitive? TEDx Event. Daaga Hall, 17th March, 2012.

**Umaharan, P.** [2012]. Cacao germplasm resources and their use in the genomics era. Plant and Animal Genome Conference XX. San Diego, California.

**Sukha D.A.** [2012]. El concepto de calidad en la cadena productiva de cacao. In Proceedings of: Calidad de Cacao en Centroamérica: Un vistazo a la situación en 2009. Serie técnicas/CATIE; No. 17. Turrialba, Costa Rica: CATIE 2012. 88p ISBN 978-9977-57-554-4

#### Other Publications

Spence, J.A; **Sukha, D.A;** Persaud, K.; Waldropt-Ferguson, L.; Maharaj, P. and Gordon, K. [2011]. Cocoa as an option to diversify the Trinidad & Tobago economy. A Report Presented on behalf of the Economic Development Board. 38p Ministry of Planning and the Economy.

## Institute for Gender & Development (IGDS)

#### Journal Publications

**McNeal, K.** [2011] Trance and Modernity in the Southern Caribbean: African and Hindu Popular Religions in Trinidad & Tobago, University Press of Florida, "New World Diasporas" Series.

**Mohammed, P.** [2011] 'Islands as Crossroads - Sustaining Cultural Diversity in Small Island Developing States', published by the United Nations Educational, Scientific and Cultural Organization (UNESCO), pp. 129 -140.

**Mohammed, P.** [2012] 'Modernity, Consciousness, and Gender' in <http://uwihistory.com/wordpress/wp-content/uploads/2011/07/Historical-Tides.swf>, *Historical Tides*, Volume 2, March 2012, Modernity, Trinidad & Tobago and the Caribbean, Publication of the Historical Society of The University of the West Indies, St Augustine, pp 9-11.

**Reddock, R.** and **J. Foster.** [2011] 'The Global Financial Crisis and Caribbean Women: A Gender Analysis of Regional Policy Responses', *Social and Economic Studies*, Vol. 3 &4, pp. 67-100.

**Reddock, R.** (2011) 'A THEME FOR DIALOGUE?: The Significance of Interrogating Whiteness', Conversation with Norma Romm, Ulrike Vieten, Georgina Tsolidis and Veronica Watson, in International Sociological Association, Research Committee on Racism, Nationalism and Ethnic Relations, 2nd Newsletter - October 2011, [http://www.isa-sociology.org/pdfs/rc05newsletter\\_october2011.pdf](http://www.isa-sociology.org/pdfs/rc05newsletter_october2011.pdf)

### Books & Book Chapters

**Mohammed, P.** (2011) Foreword to *Youth Undaunted: Celebrating 100 years Naparima Girls High School 1912 – 2012*, The Centenary Committee of Naparima Girls High School, Paria Publishing Company, Trinidad, 2011. 152 pages, illustrated hard cover.

**Mohammed, P.** (2011) *Gender Negotiations among Indians in Trinidad 1917-1947*, Palgrave MacMillan (UK) is now available as an Ebook on ebooks.com from 2011.

**Pangsapa, P.** and M.J. Smith (2011) 'Transforming Labour Standards into Labour Rights' in *The Business of Human Rights*, A. Voiculescu and H. Yanacopulos (eds), (London: Zed, 2011). HB: ISBN-9781-84813-8636; PB: ISBN-9781-84813-8629; EB: ISBN-9781-84813-8643.

**Smith, M. J.** and **P. Pangsapa** (2011) 'Corporate Responsibility, Human Rights, International Labour Standards, and Environmental Sustainability' in *The Business of Human Rights*, A. Voiculescu and H. Yanacopulos (eds), (London: Zed, 2011).

**Pangsapa, P.** (2012) 'Teaching, Research and Outreach at Institute for Gender and Development Studies, The University of the West Indies, St. Augustine, Trinidad & Tobago' [Chapter 17] in V. M. Moghadam (ed) *Women's Studies North and South: Addressing Gender and Social Justice Issues*, Bangkok – UNESCO and as an e-book. [Funded by the Rockefeller Foundation Bellagio Center, Italy].

**Reddock, R.** (2011) 'Constitutional Change and the New Nationalist Politics' in V. Shepherd (ed), *Engendering Caribbean History: Cross-Cultural Perspectives*, Kingston: Ian Randle Publishers, pp.663-688. ISBN 978-976-637-252-1 (pbk)

### Conference Presentations

**G. Hosein**, 110<sup>th</sup> Annual Meeting of the American Anthropological Association on 'Traces, Tidemarks and Legacies' Montreal, QC, Canada, November, 2011. *Tracing Performance Aesthetics in Africa, the Caribbean, and their Diasporas: History Making, Public Art, Social Practice and Subjectivity Panel*

**C. Thomas**, 30<sup>th</sup> Anniversary on West Indian Literature Conference UWI, St. Augustine: October 2011  
Locating the "Body" as Critical Genre: Discourses of the Body and Caribbean Philosophy Genders and Sexualities: Homophobia and West Indian 'Queer' Culture.

### Other Presentations

**G. Hosein**, Caribbean Women's Regional Colloquium, Hilton Hotel, Port of Spain, June 2011. *Women Leaders as Agents of Change*.

**R. Reddock**, St. Benedict's College and St. Benedict's Past Student's Association Celebration of the 100<sup>th</sup> Birthday of founder Dr. (Dom) Basil Matthews and 55<sup>th</sup> University of the College La Romaine, Trinidad, September 2011. *Dom Basil Matthews: Legacies and Lessons for Boy's Education*

## Institute of International Relations (IIR)

### Journal Publications

**Bishop, M, L.** (2011) "Coalescing for Change? Novel Coalitions in the UK and Trinidad & Tobago", *The Round Table*, Vol. 100, Issue 412.

**Brathwaite, Tamara.** (2011) "Capturing Caribbean Publications: the Beneficial Role of the Regional ISBN Agency", *Library Review*, Vol. 60 Iss: 1, pp.15 - 23 <http://www.emeraldinsight.com/10.1108/00242531111100540>

### Books & Book Chapters

**Kirton, M.** "Alternative Pathways to Caribbean Regional Integration in the Twenty First Century", in *El Caribe en el siglo XXI: Coyunturas, Perspectivas y Desafíos* (The Caribbean in the 21st Century: Successes, Prospects and Challenges), Cuba, University of Havana, 2011.

**Shaw, T.;** Mace G. and Andrew F Cooper. *Inter-American Cooperation at a Crossroads* London: Palgrave Macmillan for CIGI 2011

**Shaw, T.**, "International Relations in Development" with Henry Veltmeyer in Henry Veltmeyer (ed) *The Critical Development Studies Handbook: Tools for change* London & Halifax: Pluto & Fernwood, 2011, 65-71.

### Reviews

**Shaw, T.**, Bowling Policing the Caribbean in *Bulletin of Latin American Research* 2011.

**Shaw, T.**, Tickner & Waever (eds) International Relations Scholarship around the World in *Round Table* 2011.

**Shaw, T.**, ACBF African Capacity Indicators 2011: capacity development in fragile states in *Round Table* 2011.

**Shaw, T.;** Hall and Chuck-A Sang (eds) CARICOM Meeks & Girvan (eds.) The thought of New World in *Round Table* 2011.

### Conference Presentations

**Mathew, B.**, 2011 Sheffield International Development Network (SIDNET) Seminar, Sheffield, UK. *Studying Development and Academic Transitions*.

**Mathew, B.** And Muzaka, V., 2011 British International Studies Association (BISA) annual conference, Manchester, UK, *The End of Trade Multilateralism*.

**Mathew, B.;** Heron, T. and Anthony Payne. 2011 International Studies Association Convention, Montréal, Canada. *Caribbean Development Alternatives and the CARIFORUM-European Union Economic Partnership Agreement*.

**Kirton, M.** 2011. NETRIS Workshop, Dakar, Senegal. *New migration patterns in South America: Brazilian Migration to Guyana and its impact on Brazil-Guyana Relations*.

**Kirton, M.** 2011. IIR UWI Suriname Alumni Forum, Paramaribo, Suriname. *Suriname, UNASUR and CARICOM: Prospects and Challenges*.

**Kirton, M.** 2011. IIR/Dalhousie University Workshop on Small Arms, Gangs, Youth and Human Security in The Americas, U.W.I, St. Augustine, Trinidad. *"Citizen Security in The twenty- First Century Caribbean"*.

**Kirton, M.** 2011. Diplomatic Dialogue, U.W.I. St. Augustine, Trinidad. *Peace Building and Conflict Resolution in the Caribbean*

**Mohammed, D.** 2011. ISA, Montreal. *Increasing the Caribbean Community Exports under the EPA Policy Considerations for Building Regional Competitiveness*.

**Montoute, A.** 2011. ECDPM/IIR Workshop, Joint Caribbean EU Strategy: Reflections and Analysis, Institute of International Relations. *Global and Regional Reconfigurations of Power: Implications for Caribbean EU-Relations*.

**Montoute, A.** 2011. Research Seminar, Institute of International. *Caribbean- China Economic Relations: What are the Implications?*

**Scobie, M.** 2011. Ethics and Governance in Caribbean Coastal Zones. Euro Caribbean Institute. Nov 24-25, 2011. *Integrated Coastal Zone Management: Empirical and Theoretical Approaches- A comparison*.

**Scobie, M.** 2011. Third Global International Studies Conference. August 17-20, 2011 *Protecting the Caribbean Sea: International Environmental Law and Governance Challenges for Caribbean SIDS*.

**Scobie, M.** 2011. Caribbean Sea and Environmental Law. Sir Arthur Lewis Institute for Social and Economic Studies (SALISES). June 1st to 3rd, 2011. *Sustainable Development of Coastal Communities Challenges and Solutions*

### Conference Papers/Proceedings

**Montoute, A.** (2011). *Civil Society Participation in EPA Implementation: How to make the joint CARIFORUM EC Consultative Committee work effectively?* (ECDPM Discussion Paper 119). Maastricht: ECDPM.

**Montoute, A,** (2011). *Emerging players in the Caribbean: What implications for the Caribbean, their relations with the EU and the ACP.* (ECDPM Discussion Paper 116). Maasticht: ECDPM.

**Kirton, M,** 2011 *Assessing the current status of South American integration and the development of UNASUR; A small states' perspective.* 5<sup>th</sup> International Conference, Whither Caribbean Integration', University of Havana, Cuba, December.

**Kirton, M,** 2011 *New regional structures in South America and the prospects and challenges of small states' participation: Guyana and Suriname in UNASUR.* NETRIS Conference, Addis Ababa, Ethiopia, November.

**Kirton, M,** 2011 *The Role of Private Security Companies in a Changing Hemispheric Environment* GAPSO / Guyana Police Force Seminar, October 2011.

**Kirton, M,** *Strategic Culture and Foreign Policy Making in Guyana.* SOUTHCOM / Florida International University Seminar, September .

**Kirton, M,** 2011 *State Capture and Organised Crime: The Case of Guyana,* New York University Centre for International Cooperation, August.

**Kirton, M** , and Kangalee, Q., 2011 *In CARICOM's Backyard: Regional Integration with Latin America -Options and Challenges,* SALISES Conference, Jamaica.

**Kirton, M,** 2011, *UNASUR and CARICOM: Prospects and Challenges* IIR UWI Suriname Alumni Forum, Paramaribo, Suriname,

**Kirton, M,** 2011 *Citizen Security in The Twenty- First Century Caribbean* IIR/Dalhousie University Workshop on Small Arms, Gangs, Youth and Human Security in The Americas, U.W.I, St. Augustine, Trinidad.

**Kirton, M,** 2011 *Peace Building and Conflict Resolution in the Caribbean* Diplomatic Dialogue, U.W.I. St. Augustine, Trinidad.

**Kirton, M,** 2011 *New migration patterns in South America: Brazilian migration to Guyana and its impact on Guyana-Brazil relations.* NETRIS/UNUCRIS Seminar, Dakar Senegal.

## Other Publications

Bishop, M, L., Girvan, N., Shaw, T, M., Kirton, R, M., Mohammed, D., Scobie, M., Anatol, M., and S. Mike (2011) "Caribbean Regional Integration", Report published by the UWI Institute of International Relations in conjunction with the UK Department for International Development (DFID).

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## Technical Reports

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Kirton, M, Final Report – Study to determine the feasibility of the establishment of a public service training institute in Grenada. – Commonwealth Secretariat 2011

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## Seismic Research Centre (SRC)

### Journal Abstracts

**Joseph, E.P.,** Fournier, N., Lindsay, J.M., and Fischer, T.P. 2011. Gas and water geochemistry of geothermal systems in Dominica, Lesser Antilles island arc. *Journal of Volcanology and Geothermal Research*, 206, 1-2, September 2011, pp.1 – 14; Doi: 10.1016/j.volgeores.2011.06.007.

Cioni R, Bertagnini A, Andronico D, **Cole PD,** Mandula F (2011) *The 512 AD eruption of Vesuvius Italy: complex dynamics of a small scale subplinian event.* Bulletin of Volcanology 73:789–810

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Taisne, B., Brenguier, F., Necessian, A., Beauducel, F., and **Smith, P.J.** (2011). *Real time magma transport imaging and earthquake localization using seismic amplitude ratio analysis*. *EOS Trans. AGU*, 92. Fall Meet Suppl., Abstract V43F-02.

### Conference Papers/Proceedings

Weber, J., Roman, P. L., Deniso, C., Ringerwole, N., Morrell, M., Volentine, J., Hippolyte, J.-C., **Johnson, M.** 2012. 5th Geological Conference of the Geological Society of Trinidad & Tobago, 3-5 September, Abstract & Presentation. *New geological and geophysical fieldwork, lab work, and interpretations: Tobago and northern Trinidad*.

Ringerwole, N., Weber, J., Hippolyte, J.C., Giorgis, S., **Johnson, M.** 2011. Geological Society of America Annual Meeting & Exposition, Minneapolis, Minnesota, USA, 9-12 October. *Fault slip and paleomagnetic analysis of the tectonics of Tobago, West Indies*.

**Robertson D, Joseph E,** Fournier N, Woith H, and Witham D. Caribbean Volcanism and Crustal Structure Workshop; 9th – 10th July, *Physical Dynamics Driving the Boiling Lake Geothermal System in Dominica*. University of Bristol, U.K.

**Joseph E., Robertson, R.** and Denise Robertson. 6th Caribbean Conference on Comprehensive Disaster Management, 5 – 9 December, 2011, Hyatt Regency Trinidad Hotel. *Potential long-term health hazards from exposure to geothermal emissions at Sulphur Springs, Saint Lucia: Community hazard preparedness*.

**Robert, W., Robertson R., Abraham W., Cole Paul,** Corriette Don, de Roche Thesser, **Edwards S., Higgins M., Isaacs N., Johnson M., Joseph B., Joseph E., Latchman J., Lynch L., Nath N., Ramsingh C., Stewart R.** 6th Caribbean Conference on Comprehensive Disaster Management, 5 – 9 December, 2011, Hyatt Regency Trinidad Hotel. *Elevated Seismic Activity Beneath The Slumbering Morne Aux Diaboles Volcano, Northern Dominica*.

**Stinton, A.;** Stewart, R.; **Cole, P.** Geophysical Union 2011 Fall Meeting San Francisco, USA, December 2011. *Determining the Timing of Pyroclastic Density Currents from RSAM Data and Deposit distribution*; American.

**Odbert, H.M.;** **Stinton, A.J.;** American Geophysical Union 2011 Fall Meeting San Francisco, USA, December 2011. *Slow cooling of extensive pyroclastic flow deposits at the Soufrière Hills Volcano, Montserrat*.

**Juman, A.,** Association of Professional Engineers of Trinidad & Tobago (APETT) Civil Division Seminar Port-of-Spain, Trinidad, January 2012. *Risk components in GEM Earthquake Loss Estimation Software OpenQuake*.

### Other Publications

**P Cole, V Bass, T Christopher, C Murrell, H Odbert, P Smith, R Stewart, A Stinton,** R Syers, P Williams (2012). MVO scientific report for volcanic activity between 1 May 2011 and 31 October 2011 prepared for the sixteenth meeting of the Scientific Advisory Committee 14 – 16 November 2011, *MVO Open File Report OFR 11-02*.

## Sir Arthur Lewis Institute of Social & Economic Studies

### Journal Publications

Kedir, A. and **Sookram, S.** 2011. Poverty and Welfare of the Poor in a High Income Country: Evidence from Trinidad & Tobago. *Journal of International Development*. (DOI: 10.1002/jid.1824).

**McCree, Roy.** 2011. The Death of a Female Boxer: Media, Sport, Nationalism, and Gender. *Journal of Sport and Social Issues*. 35(4):327-349.

Seuraj, S. and **P.K. Watson.** 2012. Banking Regulation: does compliance pay in emerging economies? Evidence from Trinidad & Tobago. *Social and Economic Studies*. 61(4):

Auguste, S., R. Moya, and **S. Sookram.** 2011. Housing Finance Policy under Dutch Disease Pressure: The Mortgage Market in Trinidad & Tobago. *IDB Technical Note No.: IDB-TN-302*. Washington, D.C.: Inter-American Development Bank.

### Conference Papers/Proceedings

Mohan, P. and **P.K. Watson.** *Caribbean Export Diversification along its Development Path*. Paper presented at the 43rd Annual Monetary Studies Conference, Barbados. November 15-18, 2011.

Rampersad, T. and **P.K. Watson.** *The Efficacy of Value at Risk Models in Caribbean Equity Markets*. Paper presented at the 43rd Annual Monetary Studies Conference, Barbados. November 15-18, 2011.

**St. Bernard, G.** *Disciplinary Practices and Children's Experiences in Trinidad & Tobago: Does Socio-Economic Status Matter?* Caribbean Child Research Conference, Jamaica Conference Centre, Kingston, Jamaica, 25-26 October, 2011.

**St. Bernard, G.** *Elderly Victimization and Prospective Measures for Prevention: The Case of Homicide in Trinidad & Tobago* International Conference on Gangs, Violence and Governance, LRC Auditorium, The University of the West Indies, St Augustine Campus, Trinidad & Tobago, 3-4 November, 2011.

**St. Bernard, G.** *Population, Territory and Sustainable Development: The Case of the Caribbean Sub-Region.* Expert Group Meeting, CEPAL Headquarters, Santiago, Chile, August 17, 2011

**St. Bernard, G.** *Road Safety Dynamics and Implications for Research: The Case of Trinidad & Tobago* 4th International Road Safety Conference, Crowne Plaza Corporate Hotel, Port of Spain, Trinidad & Tobago, 21-22 September, 2011.

Sutherland, M. S.S. Teelucksingh and **P.K. Watson.** *A Rural Community Perspective of Climate Change in Developing Countries : State of Knowledge, Level of Concern and Perception of Risk.* Paper presented at Workshop on *Natural Disasters in the Caribbean: Assessing the Physical and Economic Impacts, Mitigation and Insurance.* Institut de Paléontologie Humaine, Paris, France. October 28th, 2011.

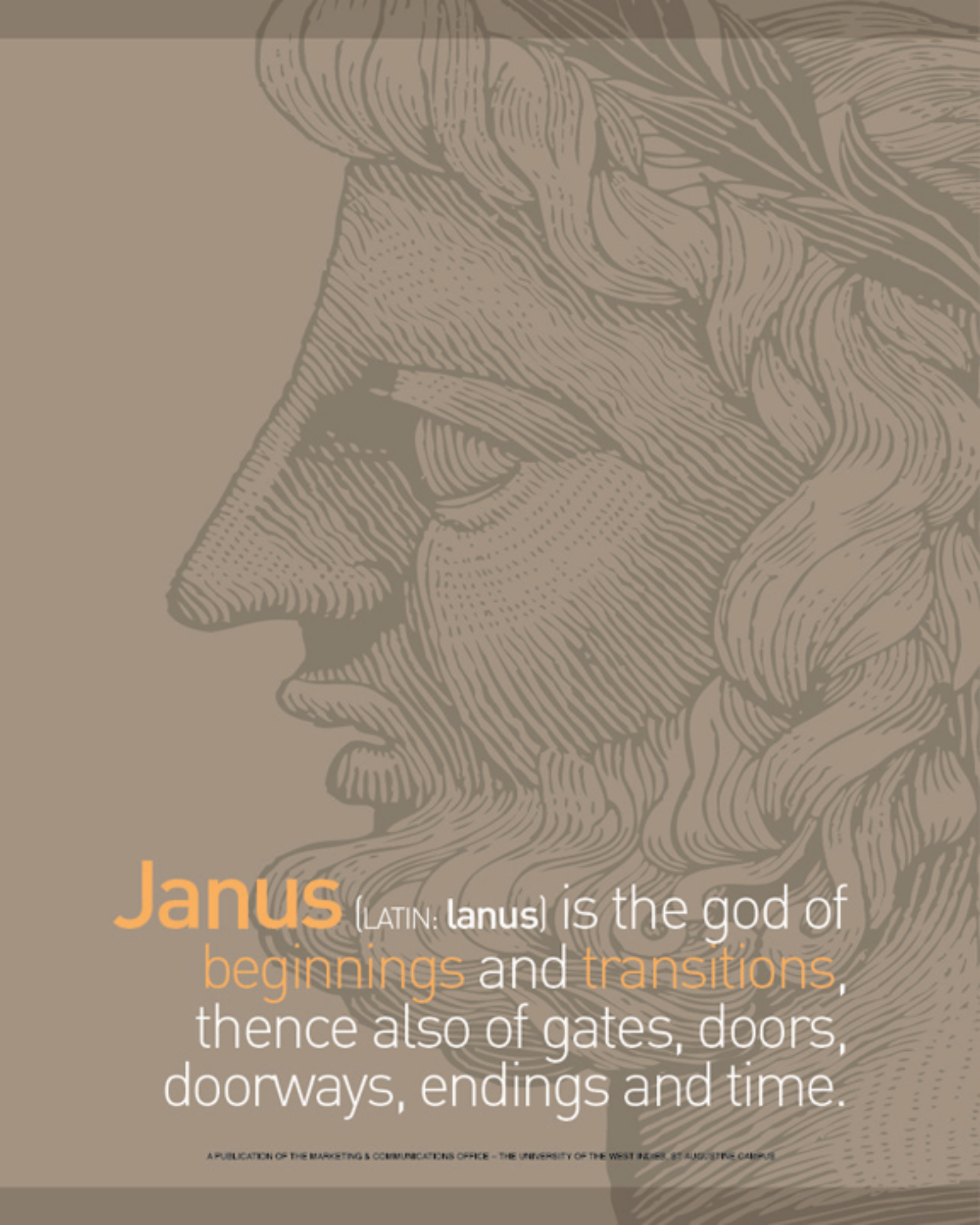
Teelucksingh, S.S. and **P.K. Watson.** *The Importance of Nature to Rural Communities in Developing Countries: Community Perceptions of Biodiversity and Ecosystem Services in Grande Riviere, Trinidad.* Paper presented at Workshop on *Natural Disasters in the Caribbean: Assessing the Physical and Economic Impacts, Mitigation and Insurance.* Institut de Paléontologie Humaine, Paris, France. October 28th, 2011.

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**St. Bernard, G.** 2011. Central Registry for Domestic Violence: Users' Manual for the Preparation and Analysis of Data. Prepared for the Gender Affairs Bureau, Government of the Commonwealth of Dominica, Roseau, Dominica.

**St. Bernard, G.** 2011. Early Childhood Care and Education in Trinidad & Tobago: An Exploratory Analysis. Prepared for UNICEF, UN House, Port of Spain, Trinidad & Tobago.





**Janus** (LATIN: **lanus**) is the god of beginnings and transitions, thence also of gates, doors, doorways, endings and time.