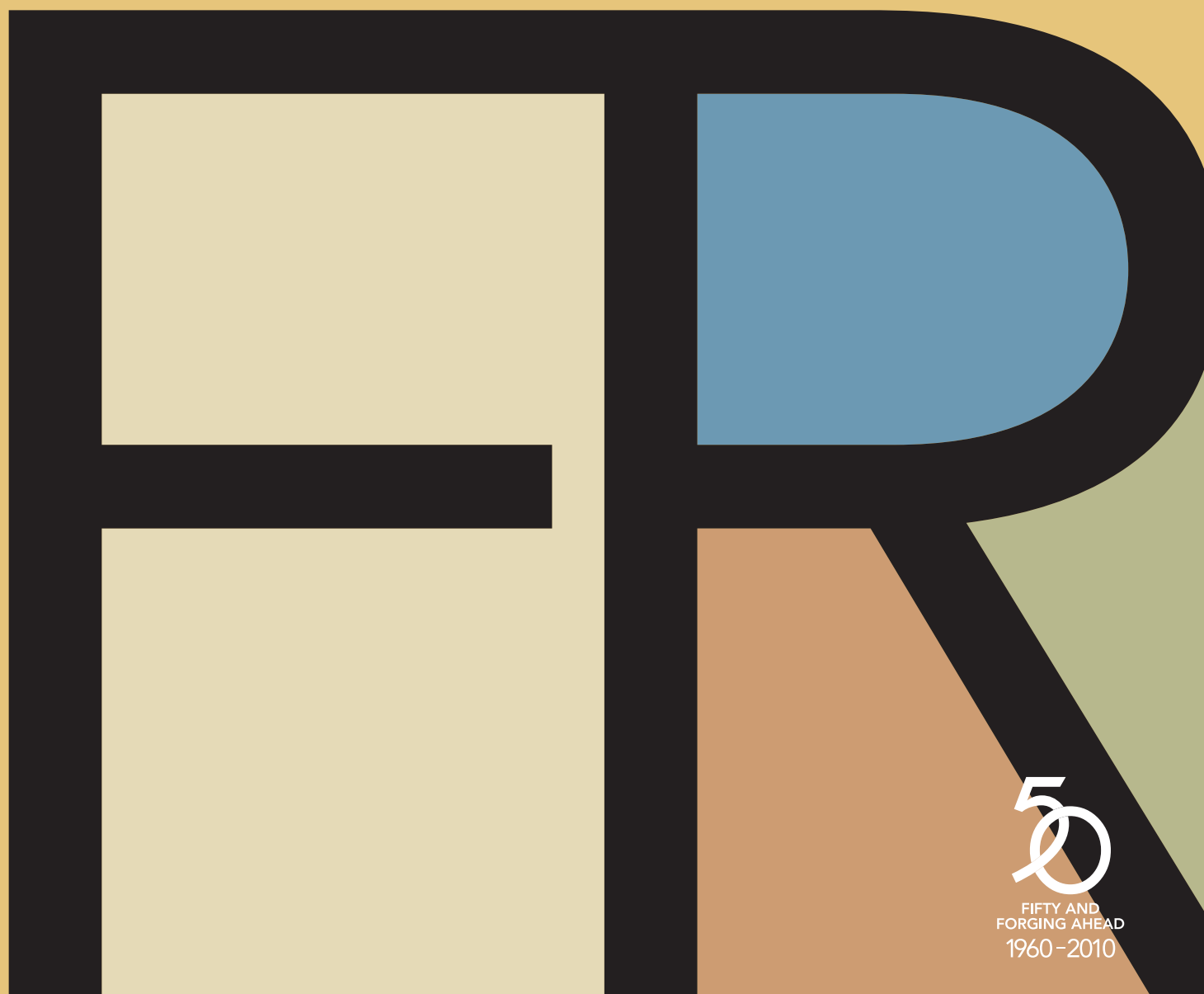


FACULTYREPORT09/10

THE UNIVERSITY OF THE WEST INDIES, ST AUGUSTINE CAMPUS



50
FIFTY AND
FORGING AHEAD
1960-2010

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ENGINEERING

THE FACULTY COMPLETED ITS RESEARCH AND INNOVATION STRATEGY AND BEGAN ENGAGEMENT OF VARIOUS STAKEHOLDERS INSIDE AND OUTSIDE OF THE UNIVERSITY FOR FURTHER INPUT INTO THE PLAN.



Executive Summary

The Faculty of Engineering continued its major activities in three areas related to the UWI Strategic Plan 2007-2012, i.e., Curriculum and Pedagogical Reform (CPR) at the undergraduate and postgraduate levels, Research and Innovation, and Support Systems. The Faculty completed its Research and Innovation strategy and began engagement of various stakeholders inside and outside of the University for further input into the plan.

The Faculty completed its plans for implementation of a pre-engineering programme in September 2010, inclusive of a vocational training component, and offered Caribbean-wide through the Open Campus. In addition, the Faculty started the process of review of its Assessment and Promotions procedures. Two members of staff, Professor Winston Lewis and Dr. Bheshem Ramlal attended a workshop conducted by Dr. Raoul Arreola, author of the book *Developing a Comprehensive Faculty Evaluation System* which is being used as a reference for the review process.

The Faculty continued its excellent work in consolidating the gains made in improving systems to provide for a better learning experience. Significantly, the Department of Electrical and Computer Engineering in collaboration with the Instructional Development Unit (IDU) is to be commended for its work in starting a programme that seeks to assist students in identifying their learning styles and developing their learning capabilities. In addition, the Department of Mechanical and Manufacturing Engineering should be congratulated for its efforts in its course and programme review, guided by feedback it received from its accreditors and from the UWI internal quality review process.

A new Electronics Engineering programme commenced at the Mona Campus in September 2009 with an initial enrolment of 17 students. Twelve (12) of these have successfully transitioned to Level 2. The programme attracted over 200 first choice applicants for September 2010, of which 32 were accepted into the first year (Level 1). Ten (10) students with a Diploma in Electrical Engineering from the University of Technology in Jamaica (UTech) were accepted into Level 2, along with 3 transfer students from the Department of Electrical and Computer Engineering, UWI, St. Augustine. This shows that the programme is becoming increasingly attractive. More needs to be done in strengthening the administration under the Faculty of Engineering so as to better ensure its accreditation.

For the review period the Faculty enrolled 375 undergraduates, inclusive of the aforementioned 17 in the Electronics Engineering programme at Mona, and 241 postgraduates. Twenty-eight (28) members of staff attended training provided by the Instructional Development Unit (IDU). The Faculty offered 62 courses with an e-learning component and introduced one market-driven course.

Work continued through the Engineering Institute in the offering of Continuing Professional Development courses.

The Faculty continued the initiative of using internal resources, including staff as well as students, to facilitate the commissioning of the refurbished Block 13 building for the academic year. Of significance was the formation of the Classroom Technology Support Unit (CTSU) which was mandated to

take responsibility for all Multimedia equipped classrooms in the faculty, to assess the compliance of all classrooms to applicable classroom standards and to recommend and effect modifications to bring all classrooms up to these standards.

Departmental Executive Summary

Department of Chemical Engineering

The Department continued to maintain its quality delivery despite its ongoing staffing challenges. The Departmental Office and members of staff were relocated to the refurbished Block 13 at the start of the new academic year 2009/2010.

A major review of the Curriculum for the BSc degree in Chemical and Process Engineering commenced in the second half of the academic year 2009/2010, and is still ongoing. The Department made steady progress in enhancing its physical facilities via implementation of recommendations from an Occupational Health and Safety Consultant. The Department takes pride in having the only functional Safety Committee in the Faculty, and continues to work assiduously to improve standards of Health and Safety.

The MSc in Petroleum Engineering was accredited by the UK-based Energy Institute for further learning for Chartered Engineers (CEng) status, and has been granted Member of the Energy Institute (MEI) status for intake years 2009-2013. The BSc in Petroleum Geosciences was also accredited for partial Chartered Scientists (CSci) status and MEI status for intake years 2009-2013. Both programmes have now earned double accreditation.

Research continued in the different disciplines within the Department. The Department has also continued to collaborate with a number of international institutions.

During the period under review, the Department graduated 62 students from its undergraduate programmes as follows: First Class Honours (31%), Second Class Honours Upper Division (40%), Second Class Honours Lower Division (26%) and Pass (3%).

Department of Civil & Environmental Engineering

In 2009, the Department of Civil and Environmental Engineering continued to perform creditably in its teaching and research endeavours. The enrolment to the undergraduate programmes was near capacity and this is expected to continue for the next few years. The postgraduate enrolment expanded significantly due to restructuring efforts designed to take advantage of perceived increased demand. In terms of research activity, several manuscripts were published in archival refereed journals, and progress was made on product development for Caribbean application (disaster-resistant housing). The department was also well-represented on several national and regional technical committees, and hosted a regional seminar on the building code being used as a model to develop the Caribbean Building Code. In keeping with the department's commitment to quality assurance and continuous improvement, a self-assessment was undertaken, benchmarked against leading UK departments, culminating in a restructured undergraduate programme. This is to be implemented from Semester 1 of 2010, and is part of the activities for the Department's re-accreditation exercise scheduled for 2011.

Department of Electrical & Computer Engineering

Over the period 2009/2010, the Department spent much of its time and effort in preparing for an accreditation visit from the Institution of Engineering and Technology (IET). This visit resulted in the re-accreditation of the Bachelor of Science (BSc) degree for the 2010 intake to the 2012 intake, a major accomplishment. A monitoring review will be required in the 2012/2013 academic year to determine if accreditation would be extended to the 2014 intake. The Department also completed a Quality Assurance Review exercise coordinated by the Quality Assurance Unit at St Augustine and continued the enhancement of various aspects of its programme of Teaching and Learning.

The Department is engaged in the study of mobile applications for small scale fisheries, multi-processor systems and linear circuit applications. It continued its innovative work in steelpan technology and energy efficiency. Its staff continued to publish scholarly research in international refereed journals and to deliver presentations at national, regional and international seminars and conferences.

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

(Formerly Surveying & Land Information)

In academic year 2009/2010 the Department made strides in the full implementation of its revised curricula. Special focus was placed on ensuring that assessments were linked with the learning outcomes designed for each course.

Academic staff continued to make significant contributions to professional bodies both at local and international levels. Many of its students were awarded scholarships with exchange programmes for graduate studies in Canada. Staff contributions to the public sector and the UWI-12 (non-campus territories) were at an all-time high. Improvements in research output led to journal publications, technical reports, and conference papers.

The Department graduated two PhDs and the throughput of its MSc programmes also saw a major improvement. Enrolment in all programmes was stable with a significant increase in the BSc Land Management (Valuation) Programme. Its students continue to excel on all fronts and for the second consecutive year a Geomatics Engineering and Land Management student was elected President of the Engineering Student Society of the Faculty.

*Department of Mechanical
& Manufacturing Engineering*

Members of staff in the Department of Mechanical and Manufacturing Engineering have been actively involved in Research and Innovation. The research conducted during the 2009/2010 academic year resulted in (2) MPhil/PhD graduates and thirteen (13) International Journal Publications.

All five (5) Graduate Studies Programme in the Department of Mechanical & Manufacturing Engineering are fully accredited by the IMechE and are well subscribed. In the period under review, the Engineering Management Programme started its delivery in Guyana. In addition, the Department began offering its new MSc programme in Engineering Asset Management with an enrolment of forty-three (43) students.

The Department finalized its curriculum review of the three undergraduate programmes and obtained the necessary University approvals. Implementation of the first year changes were approved for execution in September 2010. The Department also began the process of laboratory upgrade in response to previous accreditation reports and intends to complete this process in time for the re-accreditation exercise in the coming academic year.

Students

Enrolment

Undergraduate Enrolment

For the academic year 2009/2010 the undergraduate intake for all programmes in the Faculty was 334 students, including 32 at the Mona Campus. This was 13% more than the previous year.

Postgraduate Enrolment

The Faculty attracted 223 new students into its taught postgraduate Diploma/Master’s programmes, a 30% decrease from the previous academic year which had an enrolment of 292.

New postgraduate enrolments in MPhil and PhD programmes of the Faculty, while still low, increased by 15% to 22 students in 2009/2010. Research student enrolment is expected to remain low given the very good employment opportunities for lower level degree graduates in Trinidad and 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.

Total Enrolment

Student enrolment at both undergraduate and postgraduate levels over the past three years was as follows:

ENROLMENT	2007/2008	2008/2009	2009/2010
TOTAL	2377	2297	2405
POSTGRADUATE %	38%	40%	37%

There has been a steady increase in the percentage of postgraduate students.

Graduation

Undergraduate

In 2009/2010, the Faculty produced 369 graduates in the various disciplines. This figure is just about 15% higher than the previous year when there were 319 graduates. The Department of Mechanical & Manufacturing Engineering graduated 107 students, the highest number across the Faculty and about 12% more than the previous year.

Fifty-two (52) graduates achieved First Class Honours, three (3) more than the previous year. The following students topped the various programmes, all with 1st

Class Honours

Chemical & Process Engineering

Robert Shirley

Civil Engineering

Keron Mootoosingh

Electrical and Computer Engineering

Gerald Mahadeo

Geomatics

**Ijaz K. Ramsahai
Marcus S. Arthur**

Industrial Engineering

Amrika Ramjewan

Land Management (Valuation)

Josanne Sayers

Mechanical Engineering

Prakash Samaroo

Petroleum Geoscience

Alicia Bertie

Postgraduate

In 2009/2010, 166 students graduated from taught postgraduate programmes, a 52% increase from the previous year which had a figure of 87 students. Twenty-two (22) of these students graduated with Distinction. Nine (9) students graduated with research degrees: Four (4) MPhils and five 5 PhDs. The following is the list of the PhD awardees and the titles of their respective theses:

PhD Electrical & Computer Engineering

John Joseph

Title of Thesis:

'Modelling of non-linear electrical devices using artificial Neural Networks'

PhD Electrical & Computer Engineering

Fasil Muddeen

Title of Thesis:

'An Acoustic Study of the Steel Pan'

PhD Mechanical Engineering

Kimberly Ramroop

Title of Thesis:

'Overall Convective Heat Transfer from Pipe Surfaces'

PhD Surveying & Land Information

Armanath Chinchamee

Title of Thesis:

'Developing a Geoinformatics Based Methodology to Manage Natural Vegetation Habitats in Trinidad'

PhD Urban & Regional Planning

David Neale

Title of Thesis:

'Physical Development along a Coastline Boundary: an Examination of Sea-Use and Development on the Trinidad West Coast'

Student Success & Awards

Department of Electrical & Computer Engineering

Code Jam

Three final year students developed an application for gathering and managing feedback on social equity issues and won a software development contest. Participating teams were asked to design creative, novel and useful SMS-based (Short Messaging Service) applications that addressed an assigned category from the Ministry of Public Administration's National Information Communication Technology Plan goals.

Yudistre Jonas, Craig Ramlal and Gyasi Ambrose won the \$8000 first prize in Code Jam, a team-based programming competition, now in its second year, which aims to promote software development in Trinidad and Tobago. Code Jam focuses on the creation of SMS-based applications using the Teleios Message Central mobile messaging service delivery platform, which was opened to facilitate the competition. This contest took place on March 11, 2010 in the Faculty of Engineering and was sponsored by software firm Teleios Systems, in collaboration with Microsoft, bmobile and the Ministry of Public Administration.

A team of first year students, Ramone Graham, Vincent Ramoutar, Darryl Grant and Azeem Mohammed, built an SMS Job Application service, and copped the \$6000 second-place prize.

Imagine Cup

For the 2010 Competition, Microsoft Trinidad and Tobago was pleased to sponsor for the first time a local Imagine Cup final that guaranteed a place at the international finals for a local team. The local team was headed by Craig Ramlal, with Azim Abdool as Head Consultant for the second year running. They again entered the competition under the Embedded Systems Development Category. The team topped the regional competition and competed at the International Round. The prize was an Ebox 4300 and the design was that of an autonomous, intelligent, cheap aeroponic system.

Staff

Efforts have been made to improve the recruitment and retention of staff. The Department of Chemical Engineering under its new Department Head continued its succession planning activities. Electrical and Computer Engineering saw Mr. Sean Rocke being offered a LASPAU/Fullbright Scholarship for studies in the USA. In addition, it continued the grooming process of hiring young potential academics in various capacities.

Major Awards, Special Honours, Distinctions

Department of Electrical & Computer Engineering

- *Professor Stephan Gift*: NIHERST Appreciation Award 2009 for Dedicated Service to the Caribbean Youth Science Forum

Appointments, Promotions, Resignations & Retirements

Department of Electrical & Computer Engineering

- *Professor Stephan Gift*: NIHERST Appreciation Award 2009 for Dedicated Service to the Caribbean Youth Science Forum

Department of Geomatics Engineering & Land Management

(formerly Surveying & Land Information)

- *Professor Jacob Opadeyi*, elevated to Fellow, Royal Institution of Chartered Surveyors
- *Dr. Michael Sutherland*, confirmed Chair (2011-2014), Commission 4, International Federation of Surveyors
- *Dr. Michael Sutherland*, accepted as Member, Royal Institution of Chartered Surveyors

Department of Mechanical & Manufacturing Engineering

- *Professor K.F. Pun*: Biography published in ***Who's Who in the World 2009***, 26th Edition, The Marquis Who's Who Publication Board (ISSN 83-9825)
- *Professor K.F. Pun*: Biography published in ***Who's Who in Science and Engineering 2009-2010***, 10th Edition, The Marquis Who's Who Publication Board (ISSN 0083-9817)

Appointments, Promotions, Resignations & Retirements

Department of Chemical Engineering

- *Dr. David Janes* - New appointment
- *Professor John Akingbala* - retired

Department of Civil & Environmental Engineering

- *Mr. Hector Martin* (Construction Group) – New appointment
- *Dr. Pramenath Narinesingh* (Water Group) – New appointment
- *Mrs. Charmaine O'Brien-Delpesh* (Coastal Group) – New appointment
- *Dr. Mirko Schankat* (Water Group) – New appointment
- *Dr. Everson Peters* - Tenured

Department of Electrical & Computer Engineering

- *Mr. Sanjay Bahadoorsingh* – New appointment

Department of Geomatics Engineering & Land Management

- *Dr. Charisse Griffith-Charles* - Tenured

Department of Mechanical & Manufacturing Engineering

- *Dr. Graham King* – New appointment

Transforming Leadership, Culture & Processes

Members of academic staff are continually encouraged to attend training sessions at IDU. Work is continuing on the development of an Administrative Handbook aimed at changing the culture in the Faculty, to streamline all processes and to ensure quality assurance in all its undertakings.

Training initiatives at the Faculty led to one member of academic staff being awarded a Teaching Certificate from the IDU and another was later registered in the programme. Twenty-eight (28) academics exposed themselves to at least one course in teaching and learning effectiveness. Two members of staff attended professional training workshops in Fundamentals of Land Administration (Training for Land Surveyors) and another was specially invited to participate in an Expert Consultation on the operationalisation of the Caribbean Sea Commission, organized by the Centre for Resource Management and Environmental Studies (CERMES), in Barbados.

Research

Faculty Overview

The Faculty's Research and Innovation committee completed its mandate of drafting a proposal on how The UWI could best address the challenge posited in the Strategic Plan 2007-2012 for improving its Research and Innovation portfolio. The proposal, which was accepted by the Faculty Board, endorsed the approach described in the UWI Strategic Plan 2007-2012 document of the urgent need for increased levels of innovation to support Caribbean economic growth and sustainability. It proposed a structure for a Caribbean-wide Innovation System that would not only see the expansion and improvement of business

opportunities supported by UWI development activities but would also seed and direct more meaningful and higher levels of UWI pure and applied research portfolio. The Faculty of Engineering is proud of the fact that this proposal now forms the core of the Trinidad and Tobago Government's strategy for enhancing national innovation to better ensure economic growth and sustainability.

R&D efforts continued through the Engineering Institute, most notably in the Steelpan Initiatives Project which received continued positive public exposure through beta testing exercises conducted on the G-Pan and the Percussive Harmonic Instrument (PHI). G-pans were used for the first time at the National Panorama Steelband Competitions, signalling a start in the acceptance of the new instrument.

Department of Chemical Engineering

Research continued in the different disciplines within the Department. In the Chemical Engineering Unit, research continued in the areas of multiphase flow, near critical fluid extraction, biofilms, interfacial science, thermal cracking of polymers and production of biodegradable plastics from brewery and sugar containing wastes.

In the Petroleum Engineering and Petroleum Geoscience programmes, research continued to be focused on heavy oil reserves and their methods of exploitation; reservoir heterogeneities; reservoir fluid analysis; gas hydrates; gas monetization; micropaleontology; CO₂ injection into reservoirs; and alternative energy strategies.

In the Food Science & Technology Unit (FSTU) programme, food safety; risk assessment; carbohydrate and root crop flour characterization and utilization; and product development and evaluation of underutilized local agricultural material were the core research areas. The FSTU is represented on CARDI's Sweet Potato Industry Development Committee that has a mandate to conduct research and development on the sweet potato.

Department of Electrical & Computer Engineering

The Department has continued its innovative work in steelpan technology and energy efficiency as it moves toward the establishment of new revenue streams into The University as a result of this effort. The Department is also engaged in the study of mobile applications for the small scale fisheries targeting improvements in livelihoods, safety, informal education and citizens empowerment. The Department has continued to publish scholarly research in international refereed journals and to deliver presentations at national, regional and international seminars and conferences.

Major Projects Completed

Department of Civil & Environmental Engineering

- Research was completed on sustainable soil reinforcement by Dr. A. Mwasha
- Research was completed on improved hurricane resistant roofing by Dr. R. Clarke

Department of Electrical and Computer Engineering

Professor Brian Copeland

- Completion of G-Pan manufacturing process design
- Completion of P.H.I. manufacturing process design

Professor Brian Copeland and Dr. Ronald De Four

- Filing of G-Pan Patents and Trademarks
- Filing of P.H.I. Patents and Trademarks

Department of Geomatics Engineering & Land Management

Raid Al-Tahir

- Developing a Geoinformatics Based Methodology to Manage Natural Vegetation Habitats in Trinidad, **PhD** Thesis by Amarnath Chinchamee.
- A Spatial Analysis Approach to Studying Mud Volcano Distribution in Trinidad. Nadine Pitamber. **MSc** (Geoinformatics).
- Agroclimatic Zoning of Trinidad for Cacao Cultivation. Arlene Aaron. **MSc** (Geoinformatics).

Charisse Griffith-Charles and Dexter Davis

- The Use of Geodetic Techniques to Determine Vertical Deformation of Land on the East and West Coasts of Trinidad, **MPhil** Research by Arleene Atwell-Martinez.

Michelle Mycoo

- "Assessing the Implications of Tourism and Promoting Sustainable Development on the Coast of Trelawny, Jamaica", **MSc** Urban and Regional Planning Research Project by Doneika Simms
- "Land Developers, Hillside Development and Flooding in the Northern Range, Trinidad", **MSc** Urban and Regional Planning Research Project, by Jaimie Birbal.

- Exploring Urban Design Solutions and Planning Guidelines: A Case Study of Georgetown, Guyana, “**MSc** Urban and Regional Planning Research Project, by Anna Perriera,”

Jacob Opadeyi

- “Towards an Integrated Approach for GIS- based Flood Risk Assessment: A Case Study in the San Juan/Laventille Regional Corporation”, **MSc** (Geoinformatics) by Stephen Boodhram, 2010
- “Improving Public Participation Using a Three-Dimensional Model of Reality”, **MSc** (Planning and Development) by Gabrielle Thongs, 2009
- “Evaluating the Impacts of Landuse/Cover on the Demerara Watershed, Guyana, using the Automated Geospatial Watershed Analysis Tool”, **MSc** (Geoinformatics) by Carlene Boodoo, 2010
- “Mitigating Flood Disaster Risk in Local Communities: Trinidad Case Study”, **MSc** (Planning and Development) by Tracey Elcock, 2010
- “The Design of a Postal Code System for Trinidad and Tobago Using GIS Concepts”, **MSc** (Geoinformatics) by Rehanna Jadoo, 2010

Bheshem Ramlal

- “Spatial Analysis Techniques to Investigate Landscape Archaeology on the Island of St. Kitts”, **MPhil** Research by Madiha Farag-Miller.
- “Land Use Change and River Ecology in the Arima Valley”, Trinidad, **MPhil** Research by Shobha Sherry-Ann Maharaj, Department of Life Sciences, Co-Supervised with Dr. Mary Alkins-Koo
- “Spatial Cognition and GIS: Analysis of the Applicability of Spatial Cognition in the Design of User Interfaces to support differences within Human Use”, Barry Sinanan, **MSc** (Geoinformatics)
- “The development of cartographic standards for a geological and petroleum environment using GIS Tools”, Gernina Sawh, **MSc** (Geoinformatics)
- “The development of CSF in implementing GIS related projects and the analysis of GIS diffusion in the Oil and Gas industry within Trinidad and Tobago”, Kavita Nanan, **MSc** (Geoinformatics)
- “Methodology for Designing and Developing Graphical User Interfaces for GIS Systems”, Lynn Bereton Joab, **MSc** (Geoinformatics).

Department of Chemical Engineering

Gail S.H. Baccus-Taylor

- Investigations into Mauby (*Colubrina elliptica*) Drink Fermentation
- The Development of Dark Chocolates from Fine/Flavour Cocoa (*Theobroma cacao* L.) grown in Trinidad & Tobago
- Antibacterial Activity in Local Herbs
- Detection & Quantification of *Cryptosporidium parvum* in Water
- Risk Assessment in the Broiler chicken industry
- Detection of *Listeria monocytogenes* and Salmonella in Ready-to-Eat Foods
- The Prevalence of *Listeria monocytogenes* in Select Abattoirs in Trinidad
- Development of a Wastewater Treatment Plan at a local distillery

W.G. Bertrand

- Scope developed for Research into location, classification, resource quantity, production methods, transportation and refining of Heavy Oils in Trinidad & Tobago.

D.P. Chakrabarti

- Modeling hydrocracking in vapour liquid equilibrium
- Biosorption of Hexavalent chromium by *Lujanus Campechanus* scales
- Microwave pyrolysis of biomass
- Pretreatment of Biomass
- Artificial neural network in two phase flow pattern recognition
- Phase inversion in a two phase oil water system
- Hydrodynamics of trickle bed reactors at high pressures

R.A. Dawe

- Heterogeneity effects (permeability and wettability) on reservoir flow and displacement.
- Alternative Energy of relevance to the Caribbean Islands particularly wave, wind, geothermal, solar and developments.
- Desalination of sea water by freezing particularly gas hydrates
- Hydrates - the feasibility of transporting stranded natural gas around the Caribbean using gas hydrates (GtS); unconventional source for natural gas from sub-sea hydrates
- Heavy oil; Vapour extraction via horizontal wells; downhole heating; foamy oil; heavy oil wastewater cleanup; asphaltine production problems.
- Gas Condensate entrapment within porous media during production.
- Sustainability; energy, food, employment, water.
- Volumes of mixing.
- Sanding; dilation of unconsolidated sand; sand monitoring in production pipelines.
- Environment considerations; aspects of zero pollution emissions, heavy oil production, oil-water separation, particularly gas flotation of oily wastewaters, sanding and possible biotechnological inputs. (with A.C. Pilgrim)

R. Deo

- Biofuels Production
- Software for Pinch and HAZOP Studies
- Risk Management

H. Henry

- History and Philosophy of Adult Education via the UWI Open Campus.

J. Marcelle-De Silva

- Completed evaluation of 3-D seismic data for Block 27 offshore the East Coast of Trinidad with an aim towards delineating natural gas hydrate bearing zones.
- Research was continued into the best reservoir management practices which will create optimum development of thin oil reservoirs.

W.A. Mellowes

- SODIS methodology for water and waste-water treatment
- Characterisation of flours from indigenous materials
- Production of bio-degradable plastics
- Anaerobic Digestion of Distillery Waste
- Protein Recovery from and foaming properties of indigenous sources
- Production of bio-degradable plastics

A.C. Pilgrim

- Heavy metals in surface waters and vegetation
- Carbon Foot-printing
- Study and development of ligno-fibre products
- Formulation of roof tile from recycled materials
- Research and Development on Peppers and Pepper Products
- Carbon Foot-printing
- Study and development of ligno-fibre products
- Formulation of roof tile from recycled materials

B.J. Tyler

- Atmospheric Aerosol Chemistry
- Network for Air Quality Monitoring in Trinidad
- Atmospheric Aerosol Chemistry
- Network for Air Quality Monitoring in Trinidad
- Enhanced analysis of surface chemical spectroscopy data (BJT)
- Biomaterials Interfaces (BJT)
- Surface chemical characterization of particulate matter (BJT)

M. Sahoo

- Origin and evolution of fractures in Toco Trinidad.
- Modelling the fracture systems in Toco
- Two billion year old continental breakup in eastern India
- Closure of the north Singhbhum sea and continental collision in eastern India
- Interpretation of paleostress direction from fractures in north east Trinidad
- Estimation of Paleostress from fracture system in Toco
- Study of fracture system architecture in Toco

J.B. Wilson

- Palaeoenvironments in the Brasso Formation of Central Trinidad
- The Quaternary in DSDP Hole 148: The Changing Impact of the Orinoco Plume
- Micropalaeontology of ODP 1006A (Bahamas)
- Micropalaeontology of Coral Reefs around St. Kitts
- Larger foraminifera in the Early Micoene of the Cayman Islands

*Department of Electrical & Computer Engineering**Professor Brian Copeland*

- Steelpan Technology

*Department of Geomatics Engineering & Land Management**Raid Al-Tahir*

- The use of Geoinformatics for the assessment of watersheds' vulnerability to land degradation in Trinidad. In collaboration with R. Mahabir.
- Assessment of Watershed Wealth Using Principal Component Analysis with GIS. In collaboration with F. Canisius and T. Richardson.
- The Analysis of Land Cover and Land Use Changes in Trinidad and Tobago. **MPhil** thesis by Terri Richardson.
- Developing Ocean Current Models using Geostatistical Interpolation. **MSc** Geoinformatics by Aaron Marcus.
- Assessment of a Reservoir's Sustainability through Remote Sensing Based Examination of Watershed's Land Use. **MSc** Geoinformatics by Devi Ramcharan.

Charisse Griffith-Charles

- Family Land Tenure Governance and Extent in Tobago, **MPhil** Research by Sunil Lalloo
- GIS and Cadastral Reform in Trinidad and Tobago – **MSc** Research by Christian Persad
- A Web-based GIS to Support Land Administration in Trinidad and Tobago – **MSc** research by Tegan Medina
- Spatial Data Quality to Facilitate Hierarchical Land Use Planning – **MSc** research by Niron Carrington

Michelle Mycoo

- Adaptations to climate change and sea level rise in the Caribbean
- Liveable cities: Caribbean cities in the 21st century

Jacob Opadeyi

- GIS-based landslide risk modelling
- GIS-based flood risk modeling
- Postal codes systems for the Caribbean

Bheshem Ramlal

- Child rearing and its links to Early Childhood Education in Trinidad and Tobago: An Analysis of Cultural Beliefs and Practices, with the Family Development and Children's Research Centre, UWI, St. Augustine (2009/2010)
- Caribbean Cultural Dynamics and the Globalization of Culture: Caribbean Oral Culture: Subproject (1:2): The railway system of Trinidad, with the Department of History, The University of the West Indies, St. Augustine. (2008-2010)

Michael Sutherland

- Managing adaptation to environmental change in coastal communities: Canada and the Caribbean. International Community - University Research Alliance (ICURA) 5-year project, sponsored by the Social Sciences and Humanities Council and the International Development Research Centre, Canada (SALISES, The University of the West Indies and University of Ottawa, Canada).

- Assessing the socio-economic impacts of flooding within the Caparo River Basin, Trinidad using the spatial analysis approaches. **MSc** Research by Dhanishi Farnum.
- Reengineering a geoportal: Developing visual design decisions. **MSc** Research by Kern J. Ranjitsingh.
- Seismic Microzonation for Trinidad and Tobago using a 3D GIS. **MSc** Research by Jillian St. Bernard.
- The Development of a GIS enabled Congestion Management System for Port of Spain, Trinidad. **MSc** Research by Natalie Dobbs.
- Graphical Database for Small Scale Fisheries in Trinidad and Tobago. **MSc** Research by Ravi Singh.

Teaching and Learning

Department of Civil & Environmental Engineering

A major review of the Curriculum for the BSc degree in Chemical and Process Engineering commenced in the second half of the academic year 2009/2010, and is ongoing. The Department is making steady progress in enhancing its physical facilities via implementation of recommendations from an Occupational Health and Safety Consultant. The Department takes pride in having the only functional Safety Committee in the Faculty that has worked, and continues to work assiduously, in improving standards of Health and Safety.

The MSc in Petroleum Engineering was accredited by the UK-based Energy Institute for further learning for Chartered Engineers (CEng), and has been granted Member of the Energy Institute (MEI) status for intake years 2009-2013. The BSc in Petroleum Geosciences was also accredited for partial Chartered Scientists (CSci) status and MEI status for intake years 2009-2013. Both programmes have now earned double accreditation.

During the period under review, the Department graduated 62 students from its undergraduate programmes as follows: First Class Honours (31%), Second Class Honours Upper Division (40%), Second Class Honours Lower Division (26%) and Pass (3%).

Department of Civil & Environmental Engineering

In terms of departmental level support to students to improve student-centeredness, the web-based application “My ELearning” was used to provide students with always-available access to information.

Department of Electrical & Computer Engineering

The Department of Electrical & Computer Engineering continued its development of its Teaching and Learning processes. Consequently many accomplishments were noted.

A Quality Assurance Review exercise, which was coordinated by the Quality Assurance Unit at St Augustine, was completed. The programme’s delivery and environment was enhanced on account of student engagement in providing study resources, hardware

and software tools, web-based information, problems sets and a design studio. A curriculum renewal exercise was completed with active involvement of the Instructional Development Unit. Engineering Practice involving practical issues in Engineering Applications were further improved, such as safety, ethical and legal issues and aspects of engineering practice. “Communications across the Curriculum” was enhanced resulting in the improvement of writing skills, team-building and confidence in oral presentations. Additionally CEng was accredited for the Bachelor of Science (BSc) degree from the Institution of Engineering and Technology, UK for the 2010 intake to the 2012 intake with extension to the 2014 intake, subject to a monitoring review in the 2012/2013 academic year.

Office of the Dean

During the period under review, the Faculty made all arrangements for the implementation of its Pre-Engineering programme. This programme is geared for delivery to candidates who fall short of the qualifications for entry into the Faculty of Engineering programmes. It offers courses in Mathematics, the single major area of deficiency in high school graduates, Technical Drawing and Communication Skills. The programme has a vocational training component for which successful candidates would be awarded a Caribbean Vocational Qualification (CVQ) certificate at Level 1 at least; the inclusion of the vocational component facilitates academic learning through practical application.

Graduate Studies

New/Substantially Revised Programmes

Department of Civil & Environmental Engineering

The Department switched to a demand-driven approach to postgraduate recruitment and will be evaluating the success of this approach. In addition, through encouragement of good MSc students to continue in research, this has led to an increase in PhD registrations.

Curricula were reviewed to determine alignment with developments in the discipline and current practice. Therefore, traditional MSc programmes such as Construction Management and Civil Engineering were redesigned for better compliance with new accreditation requirements. All courses were reviewed and revised where necessary, and all assessment artifacts and schedules rationalized. The general delivery format was redefined to ensure a minimum number of contact hours, a course in Research Methods, and a design project.

Department of Electrical & Computer Engineering

The Department completed a structural revision of its MASc Programme in Electrical and Computer Engineering in accordance with the UK Standards for Professional Engineering Competence published in 2008 by the Engineering Council of the UK and was designed to satisfy the educational requirements for Chartered Engineers. This, it is hoped, will improve the attractiveness of the programme to graduates and practicing engineers in the region. The revised programme includes a course in Research Methods as required by the UWI School for Graduate Studies and Research.

Outreach

Strengthening Regionality

Discussions with the Open Campus to partner in the delivery of its Pre-Engineering programme that primarily targeted the provision of increased access to UWI-12 and other underserved communities concluded and the first cohort was expected to start in the 2010/2011 Academic Year. In addition, the Faculty continued to respond to requests from various Governments for assistance, particularly in the areas of Civil and Environmental Engineering and Disaster Management.

Department of Chemical Engineering

In May 2010, one lecturer delivered a seminar in Nevis on nearshore micro-organisms. He identified some sites prone to marine pollution and recorded natural, non-invasive measures that could be used to mitigate the impact of hurricanes. A programme was initiated with the St. Kitts Heritage Society using micro-organisms to assess the health of coral reef systems.

Department of Civil & Environmental Engineering

The Department hosted a seminar on “Overview of IBC 2009 with an Emphasis on Changes from IBC 2006”. This seminar was held at the Faculty of Engineering via the Engineering Institute in November 2009, in association with SK Ghosh and Associates as Presenter. It was attended by 35 professional engineers from throughout the Caribbean.

Department of Electrical & Computer Engineering

The Department maintains fruitful 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 significant journal publications, student exchanges and inputs to curriculum development.

Service to UWI-12 Countries and Other Underserved Communities

Discussions continued with the Open Campus to partner in the delivery of its Pre-Engineering programme that primarily targets the provision of increased access to UWI-12 and other underserved communities. The programme is expected to physically start in Trinidad in the 2010/2011 Academic Year, targeting 40 students.

Strengthening the National Engagement Processes

Department of Chemical Engineering

Staff members continue to represent the Department on State Boards and Cabinet Appointed Committees. A staff member, an Executive of the Caribbean Academy of Sciences (CAS) with responsibility for its Science Programme, was instrumental in organizing the Secondary School Teachers’ Workshop in collaboration with the Ministry of Education, Guyana. This Workshop, hosted by CAS also included educators in the Region.

One lecturer delivered a seminar in Nevis on nearshore micro-organisms. He identified some sites prone to marine pollution and recorded natural, non-invasive measures that could be used to mitigate the impact of hurricanes. A programme was initiated with the St. Kitts Heritage Society using micro-organisms to assess the health of coral reef systems.

Through the Engineering Institute, the FSTU collaborated with the Windward Islands Farmers' Association (WINFA) by assisting a Co-operative in St. Vincent & the Grenadines, in the area of product development and evaluation. The Commonwealth of Dominica also benefited from the expertise of the FSTU in the area of food safety/risk assessment, trouble shooting, product development & evaluation, and overall industry enhancement. Locally, the FSTU continues to be engaged by private sector in similar activities. Further, collaborative research has commenced with the Cocoa Research Unit in value-added products from cocoa. Collaborative doctoral research was also conducted with Tuskegee University, USA.

The Department has continued to collaborate with a number of international institutions including the Indian Institute of Technology and the University of Alberta.

The Engineering Institute

The Faculty through its Engineering Institute (EI) continues to contribute to regional development through outreach activities in research, training and consultancies. Its major activity continues to be the delivery of courses for continuing professional development (CPD). During the period under review, the Institute delivered six (6) CPD courses and 25 projects were in progress.

Links with Industry Partners

Association of Professional Engineers of Trinidad & Tobago
Board of Engineering of Trinidad & Tobago
bpTT Endowed Senior Position in Reservoir/Petroleum Engineering
CEP Limited
CISCO Academy
CL Energy Services Limited
Industrial Gases Limited
Microsoft
Neal & Massy Motors
PCS Nitrogen Trinidad Limited
Petrotrin
Phoenix Park Gas Processors Limited
Powergen
T&T National Petroleum Marketing Company Ltd
Trinidad and Tobago Methanol Company (TTMC)
Trintoplan Consultants Limited
Unilever Caribbean Limited
WASA

The Faculty also thanks the various individual and organizational sponsors of prizes at its Annual Prizes & Awards.

Other External Links

UNESCO-IHE (Edulink Project including COSTATT, the University of Guyana and WASA)
Indian Institute of Technology, Kharagpur, India
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
The University of Calgary
The University of Trinidad and Tobago*

Revenue Generation & Cost Containment Activities

The Faculty generated income by hosting short courses (TT\$1,032,813.00 - Gross Revenue) and Summer School 2009 (TT\$313,200.00 - Gross Revenue). The Department of Civil & Environmental Engineering generated income from a projects involving wall testing for Trinidad Aggregate Products Ltd (TT\$83,700.00). A seminar titled “Overview of IBC 2009 with an Emphasis on Changes from IBC 2006” hosted by UWI/SKG generated an additional (TT\$26,440.00). The event was held at the Faculty of Engineering via the Engineering Institute in November 2009, in association with SK Ghosh and Associates as Presenter and was attended by 35 professional engineers from throughout the Caribbean

Cost Containment/Increased Efficiency

The Faculty set up a Classroom Technology Support Unit (CTSU) to continue its drive to equip and to also provide technical support for all lecture rooms with Audio/Visual equipment using the Penn State standards for classrooms. This ongoing exercise has resulted in substantial cost containment.

Projected Activities for 2010/2011

Programmes

Department of Civil & Environmental Engineering

Restructured undergraduate and postgraduate programmes are to be implemented.

Department of Electrical & Computer Engineering

The MASc programme was approved and accredited. In addition, the research programme was enhanced and the undergraduate programme improved.

General Activities

Department of Civil & Environmental Engineering

Significant outcomes are expected from activities such as Caribbean Coastal Processes, Flooding in Trinidad and Tobago and Natural Disaster Resistant Housing.

Distinguished Visitors

Richard Aching

Ministry of Legal Affairs,
Government of Trinidad & Tobago

Deoraj Beepaan

IET, UK

Roger Clark

School of Earth & Environment,
University of Leeds, UK

Allison Haggart

IET, UK

Gav Hanes

W2Pp Worldwide Academy, Geneva

William Hennessey
Franklin Pierce Law Centre, USA

Oliver Hinton
IET & Newcastle University, UK

Mazina Kadir
The Intellectual Property Office, T&T

Charles Kwesiga
Uganda Industrial Research Institute

John Mertens
Trinity College, Hartford, CT, USA

Eur Ing Steve Mustars
Chairman, IET Americas, Houston, Texas, USA

Anthony Paul
Aces, Caribbean Energy Specialists, T&T

Alfredo Pires
Dili.timor-Leste, Natural Resources

Laurie Power
Energy Institute, UK

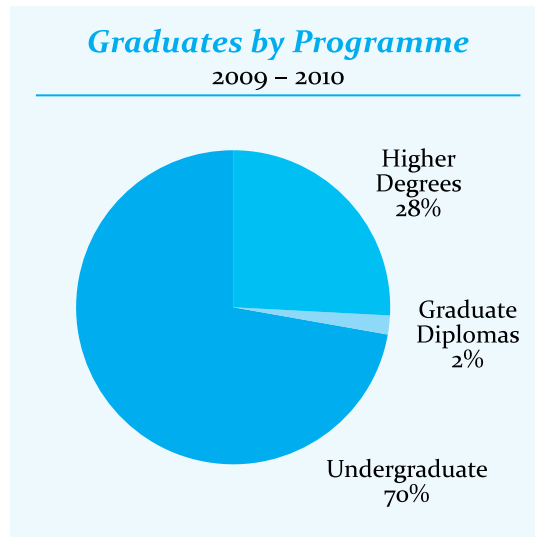
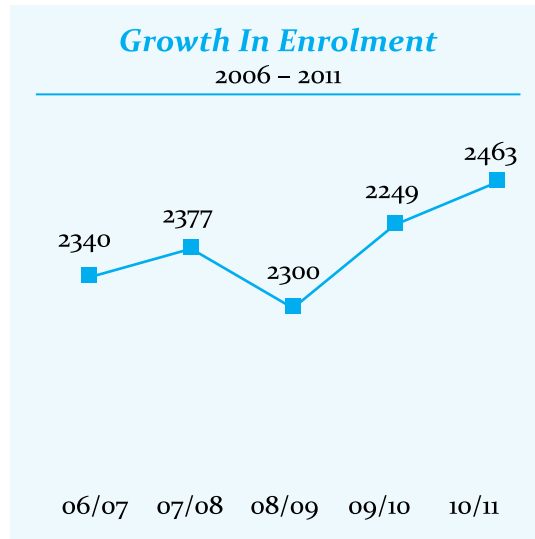
Odd Raustein
Stavanger, Norway

Jene Reece
Intellectual Property Office, T&T

Milla Riggio
Trinity College, Hartford, CT, USA

James Somerville
Energy Institute, UK

Jan Sykulski
University of Southampton, UK



HUMANITIES & EDUCATION

THE FACULTY, CONTINUED
THE RATIONALIZATION OF
ITS COURSE OFFERINGS,
DESIGNING COURSES FOR
DIFFERENT MODES OF
DELIVERY WITH INCREASING
FOCUS ON THE BLENDED
MODE OPTION



Executive Summary

The Faculty of Humanities and Education (FHE) remained committed in 2009/2010 to fulfilling its objectives in accordance 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 focussed on its outreach goals and objectives.

Teaching & Learning

In the academic year 2009/2010, the Faculty, in its focus on Teaching and Learning, continued the rationalization of its course offerings, designing courses for different modes of delivery with more and more focus on the blended mode option and developing new undergraduate and graduate programmes and courses. Some exciting new programmes such as a BA in Geography and a BA in Dance were offered for the first time in 2009/2010. The Faculty responded to calls from the Deaf Community and the media industry in Trinidad and Tobago for relevant training programmes. Consequently, an undergraduate Diploma in Caribbean Sign Language and a Certificate in Journalism were approved in 2009/2010 for offering in 2010/2011. The Faculty also designed and received approval from Academic Board to offer new undergraduate courses in History, Film and Education as well as some graduate courses.

Other major achievements during the review year in the area of Teaching and Learning were the opening up of the Faculty's Writing Centre to provide remedial instruction to students across the Campus and the offering of Spanish and French courses for credit by the Centre for Language Learning (CLL). The CLL also trained 116 Cuban Health Professionals in English Language.

Research

In the area of research the FHE engaged in a number of interesting projects surrounding two major research clusters, namely:

- *Arts, Cultures and Theories of the Caribbean*
- *Improvement and effectiveness of Public Education at the Early Childhood, Primary School and Secondary School level*

Some exciting research projects that the Faculty conducted in 2009/2010 were Professor Valerie Youssef's "Discourses of Violence and of Health", Benjamin Braithwaite's "Lokono revitalization in Suriname" and research conducted by Kathy-Ann Drayton and Benjamin Braithwaite into the Sign Language varieties being used by the Deaf in Trinidad and Tobago. The School of Education was involved in five major international collaborative research projects, which are outlined in this report under the Faculty's Strategic Appraisal of its Research and Innovation in 2009/2010.

Awards

A number of staff members received awards in 2009/2010 for excellence in creative and festival productions, and Literature and Latin American, Studies while the School of Education won research grants for projects in Culture and Curriculum.

In 2009/2010, FHE awarded 389 undergraduate degrees, of which 342 were honours degrees and of that number, 67 were First Class Honours degrees. The Faculty awarded 157 Postgraduate Diplomas and 77 higher degrees of which five were Doctoral degrees, four in the field of History and one in the field of Linguistics.

2009/2010 Publications

FHE staff produced a number of publications in the review period as listed below.

- 3 Books
- 13 Chapters in Books
- 2 Published Conference Papers
- 45 Articles
- 1 Exhibition
- 69 Papers presented at Conferences and Symposiums
- 14 Other
- 6 reviews (up from 5 in 2008/2009)
- 2 journal editorship (up from 1 in 2008/2009)
- 1 monograph
- 2 online databases
- 2 translations
- 3 other

Future Goals

The FHE has outlined a number of future goals in keeping with its strategic plan in the body of this report. Some key areas to note:

Teaching and Learning: The FHE plans to design and mount new programmes such as:

- *BA programmes in Cultural Studies and in Arts Education*
- *Diplomas in Animation, Indian Music, Carnival Aesthetics, and Design and Carnival in Education*
- *Advanced Certificate in Drama/Theatre-in-Education (as requested by the Ministry of Education to facilitate more Theatre Arts Teachers in Secondary Schools)*
- *Certificate in Carnival Studies*
- *Programme in Product/Industrial Design*

There are also plans to collaborate with the Faculty of Social Sciences to offer a 4-year BA/BSc with Education and with the Faculty of Science & Agriculture to offer a BEd and Master's in Mathematics with Education. The FHE also plans to focus on differentiated instruction to address the characteristics of all types of learners in the teaching of reading and to infuse critical thinking and authentic assessment into courses offered.

Graduate Studies: FHE plans to design and/or offer new postgraduate programmes such as MFA/MPhil in Film, MA in Film Literature and Cultural Studies, M.Ed. Programmes in Leadership, Educational Technology, and Assessment and Evaluation; and implement approved Graduate programmes in Communication Studies, MSc in Speech Language Pathology and a Master's degree in Sports Management in collaboration with FIFA.

Research and Innovation: The Faculty intends to deepen its focus on targeted research through the creation of research clusters as mandated by the Campus Principal, PVC, Professor Clement Sankat, in keeping with the UWI strategic plan. In order to create a more enabling environment for the type of cluster-based research that is envisaged, Faculty hopes to set up a Projects and Research Unit headed by a Research Coordinator and to provide Visiting Professors to enhance research capacity and supervisory skills. It is intended that staff would be trained to design and mount large scale research projects and to write proposals and grant applications.

Administrative Processes: The FHE hopes to improve the streamlining of administrative functions in the Faculty Office to better serve the Faculty and Registry, and to ultimately improve its service to its stakeholders, most important of which is its students. The design and implementation of a semi-permanent Faculty Master Timetable and an intra faculty electronic workflow are some such key projects.

Students

Enrolment

During the review period, total undergraduate enrolment at the Faculty of Humanities and Education stood at over 2,000 students while graduate enrolment amounted to just under 1000 students. Overall the Faculty experienced an overall increase of about 6% as a similar decline at the undergraduate level, caused primarily by fewer students pursuing certificate and diploma programmes, was countered by a 50% increase in postgraduate enrolment. The areas of Communication Studies, English Language and Literature with Education, Early Childhood Care and Education, and Film Studies continued to be the most subscribed programmes.

Graduating Students

The Faculty awarded 408 undergraduate degrees, of which 359 were honours degrees including 72 First Class Honours degrees. The top Bachelor of Arts degree graduating student was *Ms. Jade Achoy* who majored in Visual Arts. Her counterpart graduating from the School of Education was *Mr. Erle Wright* who majored in Primary Education: Educational Administration.

At the postgraduate level, 141 Diplomas and 39 higher degrees were awarded, including 5 were Doctoral degrees which were awarded as follows:

- *Debbie Wendy Mc Collin* (with High Commendation) - History
- *Dane Morton-Gittens* – History
- *Sean Ellery Ng Wai* – History
- *Elizabeth Anne Ramjeawan* – History
- *Dwane Kebbald Garcia* (posthumous) - Linguistics

Noteworthy Achievements

Students of the Faculty of Humanities and Education continue to excel on the national and international stage and this year, students enrolled in our Film Programme were particularly successful. A number of student films were screened at the 2009 Trinidad and Tobago Film Festival (TTFF) at MovieTowne Port of Spain. Among them, Jimmel Daniel's student film *The Power of the Vagina* received special mention by the TTFF's jury. The film was also shown at the 2009 Portobello Film Festival in London as was the documentary *Got Paper? At What Cost?* by Naomi Howard. Professor Patricia Mohammed's short film *Coolie Pink and Green*, edited by Film students Michael Mooleedhar and Christopher Din Chong (Assistant Editor) received the TTFF People's Choice Award. Meanwhile, Andre Johnson, a final year Film student, was awarded a TT\$200,000.00 budget by the Trinidad and Tobago Film Company to write, direct and produce his own short film entitled *Sweet TnT*.

Staff

In all, the Faculty welcomed 15 new members of staff to augment teaching in areas such as Education, Literature and Languages. The Department of Creative and Festival Arts (DCFA) obtained permanent posts in Dance, Music and Theatre Arts to facilitate the expansion of these areas and there was an increase in the number of Study Abroad opportunities available to staff in the Department of Liberal Arts.

Awards, Honours and Distinctions

- *Dr. Lancelot Cowie* was commissioned a Kentucky Colonel by Governor Steven L. Beshear. Commonwealth of Kentucky in recognition of outstanding contributions in the field of Latin American Studies, The University of Louisville, Kentucky, Sept, 2009.
- *Dr. Jennifer Rahim* won the Casa de las Americas Literary Prize for Caribbean Literatures in English or Creole for her collection of poems, *Approaching Sabbaths* (Peepal Tree Press, 2009).
- *Dr. Jeannine Remy* arranged and conducted the award winning steelband (CLICO Sforzata) to 1st place in the *Pan in the 21st Century* competition in June 2010.
- Cacique Best Dramatic Production 2009, *Fragments*.
- Cacique Award for Best Actor (*Marlon Debique*) in *Beauty and the Beast*.
- Cacique Award for Best Actress (*Tramaine Lamy*) in *Beauty and the Beast*.

**Appointments, Promotions,
Resignations & Retirements:**

- *Dr. Heather Cateau* was promoted to Senior Lecturer
- *Mrs. Lynda Quamina-Aiyejina* was promoted to Senior Librarian II Level
- *Dr. Basil Reid* was promoted to Senior Lecturer
- *Dr. Elizabeth Walcott-Hackshaw* was promoted to Senior Lecture
- *Dr. Merle Hodge*, Literatures in English, Department of Liberal Arts - retired
- *Dr. Ramon Mansoor*, Spanish, Department of Liberal Arts - retired
- *Dr. Sharanya Jayawickrama*, Literatures in English, Department of Liberal Arts - resigned
- *Ms. Laura Serrano* (Visiting Lecturer), Department of Liberal Arts - resigned

Obituaries

- *Mr. Dwane Garcia* – Department of Liberal Arts
- *Ms. Samantha Pierre* – Department of Creative and Festival Arts

Transforming Leadership, Culture & Processes

Staff at the Faculty continues to engage in training and professional development at different levels, particularly in areas related to Testing, Assessment, Online Instruction and the integration of ICT into programme delivery. In addition, 48 academic staff members of the Faculty participated in IDU Training Workshops. The Faculty is particularly pleased to recognise the academic achievements of the following members of staff:

- *Ms. Claudette Jessop* graduated in January 2009 with an MBA in Marketing, Arthur Lok Jack Graduate School of Business.
- *Mr. Diego Mideros Camargo* graduated in October 2009 with an MEd in Youth Guidance, UWI, St. Augustine.
- *Ms. Samantha Mitchell* graduated in October 2009 with an M Ed in Curriculum Development, UWI, St. Augustine.
- *Ms. Sylvia Rose-Ann Walker* graduated in October 2009 with a PhD Literatures in English (with High commendation,) UWI, St. Augustine. Most outstanding thesis award, Faculty of Humanities & Education and Faculty of Social Sciences, 2009.

Teaching and Learning

Programmes

At the undergraduate level the Faculty introduced a BA in Geography, a BA in Dance and a Minor in Caribbean Sign Language. A new Certificate in Education for School Librarians was also introduced as well as courses in History and Screenwriting. Meanwhile, for the first time the Centre for Language Learning offered Spanish and French Level 1A and Level 1B courses for credit. The Faculty was granted approval for an Undergraduate Certificate in Journalism and an Undergraduate Diploma in Caribbean Sign Language.

Curriculum Review

Curriculum reviews were conducted for programmes in Education, Film and Linguistics as well as the Minor in Spanish, the Special in Visual Arts, and the Carnival Arts programme. The course on French-Lexicon Creole was reoriented towards Haitian Creole in response to the needs of experts who were travelling to Haiti to provide support in the wake of the January 2010 earthquake which devastated the country. In all departments and units the Faculty endeavoured to follow through on the recommendations outlined in Quality Assurance Reviews. Courses with low intake were also identified for review and consideration for withdrawal while others were modified.

Programmes in development

A committee was set up to conceptualize a **Pre-service BEd programme** in light of the closure of the National Teachers' Colleges and the new directive from the Ministry of Education that only persons with professional qualifications would be employed in the teaching service. An undergraduate *Certificate in Carnival Studies* is also under development.

The School of Education is exploring the establishment of **Cross-Departmental and Cross Faculty Programmes** and the development and design of double major programmes. The intention is to have programmes that will attract new university students to a career in teaching by providing them with the opportunity to enhance their knowledge and skills in specific content areas while at the same time exploring educational theory and practice. This would include being involved in planning for teaching, observing classroom teaching and some degree of classroom practice.

The Faculty's contribution to development in **Tobago** stepped up a notch this year as the School of Education commenced offering both the **BEd Early Childhood Care and Development** programme and the **Diploma in Education: Science** in Tobago in face to face mode. Meanwhile, use of E-learning continues to become more widespread across the Faculty. Discipline-appropriate software has been installed in the Computer Laboratory at the DCFA and this year marked the third year of delivery of the BEd online programme. Approximately 102 new students were engaged in the programme in the year under review.

At the graduate level the Faculty welcomed the first cohorts pursuing postgraduate work in **Human Communication Studies** and the **MEd in Reading**. A **Master's in TESOL** was approved by The Academic Board this year while work continues on programmes such as a **Postgraduate Diploma in Animation**, an **MA in Creative Design: Entrepreneurship** and a **Post graduate Pre-Service Diploma in Education** which will cater to persons with an undergraduate degree who are seeking to enter the teaching profession. Some existing graduate programmes were revised, such as the **Arts and Cultural Enterprise Management Programme**, which saw student intake increase by 65% in 2009/2010 as a result, and the **MEd in Health Promotion**. It was also proposed that Information Literacy be embedded in the programmes of the School of Education and a review of graduate programmes was undertaken to facilitate implementation in the 2010/2011 academic year.

Other Developments

This year saw the implementation of Faculty of Humanities and Education Writing Centre Referral Form and Writing Centre Policy. Work is continuing on the preparation of a ***Self-Preparatory Handbook for the English Language Proficiency Test (ELPT)***, ***Functional Tertiary English*** and ***Functional Applications of Work on Tertiary English Language Learning***. These projects are being produced jointly by the Department of Liberal Arts and the Office of the Dean.

Department of Creative and Festival Arts (DCFA)

The main infrastructural developments at the Faculty were at the Gordon Street location of the Department of Creative and Festival Arts (DCFA). A new 'temporary' Musical Arts block was opened and now houses staff offices, 16 practice rooms and two music studios. Meanwhile, the Visual Arts Unit now features a new Mezzanine floor with studio space and five staff offices. The Festival Library at the DCFA was outfitted with equipment to transfer long playing records and video tapes to CDs.

Centre for Language Learning

The Centre for Language Learning entered into an agreement with the Instituto Cervantes, Spain, whereby the CLL is now an examination centre for the Diplomas in Spanish as a Foreign Language (DELE) in Trinidad and Tobago. The Centre assisted the Trinidad & Tobago Ministry of Health by providing English language training to three cohorts of Cuban Health Care Professionals, 116 in total. Similar training was provided to a group of staff members from the Universidad Nacional de Colombia who benefited from an intensive but varied programme which included weekly visits to sites of interest in Trinidad.

Research

The Faculty has two major research clusters:

1. Arts, Cultures and Theories of the Caribbean
2. Improvement and effectiveness of Public Education at the Early Childhood, Primary School and Secondary School level

Research conducted 2009/2010

The Faculty celebrated the launch of a new peer reviewed journal emanating from the Department of History. The History in Action Online Journal (www.mainlib.uwi.tt/epubs/historyaction). At the DCFA, **Rawle Gibbons** engaged in research into Carnival Traditions, Caribbean Regional Festivals, Garifuna (Belize and St. Vincent) and other 1st Nation Cultures, Arts Policy in the Caribbean: the case of CARIBNET. Research coming out of the CLL this year included a project by **Beverly-Anne Carter** on the development of a foreign language policy for Trinidad and Tobago. This was done under the auspices of the Ministry of Education's Seamless Education Policy Unit with **Ian Robertson** of the School of Education as the Principal Investigator. There was also a project by **Maria Landa** on *Spanish in contact with Bantu languages: A comparison between Palenquero and the Spanish Interlanguage of Native speakers of Swahili*. Researchers at the School of Education were involved in a number of international research projects:

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

June George and Susan Herbert worked on a large-scale assessment in Trinidad and Tobago with Professor John Anderson of the Department of Educational Psychology and Leadership Studies of the University of Victoria, British Columbia, Canada. **Raymond Hackett** became a member of the IDEA research network which is a research body of Latin American, Caribbean and Canadian researchers committed to the effectiveness and improvement of public education.

Susan Herbert collaborated with Dr. Marcia Rainford, Lecturer, Department of Educational Studies, UWI, Mona, to conduct an action research project aimed at the continuing professional development of secondary science teachers in Jamaica and which employs e-learning strategies.

Carol Logie lead 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 are national surveys on (i) Childrearing beliefs and practices in Trinidad and Tobago, and (ii) Health, wellness and parenting practices in Trinidad and Tobago

Other research projects undertaken at the School of Education looked at the impact of In-Service Training on Early Childhood Teachers; the inclusion of elements of nature in the Early Childhood Curriculum and a research project on Caribbean poetry.

Ongoing Research

Department of Liberal Arts

Jean Antoine is involved in archival research at the Fisher Rare Books Library at the University of Toronto. She is specifically engaged with research at the Walcott archive with a special focus on his film scripts, story boards and drawings. This is part of a long term project to understand and conceptualise the specific impact of sound – visual dynamics on Caribbean Literature and Film.

Barbara Lalla continues to spearhead her collaborative, cross disciplinary Caribbean Cultural Dynamics project contributing to publications and scholarly presentations. In addition she is working on a Caribbean oriented research methods text *Research Methods in Caribbean Literary and Discourse Culture* for students of Caribbean Literary and Discourse Culture. This is a collaborative project with **Nicole Roberts, Elizabeth Walcott-Hackshaw** and **Valerie Youssef**.

Giselle Rampaul is involved in the interface between British literature and postcolonial Caribbean perspectives. She is contributing to publication of an edited collection of essays with Barbara Lalla entitled *Caribbean Postscripts: Afterwords on the British Canon: Caribbean Re-readings of Seventeenth to Nineteenth Century British Literature*. She is also involved in Children's Literature and is editing a volume on representations of the child in Caribbean Literature.

Louis Regis continues his significant work on the Trinidad Calypso, West Indian Literature and Theatre.

Geraldine Skeete continues to explore Literary Linguistics, Change and Development in Caribbean Literary Discourse and Gender and Sexuality.

Jairo Sanchez has begun work on a project with the Summer Institute of Linguistics, Inc in which he is localizing the Spanish Semantic Domains for their "Language Explorer" software, a programme designed for anthropologists, ethnographers and linguists among other professionals.

Benjamin Braithwaite has begun work on a project aimed at Lokono revitalization in Suriname.

Kathy-Ann Drayton continues to research language disabilities and difficulties experienced by young learners in the school system, supporting a government-funded research project in this key area. She has also teamed up with **Benjamin Braithwaite** to conduct research into the Sign Language varieties being used by the Deaf in Trinidad and Tobago.

Valerie Youssef continues her research on Discourses of Violence and of Health. Together with **Paula Morgan**, she edited the 4th Issue of the *Caribbean Review of Gender Studies* on the theme: *The Culture of Violence in Trinidad and Tobago: A Case Study*. This brought together leading local work in the field of violence intervention. She is also about to embark on a new phase of the International Corpus of English (ICE): Trinidad & Tobago Project with Dr. Dagmar Deuber of Freiburg University. This project establishes the nation's Standard language variety amongst World Englishes accessible as a recognized language corpus.

Department of History

Bridget Brereton is conducting research into Contesting the Past: Narratives of Trinidad & Tobago's History; Society & Social Change in the British Caribbean, 1838-1938; Update to Dictionary of Trinidad & Tobago Biography.

Heather Cateau continues to explore Enslavement Systems in the Caribbean and North America; And Revisionism in Caribbean Historiography.

Claudius Fergus continues to focus on a number of topics including Revolutionary Emancipation: The Dilemmas of Slavery, Internal Security and Abolitionism in the Reformation of the British West Indies; Anansi, an African Legacy: Bridging Time, Spaces and Spirits; Emancipation and 'Military Necessity' during the Haitian Revolution: Challenging the hegemonic paradigms of Slavery and Freedom; and The Memory of Africa in "Nation Songs" and Calypso in the Diaspora; and the Ritualising of the Atlantic Slave trade Experience in West Africa.

A Garcia is exploring 19th Century Cuban Independence & José Martí's Relations with African Diaspora Global Perspectives while **Kusha Haraksingh** examines Law in Plural Societies; The Caribbean and International Trade; Globalization in theory and practice. The United States in the English Speaking Caribbean and Caribbean Archaeology and History in Maps and Images are topics that continue to attract the attention of **G. Matthews**

Rita Pemberton's research takes a look at the History of the Caribbean Agro-Economics Society and the Constitutional History of Tobago, but she shows a strong interest in the health history of the region with works such as Health and Development in Africa and the African Diaspora; Health & Medicine in the 19th Century Caribbean; Prison Medicine in the British Caribbean; and Representation and Other Matters of Concern to Doctors in the British Caribbean during the Early 20th Century.

Basil Reid continues to shed light on the first peoples of the Caribbean with research such as Caribbean Time (5000 B.C. to the 21st Century); The Encyclopedia of Caribbean Archaeology; Caribbean Archaeology and History in Maps and Diagrams (5000 BC – 1917); and Early Caribbean Farmers. He is also working on Trinidad Railways Project (1870-1968); and Caribbean Heritage: A Source Book.

Hinduism in the Caribbean is the focus for **Sherry-Ann Singh** who is conducting research into Social, Religious and Political Forum: The Yagna in Trinidad Hinduism; The Ramayana in Trinidad: A Socio-Historical Perspective; The Ramayana Tradition in Trinidad; and Women and the Ramayana Tradition in Trinidad.

Jerome Teelucksingh is pursuing projects looking at Labour relations and trade unions in Trinidad and Tobago; Party Politics in Trinidad and Tobago during the 1920s and 1930s; and The Impact of Marcus Garvey on Trinidad during the 1920s.

Michael Toussaint is concentrating on topics that explore the pre-Columbus presence of African peoples in the Americas and the political development of the Caribbean. Specific projects include Engendering Nationhood: Women in Social and Political Activism in Twentieth-century Trinidad and Tobago; Runaway East Indian Indentured Immigrants on the Spanish Main in the Late 19th Century; When Silence is Not Golden: Prompting Regional Response to the Discourse on the Pre-Columbian African Presence in the New World; Walter Rodney's Impact on Caribbean Intellectual thought, African and Indian Consciousness and Labour Politics; and The Black Power Movement in Trinidad and Tobago.

Department of Creative and Festival Arts

At the Department of Creative and Festival Arts, **Dani Lyndersay** is carrying out research into how (certain) socio-cultural dimensions of a society can be healed by the transformational elements of arts education and the socio-cultural dimensions of the transformational elements of arts education in the promotion of cultural diversity, social cohesion and societal issues for societies-in-crisis. **Kenwyn Crichlow's** research looks at the Landscapes of Michel Jean Cazabon (1848-50), while **Hazel Franco** is researching Caribbean Choreographers (Jamaica) and examining the Tobago Legacy – Making Connections through African Spiritual and Ritual Practices.

Outreach

Service to UWI-12 Countries and Other Underserved Communities

The Faculty lends its support to the development of the Open Campus through the design of more courses and programmes for mixed modes of delivery and through the BEd (Primary) Language Arts programme which is offered in collaboration with Open Campus.

Faculty Outreach Events

The Faculty hosted/was involved in the following events during the academic year 2009/2010:

Conferences - 2

- International Conference in honour of Nobel Laureate Derek Walcott's 80th birthday in January 2010 entitled *Interlocking Basins of a Globe*
- International 3-day conference entitled *One Hundred Years of the Mexican Revolution* was hosted in April 2010 by CENLAC and the Spanish Section of the Department of Liberal Arts

Lectures, Seminars, Forums, Workshops

- 11 including:

- Three cohorts of Cuban Health Care Professionals, 116 in total, received English language training at the Centre for Language Learning
- Workshops for teachers at the Secondary School Level such as "Alternative Assessment and Teaching for Student Engagement," "Towards Effective Classroom Management," and "Using the Internet in the Classroom: Webquests"
- Workshops for teachers at the Primary School Level and Early Childhood Care and Development such as "Teach them to Reach them: Channeling Behaviours of Young 'troublemakers' and Typical Children," and "Reading Assessment, Intervention and Monitoring."
- School-Based Training and Support Initiative for Secondary School Principals
- A *First Workshop on Deaf Language and Culture* was held at the end of May 2010
- Professor Valerie Youssef delivered her Inaugural Lecture entitled *Language, Education and Representation: Towards Sustainable Development for Haiti*

Annual events included Campus Literature Week and, *Kweyol/Patois Day*.

Productions and Exhibitions – 26 including:

- Modern Languages 11th Annual UWI Inter-Campus Foreign Language Theatre Festival was held at St. Augustine on 25-26 May 2010
- August 2009, *UWI FesTCo*, Department of Creative and Festival Arts' (DCFA) Theatre Company, participated in the CARA International Theatre Festival in Antigua, receiving great reviews
- December 5, 2009 Dagua Hall: UWI Arts Chorale and National Sinfonia Orchestra: *Bernstein's Chichester Psalms and Songs for Christmas*
- December 16, 2009, Humanities Undercroft & Alice Yard, Woodbrook, *Bespoke 09* - the Visual Arts Unit's Design Lab 3 class delivered a unique exhibition of art and design
- January 29, 2010 JFK Quadrangle, *Haiti Solidarity Event*: musicians and poets fully participated
- February 7, 2010, Dagua Hall: UWI Arts Chorale and National Sinfonia orchestra *Songs for Haiti*: a memorial and fund-raising production
- January 16, 2010, Soft Box, *Shabine! (Walcott) Exhibition* for Walcott Conference
- January 12, 2010, LRC, *Fragments* for Walcott Conference
- January 21, DCFA Agostini Street, *The Old Yard* which featured ole time mas characters and the Mardi Gras Indians from New Orleans
- March 11, 2010, Dagua Hall, *Rex Nettleford Memorial*, with music from the UWI Arts Chorale and the National Sinfonia
- March 2010, the UWI Arts Chorale with UWI SSteel presented their 10th Anniversary Concert: *New York, New York* and then subsequently embarked on a five concert tour to New York in April
- March 12 – 28, 2010, Learning Resource Centre, *March to Caroni: the crisis of memory*, which uniquely invited the seated audience “to join the march to Caroni” by promenading around The University of the West Indies Campus and incorporated five different outside community groups (OWTU); African Cultural Association; Baal Ramdilla; Arts-in-Action; Wordsmiths; as well as Calypsonians and Poets. The production in commemoration of the 40th Anniversary of The Black Power uprisings was directed by Rawle Gibbons, Marvin George and Louis McWilliams
- March 13, 2010, Gordon Street, *Jazz at DCFA*
- April 26, JFK Quadrangle, *Bugs* Exhibition: giant papier mache insects displayed at Gordon Street and subsequently across the JFK Quadrangle
- May 25, 2010 *Women in Calypso* Concert, DCFA, Agostini Street
- June 6, 2010 *Wordsmiths* at CLL Auditorium
- July 1-4, 2010, Queen's Hall, *Aida* by the UWI, Festival Arts Chorale

Annual events included *Sole to Sole* (Dance), the *Art & Design Show* – the Final Year Students' Exhibition, the end of the year concert Percussion and Steel presented by the Music Unit, Kaiso Dialogues 6, and the *Festival of Plays* showcasing productions by Final Year Directing students.

- **Films, Festivals and Screenings** – 7 **including:** Prof. Patricia Mohammed's short film *Coolie Pink and Green* received the TTFF People's Choice Award and the editor was Film student, Michael Mooleedhar while the assistant editor was Christopher Din Chong
- Jimmel Daniel's student film *The Power of the Vagina* received special mention by the TTFF's jury and was also shown at the 2009 Portobello Film Festival in London as was the documentary *Got Paper? At What Cost?* by Naomi Howard
- During the academic year, Dr. Meir hosted the weekly screenings of Campus Film Classics, with the assistance of Film student Jonathan Ali
- Dr. Meir and the Centre for Language Learning assisted in the screenings of Indian Films on behalf of the Indian High Commission
- The Centre for Language Learning hosted a Brazilian Film Week from September to October 2009

A number of students showed films at the 2009 Trinidad and Tobago Film Festival (TTFF) at MovieTowne, Port of Spain and The UWI held a two-day Mini Film Festival in September 2009 screening a number of the films from the TTFF.

Other Outreach Activities - 6

1. The Centre for Language Learning (CLL) hosted Japanese Cultural Days from November 13 to 14, 2009
2. The Centre for Language Learning entered into an agreement with the Instituto Cervantes, Spain whereby the CLL is now an examination centre for the Diplomas in Spanish as a Foreign Language (DELE) in Trinidad and Tobago
3. Communication Studies Section of the Department of Liberal Arts celebrated its 10th Anniversary in April 2010 with a week of activities
4. The Caribbean Interpreting and Translation Bureau (CITB) provided services for the state visit of the French President during the CHOGM meeting in November 2009
5. French and Spanish interpreting services were provided at the Bureau's expense to the Annual General Meeting and Conference of The Association of Universities and Research Institutes of the Caribbean (UNICA) in March 2010 held at The UWI St. Augustine Campus
6. See collaborative work with international partners as listed under the section of this report entitled *Research and Innovation*, which helps to strengthen national engagement and regionality.

Projected Activities for 2010/2011

The Faculty's projected activities for 2010/2011 and beyond are geared towards the realization of its key objectives of the UWI Strategic Plan include the following:

Teaching and Learning

- To start an UG **Certificate in Journalism**
- To continue the revision of programmes to identify courses for modification and for elimination, and to generate new courses
- To draft proposal for a **Foundation course in Arts, Aesthetics and Culture**
- To introduce new academic writing courses for Certificate students
- Review Carnival Studies programme
- Review year long courses in Visual Arts and Musical Arts BA programmes
- Review Part Time Students' timetable needs
- To design and mount new programmes such as **BA in Cultural Studies, Certificate in Carnival Studies, Advanced Certificate in Drama/Theatre-in-Education** (MOE requested 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** (in collaboration with the Faculty of Social Sciences), **BEd and Masters in Mathematics with Education** (in collaboration with the Faculty of Science and Agriculture), Programme in **Product/Industrial Design** and **BA degree in Arts Education**
- To re-organize the in-service BEd to accommodate potential applicants who are employed in the teaching service at the primary level but who do not possess a Teachers Diploma and to develop pre-service programmes at the BEd and Dip Ed Levels. A **Pre-Service Diploma in Education** will be developed while at the same time the School will continue to deliver the in-Service Diploma in Education programme to address the needs of the untrained teachers within the system
- The School of Education has also begun delivery of the in-service **Diploma in Education** programme in **Tobago**. The programme started in 2009 with one curriculum area (science) and has been increased to three curriculum areas during 2010/2011. The school intends to continue delivery of three curriculum areas during 2011/2012 and beyond
- To offer the Film programme on part-time status to increase enrolment of professional applicants
- To design revenue earning short courses – *Business Writing Today* and *Writing Proficiency in the World of Work*
- To develop two additional English Language Foundation courses - *Writing in the Business Discipline* and *Communication in Creative Arts*
- To introduce History courses which promote greater regional understanding and special co-curriculum courses for History students

- To fully implement revised curricula such as in Communication Studies (2008-2012) and in Visual Arts
- Implement **Music Therapy** course
- Focus on differentiated instruction to address the characteristics of all types of learners in the teaching of reading across the Faculty and to infuse critical thinking and authentic assessment into courses offered in the Department of Creative and Festival Arts
- To explore opportunities for internships for credits in various programmes
- To encourage staff to attend workshops on blended delivery and use of MOODLE
- Increase the use of discipline appropriate software in teaching
- English Language Foundation section to launch 2 workshops in collaboration with the Ministry of Education for Teachers of English in Secondary Schools
- Expand English as a Foreign Language programme to meet the needs of non-English speakers who come to The University either as international or exchange students; to capture some of the market for pre-university English for Academic Purposes courses; and to cater to non-native speaking professionals working in Trinidad and Tobago e.g. the Cuban health professionals
- Offer CLL Mandarin Chinese and Japanese Language Courses for credit

Graduate Studies

- To design and/or offer **new postgraduate programmes** such as:
 - MFA/MPhil in Film
 - MA in Film Literature and Cultural Studies
 - MEd Programmes in Leadership, Educational Technology, and Assessment and Evaluation
 - Implement approved Graduate programmes in Communication Studies
 - MSc in Speech Language Pathology
 - Master's degree in Sports Management in collaboration with FIFA
- Conduct needs assessment for Master's in Arts Education programmes and developing and/or implementing as indicated
- Design new graduate courses in History
- Strengthen and streamline Department of Liberal Arts graduate offerings
- Review Faculty Graduate Research and Methodology courses

Research and Innovation

- To focus on targeted research agendas through the creation of research clusters that are in line with the Strategic Plan
- To identify promising students in first degree programmes and to encourage them to return to undertake graduate studies in the referenced research clusters
- Set up Projects and Research Unit and an Assessment Unit
- To recruit more teaching staff and research assistants and engage the services of visiting professors with strong research records
- To develop and strengthen research ties with the Government and Private sectors
- To foster collaborative research among members of the faculty, across Campuses, and with international agencies
- Continue work towards the establishment of the region as an international centre for Caribbean Cultural Studies
- To offer new study abroad programmes

Collaboration with Open Campus

- Preparation of course material for blended modes of delivery
- Staff to attend workshops to facilitate online delivery mode
- BEd Primary degree continues to be offered online
- Mounting of portions of graduate courses online on a phased basis
- Increase activities via workshop, public lectures, co-curriculum activity and research in non-Campus territories

Distinguished Visitors to the Faculty

Department of Creative and Festival Arts

Mr. Idris Akamoor and Ms. Rhodessa Jones
Cultural Odyssey, San Francisco

Mr. Colin Boothman,
Illustrator, New York

Ms. Esailama Diouf
Creative Arts, USA

Mr. Frederick Jahn
Creative Arts, Guadeloupe

The Mardi Gras Indians
New Orleans, USA

Dr. Eugene Novotney
Head, Music Department,
Humbolt State University, USA

Dr. Sally Radford
Musical Arts, England

Mr. Gerald Tolson
Professor of Music Education and Jazz Studies,
University of Louisville, USA

Ms. Celia Weiss-Bambara
USA

Ms. Anne Marie Woods
Performance Artist and Poet,
Toronto, Canada

Department of History

Professor Patrick Manning
Professor in History,
University of Pennsylvania, USA

Department of Liberal Arts

Dr. Jane Bernstein
Children's Hospital, Boston, USA

Dr. Time Bressman
University of Toronto, Canada

Professor J. Michael Dash
Professor of French and Director of the Africana
Studies Programme, New York University,
New York, USA

Dr. Kristy Lascelles
Lecturer, Psychology,
UWI, Trinidad

Professor Daniel Miller
Professor of Anthropology, University College,
London, UK

Professor Jane Parpart
Gender and Development Studies,
Institute of Gender and Development Studies, UWI

Dr. Antonio Pedrós-Gascón
Assistant Professor, Spanish, Colorado State
University, Fort Collins, USA

Ms. Corinne Phillip
Legal Advisor, Telecommunications Authority of
Trinidad and Tobago, Trinidad and Tobago

Dr. Patricia Saunders
Cultural Studies, University of Miami, USA

Mr. David Somali
Communication Studies, USA

School of Education

Mr. Steven Khan
PhD Candidate,
University of British Columbia, Canada

Professor Tony Bush
University of Warwick,
United Kingdom

Dr. Jyothi Bathina
Education,
University of Southern California, USA

Film Programme

Ms. Ida Does
Documentary Filmmaker, Suriname.

Mr. Juan Gelas
Producer and Director, Filmmaker, France

Adoor Gopalakrishnan
Filmmaker, India

Mr. Adam Low
Filmmaker, United Kingdom

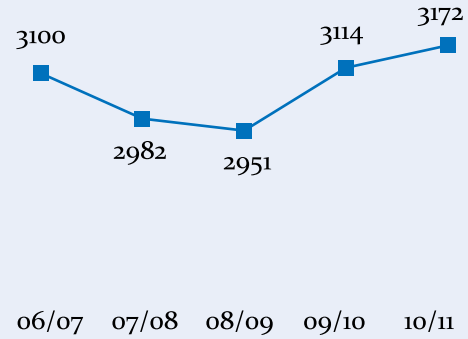
Tanja Meding
Film Producer, Germany and New York

Mr. Horace Ové
Filmmaker, United Kingdom

Mr. Raul Pantin
Screenwriter,
Trinidad and Tobago

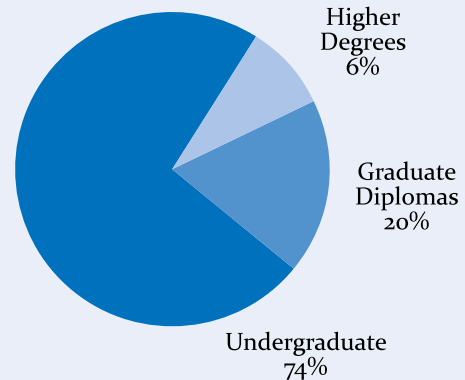
Growth In Enrolment

2006 – 2011



Graduates by Programme

2009 – 2010



MEDICAL SCIENCES

**THE ACADEMIC YEAR
2009/ 2010 SAW INITIATIVES
BY THE FACULTY WHICH
SERVED TO ADDRESS
BOTH THE FINANCIAL
AND INFRASTRUCTURAL
CIRCUMSTANCES**



Executive Summary

The academic year 2009/ 2010 saw initiatives by the Faculty which served to address both the financial and infrastructural circumstances. In the former case, increased tuition fees for the Schools of Medicine, Dentistry and Veterinary Medicine were introduced, which resulted in a much improved bottom line for the Faculty. In the latter case, clerkships have expanded to the Sangre Grande Hospital, in the areas of Surgery, Medicine and Obstetrics and Gynaecology, this took some strain off the other traditional clerkship sites. Approvals have also been received for the renovation of the Old Bachelor's Quarters at the San-Fernando General Hospital compound; when completed this will provide much needed student accommodation and teaching facilities.

Interest in the programmes offered in the Faculty has not waned. In fact, the Faculty continues to attract a large number of high calibre applicants, particularly to its MBBS and DDS programmes. This augurs well for the future existence of the various programmes, and, indeed, the Faculty. The challenge, therefore, is to continue to find creative ways of treating with the many issues that face the Faculty.

Department of Paraclinical Sciences

The Department of Para-Clinical Sciences consists of three Units: 1) Pathology and Microbiology, 2) Pharmacology and 3) Public Health and Primary Care. The Department focussed on implementing the changes in the Year 3 curriculum in tune with the GPA system and conversion to the semester system within Faculty in the Phase I programme. The Department successfully executed the changes with the active cooperation of all the members of the staff. Major changes in the continuous assessment with the introduction of Progressive Disclosure Questions (PDQs) involved extensive collective effort by the staff, which was well received by the students. In addition a number of postgraduate students were enrolled in various Units. During the academic year there were new appointments and promotions. A number of papers were published in refereed and non- refereed journals and also a book was published.

Department of Clinical Medical Sciences

The Department of Clinical Medical Sciences continues to pursue its mission of educating medical and other health professionals, to improve the health status of the Trinidad and Tobago society and by extension the Caribbean community. There continues to be a difficulty with Human Resources as one staff member resigned during the academic year and eventually had to be replaced by two part time staff members. However, the number of students entering the clinical years continues to increase and there is a great need to expand our pool of teaching resources in order to satisfactorily meet their needs. Child Health's Telehealth Unit provides a groundbreaking service to the department, health services and the wider faculty.

Professor Zulaika Ali was awarded a National award during the national Independence celebrations. The Department's impact on the wider university community was evidenced by the appointment of Professor Surujpal Teelucksingh as the university's Public Orator. Professor Terence Seemungal also chairs the campus Open Lectures Committee. The Department also celebrated the promotion of Dr Hari Maharajh in the Psychiatry Unit to the status of Professor. This now means that there are five staff members in the department with this status. Another landmark was the expansion of teaching to include the Sangre Grande Hospital for the fourth year adult medicine clerkship.

Department of Clinical Surgical Sciences

There was an increased number of students in the past year and although we have new staff, there has been no increase in staff numbers. There was continued expansion in Postgraduate programmes in Ophthalmology, General Surgery and Urology but there is still need for more training positions at General Hospitals.

We have modified the curriculum to reflect significant changes in the practice of Surgery and to ensure that adequate exposure is given to sub-specialty areas e.g., Urology and Neurosurgery. Measures have been taken to ensure that the core subjects are covered at all teaching sites so that, although individual experiences may differ, core material is covered.

Measures are being taken to put common surgical procedures on line; this will supplement the students' exposure to the operating theatre. There is need to increase teaching staff and further strengthen the bonds that exist between Full-time and Associate Staff.

School of Dentistry

The academic year 2009/2010 saw the School progress on many fronts in spite of some challenges. The demand for admissions is progressively increasing. Nevertheless, due to severe space constraints only 35 students of the many eligible students could be offered admissions during the period of report into Year 1 DDS program. The present infrastructure even for this size of admissions is insufficient and it is desirable to have more teaching staff, especially for hands-on clinical teaching. Some expansion plans that would accommodate more students with more modern equipment that would be cost effective and remunerative as well were brought to the notice of higher authorities.

Whilst the Doctor of Dental Surgery (DDS) program is in good demand, the performance of students in various exams and especially the graduating class was equally gratifying with several of them obtaining honors, distinctions and securing various prizes for their academic achievements. Sequentially the internship program and the Vocational Training-cum-Residency program have also progressed during the period. The interns continue to provide valuable services to the rural community at the UWI-MOH collaborative Arima Dental Clinic. Furthermore, the School is actively continuing with the Dental Surgery Assistants Training program.

The pilot project of School's Special Needs Dental Clinic is fast picking up providing much needed services to the mentally and physically challenged persons. Regular student rotations in this clinic are in the offing.

These achievements were not without challenges. The most tiring of these are the perpetual infrastructural issues relating to leaking roofs, air conditioning issues that actually needed the clinic closures sporadically resulting in the loss of clinical training for students. There were also some security challenges, but appropriate deterrent measures were taken in a dynamic security environment.

The School is looking forward to continue its progress in the new academic year hoping to move towards in obtaining an expanded facility in near future.

School of Veterinary Medicine

For the School of Veterinary Medicine academic year 2009/2010 could be considered one of the most productive periods of the five schools in the Faculty of Medical Sciences (FMS) in the context of postgraduate studies and research output by academic staff and students. A total of five (5) postgraduate students comprising three (3) and two (2) completed their research degrees in the academic year, 35 papers were published in peer-reviewed journals and three papers presented at international conferences by academic staff and graduate students. During the same period, 9 postgraduate students were registered for graduate studies. In the academic year 158 undergraduate students were enrolled in the five-year DVM programme of which all 27 final year students graduated as veterinary doctors. A major challenge for the School was the fact that of the 50 students, who enrolled in Year 1 of the programme, 35 were from Trinidad and Tobago, 15 from the Caribbean but none were extra-regional students. The school plans to attract more extra-regional/overseas students in the future.

During the academic year, the students participated in two major international initiatives involving the Ontario Veterinary College (OVC) of the University of Guelph in Canada and Colorado State University in the USA. To expand the spectrum of clinical cases in companion animal medicine at both UWI-SVM and OVC, a program of case sharing through the use of videoconferencing was commissioned. The SVM also hosted a regional workshop titled "Management of Common Blood Disease and Malignancies" facilitated by Professor Susan Cotter of Tufts University, School of Veterinary Medicine, Massachusetts, U.S.A. delivered through videoconferencing to veterinarians at four centres (Trinidad and Tobago, Barbados, Jamaica and Bahamas) in the region. A collaborative project was also commissioned with Colorado State University in the area of risk management with focus on food safety, public health and animal health which resulted in a technical expert, whose post is funded by the United State Department of Agriculture (USDA), is hosted by the SVM. Finally, for the first time in any programme in the FMS the SVM established seven business units (Aquaculture, Plastination, Diagnostic services, Hospital services, Food Safety, Continuing Education and Other Services) with the primary objective being the generation of revenue.

School of Advanced Nursing Education

The School of Advanced Nursing Education is proud of the contribution it has made to the development of Nursing in Trinidad and Tobago. Many of the school's graduates now serve in strategic positions within the Ministry of Health and in many Health Care Institutions. Some are serving as contract officers within the School.

The School is making strides to build capacity by strengthening the skills of its Lecturers. We have embarked on projects to enhance and expand its technological knowledge and skill base.

Students

In the 2009/2010 academic year the Faculty grew by 11%. Undergraduate enrolment increased by 9% while the number of students pursuing Higher Degrees climbed by 20%.

Department of Clinical Medical Sciences

Two students completed the requirements to graduate with the **MSc in Clinical Psychology**. The Department hosted a **Fulbright Scholar**, Ms Samantha Lee from St. Ambrose University, Davenport, Iowa from January 2010 to November 2010.

Department of Clinical Surgical Sciences

Mr. Anatole Wilk, Final Year Medical Student was awarded a Distinction in Surgery and the overall Surgery Medal at the May/June 2010 MB BS Final Surgery Examinations. The Postgraduate (DM) programme in Surgery is expected to produce its first graduates in the coming academic year.

School of Dentistry

Thirty-four (34) new students have been admitted into the Year 1 DDS Degree Program. Some 65% are from Trinidad, 22% from the Caribbean and 13% from outside the region. Each class is brimming with students, revealing the need to pursue with expansion plans.

School of Veterinary Medicine

Twenty-seven (27) students graduated from the undergraduate programme. Dr. Karla Georges graduated with an award of a PhD with high commendation.

School of Advanced Nursing Education

Top students

Our two outstanding students for the year are Oneikah Sergeant-Richards and Felicia Mohammed-Karim.

Graduation

A total of forty-one (41) BSc. Nursing students are expected to graduate in October 30, 2010. Included in this cohort, all of the one-year fulltime students enrolled in 2009 completed the programme and will be participating in the Pinning Ceremony and Graduation in October 2010.

Pinning Ceremony

A successful third Pinning Ceremony for graduating students was held on October 29, 2009. Dr. Catherine Tompkins, Associate Dean, McMaster University along with PVC Professor Clement Sankat brought greetings. Among other dignitaries were Professor Samuel Ramsewak, Dean, FMS and the Honourable Minister of Health, Mr. Jerry Narace. Forty-nine (49) students were pinned and received nursing lamps on that day.

International Clinical Observational Experience

For four weeks during May 2010, fourteen of our present students along with one student who graduated in 2009 were placed at various International Cancer Care

Management Centres in the UK and Canada. Those in Canada were hosted by the Mc Master University, while those in the UK were hosted by the The Royal Marsden NHS Trust, Sheffield Teaching Hospitals Foundation Trust & Mt. Vernon Cancer Centre.

Special Project undertaken by Students

We were privileged to supply the School of Veterinary Medicine with sixteen (16) nurses who worked on a rotation basis on the 12th and 13th November 2009. These qualified nurses were present at the 'Open House Day' to assist in the event of an emergency. Based on feedback there were cases to which their skills and competencies were exercised and therefore, we extend to the group a special note of thanks.

First cohort of MScN students

The first cohort of students for the MSc Advanced Nursing was admitted in September 2009. The cohort included a total of twenty (20) students, fifteen (15) of which are nationals and the remaining five (5) of which are Dominicans.

Launch of a new Oncology Clinic in Tobago

Five Tobago graduates from the School of Advanced Nursing were charged with the responsibility of the development and launch of a new Oncology Clinic in Tobago.

School of Pharmacy

Thirty two students have been awarded BSc Pharmacy degree: 12 first class; 14 upper second class, five lower second class and one pass class.

Staff

Appointments, Resignations and Retirements

Department of Preclinical Sciences

Dr. Junette Mohan was appointed Lecturer in Human Physiology

Dr. Edward Uche-Nwachi retired as a Lecturer in Human Anatomy

Professor Dan Ramdath resigned as Professor of Biochemistry

Department of Paraclinical Sciences

Dr. Michele Monteil, promoted to Professor, Immunology

Dr. Rohan Maharaj, promoted to the rank of Senior Lecturer in Public Health and Primary Care

Dr. Chalapathi Rao, promoted to the rank of Senior Lecturer in Anatomical Pathology

Dr. Gershwin Davis, promoted to the rank of Senior Lecturer in Chemical Pathology

Dr. Aneesa Ahamad joined as Senior Lecturer in Haematology

Dr. Altheia Jones-Lecointe retired as Senior Lecturer in Haematology/ Head Department of Para-Clinical Sciences

Department of Clinical Medical Sciences

Dr Hari Maharajh was promoted to the post of Professor and Dr Nelleen Baboolal promoted to the post of Senior Lecturer. They both work in the Psychiatry Unit.

Drs Neal Bhagwhandass and Mandrekhar Bahall were appointed as Part-time Senior Lecturers in the Adult Medicine Unit and are both based at the San Fernando General Hospital.

Dr David Coomansingh resigned as a full-time Lecturer from the Adult Medicine Unit effective 31 December 2009.

Dr Derek Emmanuel resigned as Research Assistant in the Child Health Unit.

Department of Clinical Surgical Sciences

School of Dentistry

Dr. Jason Warner appointed Lecturer, Endodontics

Dr. Amit Paryag appointed Assistant Lecturer, Dental Technology

School of Veterinary Medicine

Dr. Ridley Holder, promoted to the rank of Senior Lecturer.

Dr. Michael Diptee assumed duties as Lecturer in Veterinary Surgery (Large Animal)

Dr. Indira Pargass assumed duties as Lecturer in Clinical Pathology

Dr. Venkatasan Sundaram joined the School of Veterinary Medicine as Senior Lecturer in Veterinary Anatomy

Dr. Mervyn Campbell retired effective June 30, 2010

Dr. Gustave Borde retired effective July 31, 2010

School of Advanced Nursing Education

Mrs. Casian Rawlins

appointed Co-Coordinator in the MScN programme.

Mrs. Rita Jarvis-Isaac - resigned

Dr. Junette Mohan - resigned

School of Pharmacy

Dr. Sureshwar Pandey

appointed Senior Lecturer - Pharmaceutics

Dr. Adebayo Amusa Sarafadeen

appointed - Senior Lecturer – Pharmaceutics

Dr. Ramesh Rao, Lecturer, Human Anatomy - resigned

Awards

Department of Preclinical Sciences

S. Nayak: Recipient of UWI/Guardian Life Premium Teaching Award, 2010, Member, Fellow of Association of Biomedical Scientists (FABM)

Department of Paraclinical Sciences

Dr. Rohan Maharaj: Made a Fellow of the Caribbean College of Family Physician in November 2009

Department of Clinical Medical Sciences

Professor Zulaika Ali: Recipient of the Chaconia Medal (Silver)(For long and meritorious service to Trinidad & Tobago)- Medicine

Department of Clinical Surgical Sciences

School of Pharmacy

Ms. Rian Extavour received the President's Award for Volunteerism from the Caribbean Association of Pharmacists in August 2010.

Transforming Leadership, Culture & Processes

School of Dentistry

Dr. Ramaa Balkaran earned a Certificate in International Developmental Dentistry at University of Louisville School of Dentistry/ Underwood and Lee Outpatient Dental Clinic July 6th- 19th, 2010.

School of Pharmacy

Ms Rian M. Extavour successfully completed the IDU's part-time Postgraduate Certificate in University Teaching and Learning, June 2010 and Dr. P. Sealy completed PBL workshops for Tutors as well as workshops on Plagiarism Detection Using Turnitin and Recording and Sharing Lectures Using Camtasia Software.

Teaching & Learning

Department of Preclinical Sciences

The Department replaced end-of-year with end-of-semester examinations for all the courses and expanded the resources for anatomy laboratory practicals by providing more prosected specimens and microscopes.

Department of Paraclinical Sciences

The Department applied a multimodal of course delivery and assessment to achieve the ultimate goal of preparing the student for clinical sciences in the most comprehensive and effective manner. The methods of approach include didactic lectures, Problem Based

Learning, seminars, laboratory, museum and log card exercises, clerkships and clinical teaching in wards by certain disciplines and course information and lecture material are made available on the Faculty's website via My E-learning. Regular postgraduate seminars and presentations were conducted during the academic year

Department of Clinical Medical Sciences

The **Child Health Unit** used lecturers to carry out small group teaching for 5th year students and tutors for small groups in 4th year. Alternative assessments were implemented, my e-learning was used for the 4th year Clerkship and all-time sensitive reports and presentations were submitted via email.

The unit substantially revised its programme offering. First year students may no longer progress to second year of the programme without completing 10 mini Clinical Evaluation Exercise (CEX) cases. Second year students cannot progress to Part I examination without completing 10 mini CEX cases and submitting draft proposal for a research project. At the end of the third year of the programme the students must submit a full proposal with ethics approval and complete 5 mini CEX presentations. Fourth year students will not be allowed to proceed to the Part II examination unless they have submitted 5 mini CEX cases and a final report for the research project six (6) months before examinations.

Part I Clinical and oral circuits will be increased from five to six and the duration of each station is 10 minutes.

The candidate must attain pass mark in at least three stations in each of the clinical and oral circuits. In Part II, the oral circuit will be increased from 5 to 6 stations, the clinical circuit will remain as 10 stations and the duration of all the stations will be increased from 10 to 12 minutes. The candidate must attain pass mark in at least 6 stations in the clinical circuit and in at least 3 stations in the oral circuit.

Activities to enhance or improve delivery included the use of active learning techniques to teach a module on child development and use of internationally utilized mini Clinical Evaluation Exercise (CEX) evaluation for all students introduced in September 2009.

Department of Clinical Surgical Sciences

The Department defined the core topics to be covered at each of the four teaching sites in an attempt to standardize the teaching across institutions. The case book as been modified to fall in line with advances in surgery and development of the subspecialties.

The relationship between the Associate Lecturers and the Full Time staff is being strengthened through conferences, seminars, teaching and examination exercises in which they partner in maintaining good academic standards. All full-time staff members are now provided with a detailed list of responsibilities relating especially to teaching and research. Systems are in place to assist in ensuring that these are carried out responsibly

School of Dentistry

Lecturers incorporated and hosted a Smoking Cessation Seminar during their lecture sessions.

School of Veterinary Medicine

Most courses are now on My E-learning.

School of Advanced Nursing Education (SANE)

In keeping with its mission, SANE is partnering with other institutions to educate and to take the nursing profession to a higher level. “Summer” classes were conducted for nurses of the Tobago Regional Health Authority (TRHA) and a few other institutions have expressed their interest in similar sessions. The School also facilitated a few professional development lectures for the nurses of the North West Regional Health Authority (NWRHA).

Graduate Studies

Department of Preclinical Sciences

A Departmental Subcommittee on Graduate Studies was established to monitor and ensure improved graduate students training by supervisors and advisory committees. Invigorated weekly departmental research seminars/journal club meetings were instituted where either students or lecturers make presentations. In addition, a three-day workshop on Cell Culture techniques was conducted for academic staff and graduate students to expand the research capability of the department.

Department of Clinical Surgical Sciences

Graduate studies in Clinical Surgical Sciences are largely composed of elements of the postgraduate (DM) programmes. Candidates must produce a book of 20 clinical cases with a full discussion of each case. In addition, Residents attend monthly journal clubs, present papers at local and regional conferences. Four senior Residents have already produced peer-reviewed publications and will attempt the final

examination in 2011. We have continued expansion of the postgraduate programmes in Ophthalmology, General Surgery, Orthopaedics, Anaesthetics and Obstetrics and Gynaecology.

School of Advanced Nursing Education

The first graduate (MScN) programme commenced in September 2009. The Director has successfully negotiated with the Ministry of Health for funding of tuition fees for 15 students pursuing the MSc in Nursing programme.

Research

Department of Preclinical Sciences

Research Grants Obtained

J. Addae “Evaluation of the antiepileptic properties of Jasmine and Curcumin.” Campus Research Fund – TT\$40,200.00

C. Carrington. “Metagenomic Analyses in Support of the Nariva Swamp Wetland Habitat Restoration initiative, Trinidad and Tobago”. Campus Research Fund – TT\$91,000.00

B.S. Nayak Received “The use of N-terminal BNP and multiple risk factors to assess cardiovascular risk in elderly type 2 diabetic and non diabetic Trinidadians” Campus Research Fund – TT\$36,380.00

J. Foster. “The influence of ethnic variability on the metabolic programming of nutrition-related chronic non-communicable diseases in Trinidad and Tobago” Campus Research Fund –TT\$28,066.50

G. Kurhade. “The effects of exercise on immune cell function and other mediators of immunity in Trinidadian population”. Campus Research Fund – TT\$76,200.00

Research Agenda

Neuroscience: Neuroprotection involving glutamic acid, GABA and cannabinoid receptor ligands; Identification of neuronal pathways.

Molecular genetics and virology: Molecular evolution of dengue, yellow fever and other RNA viruses; Investigation of potential anti-viral compounds; Epigenetics in type 2 diabetes

Medicinal properties of natural products

Nutrition & Metabolism

Major Projects Completed

- The pharmacology of ethylenediamine in vivo including its antiepileptic properties. Ethylenediamine is a small molecule which exhibited activity on the GABA receptor complex and hence has the potential to be developed into an antiepileptic drug.
- The role of AMPA, a glutamic acid agonist, in modulating spreading depression in the brain. Spreading depression is part of the process that causes migraine headaches and the expansion of dead brain tissue following a stroke. AMPA was able to reduce the spreading depression. Activation of glutamic acid receptors in the brain via the use of AMPA provides a more physiological way to control spreading depression.

- The role of Adiponectin and inflammatory markers in assessing the insulin sensitivity in type II Trinidadian Diabetics” Adiponectin decreases with increasing adiposity and insulin resistance. Adiponectin and TNF- α appear to be related to differences in the insulin mediated glucose turnover
- Bombesin Immunoreactivity in the stomach and small intestine of Vagotomized Sprague Dawley Rats.

Research in Progress

Title: Molecular Characterisation of Indigenous Culex Mosquitoes In Trinidad

Investigators: Shelley Cook ^a, Albert. J. Auguste ^b, Christine V. F. Carrington ^b, Raymond Martinez, Ralph Harbach ^a

Affiliations: ^a Natural History Museum, Cromwell Road, London, UK,

^b Department of Preclinical Sciences, Faculty of Medical Sciences, The University of the West Indies, St. Augustine, Republic of Trinidad and Tobago.

Summary: Taxonomical classification of mosquitoes to species level on the basis of morphology is very time consuming and requires considerable expertise. Ideally classification should be based on observation of both male and female adults (and intermediate life stages) that have been reared from eggs. In studies dealing with adult field caught mosquitoes this is not possible and in many cases although the genus may be determined with a high degree of certainty, only tentative classifications can be made at the species level. In support of our work on mosquito borne viruses, our aim is to develop molecular bar codes for *Culex* mosquitoes in Trinidad that will allow for rapid DNA based classification.

Title: Phylogeography and Population Dynamics of Dengue In The Americas

Investigators: Orchid M. Allicock ^a, Philippe Lemey ^b, Andrew J. Tatum ^c, Oliver G. Pybus ^d, Brandi A. Mueller ^e, Shannon N. Bennett ^e, Mark A. Suchard ^f, Jerome E. Foster ^a, Christine V. F. Carrington ^a.

Affiliations: ^a Department of Preclinical Sciences, Faculty of Medical Sciences, The University of the West Indies, St. Augustine, Republic of Trinidad and Tobago.

^b Department of Microbiology and Immunology, Katholieke Universiteit Leuven, Leuven, Belgium.

^c Department of Geography and Emerging Pathogens Institute, University of Florida, Gainesville, Florida, U.S.A.

^d Department of Zoology, University of Oxford, OX1 3PS, U.K.

^e Pharmacology, Asia-Pacific Institute of Tropical Medicine and Infectious Diseases, School of Medicine, University of Hawaii at Manoa, Honolulu, HI 96813, USA

^f Departments of Biomathematics and Human Genetics, David Geffen School of Medicine, and Department of Biostatistics, School of Public Health, University of California, Los Angeles, California 90095-1766

Summary: Changes in Dengue virus (DENV) disease patterns in the Americas over recent decades have been attributed, at least in part, to repeated introduction of DENV strains from other regions, which has resulted in a shift from hypo- towards hyperendemicity. We are using a rigorous and flexible Bayesian statistical phylogeography framework, and newly sequenced envelope (E) genes from Caribbean DENV isolates together with previously published sequences for all four serotypes, to reconstruct the transmission dynamics through space and time of the four main invading DENV subtypes in the Americas. We are also testing hypotheses about factors influencing the rate and intensity of virus movement between countries. The results of this work will have implications for the monitoring and control of dengue and other mosquito-borne viruses.

Title: Metagenomic Analyses in Support of The Nariva Swamp Wetland Habitat Restoration Initiative, Trinidad and Tobago.

Investigators: Christine V. F. Carrington ^a, John Agard ^b, Adash Ramsubhag, Azad Mohammed.

Affiliations: ^a Department of Preclinical Sciences, Faculty of Medical Sciences, The University of the West Indies, St. Augustine, Republic of Trinidad and Tobago.

^b Department of Life Sciences, Faculty of Science and Agriculture, the University of the West Indies, St. Augustine, Republic of Trinidad and Tobago.

Summary: The Nariva Swamp is the largest fresh-water wetland in Trinidad and Tobago, and is an important natural resource for surrounding communities. The wetlands are comprised of several diverse ecosystems with many biological resources. Major anthropogenic interventions have resulted in large-scale deforestation and degradation of the ecosystem. The Government of Trinidad and Tobago is funding the EMA and Forestry Division through the Green Fund for a project to reforest the swamp and reduce greenhouse gas (GHG) emissions. In support of this initiative, we propose to collect, identify and determine the genetic composition of the microbial organisms in the swamp with a focus on those that are producing GHGs.

Title: The influence of ethnic variability on the metabolic programming of nutrition-related chronic non-communicable diseases

Investigators: Jerome E. Foster^a, D. Dan Ramdath^b, Adesh Sirjursingh^c, Candace Cuthbert^a

Affiliations: ^a Department of Preclinical Sciences, Faculty of Medical Sciences, The University of the West Indies, St. Augustine, Republic of Trinidad and Tobago.

^b Guelph Food Research Centre, Guelph, Ontario, Canada

^cMount Hope Maternity Hospital, North Central Regional Health Authority, Republic of Trinidad and Tobago.

Funding: U.W.I. Campus Research Grant

Summary: The objective of this research project is to examine the relationship between changes in cellular environment (by varying the level of nutrients and hormones) and the programming of cell behaviour (through gene expression), and whether such observations differ among local ethnic groups using cell lines derived from distinct ethnicities. The student investigator (C. Cuthbert) has to date successfully learnt several techniques involved in the isolation, characterization and propagation of human umbilical vein endothelial cells (HUVEC) and successfully established cell lines originating from individuals of different ethnicities. We are presently continuing the sampling of chords to create cell lines, with concurrent analyses of gene expression within these cell lines under controlled modulated cellular environments

Title: RNA virus diversity in Trinidad bats - identification of potentially emergent viruses”

Investigators: Christine V. F. Carrington ^a, Nadin Thompson ^b, Jerome Foster ^a, Abiodun Adesiyun ^b, Kathryn Holmes^c

Affiliations: ^a Department of Preclinical Sciences, Faculty of Medical Sciences, The University of the West Indies, St. Augustine, Republic of Trinidad and Tobago.

^b School of Veterinary Medicine, Faculty of Medical Sciences, The University of the West Indies, St. Augustine, Republic of Trinidad and Tobago.

^c University of Colorado Denver School of Medicine, Colorado, USA.

Funding: UWI St. Augustine Campus Research Grant

Summary: We identified and characterised bat coronaviruses in two species of Trinidad bat. This represents the first report of these viruses in South America. We are currently collecting additional bat specimens for further analyses.

Title: The role of glutamic acid and GABA receptor subtypes in physiological mechanisms that protect the brain from the neurological diseases - stroke, epilepsy, migraine and dementia.

Investigator: J. Addae

Summary: Glutamic acid and GABA receptors are the main proteins that mediate excitation and inhibition of neurons in several parts of the brain. Glutamic acid receptors are very widely and densely distributed in the brain and have been found to be involved in diverse normal physiological processes, such as, development of the nervous system, learning and memory, perception of environmental stimuli, programming and execution of muscle activities, as well as various disorders including those listed above. This project examines how to modulate the glutamic acid receptors and some of its downstream effects to make the nerves in the brain resistant to the agents that mediate the above disorders.

Title: Potential neuroprotective properties and mechanism of action of Jasmine & Curcumin

Investigator: J. Addae, S. Nayak.

Summary: A plant which is widely grown in the Caribbean, and Curcumin, an active ingredient of turmeric which is used in several Indian cuisines in the Caribbean, affect neuronal activities in the cortex and hippocampus (areas that are involved in memory formation as well as generation of epilepsies). The study is examining systematically these effects and the active compounds involved in the case of Jasmine.

Title: The Role of Stress in modulating Moral Judgments

Investigator: Farid Youssef

Summary: Traditionally moral judgments have been regarded as primarily rational decisions driven by frontal lobe activation and executive function. More recent work suggests that emotions may have a role to play in moral decision making. Given this data we sought to assess if stress which activates the hypothalamic-pituitary-adrenal axis and interacts with emotional centres in the brain could influence moral decision making. Data collected and stress does have a significant effect; paper being prepared for submission

Title: GPR55 and Immune function

Investigator: Farid Youssef, Andrew Irving

Summary: The immune system is thought to play an increasingly important role in neuropathology, with adverse inflammatory responses contributing, for example, to Alzheimer's disease, neurodegenerative disorders, pain and multiple sclerosis. Cannabinoid ligands have long been known to have a role in regulating inflammatory processes in the brain and periphery. Inappropriate activation of immune-derived cells, including brain-resident microglia and macrophages originating from blood, has been implicated as a trigger for the neuroinflammatory process. Recently a new molecular target for cannabinoids has been identified, namely GPR55 (G-protein coupled receptor 55), which has a prominent expression within the immune system and is thought to be expressed on microglia. The precise relationship between these receptors in regulating immune function however remains to be established. We are studying dynamic cross-talk between these receptor systems and seeking to establish whether endocannabinoid function is altered during inflammation and disease states. We have demonstrated GPR 55 staining in modified HEK cells lines and are currently assessing microglial cell lines. This has been used to submit a grant application to Wellcome Trust; results of the application will be available in March 2011.

Title: The effects of ketone bodies on synaptic transmission and neuronal injury in the rat hippocampal slice

Investigator: Farid Youssef

Summary: Ketone bodies are known to be protective in some models of neuronal cell death. Given that they are released in caloric restriction models that utilize alternate day feeding and we have shown this model to be neuroprotective we are investigating the role of ketone bodies as the mediator of this protection. Ketone bodies have not been shown to modulate synaptic transmission, LTP or acute neuronal damage under condition of normal glucose but were shown to be neuroprotective under conditions of low glucose availability.

Title: The role of endocannabinoids in hypoxic/ischemic neuronal injury

Investigators: Farid Youssef, Andrew Irving

Summary: Utilization of endogenous neuroprotective pathways offers a potential avenue for attenuating the effects of ischemia. One such pathway is the recently discovered endogenous cannabinoid system. In collaboration with Drs. Frenguelli and Irving at the University of Dundee we are examining the effects of the cannabinoid system on ischemia. Our initial studies suggest that this pathway may indeed be involved in neuroprotection. We are now seeking to use imaging techniques and application of newly developed ligands to investigate the mechanism by which cannabinoids can modulate ischemia.

Title: GPR35 modulation of long term potentiation

Investigators: Farid Youssef; Andrew Irving

Summary: GPR 35 is a novel receptor that is believed to be activated selectively by the compound zaprinast inhibitors and their effects on LTP. No new data collected this year at UWI; collaborators have been working on knockout mice in Dundee

Title: Effect of short term adult onset environmental enrichment on brain function

Investigators: Farid Youssef

Summary: Environmental enrichment is known to modify brain function, among other things improving neuronal function, synaptic density and memory. We are seeking to assess the effects of adult onset environmental enrichment in aged animals. We are assessing its effects upon synaptic plasticity, anxiety and evaluating its role in neuroprotection. Data and results demonstrated no effect of enriched environment on neuroprotection. Results to be written up for publication

Title: The effects of exercise on immune cell function and other mediators of immunity in Trinidadian population

Investigator: G. Kurhade

Summary: There is accumulating evidence to show that moderate physical activity can enhance the activities of T cells and neutrophils, cytokine productivity, serum immunoglobulin (Ig) G and salivary IgA levels. This study is intended to test the hypothesis that acute exercise induces a rapid interchange of immune cells between peripheral lymphoid tissues and the circulation in a systematic manner. These cell-mediated and humoral immune responses depend on many factors, including the intensity, duration, and mode of exercise, concentrations of hormones and cytokines, change in body temperature, blood flow, hydration status, and body position. In contrast, however, exhaustive exercise causes the systemic release of immunosuppressive stress hormones and anti-inflammatory cytokines, and temporarily causes a decrease in circulating. To our knowledge this will be the first and largest training study specifically designed to examine the effect of exercise on immunological modulation in Trinidadian population.

Title: Mild cognitive impairment in diabetes

Investigators: Drs. G Davis, N Baboolal Profs P Teelucksingh and A McRae (UWI), Prof R Stewart Institute of Psychiatry, King's College, London

Affiliations: The University of the West Indies and Institute of Psychiatry, King's College, London

Funding: Applied to the Campus Publication Research Fund

Summary: Surveys have been conducted using the MMSE with 60 diabetic patients. This was done in the form of a workshop where a seminar was presented to the participants indicating the risk factors associated between Diabetes and dementia. Results are being tabulated however it is clear that other measures need to be done to establish any cognitive impairment in diabetes. Such tests are being established with our collaborator at King's College London

Title: Prevalence of dementia in senior activity centres and geriatric homes in Trinidad and Tobago

Investigators: Drs G Davis, N Baboolal, Prof A McRae (UWI) Prof R. Stewart

Affiliations: Institute of Psychiatry, King's College, London; University West Indies and Institute of Psychiatry, King's College, London

Funding: Campus Publication Research Fund, TT\$ 65 000

Summary: Dementia is present in 10 percent of persons over the age of 65 years. The sample population for this study comprises elderly individuals who either visit senior centres, or live in geriatric homes or nursing homes in Trinidad and Tobago. These institutions were chosen randomly from a list of registered centres and homes provided by the Division of Ageing, Ministry of Social Development of Trinidad & Tobago. The screening tools used to determine prevalence of dementia are the Mini Mental State Examination (MMSE), Community Screening Instrument for Dementia (CSID), Consortium to Establish a Registry for Alzheimer's Disease (CERAD) Word List Learning Test and Recall, and Clock Drawing Test (CDT). Results are presently being determined at the Institute of Psychiatry, King's College, London

Title: Neuroprotection in neurodegenerative disorders

Investigators: A. McRae, A. Rogers

Summary: Inflammation is currently being considered as one of the early events in the pathophysiology of a number of major neurodegenerative disorders such as Parkinson and Alzheimer's diseases. Down regulating immunocompetent cells such as the microglia is considered as a means to intervene in these early events. Presently investigations are demonstrating that restricting food intake to rats with experimental Parkinson's disease can rescue dopamine neurons by down regulating microglia. This means that through a simple intervention such as diet there may be a means to protect these vulnerable neurons in Parkinson's disease

Title: Influence of high calorie diets on central nervous system structures

Investigators: A. McRae, A. Rogers

Funding: Grant from the Government of Trinidad and Tobago and Campus Research Grant TT\$18,999

Summary: Overeating is a significant risk factor for neurodegenerative disorders in particular those involving the dopamine system. Present investigations are establishing the influence of high fat and fructose on the vulnerable dopamine system. Studies of this nature are of value as they could assist in understanding how these diets may place this system in peril. Added to these results are findings that a low -grade inflammation is exacerbated in the substantia nigra in rats administered 30 % sucrose in drinking water.

Title: Microglial antibodies and other biomarkers. Presence in Alzheimer’s disease and other dementias

Investigators: Drs G Davis, N Baboolal, Prof A McRae (UWI), Dr Dave Prichard

Affiliations: UWI, Axis Shield Diagnostics, The Technology Park Dundee Scotland

Note: Patent application pending.

Summary: Our research has identified a microglial antibody in the serum of patients with Alzheimer’s disease. This antibody is determined immunocytochemically using perinatal rat brain as the substrate. We are collaborating with Dr Dave Prichard trying to identify the antigen recognized by the microglial antibody to develop an ELISA test for blood that would be clinically attractive and could lead to the development of commercial diagnostic kits to identify patients with Alzheimer’s disease.

Title: Pattern of innervation of the gastrointestinal tract and related organs in the Agouti, a new laboratory experimental animal species.

Investigators: Odekunle A, McEwen-Small C, and Nayak S.

Summary: Topography of vagal cranial nuclei has been determined. Vagal neurons projecting to the stomach and the intestine have been localized in the brainstem.

Title: The anticancer properties of some Caribbean plant extracts.

Investigators: Peter SR, Arrindell D, Alleyne T, Odekunle A and Daisley H.

Summary: Preliminary results have however shown that methanol extracts from dried leaves, stem and seeds of Sour sop tree contain flavonoids, alkaloid and terpenoids which exhibited anti cancer activity.

Department of Paraclinical Sciences

Major Projects Completed

- Prevalence, diagnosis and treatment of trichomoniasis: A STI clinic based study in Trinidad. Collaboration: Ministry of Health (QPCC&C), NACC and UWI
- Molecular detection and characterization of extended spectrum beta lactamase (ESBL) genes in Klebsiella pneumoniae and Escherichia coli isolates from a tertiary hospital in T & T
- Currently collaborating with Dr. Stefan Monecke, Institute for Medical Microbiology and Hygiene, Technical University of Dresden, Fetscherstrasse 74, D-01307 Dresden, Germany and Dr. Paul Levett, Saskatchewan Disease Control Laboratory Regina, Saskatchewan, Canada, working on the project in the area of molecular characterization of staphylococcus aureus isolates in Trinidad and Tobago and the Caribbean.
- Completed data collection and data analysis for the project “An Investigation into the Family Networking, Health and Volunteering Activities of Retired Persons in T & T. “
- Prospective Evaluation of the Benefits of Self blood Glucose Monitoring on the Metabolic Control of Type 2 Diabetic Patients in Tobago: A Pilot Study

Department of Clinical Medical Sciences

Each Unit has a research agenda and collaborates with other Departments within and outside of the Faculty. These collaborators include Departments of Pre- and Para-Clinical Sciences, the Department of Clinical Surgical Sciences and the Department of Gender Studies at St Augustine. The HIV training initiative led by the Child Health Unit collaborated with the Psychiatry Unit in the conduct of one of their training seminars and there is potential there for research collaboration. One of the priorities in the next academic year will be to develop a cross disciplinary research plan for the Department that will particularly encourage the younger members of the department to develop their research and publication record. **The Child Health Unit** is interested in pursuing the paediatric research in areas such as Nutrition: Childhood Obesity, Body Fat, Anthropometry; Neonatology: Perinatal Infection, Substance use in Pregnancy; Childhood Cancer; Diabetes in Children; Urinary Tract Infections (UTIs); and Child Development and Abuse, and HIV.

Research Project

The Regional Public Good Project is funded by the Inter-American Development Bank. This is a novel project which aims to unite the region in developing a surveillance system for chronic non-communicable diseases. Project Lead is Prof. S. Teelucksingh.

Major Research

- Use of phase contrast microscopy in the diagnosis of Urinary Tract Infections (UTIs). Grant approved December 2009. (Applicability - Validation of a cost-effective point of care test for diagnosis of UTIs).
- 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, EWMSC, Trinidad.
- Prevalence of perinatal exposure to illicit drugs and endocrine disrupting chemicals in neonates delivered at two (2) hospitals in Trinidad.
- Markers for diabetes mellitus and hypertension in pregnancy.
- Learner-centred design of health-oriented distance learning.
- Usability-oriented research and development in Trinidad and Tobago Health Training Centre and Caribbean's first usability lab.
- Prevalence of dementia and caregiver burden in Trinidad and Tobago and the search for biomarkers of Alzheimer's Disease. Dementia Action Research Team: **N. Baboolal**, A. MacRae, G. Davis, hosted by the Psychiatry Unit.
- Gender studies including HIV-related behaviour.
- Structural cerebral changes in patients with chronic schizophrenia. A comparative radiological study. (Collaborative study with the Psychiatry Unit).

- Ovarian volume measurements with UltraSound. Correlation with signs and symptoms of Polycystic Ovarian Syndrome.
- Comparative study of Sonography and CT in the Imaging diagnosis of Renal Calculi.
- Analysis of patients referred for Computerised Tomography Pulmonary Angiography; adherence to the Wells criteria in patient workup.
- Pituitary abnormalities in patients with headaches referred for MR brain imaging.

Research Grants

Project 1: Breaking the Silence: Child sexual abuse with a special emphasis on incest – A multi-sectoral approach. Grant amount: US\$200,000 – The United Nations Trust Fund to end Violence against Women (managed by UNIFEM); Government of Trinidad and Tobago Research Grant (through UWI); United Nations Children’s Fund

This project addresses the issue of child sexual abuse (CSA) and incest, and its relationship to HIV infection. Local data have documented the significant occurrence of CSA/incest; the link between CSA and HIV infection is made in numerous research reports; yet this continues to be a lacuna in the regional research. This project critically examines the underlying factors – gendered, cultural, sexual, and economic or otherwise which contribute to the existence of CSA/incest, and the awareness and knowledge of local service providers with respect to CSA/incest and HIV. It uses an action-oriented approach to develop interventions to 1) increase knowledge and understanding of CSA/incest and the implications for HIV, 2) to empower community

members and service providers to address these issues and 3) to influence policies and protocols of service providers in these areas.

Principal Researchers: R. Reddock, S. Reid

Collaborators: Institute for Gender Development Studies, The University of the West Indies and The Trinidad and Tobago Coalition Against Domestic Violence

Project 2: Building responsive policy: gender, sexual cultures and HIV/AIDS in the Caribbean.

(Grant amount: US\$55,564 – United Nations Development Fund for Women (UNIFEM); International Development Research Centre (IDRC)

This Project is part of a larger regional project aimed at producing new knowledge about Caribbean sexual cultures to develop a human rights-based, culturally appropriate conceptual and theoretical framework on Caribbean sexual practice that can inform research, education, law, social policy and health care programmes. Through evidence-based advocacy and technical support, it will ensure a deeper and more effective translation of a feminist analysis of sexual cultures into HIV/AIDS prevention policies and programmes in the Caribbean so as to contribute to a reduction in HIV/AIDS prevalence rates.

Principal Researchers: R. Reddock, S. Reid

Department of Clinical Surgical Sciences

Research Agenda

The Department of Clinical Surgical Sciences research agenda seeks to map out research objectives that will boost the competitiveness across many facets of each Discipline within individual Units.

It will also represent important milestones in the transformation to becoming more knowledgeable and innovative in future developments in the sector and successful implementation is aided in part by Academic Members of Staff working in conjunction with the DM Graduate students to produce and publish research. The agenda will also be facilitated by a Research Assistant, the Journal Club, and Quarterly Research Meetings.

Based on research conclusions, outcomes which are materialized will be applied within the institutions among Health Care Professionals to impact and improve methods in which we operate within each discipline. It is also important for the Department to be exemplars in their respective field training students in the importance of research and its impact in making a difference in current trends of practice.

Major Projects Completed

- A study of domestic violence in an antenatal setting in North Trinidad
- Benign cervical multi-nodular goitre presenting with acute airway obstruction: a case report
- Bile Duct Surgery without T- tubes
- Clear cell carcinoma of the male urethra presenting as periurethral abscess with fistulae
- Concept of a Duct-to-Mucosa Pancreaticojejunostomy
- Does ethnicity influence the outcome of Coronary Artery grafting Surgery – a five year study in Trinidad and Tobago?
- Endometriotic rectosigmoid obstruction presenting with frozen pelvis mimicking carcinoma
- Perioperative outcome of carotid endarterectomy under loco-regional anaesthesia – a two decade experience from the Caribbean
- Ethnic patterns of Prostate Cancer in the Southwest region of Trinidad & Tobago
- Giant intrarenal arteriovenous fistula and aneurysm- a safe surgical approach
- Is the ALPS formula used to calculate Weight-for-Age applicable to a northern Trinidadian population?
- Laparoscopic Nissen Fundoplication for improved gastro intestinal symptoms and Quality of Life
- Laparoscopic splenectomy in a minimal resource setting: a case series from the Caribbean
- Late Delayed Repair of Fractured Penis
- Management of nonparasitic Hepatic Cysts
- Minilap cholecystectomy - a real substitute for laparoscopic cholecystectomy
- Neuropathic Ulceration
- Open common bile duct exploration without T-Tube insertion- two decade experience from a limited resource setting in the Caribbean
- Pancreato - Enteric anastomosis: the duct evagination technique
- Percutaneous Nephrostomy – San Fernando General Hospital Experience
- Preoperative outcome of carotid endarterectomy under regional anaesthesia - A two decade experience from the Caribbean

- Preventative Medicine in an Ambulatory Care Centre in Trinidad
- Spontaneous perforation of the Neurogenic Bladder: an uncommon urological Emergency
- Successful Penile Replantation using loupe magnification
- The Slipping Slipper Sign: a marker of severe peripheral diabetic neuropathy and foot sepsis
- Trends of Breast Cancer Mortality in Trinidad and Tobago – A 35 year study
- Umbilical pilonidal sinus: a new treatment technique of sinus excision with umbilical preservation

School of Dentistry

Research is currently being conducted at the school to ascertain knowledge and attitudes towards the dentist's role in smoking cessation in patients attending public health centres. The project commenced in November 2009 and is continuing. Another study on the knowledge attitudes and beliefs of dental students towards patients with HIV/ AIDS, commenced in January 2010.

School of Veterinary Medicine

The School of Veterinary Medicine, through its Postgraduate and Research Committee, has identified three areas of research focus for the academic staff: Tropical Diseases; Food, Health and Disease Control; and Teleimaging Diagnostic Services and Research Network. A number of research projects were conducted in the 2009/2010 academic year including the following:

“A Comparison of fracture repair methods: Biological Osteosynthesis versus Traditional Anatomic Reconstruction” submitted by Dr. Thotta N. Ganesh (principal applicant) and Dr. Siobhan Bridglalsingh (co-applicant) received funding from the Campus Research and Publication Committee and the study is making good progress.

Development of an effective vaccine for use against leptospirosis in dogs. An effective vaccine developed from local isolates of *Leptospira* has been confirmed to be effective in hamster models and trials on Beagle puppies are on-going.

School of Advanced Nursing Education (SANE)

The School of Advanced Nursing Education is currently undergoing several research activities that are intended to promote the personal and professional enhancement of the academic staff. The evidence obtained will not only contribute to the School, but also to the Faculty and The University respectively.

Major Projects Completed

“The knowledge, attitudes, beliefs and lifestyle practices regarding coronary heart disease among persons diagnosed in Trinidad and Tobago”

This project was completed during the review period by a group of S.A.N.E., BSc Nursing students, led by the Director. Lead Researchers were Felicia Mohammed-Karim, Riaz Karim, Oneikah Sergeant-Richards, Rabindranath Singh. The purpose of this study was to explore the knowledge, attitudes, beliefs and lifestyle practices regarding CHD among persons diagnosed with this disease in Trinidad.

Major Projects in Progress

The Director currently sits on Committees to develop a standardized Patient Care Assistant (PCA) programme for implementation in January 2011 (Cabinet Minute) and to develop a generic Bachelor's in Nursing (BSN) programme as requested by the Chief Nursing Officer (CNO), at the Trinidad & Tobago Ministry of Health.

School of Pharmacy

Research Grants Obtained

Adebayo, A. S., Sealy, P., Ignacio, D. & Maharaj, S. received a grant of TT\$84,000 for the project – *“Cost-benefit, safety and efficacy analysis of using prefabricated adult drug products for obtaining child's dose of medication not commercially available for children in Trinidad & Tobago.”*

Sealy, P. I. received a grant of TT\$43,000 awarded by the Campus Research and Publication fund - *“Evaluative Research on Pharmacist Managed (Directed) Diabetes Care: Focus on self Monitoring of Blood Glucose-Chronic Disease Assistance Programme (CDAP) Trinidad and Tobago Ministry of Health.”*

Ignacio, D. received a grant of TT\$30,000 awarded by the Campus Research and Publication Fund - *“Assessment of prescription writing practices at hospital institutions in Trinidad and Tobago: Post graduation views of the pharmacology and therapeutics course.”*

Outreach

Department of Preclinical Sciences

Members of the Department provide career development, employability skills and technology training for post-secondary school students. This year, sessions were held at resource centres in Sangre Grande, Arima and Siparia using funding from the Canadian High Commission. A health check up camp was also conducted at Barackpore.

Members of the Department provided assistance to the Alzheimer's Association of Trinidad & Tobago, conducting surveys concerning caregiver burden. These surveys were conducted in POS, San-Fernando and Mount Hope. Other surveys were conducted at senior centers and nursing homes throughout Trinidad & Tobago to establish prevalence of dementia and a department representative was invited to speak at the Alzheimer's Association annual recognition of Alzheimer's disease awareness month.

Staff are also actively involved in the leadership development of young professionals and are regularly invited to speak to university students on ethics and leadership both locally and internationally.

Department of Clinical Medical Sciences

For the period under review the Child Health Unit conducted five workshops in collaboration with Trinidad and Tobago Health Training Centre (TTHTC). The workshops were all held in January 2010 and focussed on the Psychiatric Dimension of HIV/AIDS, HIV Basics: Art and Adherence Counseling by Distance Teaching and Advanced Counselling Living Positively with HIV/AIDS.

During the reporting period, Prof. Zulaika Ali was also instrumental in the delivery and development of training programmes on HIV Sensitization/Stigma and Discrimination; HIV and Diabetes; Prevention of Mother to Child Transmission and HIV Basics:- A Course for Pharmacists, among others.

Department of Clinical Medical Sciences

Service to UWI-12 Countries and Underserved Communities

MSc Clinical Psychology student has been on an internship programme in St. Lucia for the past year.

Outreach

Many of the outreach initiatives initiated previously by the Department continued in the review year. These included the conduct of clinics at the public health institutions by members of the Department. The Radiology Unit continues to provide clinical service, including on-call commitments in diagnostic radiology to patients of the Eric Williams Medical Sciences Complex, Mt Hope and services to the North Central Regional Health Authority. Meanwhile, the Psychiatry Unit continues to provide a psychiatric service for the North Central Regional Health Authority. This includes an inpatient service, a consultation/ liaison service and four outpatient clinics. Through collaboration with the Trinidad & Tobago Health Training Centre, more than 25 workshops and lectures have been mounted.

Cross Faculty Relationships

Members of the department collaborate with the UWI Department of Medicine, Mona campus. The DM Internal Medicine taught at Mona shares many tutorial and assessment similarities with the St. Augustine programme.

Collaborative Research

Collaborative work with the Gender Studies and Development Department is ongoing and the UWI is part of a collaborative research project on Herbal Medicine. The latter project is being funded by the University of Trinidad and Tobago and the Government of Trinidad and Tobago. The project also involves an international organisation – the John Hopkins International. A grant from the Centre for Caribbean Medicine is being used to fund follow up of psychotic patients in Trinidad and Tobago which is a collaborative project with the Institute of Psychiatry, King's College, University of London. Meanwhile, the Department is also involved with the section of Old Age and Geriatric Psychiatry at the Institute of Psychiatry in dementia research.

Links with Other Universities /Organisations

Hospital for Sick Kids, Toronto, Canada
University of Washington, Seattle
University of Miami
University of Florida
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).
University of Toronto
University of Birmingham
University of London

School of Dentistry

UWI Mona Dental School

A team from the School visited the UWI Mona Campus on invitation to assist with a consultation on the Dental Degree programme at Mona.

Community Outreach

The School facilitated a Dental Health Promotion programme at the TML Primary School and a Dental Health Education Seminar parents of the Bright Ideas Preschool. A preschool outreach project involving data collection and OHI was conducted at several preschools in the Caroni district while screening was undertaken of primary school children at the St. Joseph Presbyterian Primary School in conjunction with the Maracas St. Joseph Rotary Club.

External Linkages with Industry Partners

The DSA Certificate is offered through the Open Campus and the School provides training for Interns in collaboration between the Ministry of Health and the North Central Regional Health Authority.

Conferences and Seminars Hosted

Drs. Ashvin Sharma and Jana -Marie Koylass
Amphitheatre B on Wednesday 24th February, 2010 at 6:00pm

“An update in orthodontics for the General Dental Practitioner” and *“An update in Periodontics for the General Dental Practitioner”*. Sponsored by Mepha

Prof. Paluri Murti and Dr. Haytham Al-Bayaty
“Antibiotic use and abuse in general dental practice”
“Pigmented lesions in the mouth”

Lecture at Papirika Restaurant Cocorite. Sponsored by Norvatis

Lecture by Chuck B. Hudson, Professional Relations Manager 3M ESPE

“Prosthodontics: Prep to Crown”
Amphitheatre B on Thursday 22nd April, 2010.

School of Veterinary Medicine

The School continues to provide diagnostic services to the food industry and individuals and to mount workshops on areas of interest to local and regional veterinarians by videoconferencing to centres in Trinidad and Tobago, Jamaica, Barbados and Bahamas. Regular counselling is also provided to members of the public on problems related to pets and livestock. Staff at the School also engage in career counselling to secondary school students through school visits to make presentations on opportunities in veterinary medicine as well as the academic requirements.

The School has strengthened its regional and international partnerships through collaborative undergraduate teaching using student and staff exchanges, research and case sharing via videoconferencing with the following entities:

- Royal (Dick) School of Veterinary Studies, University of Edinburgh,
- Colorado State University (CSU), USA
- Ontario Veterinary College of the University of Guelph, Canada

The School is engaged in collaborative research with the Royal Tropical Institute, Amsterdam, The Netherlands on leptospirosis and with the Department of Pathology and Center for Tropical Diseases, University of Texas Medical Branch, Galveston, Texas, U.S.A. on mosquito-borne viruses of zoonotic significance.

The School was able to attract 13 undergraduate regional students in 2009/2010. The target for 2010/2011 is 20 Regional and 10 extra-regional students. It is anticipated that in 2010/2011, five practising veterinarians from Haiti will pursue graduate studies at the SVM through the UWI initiative to assist developments in Haiti following the devastating earthquake.

School of Advanced Nursing Education

Strengthening Regionality

During the period 2009 – 2010 the School of Advanced Nursing Education admitted six new students from the neighbouring Caribbean region into the BSc Nursing programme. Three are from St Vincent; two are from Jamaica and one Dominica. For the MScN programme, five Dominicans were accepted.

Links with Other Universities

In March 2010, the Director visited Dominica and Antigua. The purpose of this visit was to meet with the Dean of the Nursing School at the Junior Colleges and other health care personnel from the Ministries of Health. It is anticipated that this visit will foster better relationships for continued collaboration which will benefit UWI, Dominica, Antigua and the region at large. The Director visited the St Xavier University in Chicago to collaborate on research scholarships and support for endorsement in the Nursing sorority, *Alpha Omicrom* of which she is an active member.

A two day workshop on Oncology Emergency was held at the School in March 2010. Mrs. Tara Moffat, Coordinator for Palliative Care, Grand River Regional Cancer Centre and the Mc Master University, School of Nursing (Canada) was the facilitator. The purpose of this workshop was to provide students and practicing oncology nurses with evidence-based knowledge they can use more effectively when managing clients presenting with oncology emergency. Additionally, there were scheduled visits to the various clinical sites where Ms. Tara Moffat further guided the oncology students in developing the competencies of oncology assessment of patients.

Continuing Education Programmes

During the Summer Programme, two courses were run simultaneously for 46 nurses of Tobago. The courses represented a collaborated effort between the School and the Tobago Regional Health Authority to develop professional development programmes for the nurses of Tobago. This venture also represented the School's commitment to the development of nursing education in Trinidad and Tobago and by extension the CARICOM region.

School of Pharmacy

The School of Pharmacy is actively participating in the establishment of the Caribbean Network of Pharmacy Education, facilitated through CARICOM and the PAHO/WHO Office for Caribbean Program Coordination. In October 2010, the School facilitated the second workshop of this network to review the pharmaceutical priorities and findings of the survey of pharmacy education in the Caribbean, which was conducted by Dr. Dorothea Rudolf of the Massachusetts School of Pharmacy, Boston.

A two-day workshop on management of patients on long term therapy in the community with particular reference to HIV and diabetes complications was conducted in July. The programme was assisted by the Trinidad and Tobago Health Training Centre (TTHTC), and attracted a wide cross section of practicing pharmacists.

Revenue Generation

Department of Preclinical Sciences

The Department derived revenue from the Teaching of Anatomy & Physiology to students from COSTAATT and UTT.

Department of Paraclinical Sciences

The Immunofluorescence service is operational and provides diagnostic services to patients with renal and skin disease.

Department of Clinical Medical Sciences

The Psychiatry Unit offers services to external clients such as, National Alcohol and Drug Abuse Prevention Programme (NADAPP) and the Airports Authority of Trinidad and Tobago.

School of Dentistry

The Oral Histopathology Diagnostic Services and the Fixed Orthodontic Appliance Programme (Clinic) initiated earlier continues to generate a modest income, and more than that, a sound professional reputation for the School and The UWI. All clinical crown and bridge work now generates income into a self financing research project into an account held at the Bursary. Similarly restorative Dentistry also has an account in the Bursary.

Plans are afoot to generate more income from fabricating dentures by the Technical Laboratory of the school.

An account was opened in the Bursary for the MFDSRCS training program that will be conducted at the school as an ongoing programme. This is expected to generate income by way of fees paid by students.

School of Veterinary Medicine

The seven business units in the SVM generated some revenue during the academic year 2009/2010, the first year of operation. Additional sources of funding was provided by offering diagnostic services to practising veterinarians, the food industry and the provision of teaching aids in the form of plastinated materials for tertiary institutions.

School of Advanced Nursing Education

The School conducted “summer” schools in Trinidad and Tobago. The Tobago House of Assembly funded this professional development programme for their nurses in Tobago. This generated funds to the amount of \$106,000.00 for the School. There are other private institutions which have expressed interest in acquiring the services of the School to enhance the development of their nurses.

Projected Activities for 2010/2011

Department of Preclinical Sciences

- Revision of the learning objectives of all courses to minimize duplication and gaps across the courses.
- Developed four research clusters – Molecular medicine, Neuroscience, Nutrition & Metabolism and Medicinal Plants.
- Organize a staff/graduate students training workshop on the theory and modern techniques of molecular biology

Department of Clinical Medical Sciences

- Introduction of a DM in Cardiology and the introduction of courses in ‘Monitoring and Evaluation of HIV’ (Diploma and Certificate).

Distinguished Visitors

Department of Preclinical Sciences

Dr. Rong Cao

Guelph Food Research Centre, Toronto, Canada

Professor Trevor Stone

Professor of Pharmacology, University of Glasgow, Scotland.

Department of Clinical Medical Sciences

Dr. Mohamed Abdelhalem

Head, Haematology and Director of Molecular Haematopathology, University of Toronto, Canada

Dr. Amza Ali

Neurologist, Faculty of Medical Sciences, Mona Campus, Jamaica

Ms. Cheryl Arneson

Nurse Training Tutor, I-TECH, University of Toronto, Canada

Dr. Lenore Coleman

President at Total Lifestyle Change, Inc., Health, Wellness and Fitness, Washington D.C., USA

Dr. Goulda Downer

Nutrition Preceptor and HIV Nutrition Expert, National Minority AIDS Education and Training Centre, Howard University, Washington, USA

Sir Christopher R. W. Edwards

Chairman, Medical Education, London, England

Mr. Paul Geli

World Bank Consultant, The World Bank, Washington, USA

Dr. David Jamadar

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

Ms. Kamla Sharma

Director, International Patient Programme, Sick Kids Hospital, Toronto, Canada

Dr. Lauren Thomas

Faculty member, Howard University, Washington, USA

Dr. Shelia Weitzman

Director of Clinical Services, Haematology / Oncology, University of Toronto, Canada

Ms. Judy Van Cleef

Oncology Registered Nurse, Sick Kids Hospital, Toronto, Canada

School of Dentistry

Dr. Anthony Davis

Registrar, Bahamas Dental Council

Professor Dhuru

Visiting Professor, Marquette University

Dr. Osmond Richardson

Chairman, Bahamas Dental Council

School of Veterinary Medicine

Professor Susan Cotter

Veterinary Oncologist, Tufts University, Massachusetts, USA

Dr. Marc Kramer

Associate Veterinarian, Avian and Exotic Animal Center, Miami, Florida

Mr Aashish Krishan

Sudhir Gopi Holdings, Dallas

Dr. Stephen Kruth

Programme Coordinator, M.c in Small Animal Medicine, Ontario Veterinary College, University of Guelph, Canada

Professor Robert O'Brien

Veterinary Radiologist, University of Illinois

Dr. Lino Vella

Veterinarian, Blue Cross Veterinary Hospital, Malta

School of Advanced Nursing Education

Mrs Jane Burns
 Clinical Director, Ambulatory Oncology Clinics , Mc
 Master University

Ms. Judy Vanclief
 Hospital for Sick Children, Toronto, Canada

Professor Joanne Edward
Ms. Brenda Johnstone
Ms. Carolyn Ingram
Ms. Tara Moffat
 School of Nursing, Mc Master University

Visiting External Examiners were as follows:

Dr. Jacqueline Comerasamy
Professor Serrant Green
Mrs. Paula Hancock
Dr. Randy Jones
Professor Courtney Lyder

School of Pharmacy

Dr. Eugenie Browne-Myrie
 University of Technology, Jamaica

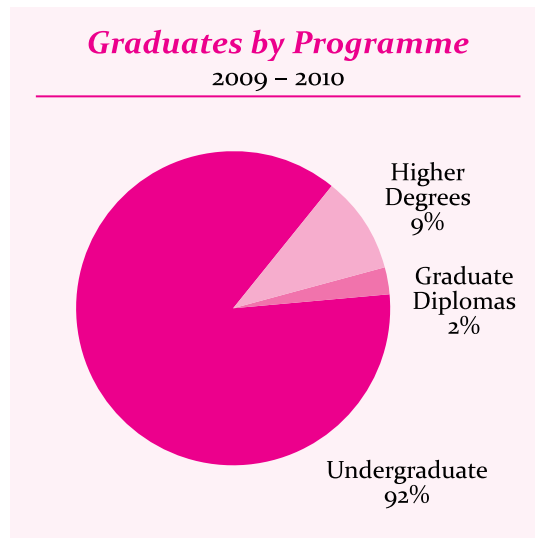
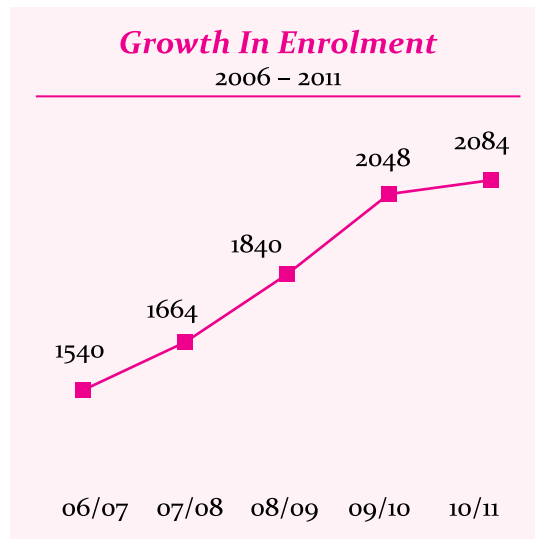
Dr. Rudolf Cummings
 CARICOM Health Desk Secretariat, Georgetown,
 Guyana

Dr. Emmanuel Cummings
 Dean, University of Guyana

Dr. Carlese Henry
 College of Bahamas

Dr. Adriana Ivama
 Sub-regional Advisor, Office of Caribbean
 Programme Coordination, Pan American Health
 Organization/ World Health Organization,
 Medicines and Biologicals

Ms. Lydia Thurton
 University of Belize



SCIENCE & AGRICULTURE

STAKEHOLDER CONSULTATION HAS BECOME AN INTEGRAL COMPONENT OF THE CURRICULUM REFORM EXERCISE. A NUMBER OF DEPARTMENTS HAVE NOW INFUSED A "SKILLS MATRIX" APPROACH, LINKING THESE TO THE EXPECTED LEARNING OUTCOMES



Executive Summary

The Faculty of Science and Agriculture is currently the second largest faculty at the St. Augustine campus. It continues to play, through its teaching and learning, research and outreach activities, a pivotal role in providing the human resource, equipped with the appropriate skills and competencies, needed to transform the Caribbean region. The Faculty has, through its myriad of research activities and working with its various stakeholders, been focusing on finding solutions to Caribbean problems and as well as in the vanguard of promoting the sustainable use of our natural resources.

Expansion of Access

The Faculty continued to witness a sustained increase in its student population, especially at the undergraduate level, over the last five years. Total enrolment stood at 3985 of which 3322 were registered in the School of Science and 663 in the School of Agriculture. This represented an increase of approximately 45% over the last five years. However, the faculty is now forced to consolidate its intake due to limitations in laboratory facilities, classrooms of appropriate size as well as human resources. The increased use of ICT will be used to address some of these issues with the view of continued expansion of access as well as an enhanced interactive teaching and learning environment.

Growth at the graduate level has been modest over the last two years. Graduate registration stood at 454 of which 309 were registered in the School of Science and 145 in the School of Agriculture. This is well below the projected target of 20% of the total student population for the faculty. A number of factors have

contributed to this situation. These included heavy teaching loads of academic staff, large class sizes and a lack of adequate laboratory research facilities, attractive research clusters and funding. In this context it should be pointed out that the faculty's strategic focus has been and continues to be on research degrees (MPhil and PhD) rather than taught Master's Degrees. However, the faculty is now actively considering the MSc as the route to the PhD rather than through the traditional MPhil route. This is expected to impact positively not only on our graduate intake but more significantly on both the quality and output rates of our graduates.

Curriculum Reform

The Faculty continued to place *curriculum reform* as its number one strategic priority as part of its ongoing commitment to ensure that its curricula offerings are relevant and current and that it is a reflection of tomorrow's clients' needs. The objective is to train our graduates to go out and create employment rather than seek employment. In this context, stakeholder consultation has now become an integral component of the curriculum reform exercise. A number of departments have now infused a "skills matrix" approach to their continuing curriculum reform exercise linking these to the expected learning outcomes. Also "out of classroom" experience is now an integral part of the new curriculum. Most programmes, especially those in Agriculture, Agribusiness Management and Human Nutrition and Dietetics, now have "built in" internships, field courses and practica. Other programmes, especially those in the sciences, have compulsory research projects. Every effort is being made to link these to industry. This is expected to better equip our graduates for the world of work as well as for further research.

A “common set of skills and competencies” approach has been successfully employed in achieving harmonization of curricula across the campuses. To date harmonization at level one has been essentially achieved. As such there can now be a seamless movement of students across the campuses wishing to pursue programmes at the advanced level.

New curricula for a number of programmes were developed and approved for introduction. These included programmes in Actuarial Science, Optometry and Tropical Landscaping at the undergraduate level, MSc programmes in The Science and Management of Tropical Biodiversity and Occupational and Environmental Safety and Health and MPhil/PhD programmes in Geography, Food Quality and Safety and Human Nutrition.

Graduation Statistics

At the undergraduate level 530 students graduated with BSc (General) degrees in various academic disciplines offered by the faculty. Of these, 380 were from the School of Science and 150 from the School of Agriculture. It should be noted that many of the programmes pursued by students in the faculty are multidisciplinary and transcend the School of Science and The School of Agriculture as well as other Faculties especially the Faculty of Social Sciences. Five percent (5%) of the students graduating received first class honours; 15% upper second class honours, 47% lower second class honours and 33 % obtained pass degrees. This declining trend in the percentage of first/upper second honours as well as in the throughput rate has been observed since 2006 and correlates with the introduction of the GPA system of grading. A number of student support systems as well as re-examination

of the modes of assessment to ensure that they are in alignment with the expected learning outcomes are being implemented to address these issues.

At the graduate level 14 students received MSc degrees, 10 MPhil’s and 12 PhD’s. However, the throughput rate is still cause for concern. A number of systems (regular supervisory committee meetings, staff/graduate student liaison committee meetings, weekly graduate seminar presentations, and presentations at regional/international conferences) are being put in place to address this issue. Already we have seen the positive impact of some of these measures where 5 students graduated with PhDs in chemistry in 2009/2010.

Research Funding

Access to adequate research funding has continued to be one of the major obstacles in the conduct of cutting edge research (both in terms of quality, relevance and output). The Faculty, recognizing this serious limitation, has encouraged departments to form strategic research clusters (intradepartmental; interdepartmental/campus; interuniversity) linked to national/regional development and to aggressively pursue funding both locally, regionally and internationally. Workshops in grant writing proposals for academic staff are being put in place. As a result of some of these initiatives our Faculty members have been able to secure a significant percentage of the Campus Research and Publication funds. In addition members were also able to secure significant funding from a number of international agencies in excess of \$9 M - most of this going to the Department of Life Sciences. It should be noted also that there are a number of other ongoing research projects which are being funded by external agencies to the extent of

over \$5M. Of significance in this respect is the \$2.5M funding from the World Bank to undertake studies on the restoration of the Nariva swamp project. Part of this project involves a study on carbon sequestration in wetlands one of the very few studies of this kind undertaken in the world.

The faculty will also be embarking on new initiatives to ensure greater involvement with the local/regional private sector and international collaborators in joint research projects. Already industry liaison committees have been established in some departments. This should provide a more sustainable source of research funding as well as assist in socioeconomic development.

Major Projects Initiated

As a result of increased emphasis being placed on research and development in the Faculty, a number of strategic multidisciplinary research clusters have been formed and projects, related to finding solutions to problems, and for which funding has been acquired have been initiated. These include among others:

Needs assessments in Caribbean fine flavour countries and provision of targeted training (CRU)

- Four-year CDE funded project aimed at providing technical assistance to 7 countries in the CARIFORUM in the areas of (a) improving the productivity and quality of cocoa (b) improving food safety through training (c) provision of technical support for value –added industries in the region and (d) supporting linkages with tourism (CRU)

- A new collaborative five-year project with USDA has been initiated to identify molecular markers for agronomic traits within the germplasm collection (CRU)

Publications

There were 119 publications in peer reviewed journals, 91 conference proceedings, 11 books/book chapters and 7 technical reports produced by academic staff members in the Faculty. This represented a small increase over the previous year. There was also an overall increase in commissioned technical reports, monographs and books. Noteworthy is the wider spread of publications across the Faculty. This augers well for the future. However, the Faculty's per capita output for refereed journal publications (1.4 per fulltime staff) is still below the expected norm of 2.0 per staff. Systems are being put in place to address this situation.

The research output and more importantly the impact of the research on socioeconomic development is expected to increase significantly with the formation of more strategic research clusters, partnering with the private sector, improved research facilities, increased funding and increase in the number of postdoctoral research fellows to drive the faculty's research initiatives.

Transforming the Agricultural Sector

The Faculty, cognizant of the strategic role it has to play in the transformation of the agriculture sector in the Caribbean, continued to work closely with stakeholders in the agrifood sector to implement a number of initiatives. Among these initiatives was the appointment of an Interim Director for the School of Agriculture, upgrading of the soil science laboratory facilities in the Department of Food production, as well as upgrading the greenhouse facilities both on Campus and at the Field Station. This upgrading of facilities in agriculture is expected to be accelerated in the coming year with the upgrading of the sheep facilities at the Field Station and the expected acquisition of the long awaited Orange Grove lands for the construction of a modern agricultural experimental field station. The BSc Agriculture curriculum is also expected to be completely revamped.

The recommendations arising out of the International Congress on Tropical Agriculture- ***Overcoming Challenges to Developing Sustainable Agri-Food Systems in the Tropics***, at which key stakeholders from CARICOM were present, were compiled and circulated to all CARICOM Governments for their follow up action.

A number of MOUs have been signed with regional and extra regional countries/institutions. Technical assistance, arising out of the MOU between the Government of Grenada and the Faculty, is being provided with the view of assisting with revitalizing the Grenada agricultural sector. In this context, systems have been put in place for the Faculty to assist with revitalizing the cocoa and nutmeg industries,

as well as to assist in upgrading the human resource skills in Grenada. Also of significance is the signing of a MOU with the Guangdong Academy of Agricultural Sciences in China.

Public and Professional Services

The Faculty continued to make significant contributions towards national/regional development through the varied public/professional services of its academic staff and by serving as reviewers and editorial staff for various regional and international journals.

Conclusion

While the Faculty has seen significant, positive advances in many areas such as student intake, curriculum reform, enhanced teaching and learning environment, formation of strategic research clusters, stakeholder relations and international collaborations, there are a number of critical areas that must be addressed as a matter of urgency. These include:

- greater realignment of our research agenda to socioeconomic developmental issues
- greater private sector participation in our research agenda (incubator facilities)
- more rapid progress in curriculum reform (stakeholder participation should be a critical component of this process) with increased emphasis on developing the critical thinking skills of our students
- increased exposure to real life experiences of our students through field trips, projects and internships (service learning) done in collaboration with industry

- use of technology to enhance the teaching and learning environment
- reduction in size of tutorial/laboratory classes. This would require additional staffing resource
- improved laboratory facilities
- improved facilities for students to study
- greater emphasis on sourcing of external funding
- income generating activities to assist the Faculty in carrying out its activities
- provision of more postdoctoral research fellows to help drive the research initiative

Students

The Department of Agricultural Economics and Extension experienced a small decline from 549 to 535 in its day (regular) student intake at the undergraduate level compared to the previous year. A 20% decline in student intake was also experienced in the Evening Programmes. This can be mainly attributed to limits placed by the Faculty of Social Sciences. As such the Faculty was forced to gradually reduce the first year registration in the BSc Agribusiness Management programme from over 250 to 150 places (day students) starting in 2006/2007. With respect to the postgraduate programmes, the department also witnessed a general decrease in total enrolment from 39 to 27 over the previous year.

In the Department of Food Production the new Major in Tropical Landscaping commenced. Enrolment in the Major in Geography increased from 65 students in 2008/2009 to 71 students and a cap on numbers had to be instituted because of lack of resources.

Meanwhile, enrolment in the BSc Agriculture and the Major in Agricultural Science, moved from 68 students to 81 students respectively.

The enrolment of undergraduate students in the Department of Chemistry continues to be capped at approximately 385 for the Level I programme. Laboratory and classroom space and the availability of human resources are some of the Department's challenges hampering student intake. Postgraduate student enrolment is also increasing especially as the Department has dramatically improved its instrumentation to meet international standards.

Enrolment in courses offered by the Department of Life Sciences generally remained steady save for a marked increase of more than 100% in BIOL 3864, Fisheries Biology & Management. There was a decline in the pass rates for the majority of courses offered by the Department, particularly BIOL 2361, Biomolecules and Energy Metabolism where the pass rate declined from 75% in the previous year to 46% in the review year.

The major development in the Department of Physics was the requirement that all students be required to undertake a project in conjunction with industry in their final year. A Manual of Abstracts for oral presentation is produced and widely circulated to stakeholders and the initiative is expected to help foster further collaborative research initiatives

Students Achievements

Department of Agricultural Economics and Extension

Grants awarded to graduate students:

- *Brent Theophille* of the Department of Agricultural Economics and Extension received a Graduate Student Exchange Program Fellowship tenable at the University of Saskatchewan, Canada.
- *Michelle Ash*, BSc Nutrition and Dietetics, was awarded a 2010 OAS scholarship to read for an advanced degree in Public Health at the University of St. Georges
- *Dr. Neesha Beharry-Borg*, BSc Agribusiness Management, was awarded the PhD in Environmental Economics and Management, York University, UK in 2009. She is currently employed as a lecturer at Leeds University, UK.
- *Rachel Brathwaite*, BSc Human Ecology (Nutritional Sciences major), was awarded a National Scholarship to read for an advanced degree in Epidemiology at the University of Nottingham, UK.
- *Antonette Brown*, MPhil Agric Economics and Extension candidate, has been awarded the opportunity to pursue doctoral courses at Wagenien University under the CariWatNet programme.
- *Marlon Francis*, BSc. Human Ecology (Nutrition and Dietetics), was awarded a National Scholarship to read for an advanced degree in Public Health at the London School of Hygiene and Tropical Medicine, UK.

- *Leandy Riley*, BSc. Nutrition and Dietetics, was awarded a 2009 OAS Scholarship to read for an advanced degree in Nutrition and Dietetics at the University of Saskatchewan
- *Dr. Candice Simpson-Smith*, BSc Human Ecology, was awarded the PhD in Nutrition, UWI in 2009. She is the first graduate of the BSc. Human Ecology programme to gain a PhD. The BSc Human Ecology programme produced its first graduates in 1997.

Department of Food Production

- *Luckeisha Olliverrie* was the most outstanding student for the academic year, graduating with First Class Honours and winning five Faculty Prizes.

Department of Chemistry

- *Wainella Isaacs*, a Level 2 student, won the poster competition at the National Science Foundation Research Experience for Undergraduates (REU) Tampa Interdisciplinary Environmental Research (TIER). The Programme entailed a 10-week long research on an area of study related to the Graduate Mentor's dissertation.
- *Ms. Nakita Noel and Ms. Neatcha Mark-Wallace* were the top graduates in Chemistry for 2009/2010. Both received First Class Honours. *Mrs. Nadia-Beepath Singh and Ms. Azeena Ali* graduated with the PhD in Chemistry with *High Commendation*. Their Research Projects were entitled: "NMR/NQR Studies of Selected Aromatic Dinitroso and Related Compounds" and "Development of Cost-Effective Treatments for Lead-Acid Battery Waste and Lead-Contaminated Soils in Trinidad", respectively.

Department of Life Sciences

- Miss Karen Polson, MPhil/ PhD student was awarded the **Caribbean Health Research Award** for the most outstanding Student Paper 2010, as well as the **David Picou Young Scientist Award**.

Staff

Awards, Honours & Distinctions

Department of Agricultural Economics and Extension

Dr. Isabella Granderson

- Appointed Principal Investigator in the development of the McGill-CARICOM IDRC concept paper proposal on Improving the Nutrition and Health of CARICOM Populations through Sustainable Agricultural Technologies that Increase Food Availability and Diversity of Food Choices.

Dr. Sharon Hutchinson

- Awarded a short-term fellowship to participate in the Faculty Leadership Programme, an extension of the Canadian Commonwealth Scholarship Programme, and was appointed Chairperson of the CARICOM Sub-committee on Food Security.

Dr. Selby Nichols

- Appointed World Cancer Research Fund International (WCRF) Fellow to the International Course in Nutritional Epidemiology hosted by the Faculty of Medicine, Imperial College, London.

Dr. Carlisle Pemberton

- Awarded a short-term fellowship to participate in the Faculty Leadership Programme – an extension of the Canadian Commonwealth Scholarship Programme.

Department of Food Production

Dr. Gaius Eudoxie:

- Certificate in Quarry Rehabilitation with Emphasis on Agriculture, Professional Education Unit, UTT

Dr. Wendy Ann Isaac:

- Recipient of ENDURE Crop Protection grant for Scientists from International Cooperation

Dr. Mark Nakka Wuddivira:

- Postgraduate Certificate in University Teaching and Learning (CUTL), The University of the West Indies, St. Augustine
- Certificate in Managing and Facilitating Online Instruction (MFOI), The University of the West Indies Open Campus/ Virtual University for Small States of the Commonwealth.

Department of Chemistry

Dr. Nadia Beepath-Singh:

- Development Engineer, awarded PhD in Chemistry with High Commendation.

Department of Life Sciences

Professor John Agard:

- Vice Chancellor's Award for Excellence for All-round Excellent Performance in Research Accomplishments and Contribution to Public Service.

Dr. Dave Chadee:

- Vice Chancellor's Award for Excellence for All-round Excellent Performance in Research Accomplishments.

Dr. Grace Sirju-Charran:

- Guardian Life Teaching Award for Excellence.

Department of Mathematics and Computer Science

Dr. Noel Kalicharan:

- Designated by NIHERST and CAS as a "Trinidad & Tobago Icon in Science" in the area of "Computer Science"

Dr. Angela Shirley:

- Completed the Certificate in University Teaching and Learning from IDU, UWI, St. Augustine Campus in June 2010

Dr. Virish Tripathi:

- Completed the Certificate in University Teaching and Learning from IDU, UWI, St. Augustine Campus in July 2009.

Department of Physics

Prof. Ramsey Saunders:

- Received the NIHERST/CAS Icons in Science in Trinidad and Tobago, January 2010.
- Appointed "Guest Professor" at the Charite (Humboldt & Free University Berlin)

Newly Appointed and Promoted Academic Staff

Department of Food Production

Dr. Victor Mlambo – Lecturer in Animal Nutrition - New appointment

Dr. Marisa Wilson – Lecturer in Agricultural Geography - New appointment

Dr. David Robinson, Senior Lecturer, Soil Science - Resigned

Department of Life Sciences

Dr. Laetitia Brechet: appointed Postdoctoral Fellow - specializing in Plant Ecophysiology/Ecohydrology/ Forest Soils in the Biodiversity and Ecosystem Services Research Cluster.

Dr. Brian Cockburn: re-appointed as Deputy Dean (Enterprise, Development and Outreach)

Dr. Aidan Farrell: appointed Lecturer in Plant Physiology

Mrs. Casandra James-De Freitas was promoted to the post of Secretary Grade 7

Dr. Jayaraj Jayaraman: appointed Lecturer in Microbiology Professor

Professor Indar Ramnarine: re-appointed as Deputy Dean, Student Matters

Mr. Mike Rutherford: appointed Museum Curator.

Professor Pathmanathan Umaharan: seconded to the Cocoa Research Unit as Head of the Unit.

Mr. & Mrs. Peter Antoine who served the department as part time Lecturers/ Teaching Assistants for many years migrated to Canada.

Department of Mathematics and Computer Science

Dr. Christoph Hamburger - appointed Lecturer in Mathematics

Dr. Noel Kalicharan – Senior Lecturer: cross the merit bar

Dr. Alexander Nikov – Senior Lecturer: extension on contract on indefinite tenure

Dr. Sreedhara Rao Gunakala - appointed Lecturer in Mathematics

Professor Christian Posthoff - retired

Cocoa Research Unit

Mr Eusebius Solazano – promoted to Technical Assistant-I

Dr. Surendra Surujdeo-Maharaj, appointed Research Fellow/Pathologist, Cocoa Research Unit

Prof. Pathmanathan Umaharan, appointed Head, Cocoa Research Unit

Department of Chemistry

Obituary

Ms. Linda Phillip (Departmental Secretary) passed away in October 2009.

Transforming Leadership, Culture, Process

Department of Food Production

The department worked on developing a quality assurance manual to guide several aspects of the department's activities including course/programme design, delivery, examination, research as well as administrative and financial matters. The objective is to provide all staff and especially, new members, with guidelines on procedures to facilitate good practice by all. The document had the input of relevant staff and the final draft was circulated for additional input before preparation of the final version.

Three lecturers pursued the IDU Certificate programme in University Teaching and several Teaching Assistants participate in various workshops including Moodle training.

Department of Chemistry

Postgraduate student throughput and research output have been dramatically increased due to the change in the Department's culture which has been guided by the implementation of the Strategic Plans of the Department, Faculty and UWI as a whole. Special emphasis has been placed on monitoring part-time postgraduate students to enable them to complete their research projects in a more reasonable timeframe. The result of all these activities this year will be evidenced by further improved postgraduate throughput and research publications. It is expected

that at least 12 postgraduate students will be ready to graduate in 2011. Improved research facilities, better “people” management and training opportunities at all levels have led to increased candidates applying for vacant positions as well as fewer resignations.

The academic year 2009/2010 has also been a consolidating year where much attention has been placed on installing and commissioning new equipment and introducing new systems for technical and administrative management. Work commenced on the production of a Quality Assurance manual for the department

The CHEM_{IA} (Chemist in Action) student group continues its outreach programme to the chemistry students and the general student population with their focus to promote awareness of chemistry as an academic discipline and a career option and to assist with the overall development of the student. Their initiatives include field trips to industries, seminars, Mole Day Celebrations, participating in FSA Week and Chemistry’s Orientation Programme.

Significant training initiatives

- New Teaching Assistants and Lecturers received IDU training in the scholarship of teaching.
- *Dr. Nicole John-Thomas* received an attachment at the University of Wisconsin – Milwaukee campus from 1st June to 31st August 2010. She conducted collaborative work with the American Chemical Society’s Examination Institute on measuring student learning.
- *Mr. Franklyn Julien* (Development Engineer III in charge of Mass Spectrometry Services) attended a training course by Bruker/BioSpin “Introduction to Avance AV I-III Spectrometer Service and Maintenance” in Switzerland.
- *Ms. Lorele Lalgee* (postgraduate student) pursued training as a Research Intern at the Jacobs University, Bremen, Germany in the area of “*Molecular Distribution in Biphasic Aggregates*”
- *Dr. Nadia Singh* (Development Engineer II in charge of our NMR Services) participated in three training courses held by Bruker: Advance 1D/2D, Advanced NMR Methods and Small Molecule Spectra Analysis - in Switzerland
- *Dr. Richard Taylor* was invited as an Honorary Academic Staff member at the School of Chemistry, University of Manchester, UK. His training focused on the synthesis and characterization of semiconducting nanoparticles (Quantum Dots) for solar cell applications.
- *Mrs. Simone Walcott* (Postgraduate Student and Laboratory Technician) participated in the following training courses hosted by Bruker/BioSpin in Switzerland:
 - Small Molecule Spectral Analysis:
 - Natural Products Training Course: this offered an introduction into the complexities of working with natural products from a drug discovery perspective. The focus was mainly on plant biomass which can be extrapolated to include any natural product source.

Department of Life Sciences

Work has commenced on the production of a Quality Assurance manual for the department. Two members of staff embarked on a Certificate Course on Teaching and Learning with the IDU. In addition, several staff members benefited from IDU training on Camtasia Studio and Turnitin plagiarism detection software.

Significant Training Initiatives

Staff at the Faculty participated in UWI's Talent Development Programme, organized by the Human Resources Division as well as a Field Course on Forest Research Methods in Guyana.

Department of Mathematics and Computer Science

A first draft of the Quality Assurance was submitted and the manual has been upgraded. Also an active Postgraduate seminar series was developed.

Department of Physics

The Quality Assurance Manual was implemented and an active research seminar series was developed.

Significant Training Initiatives.

Three members of staff participated in the IDU Certificate in Teacher Training.

Cocoa Research Unit

Strategic planning and business planning exercises were implemented to propel the Cocoa Research Unit over the next 5 years.

A quality management system was introduced for the core processes within the Unit.

Significant Staff Training Initiatives

S. Bharath - Technical Assistant

- attachment to the Department of Biological Sciences at Towson University to work on the collaborative project "Detection of misidentified plants in ICS germplasm collections (3 months)
- training in statistical analysis of cocoa quality parameters at CIRAD – 3 months

A.Sankar

- Training in capillary electrophoresis and genetic analysis at the Sustainable Perennial Crops Lab (SPCL) in the Beltsville Agriculture Research Center of the United States Department of Agriculture (USDA)/ Agriculture Research Service (ARS) in Beltsville, Maryland (USA) – 6 months.

S. Surujdeo-Maharaj

- Training in Host-Pathogen Interaction – University of Manitoba – 6 months (Canada-CARICOM Fellowship)

P. Umaharan

- EduLink Professional Development and Programme Training – (UWI) – 6 weeks
- HR Leadership training – Ask Leadership Ltd (UWI)- 2 months

Efforts To Improve

Recruitment And Retention

A proposal is being developed to upgrade the status of the Unit to that of a UWI Centre providing greater stability to the 48 year old unit. A business plan is being developed to ensure the sustainability of the unit.

Significant Training Initiatives

- Xoco Central America Ltd, Honduras - Training of industry personnel on postharvest processing and flavor profiling.
- Training on Fine Flavour Cocoa Development to personnel from the Cocoa Research Institute of Ghana (CRIG). Done in two phases. Dr. D. Sukha visited Cocoa Research Institute of Ghana (CRIG) in October, 2009 as part of a training initiative to develop and test cocoa postharvest protocols for the Ghana Fine Flavour Cocoa Project. A reciprocal visit and hands-on training for a selected person from CRIG to the CRU was arranged this year.
- CRU provided four (4) one to two week short-courses to personnel from the Ministry of Agriculture and the cocoa industry from St. Lucia on (a) flavor profiling (6 persons) (b) DNA fingerprinting techniques (4 persons) (c) morphological characterization (5 persons) and (d) disease screening for resistance to cocoa diseases (5 persons) with funding from the Banana Industry Trust, diversification fund.

Herbarium

Significant Training Initiatives

Mrs. Beverly Adams-Baptiste (Library Assistant) participated in training workshops conducted on the campus on First Aid Training and Strategies for Success

Mrs. Baksh-Comeau continued to pursue her PhD entitled *Ecosystem services: A case for the conservation of the vascular flora of Trinidad and Tobago*.

Ms. Keisha Manaure (Technical staff) continued to pursue the MSc in the Science and Management of Tropical Biodiversity

Teaching & Learning

Department of Food Production

The Department introduced practical aspects into the core course - AGCP 2001: Principles of Crop Science and Production - which traditionally focused on major concepts in crop science and production. Practical components were introduced to reinforce/ stimulate learning and understanding of crop science and production theory. The learning activity also sought to foster team work and cooperation, instilling a work ethic in students. Students were divided into small groups (5-7 students) each responsible for a field established research project. The exercise lasted eight weeks and provided practical experience in establishing and maintaining an experiment, data collection and analysis, preparation of a research paper and delivery of a seminar based on the study.

The Department adopted a blended learning approach for courses, using technologies such as podcasting, wikis, social bookmarking, and online discussion forums among other things, to advance teaching and learning. This was a major shift from the traditional way the courses had been taught and greater learning impact was achieved.

Department of Chemistry

The Department continued to do work on reforming the curriculum for the various programmes offered. Development of a matrix of practical skills and revision of the supporting laboratory exercises is to be finalized. Approvals and implementation of the revised curriculum for the Level One programme will take place in September 2011.

The process of ensuring direct links between assessment practices and the identified course learning objectives continued in 2009/10. Staff members have made the necessary adjustments and are ensuring that course objectives are provided to students.

A one-on-one oral exercise was implemented for the Level II/III organic chemistry courses and this is having a positive impact on the learning outcomes.

New outcomes experienced as a result of prior initiatives.

The individual oral exercises for the Level II/III organic courses were able to identify the weaknesses of the students and to build confidence in them.

The students have found that when course outlines, objectives and learning outcomes are provided, they are able to have better direction for the learning process and preparing for examinations. This initiative has been extremely useful and helpful to the students.

Department of Mathematics and Computer Science

An innovative approach to teaching computer programming was introduced. Students used personal robots in our introductory course, COMP1100 – Computer Programming 1 with good success. Office hours for all lecturers were posted on the notice boards allowing students more ready access to lecturers for one on one consultation. In addition, a website for the Application of Structural and Computational Biology in Biomedical Sciences was created at <http://sta.uwi.edu/fsa/dms/icgeb/index.asp> to host teaching material and lectures. It was initiated to make available all material and lectures, including audio and video wherever available, to all those interested in this field both within the UWI and internationally.

Department of Physics

Generally, the Department embraced the use of technologies such as websites and social network for teaching and connecting to students. In some courses lecturers sourced video clips on Youtube as well as DVDs for special topics. Yet in some cases it was found that more one-on-one contact would benefit students. As such, in order to address high failure rates in PHYS 2280 - Mathematical Methods, the Department removed laboratory work from the course, and instead allocated this time to additional tutorials. The Department also introduced a new level one course, PHYS 1001 - Introduction to Astronomy.

New Programmes

- Major in Tropical Landscaping - Department of Food Production
- MSc in Science and Management of Tropical Biodiversity – Department of Life Sciences
- BSc Computer Science – Department of Mathematics and Computer Science

The Department of Agricultural Economics and Extension, together with the University of East Carolina and the International Office at UWI, St. Augustine is developing the MSc in Human Sciences.

Graduate Studies

Department of Agricultural Economics and Extension

In the Department of Agricultural Economics and Extension, the MSc programmes in Agricultural Economics and Marketing and Agribusiness were revised during the reporting period. The MSc (Marketing and Agribusiness) has quickly become the most popular postgraduate programme in the Department. Currently the programme has graduate students from Trinidad and Tobago, Dominica, Guyana, Jamaica and Montserrat. During the period under review there was also the formation of a very vibrant agribusiness postgraduate association.

Collaboration continued with the Universite Des Antilles Et De La Guyane, Guadeloupe to develop the MSc in Nutrition and Health while the MPhil and PhD in Human Sciences are currently being ratified for submission to the Board for Graduate Studies. The Department also instituted more effective monitoring of the progress of graduate students.

Department of Food Production

The Department increased the number of seminar presentations required in graduate level courses. The aim of this measure was to improve the writing and presentation skills of graduates from the MSc Tropical Commodity Utilization (TCU) programme.

Department of Chemistry

In 2009 the Department introduced the Master of Science Programme in **Occupational and Environmental Safety and Health**. The programme was developed in response to stakeholders' needs and has been a great success both financially and academically with 58 students registering in the first year. At the end of June 2010, 30 full-load students had completed their taught courses and were about to launch into their 6-month research projects in September 2010.

Advisory Committee groups continued to meet for the academic year 2009/10, once per semester. These meetings are in their second year of implementation and have resulted in an increase in the throughput of graduate students. At these meetings the students must justify the progress on their research project. Access to modern facilities and instrumentation has also led to the improvement in research activities for the graduate student. Five PhD students and one MPhil student graduated in 2009/2010.

One postgraduate student received an attachment at the Jacobs University, Bremen, Germany from October to December 2009 and July to September 2010 to further her research project on "*Molecular Distribution*

in *Biphasic Aggregates*”. Another student **presented a poster at the** 39th International Conference on Coordination Chemistry in Adelaide, Australia, July 2010. Her research presented was *Synthesis of a novel functionalized Cobalt (III) caged surfactant*.

Department of Life Sciences

In the review year work commenced on the development of a Master’s in Health Administration and Hospital Administration. The Department facilitated courses in Managing and Facilitating Online Instruction with the Open Campus for Lecturers from UWI, University of Guyana, University of Belize and the University of Suriname in order to prepare for online teaching in 2011/12.

Department of Mathematics and Computer Science

Advisory Committees for postgraduate students have been meeting every semester and significant improvements in graduate supervision and graduate student output have resulted. The Department has graduated 13 postgraduate students in 2009/2010 compared to seven students in 2008/2009.

Department of Physics

Three new courses were developed at the postgraduate level – PHYS 6294 (Novel Materials), PHYS 6492 (Digital Systems Design) and PHYS 6295 (Solar Energy Conversion). These courses will assist in providing postgraduate level courses required for the MPhil and PhD requirement and will in addition assist in the future with the development of a Master’s of Physics (MPhys) as well as a MSc in Physics with Education.

Other developments during the review period include staff-facilitated training abroad of postgraduate students through grants and split-site scholarships; 10 postgraduate students presented papers at conferences and seminars; and the introduction of a postgraduate seminar series and a postgraduate staff student liaison program to cultivate a more interactive research environment.

Cocoa Research Unit

At the Cocoa Research Unit (CRU) graduate students engaged in projects involving not just cocoa, but also other plant species such as anthuriums, bodi beans and pigeon peas. There were five MPhil theses under examination and one PhD was awarded to **A. Ragoobarsingh** for his work looking at Morphophysiological selection criteria related to yield stability in bodi beans (*Vigna unguiculata* L. Walp).

Research

Department of Agricultural Economics and Extension

The Department has identified specific research foci: Nutrition Education, Food Security, The Impact of Climate Change on Food Systems and Natural Resource and Environmental Management. Other research areas include access to and control of resources for agricultural productivity by Gender; improving classroom teaching through action research in the classroom on two topics: Group learning and engaging students in the learning processes; and the use of Farmer Field Schools in Extension Programmes in the Caribbean.

During the course of the year the Department engaged in research partnerships with institutions such as the Guangdong Academy of Agricultural Sciences, Guangzhou, South China to develop an outreach capacity for vegetable extension systems in Trinidad and Tobago; and the John Cropper Foundation on the implementation of sustainable farming practices in Trinidad's Northern Range.

Department of Food Production

Funding was granted for new research including **G. Eudoxie's work on Physicochemical, Engineering and Biochemical properties of Trinidadian soils and their relation to mass movement** (TT\$51,000.00) and another on **Enhancing compost production with enriched microbial cultures**. (TT\$60,000.00). Both projects received funding through the Campus Research and Publications Fund (CRPF).

Completed Projects

Several projects reached completion this year which aimed to help regional farmers compete in international markets; assessing climate change and protecting wetlands. They are as follows:

W. Isaac

- Reducing Chemical Use, Improving Rural Livelihoods: Towards the Sustainable Production of Fair Trade Bananas, Food Crops and Alternative Markets in St. Vincent. (CRP.3, NOV09.5)

M. Mohammed

- Chilling injury studies in selected tomato cultivars
- Postharvest studies in fresh-cut limes
- Simulated studies on marine shipment of hot pepper

R. Stone

- Climate Change Monitoring and Assessment in Trinidad
- Impact of El Niño Southern Oscillation on Rainfall in Trinidad
- Thermal Properties of Trinidadian Soils - (Edwin I. Ekwue).
- Strength, Hydraulic Characteristics and Erodibility of Some Humid Tropical Soils under Intense Rainfall - (With Dr. Mark Wuddivira and Prof. Edwin.I. Ekwue).

M. Wuddivira

- Structural stability, hydraulic properties and erodibility of humid tropical soils under intense rainfall - (With Reynold Stone and Edwin Ekwue)
- Determination of soil spatial properties under a Mora hardwood forest in Trinidad & Tobago - (With Mike Oatham and David Robinson)
- Determination of soil spatial properties under Cocoa in Trinidad & Tobago. - (With Isaac Bekele and Sunshine De Caires)
- Soil properties and plant zonation in tropical wetlands and estuarine/river systems using electromagnetic induction - (With Judith Gobin and Melissa Atwell)

- Geophysical Soil Survey as an aid to understanding tropical forest productivity, carbon sequestration, and forest restoration - (With Laetitia Brechet, Mike Oatham, and David Robinson)

Research in Progress

Research in progress is expected to produce exciting developments in a number of fields. For instance, for those who are concerned about the ability of the region to feed itself and produce crops for export, work is being done to improve the growing of a variety of food crops. At the same time, other researchers are investigating methods of preserving or restoring areas, particularly wetlands that may have been destroyed by poor cultivation practices. Lovers of what is referred to locally as “wild meat” and other less traditional protein sources, may be interested in the outcome of projects dealing with the rearing of wildlife even as we look at improving the breeding and rearing of more traditional sources of meat protein. Meanwhile, other researchers are themselves delving into areas not traditionally associated with Food Production, such as sports and culture.

I. Bekele

- Heavy metal investigation in cocoa

C. Bowen-O'Connor

- Micropropagation of woody plants (coconut and breadfruit)
- mycorrhizal effect on growth and development of breadfruit
- environmental management and crop growth in low-cost tropical greenhouses

- propagation of tropical fruit, ecophysiology and stress tolerance in plants (Capsicum)

R. Butland

- Urban geography
- cultural heritage management
- participatory GIS
- community landscape perceptions and the relationships between people and place

G. Eudoxie

- Soil management
- Composting
- Turf management

G. Garcia

- Neo-tropical Animal Wildlife Conservation, Production, Utilization and Cuisine
- Research in the writing of Self Instructional Training Manuals for Animal and Livestock Production
- Research work is also being undertaken with milk producing animals, namely Dairy Cattle (Jamaica Hope, Crossbred Holstein) and Dairy Goats
- Livestock Production Systems
- Carnival Ecology
- “Ethnocuisineology”

G. Gouveia

- Managing Soil Acidity through Liming Technologies;
- Carbon Sequestration in Soils for Mitigation and Adaptation to Climate Change;
- Modelling Nitrous Oxide Emissions from Agro-systems;
- Predicting Cricket Pitch Behavior in Relation to Prescribed Preparation Protocols;
- Managing Sports Turf under Stress Situations.

M. Mohammed – (jointly with. L. Wickham)

- Physicochemical and organoleptic changes in balata fruits.
- Chilling injury studies in okra and sweet pepper.
- Physical measurements and shelf life studies on Chinese tamarind

R. Rastogi

- Rabbit and Sheep Breeding

L. Roberts-Nkrumah

- Investigation of chataigne responses to waterlogging
- Grafting selected breadfruit cultivars on chataigne rootstock J. Rouse-Miller
- Breadfruit micropropagation – with Dr. J. Rouse-Miller
- Evaluation of breadfruit flour from selected breadfruit cultivars jointly with Dr. N. Badrie
- Sustainability of use of the Queen’s Park jointly with Dr. S. Hutchinson, and Dr. R. Marshall

- Weed management in cricket outfields jointly with Prof. R. Brathwaite, Dr. W. A. Isaac and Dr. G. Eudoxie

P. Shaw

- Environmental change in tropical regions
- Techniques of measuring long term change

R. Stone

- Climate Change Monitoring and Assessment
- Impact of El Niño Southern Oscillation on Trinidad rainfall
- Physical and Engineering Properties of Soils
- Hydrology of Agricultural Watersheds/ Wetlands

L. Wickham

- Development of value added products from locally and regionally produced commodities. Objective: increased availability and utilization of locally and regionally produced food. (Lead researcher)
- Long-term storage of yam tubers. Objective: increased availability and utilization of locally and regionally produced food. (Lead researcher)

M. Wilson

- Restoration of the Nariva freshwater wetland, Trinidad. This World Bank funded project aims to replant native wetland species and remove artificial drainage channels which have been introduced by illegal agriculture. The surface water component will provide quantitative analysis of the changing hydrodynamics, using hydrological and hydraulic modelling parameterised using acoustic Doppler current profiling.
- Development of a hydraulic model of the Congo River wetlands. The Congo is the second most significant river globally, yet has been the subject of relatively little research due to ongoing political and logistical difficulties. This research uses a wide variety of remote sensing data to fully parameterise hydraulic and hydrological models of the system. Initial work on a hydraulic model has commenced, in collaboration with Hahn Chul Jung and Dr. Doug Alsdorf (Ohio State University).
- Swath altimetry measurements of the mainstem Amazon River: measurement errors and hydraulic implications. This research uses a hydraulic model of a 300 km reach of the Amazon River to provide “truth” data of surface water elevations for use in a swath altimetry instrument simulator. The work has important implications for the forthcoming satellite mission, SWOT (Surface Water and Ocean Topography, <http://swot.jpl.nasa.gov/>), since it quantifies the likely accuracy with which remote measurements of the water surface may be used to derive

hydraulic estimates of variables such as river discharge. Research is in collaboration with Dr. Mike Durand and Dr. Doug Alsdorf (Ohio State University). To be submitted to Remote Sensing of Environment.

M. Wilson

- Flood risk, wetland and floodplain hydrodynamics, computational
- Modeling of hydrodynamics, remote sensing, GIS

M. Wuddivira

- Soil structure, infiltration and susceptibility of soils to seal formation, runoff and erosion under intense humid tropical rainfall
- Determination of soil spatial properties under a Mora hardwood forest in Trinidad and Tobago
- Determination of soil properties under cocoa in Trinidad and Tobago
- Soil properties and plant zonation in tropical wetlands using electromagnetic induction
- Spatial and Temporal Variability of Water Quality Parameters in relation to Mangrove Zonation along the Godineau River, Trinidad
- Relationship between hygroscopic water content and clay percentage in tropical soils
- CARIWATNET Project: Strengthening the Caribbean Scientific Community in Natural Resource Management and developing integrated watershed management plans
- Geophysical soil survey as an aid to understanding tropical forest productivity, carbon sequestration and forest restoration

- Using electromagnetic induction to explore the geophysical relationship between forest structure and the soil properties in a tropical forest
- Using electromagnetic induction and chlorophyll meter technologies to establish relationships between soil properties and nutritive value of tropical pastures for improved feeding efficiency of dairy cattle in Jamaica

Department of Chemistry

Research Focus

Chemistry's departmental research agenda is being developed around the following areas: Novel Materials (catalysts; quantum dots; solar cell systems); Natural Products and Carbohydrate Chemistry; Environmental Monitoring and Remediation; and Biological Chemistry – focus on synthesis and investigation of potential ion channels. The research agenda is geared to meet the needs of the local and regional stakeholders as well as to establish the department as a leading international centre of excellence in research.

This year, projects completed by staff and students in the Department included topics with appeal to lay persons such as cost-effective methods of treating lead contaminated soils and treatments for dengue. As well as those which arouse as much interest in academic fields:

I. Chang Yen

- Development of Cost-Effective Treatments for Lead-Acid Battery Waste and Lead-Contaminated Soils in Trinidad. (PhD Student: Azeena Ali.)

A. Caffyn

- Grignard Synthesis of Perfluoroalkyl-Substituted Phosphorus and Sulphur Compounds. (PhD Student: Adil Hosein)

A. Maxwell

- Synthesis and Investigation of Homchiral [2.2] Paracyclophane Derived Ligands as Potential Catalysts for the Enantioselective addition of Diethylzinc Benzaldehyde. (PhD Student: Nyan Gadsby-Dolly)

G. Singh

- The Development of Novel Treatments for Dengue Viruses. (PhD Student: Nigel Jalsa)
- Biomimetic Synthesis of Chiral Cyanogenic Glycosides. (MPhil student: Anthony Dookieram)

D. Stephenson

- NMR/NQR Studies of Selected Aromatic Dinitroso and Related Compounds. (PhD Student: Nadia Beepath-Singh)

Current Research

Some 35 projects are currently being researched by faculty and students at the Department. Many aim at solving problems affecting not only persons in the Caribbean and around the world. It should also be noted that the Department received funding (TT\$200,000.00) from the Government of Trinidad and Tobago Research Fund to conduct research on corrosion.

D. Beckles

- **Biodiesel from used cooking oil: evaluation of production methods and engine emissions.**

The high costs of petroleum fuel use (both economic and environmental) have encouraged the investigation of other sources. Biodiesel is one such – first, the project will examine an optimum technique for biodiesel production from a variety of waste oils. Second, it will determine whether this fuel can significantly reduce air pollution in the Trinidad and Tobago context.

- **Determination and characterisation of sources and sinks of ozone depleting gases in Trinidad and Tobago and measurement of their emission rates**

This research is to assist in an understanding of how the small volume use of ozone depleting substances would impact air borne concentrations in developing countries.

- **Evaluation of Brassica juncea as a feedstock for biodiesel production**

The high costs of petroleum fuel use (both economic and environmental) have encouraged the investigation of other sources. Biodiesel is one such – and this project is to evaluate how a novel source of vegetable oil would perform as a feedstock for biodiesel production.

I. Chang Yen

- Investigation of quality of cocoa beans in Trinidad and Tobago, with respect to heavy metals and ochratoxin levels, from cultivation, processing and storage practices, and development of a HACCP-based system for cocoa beans in T&T - this can maximize cocoa bean quality for export and local consumption.
- Development of a Certification System for Quality of Cocoa Beans in Trinidad and Tobago - this will allow local regulatory authorities to monitor and control quality of cocoa beans for export and local consumption.
- Characterization of cocoa and chocolate flavor profiles, using sensory and chemical techniques - this will provide basis for maximization of desirable flavours in local cocoa beans and development of high quality local chocolates.

R. Fairman

- The synthesis of amphiphilic molecules with a variety of functional heads for use as molecular sensors, transporters and probes.
- Divergent synthesis of dendrimers with paramagnetic lanthanide cores for use as MRI contrast enhancement agents.
- Defining structure activity relationships in macromolecules by molecular modeling, physico-chemical experiments, and testing biological activity in bacteria.

L. Grierson

- Waste/Virgin plastic recycling (in collaboration with BPUK/BPTT) for Environmental Waste Management.
- Setting up corrosion/applied electrochemistry laboratory for the investigation of coating technology corrosion protection of gas/petroleum steel pipes (with Dr. Ann Wilson)
- Design and characterization of potential ion-channels for membranes in synthetic bio-membranes and micro-organisms. (In collaboration with Dr. Richard Fairman)

A. Hosein

- The development and testing of novel main group and transition metal catalysts for applications in olefin polymerization and organic transformations, particularly for processes that target stereo-specific products.

N. John-Thomas

- **Evaluation of students' pre-university conceptual understanding of Chemistry**

Science education researchers indicate that many novice learners in chemistry are able to apply algorithms without significant conceptual understanding. An algorithmic problem is one that can be solved using a memorized set of procedures; whereas a conceptual problem requires the students to work from an understanding of a concept to the solution to the problem where no memorized procedure is likely to be known to the student.

- **Developing Greener Organic Chemistry Laboratory Experiments**

Green Chemistry deals with pollution prevention at the most fundamental level of atoms and molecules. It focuses on the replacement of hazardous substances with less or non-hazardous substitutes. In the first instance, greener alternatives to most, if not all, of the CHEM2260 Basic Organic Chemistry I laboratory experiments are being developed.

A. Kumar

- **Metal-directed macrocyclic 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 complexes of Schiff base and amine ligands of above mentioned importance.
- Synthesis of dyes for harvesting solar light (dye sensitized solar cells, DSSCs) - In this area of research the target will be to design organic/inorganic dyes which could cover the entire spectral region with high molar absorptivity as well as strong adsorption on the surface.

A. Maxwell

- Study of the Chemistry of Trinidadian Rubiaceae and Euphorbiaceae species
- Study of the metabolites produced by microorganisms from the Caroni Swamp
- Synthesis of chiral 2.2 [pc] derivatives for use as asymmetric catalysts.
- Bioactive natural products from plants and microorganisms isolated from unusual habitats.
- Synthesis of chiral derivatives of [2.2] paracyclophane for use as chiral catalysts.

D. Narinesingh

- Development of novel sensitive devices for analysis of clinical and environmental 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.

R. Pingal

- Preparation of antiviral pyrazoline compounds for medical use.

R. Ramsewak

- Discovery of biologically active compounds with varying structural diversity from terrestrial plants and marine organisms.

G. Singh

- Synthesis of TB Epitopes for the development of new vaccines
- Carbohydrate chemistry for dengue virus inhibitors
- Oxidation of Methane
- Enzymatic synthesis and new biosensors
- Insect anti-feedents

D. Stephenson

Studies used for characterizing narcotic drugs and understanding food systems:

- NMR Studies of the kinetics of dynamic equilibria.
- Low Frequency Nuclear Quadrupole Resonance (NQR).

R. Taylor

- The Study of Lanthanide/Transition Metal Doped Copper-Zinc-Tin-Sulphide/Selenide Semiconducting Nanocrystals (Quantum Dots) for Solar Cell Applications.
- The Synthesis, Structural Elucidation and Thermotropic Phase Transition Studies of Metal-containing Liquid Crystal Compounds for Liquid Crystal Display (LCD) device applications.

A. Wilson

- Electroactive polymer: Incorporation of these polymers into hydrogel materials for the preparation of smart polymers and their use in sensor devices. Research is also being conducted on the use of these electroactive polymers as corrosion protection agents.

Department of Life Sciences

Research Focus

The Department of Life Sciences has adopted a research agenda focused in two main areas:

- *Biodiversity and Ecosystem Services* which targets the documentation, protection and use of eastern Caribbean biodiversity and ecosystem services within the context of sustainable development as well as knowledge dissemination to the wider community. The potential impact of climate change of biodiversity and ecosystem services is also being investigated.
- *Biotechnology and Molecular Biology for agricultural improvement and human health.* This research will concentrate on developing biotech products including genetically improved papaya, anthurium and hot pepper. In addition, biotechnology will be used to develop rapid and accurate diagnostic services for human, veterinary and plant diseases. Biotechnological tools may also be used in the management of genetic diversity in forestry, and fisheries.

Research in Progress

The Department is carrying out extensive work on breadfruit propagation and cultivation. Other major projects focus on topics as diverse as dengue prevention and wetland preservation.

- 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 development of the ovitrap is based on over 20 years of research surrounding the laying behaviour of the *Aedes Aegypti* mosquito. ALOT is a lethal trap designed to collect the *Aedes aegypti* eggs and kill female mosquitoes visiting the traps. The trap is intended to be a key component of community-based dengue – management programs.
- Improving hot pepper yields through the development of hybrids.
- Isolation, purification and identification of cultivable endophytes of *Artocarpus altilis* (breadfruit) and *Artocarpus camansi* (breadnut) shoot explants.
- Effect of maturation and juvenility of *Artocarpus altilis* shoot tip and nodal explants on *in vitro* culture establishment.
- Micopropagation of *A. altilis* using a temporary immersion system.
- Effect of light on *in vitro* tuber formation of cassava storage organs.

- Effect of arbuscular mycorrhiza isolated from *Artocarpus altilis* roots on acclimatization of rooted stem cutting of *A. altilis* under greenhouse conditions.
- 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.
- Biochemical and Molecular Studies on Tuberization in cassava (*Manihot esculenta*): The Role of Light.

Department of Mathematics and Computer Science

Major Research Completed

- *Dr. P. Mohan* completed the project, “*A Caribbean-wide Healthcare Management System Based on Cellular Phone Technology*” (funded by Microsoft Research based on its “Cell Phone as a Platform for Healthcare” RFP).
- *Dr. A. Nikov* conducted a usability study of computer-oriented workplaces in British Gas, Trinidad and Tobago.

Department of Physics

Research Collaboration/Partnerships

- Florida State University, USA to further research in solar energy.
- Bangladesh University of Engineering and Technology
- Kwame Nkrumah University of Science and Technology, Ghana to further research in solar and renewable energy.
- Institution for Surface Science in Uppsala Sweden.
- Free University and Humboldt University (Charity)- Berlin.
- University of Wales, Swansea in the area of Biomagnetism
- Massey University, New Zealand in water purification with nano particles.
- University of Turku, Finland in astronomy.
- University of Flensburg in geothermal and renewable energy.
- University of the Anterlies of Guyana and Guadalupe in material science.
- Suny State University, New York in EEG Analysis.
- ICTP on the development of a wind assessment map for Trinidad and Tobago.
- University of Ghent, Belgium on the development of the rainfall erosivity map.

New Projects for which funding has been obtained

1. Campus Research Grant; Development of Ternary System based Polymer Electrolyte Membranes for Fuel Cells
2. Campus Research Grant; Novel Nano composite Polymer Electrolyte Membranes for Fuel Cell Applications

Research Focus

The areas of research focus in the Department includes Environmental Physics with emphasis on alternate energy(solar, geothermal and fuel cells), Materials Science, Quantum Physics, Electronics, Astronomy and Biomedical Physics.

Major research completed

Dr. R. Clarke

- Modification Analysis and Testify of a Sola Timber Dryer for Adoption by Industry

Dr. H. Missan

- Developed Caribbean's First Fuel Cell Materials research Lab

Prof. Ramsey Saunders

- Water potabilisation in collaboration with Massey University, New Zealand.

Dr. Davinder Sharma

- VLSI Implementation of various Digital Signal processing algorithms

Ms. Sybele Williams

- Assessment of three-dimensional movement in the upper extremities.

Major research in progress

Dr. R. Andrews:

- Quantum Physics and energy efficient buildings in Trinidad and Tobago.
- Quantum Physics is applied to microscopy, quantum information science and lattice dynamics of bosons.

Dr. Ricardo Clarke

- The development of a T&T wind assessment map to develop renewable wind energy for Trinidad and Tobago.
- Rain erosivity map of St. Joseph/Maracas to assist with planning and development with respect to housing and agriculture.
- Stratigraphic and structural change to specific area in the Northern range of Trinidad. The results will assist with the development plans of the northern range.
- Determination of possible climate trends for T&T using non-parametric methods. This will assist with the adapting for climate change relating to global warming.
- Rainfall prediction for the Caribbean using Artificial Neural Networks. The findings will aid relevant authorities adequate information in the development of agricultural policies.

Dr. Keith De Souza

- Optoelectronics and Solar Energy

Dr. Indra Haraksingh

- Renewable Energy – Geothermal and solar energy as renewable energy for the Caribbean region.

Dr. Shirin Haque

- Astrobiology – the research in this area involves work on mud volcanoes and the pitch lake in Trinidad as analogs for conditions on Mars and Titan respectively.

Dr. J.C. Knight

- Ceramics Synthesis/Cements Additives/ Mud Volcano Dynamics. Ceramic and refractory engineering materials are indispensable in, for example, steel and glass making industries, petro-chemical industries, electronic and electronic industrials, etc.

Dr. Harinder Missan

- Development of novel, high efficient and cost effective electrolytes for application in Fuel Cells and Lithium Batteries, Dye Sensitization. Trinidad and Tobago, being a hydrocarbon driven economy, is totally dependent on oil and natural gas with hardly any renewable energy contribution. There is an urgent need for the development of renewable/alternate energy program and policy which will lead to sustainable energy development for Trinidad and Tobago. Globally alternate energy research and applications (includes fuel cells, lithium batteries and solar cells) is getting a lot of importance. It is expected that the global fuel cell market alone will be in the order of 90 billion dollars by 2015.

Prof. Ramsey Saunders

- Nanotechnology as applied to water purification.
- EEG analysis in collaboration with State University New York (SUNY) for diagnosis of schizophrenia, depression, autism and alcoholism.

- Photoplethysmography for diagnosis of disturbances in the human circulatory system in particular with respect to diabetes and hypertension.
- Alzheimer's research with Free University, Berlin (Charite) and Institute of Surface Science, Uppsala, Sweden aimed at the elimination of plaque formation in the cerebro-vascular system.
- Biomagnetism in collaboration with the University of Wales Swansea where the measurement of the magnetic field of the normal heart and those with cardiac disfunction is used to develop diagnostic modalities.

Dr. Davinder Sharma

- Development of FPGA based speech recognition system. Security is of major concern in all the Caribbean countries. This issue can be addressed by deploying speech recognition based security systems at offices/houses. Voice operated security systems proposed by us can provide very high degree security at lower cost as compared to the others systems. We, at VLSI Research Lab, in Physics are trying to develop efficient algorithms to improve man-machine interaction so that efficient and low cost automation systems can be designed.

Ms. Sybele Williams

- Non-invasive monitoring of idiopathic scoliosis
- Assessment of the physical anthropometry of the population of Trinidad and Tobago.

Cocoa Research Unit

Research Focus

Cocoa Research Unit continues to carry out research centred on the international genebank and focused on morpho-physiological, genetic and molecular characterization as well as research into efficient germplasm management. Other areas of research focus include understanding the host pathogen interaction and the genetic basis of resistance, identifying molecular markers for characters of breeding interest, factors influencing chemical and sensory quality attributes, studies on microfermentation systems, development of standards, mechanisms of cadmium uptake in cocoa and improving the efficiency of propagation through rooted cuttings.

Major Research Completed

- A CFC/ICCO/Bioversity International sponsored five-year project entitled “Cocoa productivity and quality improvement: a participatory approach. Under this project germplasm enhancement for blackpod and witches broom diseases were initiated. Over 100 promising accessions with resistance combined with other useful traits have been transferred to the International Cocoa Quarantine Centre, Reading (ICQC,R), UK for distribution to cocoa breeders worldwide. (D.A Iwaro)
- A project entitled “Safeguarding the International Cocoa Genebank,Trinidad (ICG,T): a global resource for the cocoa industry” supported jointly by the Dutch Ministry of Agriculture, Nature and Food Quality (LNV) and the CRA, UK. The results of the project has considerable reduced the vulnerability of the collection through improving the security of the collection (fencing the area) and by providing a comprehensive irrigation system based on underground pipes. The project enabled propagating and refilling empty spaces within germplasm plots that had resulted from genetic erosion. (B. Lutchman & D.R. Butler).
- A five year collaborative project between USDA, Beltsville and the Cocoa Research Unit entitled “ Developing a DNA fingerprinting database for the cocoa collections held at the ICG,T” came to an end. The project resulted in the following outcomes.
 - Molecular characterization of Upper Amazon cacao material. The earliest cacao germplasm that was brought into Trinidad from the Upper Amazon was characterized with microsatellite markers. The results demonstrated that the collection was composed of a large number of related family members from a relatively small area. The study allows for further rationalization of each accession groups towards more effective conservation of germplasm. (M. Boccara & L.A. Motilal).

- Determining the level of mislabeling within the International Cocoa Genebank, Trinidad. The existing methodology for assessing mislabeling in cacao field genebank was improved and the level of mislabeling estimated within the genebank. This is particularly important in devising a strategy for correcting the errors and ensuring more effective and efficient management of the genebank. (L.A. Motilal)
- An ancient variety of Criollo cacao from Belize was characterized with microsatellite markers. The study elucidated the high level of homozygosity and homogeneity within the population collected from Belize and its phylogenetic association with other pure Criollo material collected elsewhere in Central America. The study showed that this population can be effectively represented by a few individuals. The study also showed that the ICS collection has a much smaller proportion of Criollo ancestry than expected. (L.A. Motilal).

Major Research in Progress

- A project entitled “To assess the quality attributes of the Imperial College Selections” is aiming to assess the value of “Imperial College Selections (ICS varieties)” for chemical and sensory quality attributes. The ICS have been the most widely distributed Trinitario cocoa material worldwide and are the basis of cocoa cultivations in many parts of the world. Understanding the flavour profiles of these accessions will allow the development of specialty chocolate products.
- A project entitled “Neutraceutical and flavour profiling of cocoa in Trinidad is a joint project between the Department of Chemistry and the Cocoa Research Unit to understand the chemicals behind flavour and other known health benefits of cocoa.
- A collaborative project between the Cocoa Research Unit and the Ministry of Agriculture, Land and Marine Resources of GORTT began last year to improve resistance to black pod disease in the Trinidad Selected Hybrids. It is expected that this will result in a new series of cocoa varieties.
- A project entitled “To evaluate cocoa germplasm for resistance to Witches’ Broom Disease” funded by the World Cocoa Foundation is continuing to screen cocoa accessions held at the International Cocoa Genebank, Trinidad for resistance to the fungal disease. The resistant varieties identified are being used in a population enhancement programme in another project.

- A world bank funded project “Identification and promotion of ancient cacao diversity through modern genomics methods to benefit small-scale farmers” began in 2009 and is continuing. The project will identify ancient cocoa types grown around Trinidad and the phylogenetic relationships, flavour profiles and agronomic potential.

New projects for which funding has been obtained

- Funding from the Perez Guerrero Trust Fund has been obtained to support need assessments in Caribbean fine flavour countries and for provision of targeted training.
- Cocoa Research Unit will serve as the executing agency for a four-year CDE funded project aimed at providing technical assistance to 7 countries in the CARIFORUM in the areas of (a) improving the productivity and quality of cocoa (b) improving food safety through training (c) provision of technical support for value-added industries in the region and (d) supporting linkages with tourism industries.
- A new collaborative five-year project with USDA has been initiated to identify molecular markers for agronomic traits within the germplasm collection.

Herbarium

Projects Completed

- Increased storage capacity of the herbarium and the library. This offers new opportunities for expanding flora research and building up the lower plant specimen reference collection.
- The completion of the Darwin project which involved an extensive botanical inventory of the vascular plants has produced a draft Conservation Checklist soon to be published. The data provided from this study will help to develop a bio-monitoring system for Trinidad and Tobago which we hope to embark on in the near future.
- Completed the data base on an ethno-botanical survey of folk medicinal plants used in Trinidad and Tobago.

Projects in progress

- Field photography, digitizing and data basing into BRAHMS for the Virtual Field Herbarium is in progress which will go live on line in the near future
- A study of the biodiversity of the lichens of Trinidad and Tobago is in progress with a PhD student undertaking a base line study of Trinidad lichens and its importance for bio-monitoring and forest health. This is a taxon which has not been fully studied in Trinidad and Tobago and its role and function in the ecosystem is virtually unknown

Service to UWI-12 Countries and Other Underserved Communities

Department of Agricultural Economics and Extension

- The Department continued to offer the BSc Agribusiness Management degree by distance.

Department of Chemistry

- Aim of the Department of Chemistry is to assist the Open Campus in achieving a high level of student satisfaction through efficiency in student administration and the functioning of the examination system. As a result the Department appointed a lecturer in Chemical Education who coordinates the Preliminary Chemistry programme for Open Campus.

Department of Life Sciences

- Members of the Department, with sponsorship from FAO, conducted a short course on “Laboratory Training on Aspects of Biotechnology for Agricultural Officers from St. Vincent & The Grenadines in July 2010.

Department of Agricultural Economics and Extension

Since 2008/2009, the Department has offered the BSc Human Ecology and the BSc Agribusiness Management as part of the Evening University to cater for persons who cannot attend regular day classes.

Department of Food Production

The Department introduced practical aspects into the core course (AGCP 2001: Principles of Crop Science and Production) which traditionally focused on major concepts in crop science and production. Practical components were introduced to reinforce and stimulate learning and understanding of crop science and production theory. An eight-week long field-base group exercise was introduced to provide practical experience in establishing and maintaining an experiment, data collection and analysis, preparation of a research paper and delivery of a seminar based on the study. This learning activity also sought to foster team work and cooperation and to instil a work ethic in students. Students were divided into small groups (5-7 students) each responsible for a field established research project.

The Department also adopted the use of blended learning into delivery of course material using technologies such as podcasting, wikis, social book marking, online discussion forums, etc, to advance teaching and learning. This was a major shift from the traditional way the courses were been taught with greater learning impact.

New programmes:

The Major in Tropical Landscaping commenced.

Department of Chemistry

The Department continued to do work on reforming the curriculum for the various programmes offered. Development of a matrix of practical skills and revision of the supporting laboratory exercises is to be finalized. Approvals and implementation of the revised curriculum for the Level One programme will take place in September 2011.

The process of ensuring direct links between assessment practices and the identified course learning objectives continued in 2009/10. Staff members have made the necessary adjustments and are ensuring that course objectives are provided to students.

A one-on-one oral exercise was implemented for the Level II/III Organic Chemistry courses and this is having a positive impact on the learning outcomes.

New outcomes experienced as a result of prior initiatives

The individual oral exercises for the Level II/III Organic Courses were useful in helping to identify the weaknesses of the students and to build their confidence. Students have indicated that when course outlines, objectives and learning outcomes are provided, they are able to have better direction for the learning process and preparing for examinations. This initiative has been extremely useful and helpful to the students.

Department of Life Sciences

New Courses and Programmes

The MSc in Science and Management of Tropical Biodiversity was launched in September 2009. At the undergraduate level an alternative course on Biochemistry for Biologists is being developed to replace the current Biomolecules and Energy Metabolism. This will be revised to fit more appropriately with the Biology Major to improve the success rate. Approval will be sought for its implementation in 2011/2012.

Department of Mathematics and Computer Science

An innovative approach to teaching computer programming was introduced by the Department. Students used personal robots in our introductory course, COMP1100 – Computer Programming I with good success. All Lecturers made submission of their office hours which were posted on the notice boards. Students therefore had more ready access to lecturers for one on one consultation. A website for the teaching material and lectures was initiated at <http://sta.uwi.edu/fsa/dmcs/icgeb/index.asp>. The purpose of the site is to make available all material and lectures (audio and video wherever available) to all those interested in this field, whether based at UWI or internationally.

New Programmes

The proposal for introducing a new degree programme, the BSc Computer Science, was approved for implementation in September 2010.

Department of Physics

The removal of the laboratory work from the course (PHYS 2280), Mathematical Methods, allowed that time to be used for additional tutorials. This was done to address the high failure rates in this course. Lecturers adopted the use of YouTube and other film clips as well as DVDs to illustrate special topics. Other technologies such as websites and social networking sites were also used for teaching and connecting with students.

New Courses

The Department introduced a new Level I course (PHYS 1001) Introduction to Astronomy.

Graduate Studies

Department of Agricultural Economics and Extension

A collaborative effort with the Universite Des Antilles Et De La Guyane, Guadeloupe, has led to on-going efforts to develop the MSc in Nutrition and Health and the MPhil and PhD in Human Sciences are currently being ratified for submission to the Board for Graduate Studies. The MSc programmes in Agricultural Economics and Marketing and Agribusiness were revised during the reporting period.

The MSc (Marketing and Agribusiness) has quickly become the most popular postgraduate programme in the Department. Currently the programme has graduate students from Trinidad and Tobago, Dominica, Guyana, Jamaica and Montserrat.

The Department provided more effective monitoring of the progress of graduate students and a very vibrant Agribusiness Postgraduate Association has been formed.

Department of Food Production

An increased number of seminar presentations is now required as part of graduate level courses with the objective of improving the writing and presentation skills of graduates from the MSc (TCU) programme.

Department of Chemistry

The Master of Science Programme in ***Occupational and Environmental Safety and Health***, introduced in 2009 in response to stakeholders' needs, has been a great success both financially and academically with 58 students registering in 2009. At the end of June 2010, 30 full-load students have completed their taught courses and are expected to launch into their 6-month research projects in September 2010.

Advisory Committee groups continued to meet once per semester during the 2009/2010 academic year. These meetings are in their second year of implementation and have resulted in an increase in the throughput of graduate students. At these meetings the students have to justify the progress on their research project. Five PhD students and one MPhil student graduated in 2009/2010. Access to modern facilities and instrumentation has also led to the improvement in research activities by graduate students.

One postgraduate student received an attachment at the Jacobs University, Bremen, Germany from October to December 2009 and July to September 2010 to further her research project on “*Molecular Distribution in Biphasic Aggregates*”. Another student presented a poster at the 39th International Conference on Coordination Chemistry in Adelaide, Australia, July 2010. Her research presented was *Synthesis of a novel functionalized Cobalt (III) caged surfactant*.

Department of Life Sciences

In order to prepare for online teaching in 2011/12, Lecturers from UWI, University of Guyana, University of Belize and the University of Suriname pursued courses in Managing and Facilitating Online Instruction with the Open Campus. Meanwhile, work commenced on the development of a Master’s in Health Administration and Hospital Administration.

Department of Mathematics and Computer Science

Advisory Committees for postgraduate students have been meeting every semester and significant improvements in graduate supervision and graduate student output have resulted. The Department has graduated 13 postgraduate students in 2009/2010 compared to seven students in 2008/2009.

Department of Physics

Three new courses were developed at the postgraduate level – PHYS 6294 (Novel Materials), PHYS 6492 (Digital Systems Design) and PHYS 6295 (Solar Energy Conversion). These courses will assist in providing postgraduate level courses required for the MPhil and PhD requirement and will in addition assist in the future with the development of a Master’s of Physics

(MPhys) as well as a MSc in Physics with Education. The Department arranged COMP 6980 Scientific Computing for Physics postgraduate students.

Staff facilitated training abroad of postgraduate students through grants and split-site scholarships and funding received from the Campus Research Fund has allowed continued research. Ten postgraduate students presented papers at conferences and seminars during the reporting period. A postgraduate seminar series and a postgraduate staff student liaison program were initiated to cultivate a more interactive research environment.

Cocoa Research Unit

Research Degrees Completed/Under Examination/Completed Writing Up

Avila-Rostant, O. Studies on the molecular control mechanisms in *Anthurium andraeanum* with various spathe colours (M.Phil thesis). Supervisor: P. Umaharan (**under examination**).

Austin, N. Effect of forest management practices on the molecular genetic variability of some important Tropical Forest Species in Trinidad and Tobago. PhD thesis (**under examination**). Supervisors: M. Oatham and P. Umaharan

Bharat, S. Mopho-physiological descriptors of a Caribbean *Capsicum chinense* germplasm collection. (MPhil thesis). Supervisor: P. Umaharan (**under examination**).

Joseph-Alexander, A. Morpho-physiological selection criteria associated with biological nitrogen fixation in pigeonpea MPhil thesis. Supervisors: P. Umaharan and A. Ramsubhag (**under examination**)

Motilal, L. Association mapping of butter fat content, resistance to witches' broom disease and selected morphological traits in a Refractario population of *Theobroma cacao*. PhD thesis. Supervisors: P. Umaharan and Dapeng Zhang (**under examination**)

Ragoobarsingh, A. (2010). Morpho-physiological selection criteria related to yield stability in bodi beans (*Vigna unguiculata* L. Walp). PhD (Awarded.) Supervisor: P. Umaharan.

Outreach

Department of Agricultural Economics and Extension

The Department along with the Caribbean Agro-Economic Society, hosted the 28th West Indies Agricultural Economic Conference, held in Barbados, where a special session was held on the 'University of the West Indies (UWI) Contribution to Regional Agriculture'. The Caribbean Agro-Economic Society has its Secretariat in the Department. The Department also took over the responsibility for the publication of the journal, *Tropical Agriculture*.

Department of Food Production

Dr. M. Mohammed collaborated with NAMDEVCO on a Fresh-Cut Fruit and Vegetable project; with the School Nutrition Company on a Fresh-Cut Fruit project; with the Tobago House of Assembly (Tobago) on postharvest projects in banana and plantain and presented a paper on postharvest management of tropical fruits and vegetables. The following factsheets were also completed in collaboration with Ms. S. Ragbir (Dept. of Agricultural Economics and Extension) for public distribution:

- Postharvest handling and quality management of okra.
- Postharvest handling and quality management of melongene.
- Postharvest handling and quality management of bitter melon.
- Postharvest handling and quality management of bodie.

Dr. L. B. Roberts-Nkrumah collaborated with the Tobago House of Assembly in training nursery personnel in breadfruit propagation techniques.

Department of Chemistry

The Department continues to support initiatives of the University to assist in strengthening primary and secondary school systems in the region. Three Open Day sessions were conducted with the International School, ASJA Girls and St. George's College. Work also continues to sensitize national communities to the advancements in science and technology and its role in industrial development, and in the training of secondary school teachers in the teaching of special modules of the CAPE chemistry curriculum.

Department of Life Sciences

The Department provided representation on the Repsol Biodiversity Management Project Working Group and the

Darwin Initiative Workshop to review the way forward for the Darwin Initiative Zoological Society, London. Staff coordinated the production of three UNESCO-funded DVD's targeting early childhood audiences (animated), primary school-aged students and adults on: 'Understanding Water- this precious commodity'. (Dr. Grace Sirju-Charran). The Department also hosted a workshop with the Institute of Marine Affairs on "Building Reef Resilience: Integrating Reef Resilience into Management".

Department of Mathematics and Computer Science

The Department conducted a workshop on "Low-cost Wireless Computer Networking" held from 7th June to 11th June 2010. The aim of the wireless workshop was to build needed capacity in the country and Caribbean region in low cost wireless technologies for social networks and education. It has provided a technical forum for disseminating information on tools used for assessing, implementing, maintaining and training wireless networks. It also provided a unique opportunity for members of the university in various disciplines, to obtain first-hand knowledge and research skills from regional and international experts. Contributing institutions were:

- The Abdus Salam International Centre for Theoretical Physics,
- The Internet Society,
- Network Start-up Resource Center (NSRC), and
- The Foundation Escuela Latinoamericana de Redes (EsLaRed).

The Department hosted a Capacity Building International training programme "Caribbean Training Programme on Bio-informatics: Application of Structural and Computational Biology in Biomedical Sciences" from 18th - 30th January, 2010, in collaboration with International Centre for Genetics Engineering and Biotechnology (ICGEB) and United Nations University-Biotechnology for Latin America and the Caribbean (UNU-BIOLAC). The two-week international workshop received funding from ICGEB (Euro 20,000) and UNU-Biolac (USD 10,000). Delegates from the Americas, Caribbean and Europe participated in this workshop. The programme attracted trainers from India, United Kingdom, Venezuela, Uruguay and the USA.

Open Seminars

Two seminars were held on "Eya Automatic Lecture Recording: How To Deliver A Lecture To An Audience Of Thousands And More" and "The Science Dissemination Unit of the ICTP: Our Mission And Projects"

In March 2010 a week of activities was held for 'Statistics Week', in honour of Prof. Winston Richards seventy-fifth birthday. The main activities consisted of several talks by the distinguished invited speaker, Professor Ingram Olkin of Stanford University. Professor Olkin also conducted a workshop on Meta-Analysis. In addition, there was a 'Mini-Conference' on statistics.

Department of Physics

The Department hosted the “Unfolding Seminar Series”, linking employers with Physics students and in association with the Ministry of Education a workshop on electronics for CAPE teachers was organised. The Department also organized and hosted the ISYA (International School for Young Astronomers) in December 2009. The review period saw collaboration on energy efficiency building/energy efficiency in the region.

The Cocoa Research Unit (CRU)

Memoranda of Understanding with Regional Stakeholders

The CRU signed MOUs with the Cocoa Industry Board of Jamaica, the Cocoa Growers’ Association of Grenada and is in the process of signing MOUs with the Ministry of Agriculture, Government of St Lucia, the Cocoa and Coffee Industry Board, Trinidad and Tobago and with the Cocoa Grower’s association, Jamaica with regards to providing germplasm services, flavour testing, accreditation of quality and plant pathology services. As an initial step, a visit was made to Grenada to assess the needs of the Cocoa Industry. Based on the report, a project is being developed to support the Grenada Cocoa Industry.

The CRU is actively seeking the support of the Ministry of Agriculture, Government of Barbados and the Cave Hill Campus of the UWI to re-establish the regional Cocoa Quarantine Facility in Barbados. Funding for this activity is being sought through regional projects and a grant application to the Benefit Sharing Fund of Bioversity International.

The CRU/UWI has been designated the executing agency for a 4-year project funded by the CDE entitled “Caribbean Fine Flavour Cocoa Industry Commercialisation” covering seven Caribbean countries (1.7 million Euro). This aims to support the improvement of cocoa productivity, quality, food safety value added products and the promotion of agrotourism.

CRU/UWI has also won a competitive Perez-Guerrero Trust Fund aimed at supporting the development of a regional network of cocoa industries and sharing of best practices. It is envisaged that this could be carried out in the form of a workshop and exhibition.

National Projects

The CRU provides support to the MFPLMR, Cocoa and Coffee Industry Boards, farmer cooperatives, private chocolate manufacturers and private cocoa growers on aspects of cocoa DNA fingerprinting, quality management, sensory testing of samples, resistance screening and germplasm characterization. The Unit CRU is also working with various stakeholders nationally on a major germplasm duplication project where fractional replicates of the collection will be housed with NGOs, CBOs and private famers. Funding to support this project is being sought from the greenfund.

External linkages with industry partners

The Cocoa Research Unit continues to work very closely with industry partners, nationally, regionally and internationally. During the last year, CRU has offered training, consultation or services to cocoa industry boards in Jamaica, Belize, Grenada, St. Lucia and Trinidad and Tobago in various capacities. The

list of international companies that have collaborated with the CRU is long. There have been collaborative projects, sponsored projects, co-financing, technical advice and general support. The companies include Atlanta Cacao, USA; Belcolade & Puratos, Belgium; Cadbury Ltd. UK; Guittard Chocolate Co., USA; Kraft Foods Ltd.; Lindt and Sprüngli International AG, Switzerland; Mars Ltd., USA; Rausch Plantagen Schokolade, Germany; The Hershey's Chocolate Co., USA; Valrhona, France.

Cross Faculty Relationships

The Cocoa Research Unit is actively seeking partnerships with faculties and departments across the various campuses to improve the size and scope of the cocoa research cluster. The CRU already has strong links with the Departments of Chemical and Mechanical Engineering of the Faculty of Engineering, Departments of Chemistry and Life Sciences of the Faculty of Science and Agriculture, and will be working with the Biotechnology Centre at the Mona Campus and the Department of Biological and Chemical Sciences at Cave Hill in the near future.

Local, Regional & International Links

UWI has had a strong relationship with Centre de Coopération Internationale en Recherche Agronomique pour le Développement, France (CIRAD) under an existing MOU. Under the arrangement, two scientists in Molecular Biology and Plant Pathology from CIRAD are stationed at the CRU. Next year an additional researcher in Flavour Chemistry will be stationed at the CRU. This greatly builds critical capacity in various areas within the CRU.

An MOU has been signed with the University of Hamburg, Germany to support collaboration on Cocoa Flavour Chemistry. Agreements with the University of Reading, UK and with the University of Poland are being pursued in the areas of cocoa research, collaboration in international germplasm quarantine and the international cocoa germplasm database development and to support collaboration in development of value added products in cocoa respectively.

Herbarium

The Herbarium provided institutional support, edited and wrote the forward to the publication, "The Wild Plants of Antigua and Barbuda: An illustrated Field Guide to the Native and Naturalized Vascular Plants" (Pratt et al 2009). Published by the NGO, Environmental Awareness Group (EAG) in Antigua and Barbuda, it is funded by USAID.

During the review period the Herbarium collaborated with TTHSI (Trinidad and Tobago Health Science Initiative)/CaHMRI (Caribbean Herbal Medicine Research Institute) based in UTT, The School of Pharmacology Unit, UWI to screen indigenous medicinal plants in Trinidad and Tobago for clinical trials. An internship programme with students from the University of the Southern Caribbean, Maracas Valley, St. Joseph was initiated where students would volunteer their time to assist the Herbarium staff with the mounting of specimens plus cataloguing and labelling in the library.

Research on the flora of Trinidad and Tobago continues at the Natural History Museum and the Royal Botanic Gardens Kew in England. Initiated discussions with lichen expert Ms. Pat Wolseley at the NHM to provide training for PhD student Mrs. Andrea Scobie in lichen preservation and identification for her research in 2010.

Revenue Generation & Cost Containment Activities

Department of Chemistry

- Sum of \$80,000.00 derived from consultancies in Occupational, Environmental Safety and Health as well as from manufacturing companies
- Cost containment/ increased efficiency -
- Effective preventative maintenance system implemented.

Department of Life Sciences

- Grant from The International Atomic Agency Grant in the sum of Euro 20,000.
- Grant from the University of Alabama in the sum of US\$50,000 for the Master's in Public Health programme
- A set of new field exercises surveying plants and insects on the campus lawns has replaced two field trips for BIOL1462 (enrollment 476 students), saving about \$32,000 in transport costs.

Department of Physics

Revenue was generated from the following activities:

- Services offered by the Electron Microscopy Unit (\$3,660.00)
- Services offered by the Electronics workshop (\$ 46,159.38)

Cocoa Research Unit

Project funding

The CRU continues to generate most of its operating costs from project funding. During the reporting year, new funding was obtained from the following sources:

- The Perez Guerrero Trust Fund to support training within the CARICOM,
- The World Cocoa Foundation to support the 'Witches' Broom resistance Screening',
- The USDA to support work on identifying molecular markers linked to traits of interest,
- The World Bank for molecular profiling of ancient cocoa varieties from Trinidad and GORTT for screening of breeding lines for systemic resistance to blackpod disease.

Short courses

The CRU continued to generate income through the delivery of short courses in sensory testing, molecular fingerprinting, germplasm identification, resistance screening and grafting methodologies.

Contractual services/ consultancies

Cocoa Research Unit continues to provide contractual services in a number of areas including germplasm services, sensory quality testing services, design of post-harvest processing systems and resistance testing

Projected Activities for 2010/2011

Department of Food Production

Proposed new programmes:

- A new **BSc in Agriculture**
- **MSc in Agrifood Safety and Quality**(self financing) to commence in September,2010

Research activities:

- Resume research work on agronomic requirements and physiological characteristics of yams (*Dioscorea* spp.) focusing on areas identified as deficient in keeping with the renewed focus on domestic and regional food security (Dr. L Wickham)
- Horticultural maintenance of urban green spaces (Dr. L Roberts-Nkrumah)

Proposed general activities:

Mounting of a regional 15-day short-course on “Sustainability in Caribbean Agriculture: Principles and Practices”.

Department of Life Sciences

Proposed new programmes:

- A new **MSc in Biodiversity Conservation and Sustainable Development** to be delivered on-line. This MSc will be the product of our Edulink Biodiversity project and will be launched in September 2011.

Research activities:

- Project for Ecosystem Services (ProEcoServ). Start of 4 year funded project on measurement and economic valuation of ecosystem services at 3 pilot sites in Trinidad and Tobago. (J. Agard, A. Mohammed, M. Oatham, J. Jayaraj, A. Ramsubhag, Y. Comeau, J. Gobin)

General activities:

Biotechnology and Molecular Biology Research Initiative

The specific objectives are to:

- Initiate the development of an MSc programme in Biotechnology with specialties in a number of cross cutting areas including agricultural biotechnology, medical biotechnology, and bioinformatics.
- Develop strong research programmes and graduate research programmes in micropropagation, genetic transformation, embryo transfer, genomics, transgenics, molecular marker technologies and biopesticides to serve as tools in solving regional problems.

Use the existing strong industry linkages with regard to anthurium biotechnology research; cassava micropropagation and hot pepper improvement as a spring board towards developing spin-off companies that can bring much needed revenue to the University. Other areas of potential interest are diagnostics, bioremediation, biofertilizers and biopesticides.

Biodiversity and Ecosystem Services

The overall goal of this research (Project for Ecosystem Services -ProEcoServ) is to utilise ecological assessment, scenario development and economic valuation of ecosystem services to better integrate these into national sustainable development planning. The project will lead to developing capacities of decision makers, users and beneficiaries of ecosystem services to assess trade-offs and development choices that contribute to strengthened biodiversity and ecosystem resilience, and to develop and apply appropriate ecosystem management tools within sectoral planning frameworks and macroeconomic planning models.

The expected outcomes of the project are:

- Development of multi-scale and locally valid tools and decision support models to apply these in development planning and policy making e.g. GIS based mapping of ecosystem services and evaluating a computerised decision support system to aid in optimising trade-off analysis of competing natural resource uses.

- Policy implementation support for the application of ecosystem management and services approaches at national and trans-boundary levels e.g. develop a pilot pro-poor payment for ecosystem services case study using the Nariva Swamp Restoration, Carbon Sequestration and Livelihoods Project. Review laws of T&T for opportunities to introduce ecosystem services conservation and wise-use legislation.
- Strengthening of science-policy interfaces to reinforce multi-scale linkages from local to international actors, as well as to bridge the gap between research results and policy application in developing countries and the international biodiversity arena.

Department of Mathematics and Computer Science

Separation of the Department into two new departments - the Department of Mathematics and Statistics and the Department of Computing and Information Technology.

Proposed academic programmes:

Introduction of the **BSc in Actuarial Science**.

Review of the curriculum for the **BSc in Information Technology** and the **MSc in Computer Science**.

This will involve stakeholder consultation

Proposed general activities

- Appointment of Programme Coordinators.
- Appointment of an Industry Coordinator to liaise with the stakeholders with the view of executing joint research projects as well as developing a programme of continuing education in key areas

Department of Physics

Proposed new programmes:

- Introduction of three new postgraduate courses in Digital Designs (PHYS 6492), Novel Materials (PHYS6294) and Solar Energy Conversion (PHYS 6295)

Proposed general activities

- 3 day course in VLSI Design and Signal Processing for industrial engineers and researchers

Cocoa Research Unit

Proposal to convert the CRU from a single campus unit to a regional center.

Herbarium

- Publication of ethno-botanical data
- Improvement to the infrastructure and the resources of the Herbarium to enable staff to increase the output of research and publication of the flora.
- Accommodate more staff, researchers and students in the Herbarium.
- Increase the rate of restoration of fragile historical specimens in the collection.

- Increase the rate of mounting and data basing of specimens to keep the reference collection up-to-date as possible.
- Develop the virtual field Herbarium
- Develop a culture of volunteerism to assist with the workload in the Herbarium.

Distinguished Visitors

Department of Agricultural Economics and Extension

Dr. Cathryn Clement

Academic Coordinator, Borlaug Institute.
Lecturer, Department of Agricultural Leadership, Education and Communications

Dr. Clarice Fulton

Graduate Programme Coordinator, Department of Agricultural Leadership, Education and Communications

Professor James R. Lindner

Department of Agricultural Leadership, Education and Communications

Department of Food Production

Santiago Rivas

Center for Agricultural & Forestry Division, CEDAF, Santo Domingo, Dominican Republic

Department of Chemistry

Dr. Jeanese Badenock

Department of Biological Science/Chemistry, UWI, Cave Hill Campus, Barbados

Professor Robert A. Dibie

Dean and Professor of Public Affairs Editor, Journal of International Politics and Development, School of Public and Environmental Affairs (SPEA), Indiana University

Prof. G.W.J. Fleet

Chemistry Department, Oxford University, Oxfordshire, U.K.

Dr. E. Andrew Kapp

Associate Professor of Occupational and Environmental Safety and Health, University of Wisconsin

Prof. Mark Lautens

Department of Chemistry, University of Toronto, Canada

Prof. Willem Mulder

Department of Chemistry, UWI, Mona Campus,

*Department of Life Sciences***Dr. Grant Brown**

Concordia University

Dr. Daren Croft

University of Exeter

Dr. Safi Darden

University of Exeter

Dr. Aaron Fisk

University of Windsor

Dr. Jean-Guy Godin

Carlton University

Professor Anne Magurran

St Andrews University

Dr. Trevor Pitcher

University of Windsor

Professor David W. Severson

Center for Tropical Disease Research and Training, University of Notre Dame, Indiana, USA

Professor Fedora Sutton

South Dakota State University, Brookings, South Dakota, USA

*Department of Mathematics and Computer Science***Dr. Carlo Fonda**

The Abdus Salam International Centre for Theoretical Physics (ICTP) Trieste, Italy

Mr. Christian O'Flaherty

Senior Education Manager, The Internet Society, Aires, Argentina

Professor Ingram Olkin

Stanford University, USA

Professor Ermanno Pietrosemoli

Professor of Telecommunications
President of Fundación Escuela Latinoamericana de Redes (EsLaRed), Universidad de los Andes Facultad de Ingeniería LabRed, Primer piso Ala Suroeste, Merida 5101 Venezuela

Mr. Javier Triviño

Fundación Escuela Latinoamericana de Redes, Universidad de los Andes Facultad de Ingeniería LabRed, Primer piso Ala Suroeste, Merida 5101 Venezuela

Dr. Marco Zennaro

The Abdus Salam International Centre for Theoretical Physics (ICTP) Trieste, Italy

*Department of Physics***Professor Clive Davies**

Massey University, New Zealand

Dr. Daryus Rassi

University of Wales Swansea

*Cocoa Research Unit***Mr. Winston Acqui**

French Embassy, TATIL Bldg., Maraval Road, Port of Spain

Mr. Philippe Bastide

CIRAD, Montpellier, France

Hon. Mr. Vasant Bharath

Minister, Ministry of Food Production, Land and Marine Affairs

Mr. Jean Claude Breton
President des Chocolatiers Poitou-Charentes

Mrs. Eltha Brown
First Project Manager,
The Common Fund for Commodities

Dr. David Butler
Intrepid Equipment, Brazil

Dr. Christian Cilas
Head, Cocoa Research, CIRAD, France

Mr. Pierre Costet
Chocolaterie Valrhona, France

Mr. Anton Doldron
CEO of the Cocoa and Coffee Industry Board,
Trinidad & Tobago

Mr. Jacomien Ford
Burlington, Ont., Canada, March

Dr. Marcus Grob and Walter Matter SA
Cocoa buyers

Professor David Guest
University of Sydney, Australia

Dr. Bill Guyton
President, the World Cocoa Foundation

Mr. José Enrique Herrera
Xoco Central America Ltd, Honduras

Mr. Frank Homann
Xoco Central America Ltd, Honduras

High Commissioner, Joseph-Harris
Ministry of Foreign Affairs, Port of Spain

Mr. Biki Khurana
Marketing Manager, Rausch, Germany

Mr. Eric Martin
Valrhona, France

Mr. David N Khun
USDA-ARS SHRS, Miami

Mr. Forrest E. Mars Jr.
MARS INC., Mc Lean, VA, USA

Dr. Lyndel Meinhart
Sustainable Perennial Crops Laboratory, United
States Department of Agriculture, Beltsville, USA,

His Excellency Ali Muchumo
Managing Director, The Common Fund for
Commodities

Mr. David Preece
Director, CRA Ltd, United Kingdom

Mr. Eric Rosenquist
Consultant World Cocoa Foundation

Mrs. Jacqueline Rawlins
Chairman of the Board of Directors, Cocoa and
Coffee Industry Board, Trinidad & Tobago

Professor Marek Sikora
Professor of Food Science and Technology,
Department of Carbohydrates Technology,
University of Agriculture, Krakow, Poland

Dr. James Small
USAID

Dr. Scott Tiffin
IDRC Consultant, Alastair Ross Tech Centre

Mr. Josh Weimer
Xoco Central America Ltd, Honduras

Professor Rene Williamson
UTT BME, O'Meara Campus

*Herbarium***Dr. Javier Baliosian**

Universidad de la Republica de Uruguay

Mr. Phillip DaSilva

University of Guyana

Ms. Helen Hardinge Field

Ontario, Canada

Ms. Colleen Hill

Panama

Ms. Julie Insley CCH, R.S. Hon, BS, LRT

North Carolina, USA

Prof. Paul S. Lietman

Johns Hopkins University, USA

Dr. Sergio F. Ochos

Universidad de Chile

Mr. Marcus Schaffry

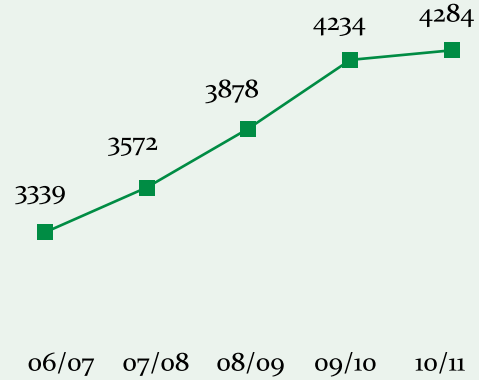
Linacre College, Oxford, UK

Dr. José Tiberio

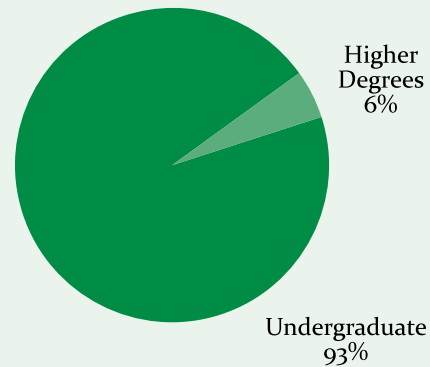
Hernando University of Los Andes, Bogota

Growth In Enrolment

2006 – 2011

***Graduates by Programme***

2009 – 2010



SOCIAL SCIENCES

**ACADEMIC STAFF, RESEARCH
AND TEACHING ASSISTANTS
PARTICIPATED IN INSTRUCTIONAL
DEVELOPMENT SESSIONS
CONDUCTED BY THE
INSTRUCTIONAL DEVELOPMENT
UNIT, WITH A VIEW TO
DEVELOPING
PEDAGOGICAL
SKILLS FOR THE
EFFECTIVE
DELIVERY OF
COURSES.**



Executive Summary

At the mid-point of the current UWI Strategic Plan 2007-2012, the Faculty of Social Sciences continued to make significant progress in achieving its objectives consistent with the strategic goals identified in the Strategic Plan.

In 2009/2010, the Faculty continued to have the largest number of students registered at the St. Augustine Campus. Total enrolment in the Faculty levelled off however, due to resource constraints, with 5,141 students registered; 3,699 students were registered at the undergraduate level and 1,442 at the graduate level. Of the total undergraduate enrolment, 1,097 students were registered in the Evening University. This figure accounted for 59% of the 2009/2010 target set for Evening University enrolment. In 2009-2010, enrolment in research degrees continued to increase with 83 students registered in MPhil programmes and 66 in PhD programmes in the Faculty. Additionally, in 2009/2010, 804 students graduated from the Faculty of Social Sciences with BSc degrees, while 388 graduated with higher degrees.

In 2009/2010, the Faculty introduced several new market-responsive and elective undergraduate and postgraduate courses. New undergraduate courses included: Professional Ethics; Advanced Strategic Simulation; Sociology of the Families; History and Systems in Psychology and Research Methods in Psychology. The postgraduate courses included: Contemporary Issues in Cognitive Psychology; Advanced Financial Economics; Advanced Portfolio Management; Advanced Risk Management; and, Financial Econometrics. The preceding three courses were introduced as part of a finance option in the

revised MSc in Management Studies to be delivered from January 2011. Teaching began in the Postgraduate Diploma as well as the MSc in Sports Management in January 2010.

In 2009/2010, the BSc and MSc Leadership and Management programmes initially designed to satisfy a demand by the Defence Force of Trinidad and Tobago, were offered for the first time to the civilian population.

The Department of Management Studies collaborated with the Certified Management Accountants (CMA) body of Nova Scotia, Canada to develop the Diploma in Accounting programme for university graduates without an accounting background. The intention is to replace the existing Foundation Studies Programme which is not GATE-funded.

In the 2009/2010 academic year the Department of Behavioural Sciences also began its pilot programme to offer a limited number of courses in South Trinidad. The Semester I courses were: Introduction to Politics; Introduction to Public Administration; and Organization Theory and Behaviour. The Semester II courses were: Introduction to Politics II, Issues in Caribbean Public Administration and Organization Theory and Behaviour II. These courses form part of the core courses for the Certificate in Public Administration (CPA) and were also offered in the Faculty's customized Certificate in Local Government Studies which made use of the decentralized teaching model pioneered by the Faculty. The Faculty also continued its collaborative arrangement with the Open Campus to offer the CPA programme in Tobago.

The Faculty revised the curriculum for the Certificate in Local Government Studies programme to meet market demand. This revised programme, which was customized to include four workshops to train 40 employees of the Ministry of Local Government, was launched on February 22, 2010. The launch was attended by the former Minister of Local Government, Senator the Honourable Hazel Manning, the incoming and the outgoing Permanent Secretaries in the Ministry of Local Government, the Campus Principal and other invitees including the first batch of students in the programme.

In Semester II of 2009/2010, the Faculty of Social Sciences also revised the Foundation course – Law, Governance, Economy and Society – offered in dual mode, i.e. online to students of the Open Campus and face-to-face at the St. Augustine Campus. The aim of the revision was to allow all students to read the same course material and be assessed on the same, revised assessment methods.

As part of its remedial programme, the Department of Economics introduced a Mathematics Proficiency Test (MPT) for students reading for the BSc Economics who do not possess a Pass at Additional Mathematics, Advanced Level Mathematics, AS Mathematics or CAPE Mathematics (Units 1 & 2). Students who are unsuccessful in the MPT will be required to read and pass Remedial Mathematics – ECON 0001, before being allowed to read Introduction to Mathematics – ECON 1003. The objective of this Remedial Mathematics course – ECON 0001 is to provide these students with the basic mathematics skills to close the proficiency and knowledge gaps in order to meet the prerequisites for the Level I Introduction to Mathematics course – ECON 1003.

Despite the physical and financial resource constraints, the Faculty continued to make improvements to physical plant and equipment for the benefit of both staff and students. The Faculty secured University funding to convert Room 103 on the Ground Floor of the Faculty of Humanities and Education building into a “smart classroom” equipped with a wide variety of media. Plans are afoot to convert several additional classrooms into “smart classrooms” in the coming period. The Department of Economics secured additional tutorial rooms and a graduate research room at Campus House. In the Department of Management Studies, there was the provision of enhanced facilities for Postgraduate students and the creation of eight new staff offices. The Management Lecture Theatre was also refurbished and refurnished, with funding generated internally at the Faculty and Department levels.

In 2009/2010, the Faculty of Social Sciences also extended its hours of service to Evening University students on Saturdays from 8.00 a.m. to 4.00 p.m. to 8.00 a.m. to 8.00 p.m. as a direct response to the growth and success of the Faculty’s Evening University policy adopted in 2004/2005.

With regard to investments in teaching quality, in 2009/2010, academic staff, research and teaching assistants in the Faculty continued to participate in instructional development sessions conducted by the Instructional Development Unit with a view to developing pedagogical skills necessary for the effective delivery of courses. Two members of Management Studies staff received certification in Instructional Development in the review period.

A 25-member Faculty team, comprising academic and administrative staff, participated in the second cross-campus conference of the Faculties of Social Sciences at the Cave Hill campus from January 18 to 20, 2010 with a view to harmonizing Foundation courses across the campuses, expanding cross-campus supervision of graduate students, and offering joint academic programmes.

In 2009/2010, a delegation from the Faculty visited partner institutions in the Faculty's franchise programme to conduct its usual semester monitoring visits to meet with staff, students and administrators. The visits included Clarence Fitzroy Bryant College in St. Kitts (September 24-26, 2009 & February 24-26, 2010), the St. Vincent and the Grenadines Community College (November 5-6, 2009 & March 18-19, 2010), and the Sir Arthur Lewis Community College in St. Lucia (October 15-16, 2009 & April 8-9, 2010).

The Faculty of Social Sciences hosted a number of conferences, workshops and seminars during the 2009/2010 academic year. The 7th Sonny Ramadhin Distinguished Cricket Lecture on June 11, 2010 was delivered by Mr. Goolam Rajah, Logistics Manager of the touring South African Cricket Team, at the Learning Resource Centre.

The Department of Economics held its annual Conference on the Economy (COTE) on October 1 and 2, 2009. The conference highlighted the key economic and related developmental issues facing Trinidad and Tobago and the wider Caribbean region in light of the global economic environment. The Department also convened its usual post-budget Forum in September 2009 following the presentation of the 2009 national budget in Parliament.

The Sustainable Economic Development Unit (SEDU) hosted a workshop in Forest Financing in Small Island Developing States for NGOs and the public sector organisations in Trinidad and Tobago.

The Faculty in collaboration with the Mahatma Gandhi Institute for Cultural Co-operation held the 7th Gandhi Memorial Lecture on October 9, 2009. The feature speaker, Gandhian Scholar, Ambassador Pascal Alan Nazareth was a former Ambassador of India to Egypt, Mexico, El Salvador and Belize. His lecture was entitled "Satyagraha and Sarvodaya as keys to Good Governance and Corporate Management".

The Governance Unit of the Department of Behavioural Sciences held a panel discussion on "Race Relations" on October 28, 2009 at the JFK Lecture Theatre, which featured Professor Prem Misir, Pro-Chancellor, University of Guyana; as well as UWI St. Augustine representatives, Professor Rhoda Reddock, Deputy Principal; Professor Bridget Brereton, Department of History; and Professor John Gaffar La Guerre, Professor Emeritus.

The Faculty of Social Sciences' Evening of Excellence, to honour its First Class Honours graduates and winners of Departmental, Faculty and University prizes in 2009, was held on October 28, 2009. The feature speaker was the Honourable Alicia Hospedales, former Minister of State in the Ministry of Social Development. Ms. Hospedales is a graduate of the Faculty's Social Work programme and now a doctoral candidate in the Criminology programme.

Academic staff in the Faculty of Social Sciences continued to make invaluable contributions to national development by participating in Government Task Forces, Committees, Commissions and Regulatory Bodies. Professor Ann-Marie Bissessar was appointed to the Integrity Commission in March 2010. The Faculty was also fortunate to have several members of staff appointed to serve as Ministers and Senators in the 10th Parliament of Trinidad and Tobago. Mrs. Therese Baptiste-Cornelis, former Lecturer in the Department of Management Studies, was appointed Government Senator and Minister of Health. Mrs. Nan Ramgoolam, former Part-time Lecturer in the MSc Public Sector Management programme, was appointed Government Senator and Minister of Public Administration. Dr. Roodal Moonilal, former Part-time Lecturer in the Department of Behavioural Sciences, was appointed Minister of Housing and the Environment. Professor Patrick Watson of SALISES and Dr. Lester Henry of the Department of Economics were appointed as a Government Senator and an Opposition Senator.

Over the next two years of the UWI Strategic Plan period, the Faculty of Social Sciences looks forward to the implementation of several regional development initiatives as well as some aimed towards creating the distinctive UWI graduate. The Faculty plans to incorporate a research component in all Level II and III courses, enhance technology in the delivery of all courses and build research capacity. In particular, the Department of Management Studies is collaborating in the development and delivery of the BSc Accounting Special to be offered shortly to Open Campus students. The Department also plans to expand the disciplinary areas in the PhD in Business Administration to cater to the needs of students in Finance, Accounting and other disciplines in Business Administration, as well as offer majors in Human Resource Management, Finance and Marketing to better equip graduates to meet the needs of industry.

Students

Department of Behavioural Studies

There has been a general decline in enrolment in many undergraduate programmes with the exception of International Relations.

The success of postgraduate students in scholarship and award of research grants is recognised in 2009/2010. Mrs. Sideeka Ali received both a UWI Scholarship and the Campus Research and Publication Fund award for her MPhil research while Ms. Mary Arneaud received the 2009 Tatil Prize for the best research project in Psychology as well as a Government scholarship and UWI postgraduate scholarship and her MPhil research is currently under review by the Campus Research and Publication Fund.

Department of Economics

The Department of Economics re-introduced the Summer Internship for postgraduate students in Economics at the Central Bank of Trinidad and Tobago, with Ms. Samantha Joseph being the first candidate. Several postgraduate students also had the opportunity to make presentations at three major conferences including the 41st Caribbean Centre for Money and Finance Conference in Guyana 2009; Sir Arthur Lewis Institute Social and Economic Studies (SALISES) 11th Annual Conference in Port of Spain 2010; and the Research Review Seminar hosted by the Central Bank of Trinidad and Tobago in August 2010.

Department of Management Studies

The Department continued to experience strong growth in demand for its courses and programmes with an annual intake of approximately 450 new students. Demand for Departmental courses from students from other faculties and departments also experienced robust growth, and the Department continued to attract high calibre students, including national scholarship winners. The number of students from OECS member countries, particularly St. Lucia, St. Vincent and the Grenadines, and Dominica also continued to rise. The MSc in Management Studies programme has attracted students on OAS scholarships from Suriname, Grenada, and Jamaica and also attracts students from Guyana, Barbados, and Nigeria. The **Management Student Society (MSU)** remains vibrant and students take advantage of the study abroad and **mentorship programme** run in conjunction with members of the business community.

Thirteen students graduated from the **MSc Management Studies** programme; five from the **MSc in Aviation Management** programme; and two from the **MSc Tourism Development and Management**. The Department congratulated two recent graduates who received prestigious scholarships to further their studies. Ms. Cherisse Hoyte was awarded a Japan-IADB scholarship to pursue a Master's at the *London School of Economics* and Mr. Gerard Cooper was awarded an Organization of American States scholarship to pursue a Master's in Finance at the *Schulich School of Business at York University* in Canada.

Staff

Awards, Honours & Distinctions

Department of Behavioural Studies

Professor Ann Marie Bissessar appointed a member of the Integrity Commission of Trinidad and Tobago.

Dr Derek Chadee appointed a member of the Mediation Commission of Trinidad and Tobago

Department of Economics

Professor Patrick Watson appointed a Government Senator in the Senate of Trinidad and Tobago

Dr. Lester Henry appointed an Opposition Senator in the Senate of Trinidad and Tobago

Department of Management Studies

Mrs. Therese Baptiste-Cornelis appointed a Government Senator and Minister of Health, Government of Trinidad and Tobago

Appointments, Promotions, Retirements & Resignations

Dr Randy Seepersad appointed Lecturer in Criminology

Dr Sandra Celestine appointed Lecturer in Social Work

Dr Amar Wahab appointed Lecturer in Sociology

Dr Ann Marie Bissessar promoted to Professor

Ms Jacqueline Padmore
Lecturer in Social Work- retired

Dr Anthony Bowrin
Lecturer in Accounting - resigned

Professor Bhiko Agozini
Lecturer in Sociology - resigned

Public and Professional Service of Staff

In 2009/2010, staff continued to serve as international journal reviewers, as well as published numerous articles, chapters and books. Staff also provided service to the wider University, national and regional communities through membership on various boards, committees and associations.

Teaching & Learning

Department of Behavioural Studies

The Ethics Committee which was established during the last academic year was piloted for the first time in the 2009/2010 academic year with postgraduate students and students enrolled in Research Project in Psychology – PSYC 3025 course. A research manual developed for use in Research Design & Methodologies for Social Work – SOWK 6000 continued to be beneficial to students.

In 2009/2010, there were four significant innovations in the delivery of the Social Work programme. At Level I an in-house Practicum was introduced along with simulated case conferences. A short course on Social Work Practicum Instruction was introduced for Level III students, as well as community organization projects and interactive presentations. In addition, the programme piloted Community Case Conferences for student groups engaged in community organization projects.

Department of Management Studies

The Department continued to expand its use of **E-Tutorials** and thus alleviate some of the space constraints confronting the Faculty with respect to the hosting of tutorials. It has also had the added benefit of allowing recruitment from a wider pool of tutor, with some persons residing abroad being selected to conduct tutorials. The student response to the use of **blended teaching** methodology in the delivery of several courses continued to be favourable.

The **internship modules** in the Tourism and Aviation Management programmes were strengthened with the inclusion of an international attachment, which in the case of the Aviation programme, was undertaken at Westchester County airport in the USA; and, in the case of the Tourism programme included attachment at hotels throughout the Caribbean including Turks and Caicos Island and US Virgin Islands. Students in the Tourism programmes also participated in an **educational tour** to Curacao. This was a one-week visit that was funded in the main by the Department and the Faculty of Social Sciences.

A Memorandum of Understanding (MOU) entered into between the Department and the **Certified Management Accountant Society (CMA)** of Nova Scotia, Canada allows for the strengthening of accounting education in Trinidad and Tobago through the provision of teaching and other resource material as well as funding from the CMA. The programme covers UWI students as well as non-UWI students enrolled in CMA programmes in Trinidad and the Eastern Caribbean.

In accordance with the last Departmental Quality Assurance Review team, the Department is preparing to establish an Advisory Board comprising leading members of the business community and relevant professional bodies in Trinidad and Tobago. The terms of reference for this Committee were developed and recently approved by the Campus Academic Board.

Programmes

In the period under review, Departments made considerable advancements in the area of curriculum development.

Department of Behavioural Studies

Research Methods in Psychology - PSYC 1009 was taught for the first time. The course, which had a heavy online component, delivered tutorials, discussion, focus groups and assignments entirely online.

Department of Management Studies

Two new courses were developed and approved. These are *Caribbean Finance: The Regulatory and Institutional Framework* – MGMT 3092 and *Professional Ethics* – MGMT 3095. The course on Caribbean Finance was developed in response to suggestions from members of the financial community in Trinidad and Tobago. The Postgraduate Diploma and a MSc programme in Sports Management developed and approved in the last reporting year were formally introduced in 2009/2010. The Diploma programme is offered in conjunction with the International Centre for Sport Studies (CIES), in Switzerland under the auspices of the International Federation of Association Football (FIFA).

The **PhD in Business Administration** introduced in the previous academic year, continued to be well subscribed with 12 students currently enrolled in the North American modelled programme. This programme is a departure from the traditional UWI PhD programme in that it is comprised of a significant taught component as well as a substantial thesis.

As it relates to its support of distance education and course delivery at satellite locations, during the last academic year, the Department also continued to offer its BSc Management Studies and Accounting programmes through the Open Campus. Management and Accounting courses were also delivered as part of the BSc Pharmacy programme offered by the Faculty of Medical Sciences at Mount Hope. The Department also continued the delivery of these courses at the Sir Arthur Lewis Community College in St. Lucia, and the Clarence Fitzroy Bryant College in St. Kitts

Research & Innovation

Research in Progress

Department of Behavioural Studies

B. Ragoonath

- A Youth Integrity Survey – with participation of 2880 youths between the ages of 12 and 15: The results of this survey are currently being analyzed.

K. Lascelles

- Selective Association Learning and Expectancy Bias in Evaluative Conditioning with Foods and Body-Shapes: This research explores the potential role of learning and information biases in relation to eating disorders.

K. Lascelles

- Implicit Attitudes towards Breast Cancer, Breast Cancer Treatment and Body-Image: This research explores the role of appearance attitudes in relation to breast cancer and breast cancer treatment.

N. Abada

- Thinking about Life Experiences (TALE) Project: An examination of the extent to which memory serves self, social, and directive functions for Trinidadians and whether these memory functions predict psychological well-being.

- Reminiscence Bump Project: An examination of the developmental, memory, and socio-cultural influences on the existence of the reminiscence bump (i.e., a finding that there is a disproportionate number of memories recalled from the period of 10-30 years old) in a Trinidadian sample.
- Memory Quality Project: An examination of the change and stability in older adults' positive and negative autobiographical memories from four life periods.
- Positive and Negative Relationship-Defining Memories Project: An examination of whether the quality (i.e., vividness, emotional intensity, etc.) of relationship-defining memories predicts marital satisfaction.

S. Rollocks

- Marital Satisfaction in Autonomous and Free-Choice Marriages in the Trinidad Context.
- The Relationship between Internet Addiction and Depression among University Students in Trinidad.
- The Social Construction of Key Demographic and Psychological Variables in Explaining Psychological Phenomena.
- The Relationship between Demographic and Psychological Variables in Internalizing and Externalizing Behaviours among Children ages 10 to 16 Years Old in Trinidad.

D. Chadee

- A Social Psychological Assessment of Elaborative vs. Heuristic Information Processing in influencing Negative Copy Cat Behaviour of Male Adolescents: The study seeks to explore the cognitive processing of information in juveniles and the propensity to copycat negative behaviour from the media.
- The Impact of Emotion Induction on Psychological Reactance: This research examines the degree to which the elicitation of emotional states impacts the strength of individuals' reactance response to a perceived threat to freedom. In particular, the study focuses on the induction of anger and calm, as they lie in opposing quadrants with regards to the affect dimensions of pleasantness and arousal. This study is a seminal contribution to the literature on psychological reactance.
- Gambling in Trinidad and Tobago: This study utilizes a host of research methods (household survey, in-depth interviews and focus groups to study gambling and the perceptions of problem gambling in Trinidad and Tobago. This study comprises a sample size of 2,500 respondents across Trinidad and Tobago and assesses approach problem gambling by assessing the frequency of gambling thoughts and practices, faulty cognitions (the use of strategies and systems), propensity to gamble (addiction within the family, depression), co-occurrence with addictive and delinquent behaviours (alcohol/drug consumption),

loneliness, risk-taking behaviours, economic cost and gains to the individual, problem-gambling behaviour, assistance.

- Fear of Crime and General Crime, Emotional States and Perception of Risk of Victimization: This research builds on data collected from 2007 and further explores the relationship between state and dispositional fears with the mediation of emotional states.

L. Hadeed

- Mediation and Intimate Partner Abuse – Three Case Studies in Trinidad and Tobago.
- Community Members' Views of Conflict Management.

M. Sogren

- Crimes of Child Sexual Abuse: Cross-cultural Explorations and Interventions. A collaborative project with The University of Huddersfield, U.K.

K. Nathaniel-DeCaires

- Commitment to Social Work Teaching/ Learning Innovation and Scholarship.

R. Seepersad

- Crime and Citizen Security, Youth Violence, Gangs in Trinidad and Tobago, Risk Factors for Criminal Offending, Forensic Science.
- UNDP's Human Development Report On Citizen Security. Forensic Science in the Caribbean.

N. Mustapha

- Indians in Education in Trinidad and Tobago: A Social History
- Patterns of Cultural Change among Indians in three Caribbean Societies.
- Quality Issues in Trinidad and Tobago Education.

Collaborative Research

J. Cameron-Padmore

- Collaborative research with University of Helsinki on “Issues in the Study of Poverty and Social Welfare Clients” to identify gaps between accessible and needed services and benefits to contribute to improving quality of service delivered.

M. Sogren

- Further development and implementation of collaborative research and programme initiatives with The University of Huddersfield in the area of (*Sex Crimes Against Children*). The expected outcome is a cadre of professional Social Workers with advanced training in intervention with this client population.

The Social Work Unit was awarded a grant from the Campus Research and Publication Fund to implement a collaborative project with the University of Huddersfield, United Kingdom on *Crimes of Child Sexual Abuse*.

Graduate Research

Vusudev Ramkissoon

Master's of Science in Sociology

- “Dynamics and consequences of population Aging: A call for Suitable Planning for Sustainable development- WASD 2010

Alea, N., Arneaud, M. J., & Ali, S. (November 2009).

- The quality of self-continuity, social-bonding, and directing-behaviour memories across Adulthood in a Trinidadian sample. Invited paper presentation the International Institute for Reminiscence and Life Review Conference, Atlanta, GA.

Wendel Wallace. PhD Criminology.

- The Impact of Tourism on Crime in a Small Island Developing Tourist Destination: The Case of Tobago”. University of Trinidad and Tobago (UTT), Caribbean Journal of Criminology and Public Safety (CJCPS) Volume 14, Nos. 1&2, January and July, 2009.

Alexis, Simon

- Rapists’ Account of their Motivations, Premeditation and Target Choices: Some Trinidad and Tobago Data. Caribbean Journal of Criminology and Public Safety. January & July, 2009. 14(1&2). 186-213. Ed. Professor Ramesh Deosaran (Emeritus). ISSN 2073 5405

Graduate Research: Poster Presentation

Alea, N., Ali, S., & Arneaud, M. J. (November 2009).

- A Caribbean Tale: The use and adaptive function of autobiographical memory in adulthood. Poster presented at the 62nd Annual Scientific Meeting of the Gerontological Society of America, Atlanta, GA.

Graduate Research: Conferences

Anand Rampersad. PhD Sociology

- Ethnicity, National Identity and Cricket in contemporary Trinidad, Beyond Boundaries: Third International Conference on Sport, Race, and Ethnicity. University of the West Indies, Cave Hill, Barbados. 14-18 July 2010

Keron King. PhD Criminology

- Policing your Brother as the Other: An Analysis of Policing in East Port of Spain, Trinidad and Tobago. The Academy of Criminal Justice Sciences (ACJS) (2010)

Wendel Wallace. PhD Criminology

- The Impact of Tourism on Crime in a Small Island Developing Tourist Destination: The Case of Tobago.
- The University of the West Indies, St. Augustine. Criminology Unit, Criminology Conference, April 9-10th, 2009.
 - (1) The Impact of Tourism on Crime in a Small Island Developing Tourist Destination: The Case of Tobago.
 - (2) Juvenile Delinquency, Juvenile Justice: Continuing Myths or Promised Realities in Trinidad and Tobago.

47th Annual meeting of the Academy of Criminal Justice Sciences (ACJS). “Beyond Our Boundaries: The Inclusivity of Criminal Justice Sciences”. San Diego, California, February 23rd to 27th, 2010

Department of Management Studies

B. Pacheco

- The Influence of Sales Promotion Face Values and Company Reputation on Consumer Product Evaluations.
- Marketing Innovations: The Interaction of Promotion Type, Price Level and Consumer Expertise.

D. Noel

- SAS Hash® Object: An Application to Ultra High Frequency Finance.
- Cost of Trading on Competing Parallel Markets: SETS vs. Dealers in London.
- Modelling Execution Risk on SETS on the LSE.
- Pricing the Stabilisation Rule of the Heritage and Stabilisation Fund, Government of Trinidad and Tobago.
- Estimating the Withdrawal Probability of the Heritage and Stabilisation Fund of Trinidad and Tobago.
- The History of Slave Finance: A Microstructure Examination of the Auction Markets and Sale Contracts in Antebellum Southern United States.

L. Jordan-Miller

- Sports Event Management: The Caribbean Experience. [A book jointly developed with C. Hayle].

A. Lewis-Cameron

- An Examination of Managerial Competencies of Hospitality and Tourism Graduates of UWI Programmes.
- Community Tourism Participation in Matura and Fishing Pond.
- Attitudes of Hospitality Employees in the Accommodation Sector in Trinidad.

M. Raghunandan

- Emerging Issues on the Horizon: The Financial Services Industry in Trinidad & Tobago and the Region.
- Corporate Social Responsibility Reporting: The Way Forward.

C. Sahadeo

- The Future of Green Accounting and Sustainability Reporting at the Micro Level.

Continuing Research*B. Pacheco*

- Once Rejected Twice Shy: Consumer Responses to Rejection as a Determinant of Purchase Intentions.

S. Fraser

- Student Attitudes towards Elearning Environments at UWI, St. Augustine (a collaborative project).

- Conducting a National Telephone Survey on Online Purchasing in Trinidad and Tobago.
- Challenges faced by Caribbean Companies attempting to use Ecommerce.
- Update of 2003 study on B2C activity in Trinidad and Tobago.

P. Ramlakhan

- Adequacy of Risk Management Practices in Commercial Banks.
- A New Framework for Managing Macro-Financial Risk in Trinidad & Tobago.
- An Application of Contingent Claims Analysis to the Banking System.

R. Ramlogan

- Industrial Relations: A Caribbean Perspective: This research examines industrial relations across the Commonwealth Caribbean.
- Sustainable Development – A Judicial Interpretation: This research will attempt to define sustainable development through judicial pronouncements.

E. Simms

- Determinants of Export Performance: The Case of Manufacturers in Trinidad and Tobago (jointly with Joni Jacob).
- An Eclectic Analysis of the International Entry Mode Choices of Manufacturing Firms in Trinidad and Tobago (jointly with Hima Singh).
- The Measurement of Service Quality: The Case of Two Service Firms in Trinidad and Tobago (jointly with Veronica Reid).

Outreach

During the review period, the Faculty maintained its aggressive pursuit toward the strengthening of outreach initiatives on several levels. The Faculty continued to oversee and monitor the delivery of its BSc programmes on a franchised basis to Community Colleges in St. Kitts, St. Lucia and St. Vincent and the Grenadines, with the two-fold intent of widening access to tertiary education programmes in these territories and establishing a more regional student body on the St. Augustine campus. Departments and units also made significant advancements in the areas of strengthening regionality as well as international partnerships.

Department of Behavioural Studies

Collaboration with three regional agencies, namely the Caribbean Internship Project, the Commonwealth Youth Programme and Caribbean Media Partnership allowed for placements of Master in Social Work (MSW) students in special projects in St. Lucia, St. Vincent and the Grenadines and Barbados.

Members of staff continued to foster joint-research relationships with faculty from other Universities. The Psychology Unit, in particular established a number of international linkages in 2009/2010 which has an overall effect on the Unit's vision, research agenda and publications.

In collaboration with three regional agencies, MSW students were placed in St. Lucia, St. Vincent and the Grenadines and in Barbados. Again through the Caribbean Internship Project in St. Lucia, one student was assigned to the Human Services Division

of the Ministry of Health, Wellness, Family Affairs and Mobilization.

In St. Vincent and the Grenadines another student was placed at a residential facility for delinquent and 'at risk' boys. This placement was coordinated through the Commonwealth Youth Programme and the Ministry of National Mobilization, Youth and Sport. The third student was assigned to the Caribbean Broadcast Media Partnership in HIV and AIDS in Barbados.

In appreciation of their willingness to accommodate a student and at their request for training for the staff of their social services sector, the Business Development Unit of The University of the West Indies, St. Augustine has initiated discussion with the Permanent Secretary, Ministry of National Mobilization, Youth and Sport in St. Vincent and the Grenadines. This exercise will be mutually beneficial as appropriately trained staff will: -

- be better placed to pursue tertiary level studies in the area of Social Work
- provide qualified personnel equipped to supervise students on graduate placements in future
- allow Social Work to be added to the list of offerings to the UWI – 12 countries

The Department engaged in an ongoing project aimed to assess forensic science capacity in CARICOM member states. This project facilitates dialogue with relevant Ministry of National Security stakeholders in all member states, ultimately aiming to arrive at a regional solution designed to meet the forensic needs of all member states.

Aimed at strengthening the national engagement processes (eg. public, private or community activities). Another project, the UNDP's Human Development Report on Citizen Security, engaged stakeholders from the Ministry of National Security and other relevant sectors, including NGOs, in identifying relevant issues, and in developing recommendations for reducing crime and citizen insecurity.

Cross Faculty Relationships

The Psychology Unit maintained its support to the MSc Psychology programme offered by the Faculty of Medical Sciences at Mount Hope. It also continued to pursue international exchange and staff collaboration with University of North Carolina Wilmington and Middlesex University London, University of Syracuse. SUNY Albany expressed renewed interest in exchange, and the Unit Adviser is currently communicating with the St. Augustine Campus' International Office on these developments. Visits were made to the St. Augustine Campus by Professor Jaipaul Roopnarine, University of Syracuse, Professor Joseph Khiston, University of North Carolina Wilmington, and Dr. Camille Garsee of Middlesex University.

Department of Management Studies

The Department continued to be actively involved in implementing the **FINPYME programme**. This programme is aimed at assisting small- and medium-size enterprises (SMEs) in Trinidad and Tobago to improve their competitiveness and facilitate their access to potential sources of financing. It entails a diagnostic review of the selected companies in order to provide them with a roadmap for competitiveness

improvement. Technical assistance will also be provided so as to help firms to implement the recommendations made. The diagnostics involved are carried out by staff and graduate students of the Department.

Conferences, Panel Discussions and Public Lectures

The Faculty sustained its public outreach and engagements efforts through the hosting of several notable conferences, panel discussions, public lectures in 2009/2010. At the Faculty level, public lectures such as the Sonny Ramadhin Distinguished Cricket Lecture and the Gandhi Memorial Lecture continued to be well-attended. The Department of Economics also hosted another successful annual Conference on the Economy (COTE) and post-budget Forum, while the Sustainable Economic Development Unit (SEDU) also hosted a workshop in Forest Financing in Small Island Developing States for NGOs and the public sector organisations in Trinidad and Tobago.

The Department of Behavioural Sciences in 2009/2010 introduced a committee to deliver public lectures, In 2009/2010, the Governance Unit hosted several outreach seminars and training programmes for the National Insurance Board, Mayaro Regional Corporation and Local Government Councillors and Aldermen and held a Panel Discussion on Race Relations which featured Professor Prem Misir, Pro-Chancellor, University of Guyana; as well as UWI St. Augustine representatives.

Looking ahead to the next academic year, in the Department of Management Studies, planning is underway for the staging of the 4th biennial Business, Banking and Finance conference to be hosted by the Department in collaboration with the Caribbean Centre for Money and Finance (CCMF) and the Sir Arthur Lewis Centre for Social and Economic Studies (SALISES).

Revenue Generation

Departments across the Faculty continued to generate surplus revenue through consultancy services and self-financing programmes such as the Summer School initiative and department-specific programmes as the Department of Behavioural Studies' Mediation and Criminology programmes and the Department of Economics' Mathematics Proficiency Test.

Distinguished Visitors

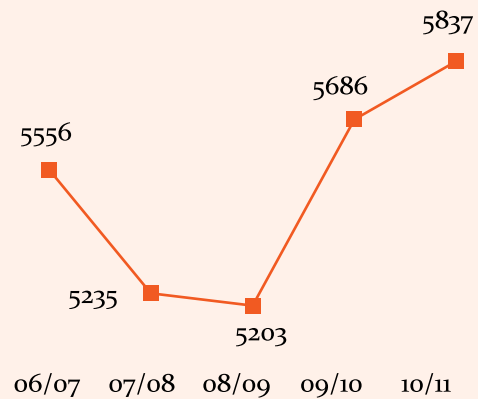
Dr. Camille Garsee
Middlesex University, London, UK

Professor Joseph Khiston
University of North Carolina Wilmington, USA

Professor Jiapaul Roopnarine
University of Syracuse, USA

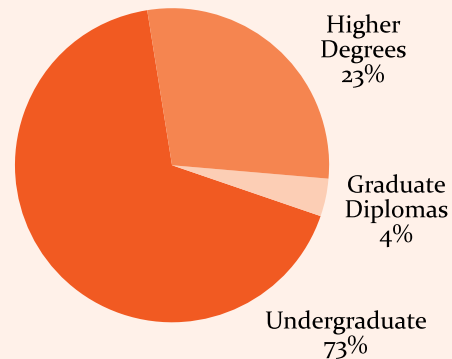
Growth In Enrolment

2006 – 2011



Graduates by Programme

2009 – 2010



CENTRES & UNITS

ANSA McAL Psychological Research Centre

In the 2009/10 academic year the ANSA McAL Psychological Research Centre undertook a number of research projects including studies on copycat behaviour, HIV/AIDS, fear of crime, psychological reactance, and gambling. In November 2009, the Centre completed the collection and analysis of data of the Social Norms Project for the Ministry of the People and Social Development, Republic of Trinidad and Tobago. This project came to an end in May 2010 with the submission of the final report. The Centre initiated the start of the Gambling project which tries to ascertain a baseline measure of gambling in Trinidad and Tobago, among other factors. Experimentation is a key element of psychological research and the Centre moves forward in to further enhance this arm of the discipline of psychology.

Research Projects

Social Norms

A multi-disciplinary research venture was conducted on the degree of conformity to social norms and values in Trinidad and Tobago. This was done in collaboration with the Ministry of the People and Social Development, Republic of Trinidad and Tobago. Data collection has been concluded, and a comprehensive report of research findings has been presented to the Ministry.

The Centre is currently scheduled to present the major findings from this study in the first quarter of 2011.

Gambling

Problem gambling has been an ongoing area of research interest at the Psychological Research Centre. This project seeks to combine data from both quantitative (household surveys) and qualitative (in-depth interviews; focus groups) methodologies to examine the frequency of gambling practices in Trinidad and Tobago.

In particular, the study is aimed at assessing individuals' proclivity to engage on gambling; cognitive distortions associated with problem gambling; risk taking behaviours; cost-benefit analysis; as well as other forms of addictive behaviour. The Centre has recently finalized the research instrument to be used in this project. Data collection is scheduled to begin in the first quarter of 2011.

Psychological Reactance

Among the social psychological constructs being explored by the Centre is psychological reactance. Reactance is viewed as a motivational state which is aroused in response to a threat to individuals' free behaviours. This theory has been applied to two of the Centre's current research undertakings: the impact of emotion elicitation on psychological reactance; and reactance as a response to e-commerce.

With regards to the former, the study is aimed at examining the degree to which the elicitation of emotional states (such as anger and feelings of calm) impacts the strength of individuals' reactance response to a perceived threat to freedom. This study is also aimed at understanding the psychophysiology of emotion elicitation and subsequent changes resulting from reactance. Pilot testing is currently being done to ascertain the most effective form of mood induction. Furthermore, this phase of the study would help determine the nature of respondents' physiological reactions to each mood induction procedure.

The Centre is also involved in pioneering local research on the role of psychological reactance in shaping individuals' attitudes and behavioural intentions regarding e-commerce and goal-directed internet use. This study is focused on internet users' cognitive, affective, and behavioural response to online advertisements, which are viewed as obstructions to navigation on the internet. The outcome of this research venture has implications for website and advertisement designs, as it provides key insights into the psychology of internet use.

Copy Cat Behaviour

A Social Psychological Assessment of Elaborative vs. Heuristic Information-Processing in influencing Negative Copy Cat Behaviour of Male Adolescents: The study seeks to explore the cognitive processing of information in juveniles and the propensity to copycat negative behaviour from the media.

Fear of Crime and General Fear

Research continues at the Centre in the area of fear of crime. The objective of one such project is to assess the nature of the link between fear of crime and general (dispositional) fear. Multi-stage random sampling was used to solicit respondents across administrative regions in Trinidad. The data from a sample of 1457 respondents were used.

The goal of the study was to highlight the degree to which general fear can be considered an explanatory variable in fear of crime. This is driven by the view that fear of crime can be considered the product of both situational and dispositional factors. Furthermore, it is aimed at examining the differences in this dyad across ethnic groupings in Trinidad. The roles of perceived risk of criminal victimization; perceptions of general risk; self-efficacy in predicting fear of crime in ethnic groups is also being explored.

Fear of Crime and Emotional States

The captioned study seeks to understand to impact of mood induction on reported levels of fear of crime; general fear; as well as perceptions of general risk and the risk of criminal victimization. This venture is designed to encapsulate key socio-psychological features – such as life satisfaction and need for cognition – in explaining the impact of differential emotional activation on fear and perceived risk.

The Centre is currently involved in the pilot phase of this project. To date, the pilot exercise has been completed with a randomly obtained sample of 107 students of the University of the West Indies, St. Augustine Campus.

Trinidad and Tobago Guardian Survey

The Psychological Research Centre continues to partner with the Trinidad and Tobago Guardian (Trinidad Publishing Company) in conducting nationwide surveys on current events. In May 2010, the Centre was responsible for a nationwide poll on the Trinidad and Tobago 2010 General Election. This took the form of a telephone survey conducted between 6th to 9th May. A field survey involving respondents from six marginal constituencies in Trinidad – namely San Juan/ Barataria; Princes Town; San Fernando West; St. Joseph; and Tunapuna – was also held from the 14th to 16th May 2010.

Graduate Research

Research on Stigmatization

Graduate students, Jannel Philip and Rosana Yearwood are completing their PhD research on HIV/AIDS Stigmatization.

Jannel Philip's dissertation title is *Health care students' willingness to interact with patients living with HIV/AIDS (PLHIV): Examining the influence of attributions, prejudicial evaluation, perception of occupational risk and emotions*. Specifically, this research studies the impact of cognitive and affective variables on health-care students' willingness to care and interact with PLHIV. Care and treatment of HIV patients are critical factors to HIV reduction efforts. Factors which adversely affect health providers' care of patients living with HIV/AIDS (PLWHIV) have serious implications for the epidemic. Cognitive (attributions of blame, perception of occupational risk, and prejudicial evaluation) and emotional (fear, anger, empathy and disgust) factors have direct effects on health care providers' delivery of treatment and care to PLWHA. This study examined effects of these factors on health-care students' (HCS) willingness to interact with PLWHA.

Rosana Yearwood's dissertation title is *Fear of HIV/AIDS and perception of personal risk: Examining the impact on stigma towards PLHIV and intentions to be HIV tested*. The research investigates the impact of fear of HIV/AIDS and perception of personal risk on stigma towards PLHIV and HIV testing intentions. Her methodology included the employment of a stratified random sampling strategy, from which 365 persons aged 18-85 years, 50 % male and 50% females, were surveyed using a 50 item questionnaire administered via face-to-face interviews. Utilizing social psychological theorization, both students provide a unique understanding of factors contributing to HIV/AIDS stigmatization.

New Programmes

A proposal for the introduction of a taught Masters programme in Applied Psychology is being finalized for submission. This programme is to be offered through the Department of Behavioural Sciences UWI St. Augustine Main Campus, in partnership with the Department of Clinical Medical Sciences (Eric Williams Medical Sciences Complex).

Public Fora

Psychology Seminar Series: A Meeting of Minds

The Psychology seminar series was launched in April 2010. This venture, which is hosted by PhD candidates Jannel Philip and Rosana Yearwood, is also supported by the ANSA Psychological Research Centre.

In the inaugural seminar, MPhil candidate, Sideeka Ali and PhD student, Jannel Philip presented the following: *Emotion Experience and Emotional Regulation – How are they Related to Relationship Satisfaction across Age and Gender*; and *Feeling or Cognition? Cognitions and Emotions as Predictors of Pro-Social Behaviour* respectively.

The second seminar involved a presentation by visiting lecturer, Professor Joseph Kishton, Developmental Psychologist from the University of North Carolina Wilmington. Professor Kishton presented in the area of psychobiography which views individuals' life histories as a cross-product of genetics and the navigation of life events across each stage of the developmental process.

The third instalment in the seminar series, which was hosted by Ms. Jannel Philip and Ms. Rosana Yearwood, focused exclusively on HIV/ AIDS awareness. The presentation was titled *HIV/AIDS - A Regional and Local Analysis: Where are we now? Where are we headed?* This seminar was held in recognition of World AIDS Day 2010.

International Collaboration

The ANSA McAL Psychological Research Centre recognizes the importance of international collaboration and deepening of relationships with foreign colleagues. Among the collaboration were with colleagues at University of Central Florida, Hunter College, CUNY, New York, University of Florida, University of Nis, Serbia and Middlesex University London.

Distinguished Visitors

Prof. Jaipaul Roopnarine

Professor - Child and Family Studies; Director – Jack Reilly Institute of Early Childhood and Provider Education. College of Human Ecology, University of Syracuse, United States of America

Arthur Lok Jack Graduate School of Business

In the academic year 2009/2010 the Arthur Lok Jack Graduate School of Business (Lok Jack GSB) commenced its strategy for rebranding, internationalisation, new programmes and restructuring for exponential growth.

Staff

The Board of Directors of the ALJGSB is made up in the larger proportion of industry leaders of the private sector who in turn comprise the various Board Sub Committees together with the UWI representatives. In this regard the Board of Directors is the explicit “industry liaison committee”. For the period 2009/2010 the Board of Directors saw the departure of Sydney Knox and Thomas Gatcliffe. During this time, the Board welcomed Eugene Tiah, Christine Sahadeo, Kristine Thompson and Gervase Warner.

There was continued restructuring within the school to meet the growing needs of the organisation with the creation of new departments and the addition of staff.

The Market Development Centre was created to lead the rebranding of the school, and to create awareness of the Lok Jack GSB in the international markets. This new department is a combination of the Communications Unit, the Alumni Relations, Conferencing and Customer Service. The Centre is

led by a new member of Leadership Team, Fayola Nicholas, and saw to the rebranding of the school with a new logo, Motto “Innovatus Ars Ducendi” and marketing campaign challenging prospective students with the tag line “Are you up to the challenge?”

The Student Recruitment Centre was established to provide prospective students with personal service and assistance in making their decision and navigating the enrolment process. The department is comprised of Academic Advisors, Student Recruitment Officers and is led by another new member to the Leadership Team, Adi Mabel Montas.

2010 also saw the creation of the Executive Education Unit, which comprises In Company Training and Corporate Learning Solution Centre, and eventually the Conferencing. This Unit was launched at the Distinguished Leadership and Innovation Conference 2010 to the business community. This unit is led by Jo-Anne Boodoosingh.

The Internationalisation Centre was formalised on October 2009 with the purpose of increasing strategic alliances, increasing international research projects and maintaining relationships with key stakeholders. This unit is led by Nirmala Harrylal.

Appointments, Promotions, Resignations and Retirements

Dr. Karen Murdock, PhD, Universitat Autònoma de Barcelona (UAB), Barcelona, Spain new appointment
Dr. Abhijit Battyacharya, PhD, Globsyn Business School, Ahmedabad, India – new appointment

Students

Enrolment

The following table captures student enrolment levels for the academic programmes. (2009/2010 academic year).

PROGRAMME	SEPT 2009	JAN 2010	MAY 2010
EMBA	34		18
IMBA	65	66	
MHRM	31	21	
MMKT	22	13	
DBA	9		
MIF			23
TOTAL	161	100	41
TOTAL STUDENT POPULATION	475	513	554

The Corporate Learning Solution Centre faced large challenges with the slowdown of the Trinidad and Tobago economy and the reduction on corporate spending towards training. The department was able to continue a positive trend of meeting consumer needs with the creation of 17 new programmes and executing fifteen 15 in-company programmes. Some of the firms included Government of Dominica, Neal & Massy Ltd and Republic Bank (Guyana).

Graduation

The table below captures the number of graduates by programme – November 2010. .

PROGRAMME	NUMBER OF GRADUATES
EMBA	26
IMBA	97
Master of Human Resource Management	46
Master of Marketing	19
TOTAL	188

Community Outreach

The Lok Jack GSB continued to engage in outreach activities to the business community and alumni with events that highlighted the school and the contribution of the students to society.

The *Evening Business Forum* allows graduates the opportunity to display the worth of their practicum research projects to the business community. Presenters are assessed based on the suitability of their research methodology, change management applicability, innovation and presentation. Shara Sebastien of Carib Brewery Ltd emerged the overall winner at Lok Jack GSB's fourth annual Evening Business Forum for Best Change Management Project and Best Research Project 2010. Sebastien a Master of Marketing graduate won a total of \$15,000 for her presentation, "Brand Plan for Locally Brewer Dark Beer". Karen Crichlow won the Most Innovation/ Entrepreneurial Project

The Lok Jack GSB launched the *Distinguished Alumni Series*, in April, 2010 at Hilton Trinidad, to highlight successful entrepreneurs who are former students at the GSB. The evening highlighted Mr, Langston Roach, Executive Chairman of Lanher Industries; Vaman Bajnath, CEO of Bajair and Marianne Bishop, Director of 12 Key Marketing Solutions. Dr. Karen Murdock, Deputy Director of the Centre for Entrepreneurship & Innovation delivered Opening Remarks on behalf of the School.

The *Lok Jack GSB Alumni Board* was also formalised and launched with four members at the Distinguished Alumni Series. The members of the Board currently include Stacy Homer, Cindy Goolcharan, Neil Parsan, Rani Lakhan-Narace, Neela Kissoon and Gregory Hill. This team will lead the engagement of the Alumni, and will create activities that will allow the Alumni to be a moving force in the Caribbean market.

The *Annual Distinguished Leadership & Innovation Conference* took place in June, 2010 and featured Professor Vijay Govindarajan speaking on Innovation. The Conference was marketed locally and regionally through events and mass media and attracted over 300 attendees, with 10% participation from the wider Caribbean and International markets.

Extensive additional outreach has taken place with a series of events, lectures and activities to support the Student Recruitment efforts and also to assist with the branding of the school as a leader of education in Trinidad. These events are related to the current and new programmes being launch at the school, and will continue as part of the Marketing Strategy for 2011.

Teaching and Learning

Faculty at Lok Jack GSB continues to improve their skills through training. Members of faculty attended a Microeconomics of Competitiveness Faculty Workshop at the Harvard Business School and also participated in the Certificate in University Teaching & Learning at the UWI Instructional Development Unit. Additionally, lecturers were trained in the use of Lok Jack eLearning and Elluminate Live to prepare them for the future on line programmes that will be offered.

Graduate Studies

Revisions to the Lok Jack GSB Graduate Programmes continued in 2009/2010 resulting in changes to programme names and adjustments being made to the specialisations of current programmes. The review period saw the launch of the new MSc International Finance, the launch of the Guyana In-Company Executive MBA and the launch of the International MBA in Tobago.

Faculty Outreach

The ALJGSB has launched two research Centres, including the Centre for Entrepreneurship & Innovation and the Centre for Corporate Responsibility. This investment reflects the areas in which it is believed the ALJGSB can make the greatest contribution to the transformation of the local economy.

Centre for Corporate Social Responsibility

Globally, business is being viewed as a major cause of the social, environmental and economic problems plaguing our societies. Consequently, there have been intense calls from a wide-range of stakeholders for corporations to be more responsible in their decisions and so contribute positively in the world's quest for a sustainable future. Regionally, this call for more responsible corporations has also become an increasingly prominent feature in our corporate landscape. It is in this context, that the Business School established the Centre for Corporate Responsibility (CR) in 2009.

The overarching purpose of the Centre for CR is to promote responsibility as a key policy among corporations for achieving profitability, growth and sustainability and in turn maximize stakeholder benefits in Trinidad and Tobago and the wider Caribbean. Through its research activities, the Centre intends to create relevant knowledge that will inform managers, organizations, government and the academic community on the understanding and practice of corporate responsibility as a management strategy.

The work of the Centre will result in the production of peer reviewed journal articles, conferences, case studies, teaching materials and tool kits. The Centre is currently conducting research on the following areas:

1. Corporate Governance as it relates to Family Businesses
2. Developing Measures for Corporate Social Performance in Trinidad and Tobago
3. Effective Stakeholder Engagement and Partnerships

Centre for Entrepreneurship & Innovation

The Centre for Entrepreneurship and Innovation was launched in December 2009. This is at a juncture when the school is placing more emphasis on entrepreneurship and innovation given that they effectively contribute to economic development and sustainable growth. Also the school is responding to the development needs of the country and the region. Entrepreneurship and Innovation are central to the region's developmental process or for that matter the developmental process of any nation. This importance is reflected in the Trinidad and Tobago's development priorities. Two of these priorities are:

- Developing Innovative people; and
- Enabling competitive businesses

Within this context the Centre for Entrepreneurship and Innovation will be directly addressing the development needs of the country. Additionally, the school has strategically position itself to be one of the leading business schools in the region to be known as a centre of excellence in the areas of Entrepreneurship, Innovation and Business Strategy.

The establishment of the Centre is intended to provide the business community with the broad knowledge base needed for creating and managing competitive businesses within a globalized world economy. Given the structure of the local and regional economies the Centre will focus heavily, but not exclusively, on Small and Medium Enterprises (SMEs) and family businesses. The Centre will be engaged in organizational knowledge creation (OKC) which is the capability of the organization as a whole to create new knowledge, disseminate it through the organization and embody it in products, services

and systems. The work of the Centre will therefore focus on specific, applied research, practical skills and knowledge development which have the potential to lead to context specific solutions.

Currently the Centre is involved with two major projects. These are:

- The Global Entrepreneurship Monitor (GEM); and
- The Business Accelerator.

GEM is an annual global survey of the entrepreneurial attitudes, activities and aspirations of individuals around the world. For the first time this survey was conducted in Trinidad and Tobago in 2010. The school is now a member of the GEM Consortium and will continue to conduct and be a part of this survey in the future. GEM focuses on three main objectives as follows:

- To measure differences in entrepreneurial attitudes, activity and aspirations among economies;
- To uncover factors determining the nature and level of national entrepreneurial activity;
- To identify policy implications for enhancing entrepreneurship in an economy.

The Business Accelerator (BA) aims at assisting firms that are struggling to graduate to the next level of growth in an environment of very high rate of technological obsolescence and business uncertainty. The BA will offer:

- Strategic business plan advice;
- Access to a network of expert resources that is not only limited to the Caribbean, but a truly global network;

Regional and International Engagement

During the period October 2009 – August 2010 the following was achieved by the Internationalisation Centre:

International Operations – Guyana

The Unit coordinated a series of stakeholder meetings in Guyana during October 2009 – February 2010 with the objective of formally introducing Lok Jack GSB operations in Guyana. The Centre facilitated the launch the inaugural cohort In-Company Guyana EMBA and an assessment of the market for Open Enrolment and In-Company Programmes.

As a result of this, Lok Jack GSB Formally launched Lok Jack GSB operations in Guyana on March 3, 2010 which was endorsed by Minister S. Baksh, Minister of Education, Guyana. The GSB also launched Cohort 1 of the In-Company Guyana EMBA Programme with an intake of eighteen (18) participants and based on an assessment of the market there was also the introduction of Open Enrollment Programmes in the areas of Class Customer Service, Project Management for Non PM Professionals, Strategic Human Resource Management and for the In-Company Programmes the introduction of the Republic Bank (Guyana) Ltd Commercial Customer Business Programme.

International Operations – Suriname

The Centre also began a similar assessment for potential Lok Jack GSB operations in Suriname. Meetings were held with various public and private sector heads as well as heads of Anton de Kom University of Suriname.

International Strategic Alliances

During the period, a Memorandum of Understanding (MoU) was finalized with the Indian Institute of Management, Ahmedabad (May 13, 2010) to facilitate faculty exchange, academic student exchanges, study trips and joint research.

International Research

World Economic Forum Global Competitiveness Report 2009-2010

The Centre in collaboration with the World Economic Forum launched the release of the Global Competitiveness Report 2009-2010 in Trinidad & Tobago on September 9, 2010, just nine hours after its formal release in China.

The Centre also finalized the Partnership Agreement with the World Economic Forum for the Lok Jack GSB to be the Partner Institute for Trinidad & Tobago for the execution of the Executive Opinion Survey 2010-2011. This was accepted by the World Economic Forum.

Mid Term Evaluation of Four Mentorship Projects in the Caribbean

The Centre coordinated the Inter American Development Bank Project on the Mid Term Evaluation of four Mentorship Projects in the Caribbean (Guyana, Barbados, Jamaica and Belize) which was accepted by the client. Subsequently, the Centre was invited to facilitate the Implementation Planning Workshop.

Other Initiatives

International & Local Conferences

- Dr. Ron Sookram attended the Sub-regional Consultative Meeting to discuss a Report on Factors and Circumstances inhibiting the Full Integration of OECS and Belize in the CSME on May 21, 2010 at the Bay Gardens Hotel in St. Lucia. He presented a short paper entitled “Business in Energy Markets – The Case of the LDCs of CARICOM (June 2010)
- The unit along with Market Development Centre coordinated aspects of the Trinidad & Tobago Chamber of Industry and Commerce conference on “Connecting with Central America” where Prof Carrillo was a presenter. The conference brought key business persons from across Central America together with business persons from the Caribbean region (October 20th 2010)
- The unit confirmed details of Prof Carrillo’s speaking engagement at the Institute of Chartered Financial Accountants annual finance conference which is expected to have an audience of international, regional and local captains (October 14th 2010)
- The unit also confirmed the speaking engagement of Professor Carrillo with the Trinidad & Tobago Coalition of Services Industries (TTCSI) (October 14th 2010)

Projected Activities for 2010/2011

- Introduction of International Master's of Business Development & Innovation
- Introduction of MBA in Sustainable Energy Management
- Distinguished Leadership & Innovation Conference 2011 featuring Professor Michael E. Porter
- Introduction of International MBA and Executive MBA in Tobago
- Introduction of the Master of Small and Medium Enterprise Management
- Restructuring of Academic Area to provide improved student service with Learning Assurance Officers
- Launch of the National Competitiveness and Cluster Observatory with Professor Rolph Balgobin
- Continued Research for WEF Global Competitiveness Survey & Global Entrepreneurship Monitor
- Increased International Full Time Faculty on Staff

Distinguished Visitors

Professor Abjit Battacharya
India

Dr. Sacha Joseph Matthews
United States

Dr. Sam Bradley
United States

Dr. Julien Ferdinand
St. Vincent & the Grenadines

Dr. Gour Saha
India

Caribbean Centre for Money and Finance (CCMF)

Executive Summary

Academic year 2009/2010 witnessed the transition in leadership from Dr. Delisle Worrell, who left the centre in November 2009 to take up the post of Governor of the Central Bank of Barbados, to Dr. Derick Boyd who joined the centre in May 2010. Notwithstanding, the centre was engaged in a major study on the managed funds industry in Trinidad and Tobago, while at the same time making measurable progress in preparations to embark on the Caribbean Financial Risk Assessment project that is funded by the Inter-American Development Bank.

The Centre's outreach efforts were also successful with the Caribbean Business Executive Seminar with the theme "*The Future of the Financial Services Industry after the Crisis*" attracting 127 participants and the 41st Annual Monetary studies Conference in Guyana on the theme "*Building Financial Sector Resilience in the Caribbean*" being well attended by participants from regional central banks, academia and multilateral financial institutions. The Centre's summer internship program also hosted postgraduate UWI students from the Cave Hill and Mona campuses.

In terms of our research and publication efforts, ongoing research on price formation in the Caribbean is progressing well and a seminar of stakeholders was held in July 2010 and it is envisioned that the creation of a virtual research group could constitute an ongoing source of expertise and investigation on the topic which can be consolidated over time. The Centre also published two editions of the Journal of Business, Finance and Economics in Emerging Economies in December 2009 and June 2010 and, the 2nd Edition of the book *The Financial Evolution of the CARICOM Community*, edited by Professor Ramesh Ramsaran is near completion. Staff at the Centre also published and presented numerous papers and served as experts on panels at various meeting and conferences.

Staff

Dr. Derick Boyd assumed duties as the newly appointed Executive Director of the Caribbean Centre for Money and Finance (CCMF) on 1 May, 2010. He replaced Dr. DeLisle Worrell who resigned in October 2009 to become the Governor of the Central Bank of Barbados.

Faculty Outreach

Internships

During the financial year 2009/2010, the CCMF with financial support from Caribbean Regional Technical Assistance Centre (CARTAC), hosted two interns from the University of the West Indies - Ms. Nadine Quarrie (UWI, Mona) and Mr. Marlon Stewart (UWI, Cave Hill), both MSc Economics students. They interned with the Centre from June 1 to August 31, 2010.

The 41st Annual Monetary Studies Conference (AMSC)

The 41st Annual Monetary Studies Conference was co-hosted by the Caribbean Centre for Money and Finance and the Bank of Guyana over the period 10th – 13th November 2009 at the Bank of Guyana's conference facilities in Georgetown. The theme of the conference was “*Building Financial Sector Resilience in the Caribbean*”. A total of thirty-four papers were presented. Dr. S. R. Insanally- one of Guyana's former Ministers of Foreign Affairs and now Advisor to the President on Foreign Affairs – delivered the 24th Adlith Brown Memorial Lecture entitled “Financing for Development – Challenges and Opportunities for CARICOM”.

The 13th Senior Level Policy Seminar

For the first time the Senior Level Policy Seminar was held outside of Trinidad and Tobago and was co-hosted by the Bank of Jamaica. The event took place at the Sea Bed Conference facility in Kingston, Jamaica on 4th September, 2009 and was themed “*Strategies to Cope with Global Uncertainty – Choices for Caribbean Business and Finance*”. Among the presenters were Mr. Avinash Persaud - Chairman of Intelligence Capital Limited and Member of the UN Special Committee on the Global Financial Crisis; Mr. Philippe Carrel - Executive Vice President, Reuters and Mr. Suresh Sookhoo - Chief Executive Officer, RBTT Financial Group.

The 14th Caribbean Business Executive Seminar

On the conclusion of the 13th Senior Policy Seminar held in Jamaica, it was decided that the name of the seminar should be changed to the Caribbean Business Executive Seminar. The change signaled a broadened scope for the seminar to encourage greater participation by the business sector and to more accurately reflect the nature of the intended target audience. The 14th Caribbean Business Executive Seminar was held at the Hyatt Regency (Trinidad) on the 30th April, 2010. Its theme was “*The Future of the Financial Services Industry after the Crisis*”, and included speakers such as:

- Prof. Jan Kregel – senior scholar at the Levy Economics Institute of Bard College and Director of the Monetary Policy and Financial Structure Program
- Mr. Paulo Nogueira Batista Jr. – Executive Director representing Brazil and a group of eight countries at the International Monetary Fund.
- Dr. Esteban Pérez – Economic Affairs Officer in the Development Studies Section in ECLAC (Santiago, Chile)
- Mr. Michael Mansoor – Executive Chairman of the First Caribbean International Bank Limited
- Mr. Clarence Tong – Senior Vice President in Mizuho's New York Project Finance Department

The format of the seminar followed previous years with two morning sessions and a panel discussion in the afternoon. The panel discussion was moderated by Mr. Andrew Johnson – a popular television journalist – and the panelists each represented business sectors such as tourism, banking, insurance and energy. There were 127 attendees at this year’s seminar.

Journal of Business Finance and Economics in Emerging Economies

Two issues of the Journal of Business Finance and Economics in Emerging Economies were published online at www.ccmf-uwj.org in December 2009 and June 2010. Each volume comprised papers presented at Annual Monetary Studies Conferences hosted by the CCMF in conjunction with a regional central bank.

Revenue Generating Activities

Trinidad and Tobago Securities and Exchange Mutual Funds Project

In December 2009 the CCMF was contracted by the Trinidad and Securities Commission to conduct a baseline market research survey designed to examine and understand the size, range and investment practices and impacts of the managed funds industry. Among other things, this required:

1. The development of a comprehensive profile of the managed funds industry with respect to size, structure, and institutional composition;
2. The examination and evaluation of the asset management practices of fund managers;
3. The analysis of the impact of the managed funds industry on the size, growth and development of the securities market;

4. The evaluation of the effect of the regulatory framework and investment rules on the pattern of deployment of managed funds, the efficiency of investments and on investment performance and;
5. The assessment of prospects for the domestic and regional securities market with particular reference to the regional equity markets

A draft of the report has been submitted.

Projected Activities for 2010/2011

The research programme for Staff of the Centre in the financial 2010/2011 will be focus on issues of core relevance to the central banking community. The research agenda will include *inter alia* work on the following;

- Methodological issues associated with the development of regional indicators across Caribbean Countries
- Development of research proposal for spatial/GIS analysis of capital accumulation or output in the Caribbean.
- Research on; “The importance of Nominal anchors for Macroeconomic and Exchange Rate Stability”
- Demand driven research (requests from Central Banks) featured in the Caribbean Economic Performance Report. Work on Exchange Rates was requested by Belize and resulted in a paper for the Central Bank of Belize. The work on this topic continues to be developed.

In addition, the following projects will be undertaken:

Caribbean Financial Sector Risk Assessment Project /Proposed Architecture for Regional Financial Stability

The project is an essential element of the overall architecture which CARICOM is putting together to enhance regional financial soundness, and would also allow a deeper coordination with national institutions which would bring many potential benefits for the central bank's work in the region. The project is funded by the International Development Bank (IDB) and is expected to commence within this new financial year on the appointment of a lead consultant.

The Price Formation Project

The Price Formation project is meant to bridge the gap between inflation models, inflation policy and the actual practice of price formation in the Caribbean and is being coordinated by one of CCMF Research Associates; Prof. Roland Craigwell of UWI Cave Hill. The project is being executed through a series of research papers prepared by the central banks who have committed to doing so and consists of studies in the following areas:

- Studies that describe and test the process of price formation, the dynamics of inflation and the scope and effectiveness of anti-inflationary policies;
- Studies that extract information on the frequency and magnitude of price changes from input data for the construction of the monthly CPI, over about 5 recent years. These studies would also test for possible factors affecting the frequency and magnitude of price adjustments;

- Surveys of price setting behavior in selected business activities, and the factors that play an important part in the pricing decision.

Currently, four draft papers have been completed for Barbados, Saint Lucia, Belize and the Netherlands Antilles and will be made available online at www.ccmfuwi.org. With the financial support of the Caribbean Region Technical Assistance Centre the CCMF hosted a regional conference of participants and collaborators (existing and potential) in the project to discuss the studies that have already been completed and the design of those studies which are yet to be undertaken. The conference took place on 22-23 July, 2010 in Barbados.

The Financial Evolution of the Caribbean Community, 2nd Edition

The first edition of the Financial Evolution of the Caribbean Community published in 1997 and now out of print, is a standard work of reference on Caribbean financial systems which covers the period 1970 – 1996. The second edition will consist of chapters on each of the CARICOM countries following the pattern of the first edition. The book is to be edited by Professor Ramesh Ramsaran, who will write the summary chapter which introduces the book. Chapters on Barbados, Belize, Guyana, Trinidad and Tobago and Jamaica have been completed and are currently available online at www.ccmfuwi.org. Chapters on Suriname, the Eastern Caribbean and the Bahamas are in process, and should be posted soon.

Centre for Health Economics (HEU)

Executive Summary

The HEU, Centre for Health Economics (HEU) within the past academic year relocated offices to 25A Warner Street, St. Augustine. The building houses administrative and academic staff offices along with its state of the art Conference Facility on the ground floor. We anticipate that by the end of the academic year 2010/2011 the provisions for the Regional Training Centre and administrative and academic staff spaces on the first floor facilities will be ready for use.

The Centre completed a number of major projects during the year and submitted proposals for some significant research projects. In most cases the Centre was successful in having these proposals approved. Other activities included the continuation and further development of the Graduate Seminar Series in Health Economics, the award of scholarships and the maintenance of our annual internship initiative.

The HEU coordinated, supervised and mobilized funding for the execution of HIV/AIDS sensitization exercises across the University campuses at Mona, Cave Hill and St. Augustine. The events took place during the months of April 2010 and May 2010 and a large number of university students, secondary school students and health care professionals benefitted from these exercises.

Our academic staff continued to support the teaching programmes of the Department of Economics through the delivery of lectures both in the day and evening programmes and in conducting tutorials at no charge to the Department. The HEU also had full academic responsibility for the Health Economics courses offered in the MPH programme of the Faculty of Medical Sciences. Members of staff also provided research supervision for the Graduate students at the Cave Hill campus.

With support from the World Bank, the HEU also conducted an assessment of training needs in Antigua & Barbuda, Barbados, Dominica and Jamaica. This was executed via Study Tours to various regional AIDS programmes, Ministries of Health, universities and other relevant bodies. The aim of this needs assessment was to get a clearer picture of the specific training required by the HIV/AIDS Response Agencies and Programmes in the region and to develop a training programme to help to strengthen the individuals involved in the response to the epidemic.

Research

Major Projects / Reports Completed as a Centre
Comparative Analysis of The Impact of Chronic Disease Prescription Drug Programme in Jamaica And Trinidad & Tobago, 2003-2009 – A project funded by the Inter-American Development Bank (IDB). It focuses on analyzing the Chronic Disease Assistance Programme (CDAP) in Trinidad & Tobago and Jamaica. Final Report Submitted on May 2010.

HIV and Tourism Study: A Situational Assessment of Jamaica and Barbados – A report submitted to UNDP April 2010.

Draft of Final Report on the Nexus between HIV and Tourism in Selected English Speaking Caribbean Countries- A report submitted to UNDP April 2010.

Mainstreaming Matrix of HIV and Tourism in selected Caricom Nations – A report submitted to UNDP April 2010

Disasters and Sustainable Tourism Development: Exploring Impact of HIV/AIDS on the Tourism Industry in Selected Caribbean Destinations - A project under the World Bank IDA PANCAP Fund. Executed by the Caribbean Community acting through the CARICOM Secretariat to support the Pan Caribbean Partnership against HIV/AIDS (PANCAP). November, 2009.

Strengthening the Community of Persons Living with HIV/AIDS and Those Affected by HIV/AIDS in the Caribbean – A Community Based Initiative. A Global Fund Programme Project, with the HEU as a sub-recipient receiving a grant from the Caribbean Regional Network of People Living with HIV/AIDS (CRN+), the principal grant recipient.

Research Completed: Individual Staff

Kyren Greigg

- A Review of the Trinidad and Tobago Economy 1994-2009. (2010)
- Poverty Statistics in Selected Caribbean Countries. (2009)
- Analysis of Survey Data on the Use of the Chronic Disease Assistance Programme in Trinidad and Tobago (2009)

Patricia Edwards-Wescott

- Training Needs Curriculum for HIV/AIDS and other Health Care Organizations in the Caribbean. (2010). Karl Theodore and **Patricia Edwards-Wescott**
- Review of the Literature on the Impact of Government Expenditure on Economic Growth. (2009)
- The Impact of Government Expenditure on Price Stability in Trinidad and Tobago. (2009) Penelope Forde and **Patricia Edwards-Westcott**.

C. Metivier, S. Lalta, K. Theodore, L. Ramnath

- A Comparative Analysis of the Impact of Chronic Disease Prescription Drug Programs in Jamaica and Trinidad and Tobago, 2003-2009. (2009)

Vyjanti Beharry

- An Economic Response to HIV/AIDS: A Theoretical Investigation.(2009)
- A Profile of the Economic and Health System in Jamaica. (2009)
- HIV and Tourism: A Situational Assessment of Jamaica and Barbados. (2010)
- Macroeconomic Profile of the British Virgin Islands: 2006 to 2010. (2010)
- An Assessment of the Private Health Insurance Industry in the British Virgin Islands. (2010)

Research in Progress as a Centre

HIV/AIDS and Human Development in the Caribbean.

A project funded by the UNDP. It aims at improving the effectiveness of the response to HIV/AIDS through the quality of the response to the epidemic, as well as the targeting of programmes being implemented by shifting to a much higher level that which currently prevails via research, training and technical policy support throughout different countries within the region.

The focus of this project has now been modified to report on the nexus between Tourism and HIV in the English Speaking Caribbean Countries being researched and also to display a matrix on the mainstreaming of HIV as an integral function of National Tourism Plans in those CARICOM countries. A Revised Proposal on HIV and Tourism in the Caribbean: A Study of the Relationship between HIV Disease and Tourism in Selected Tourism Territories was submitted to United Nations Development Programme (UNDP) on November 17, 2009.

To Design and Support the Implementation of a National Health Insurance System in the British Virgin Islands (Phase II).

A project being undertaken for the Government of the British Virgin Islands. Phase II of this project started April 2010 and has an expected duration of eighteen months. The dynamics of this project called for the establishment of an on-site office in the British Virgin Islands for the duration of the project. A diverse team comprising HEU members headquartered in Trinidad and Tobago, a team based in the British Virgin Islands, and a team of specialist consultants drawn

from several countries will deliver on the objectives of the project. Following an intense period of system design and implementation support, the output will be a National Health Insurance Programme for the people of the British Virgin Islands.

Knowledge, Attitudes, Practices and Behaviour on HIV/AIDS in four OECS Territories (Dominica, St. Kitts & Nevis, Grenada and Antigua & Barbuda).

A Project commissioned by the OECS, HIV/AIDS Programme Unit. The Knowledge, Attitudes, Beliefs and Practices (KABP) Surveys provides a measure of the current impact of HIV/AIDS prevention efforts and informs the development of programmes aimed at encouraging and sustaining behaviour change, as part of a continuing plan of action in response to the growing threat of HIV/AIDS. The study also aims to provide key indicators to inform the UNGASS and OECS Global Fund Projects in these countries and provide empirical data that assess the impact of current prevention efforts.

Research in Progress: Individual Staff

K. Theodore

- The Why and the How of Caribbean Development
- Government Expenditure and Small Economies
- Review of the Economics of Climate Change. DFID/ECLAC Project. May 2010

R. Mc Lean

- An Assessment of the Efforts at Integrating HIV Services into Primary Healthcare (PHC) in the Caribbean – The Case of Aruba, Barbados, Grenada and Trinidad & Tobago

- The Impact of Structural Factors on Poor and Vulnerable Children in the Caribbean - The Case of Trinidad & Tobago and Belize. Ongoing

V. Beharry and R. McLean

- Estimating the Impact of HIV/AIDS on Businesses in Selected Caribbean Country - Technical Advisor to Consultant Mr. Nigel Gaines for the UNAIDS funded project “. UNAIDS-June 2009. Ongoing

C. Laptiste

- “Towards Estimating the Intangible Costs of Illness: End-Stage Renal Disease in Trinidad and Tobago”
- Health, Wealth and Development in the Caribbean: Theoretical Considerations

P. Edwards-Wescott

- The Impact of Remittances on Poverty and Income Distribution in Grenada.
- Milestones in Caribbean Development. A. La Foucade and P. Edwards-Wescott
- Benefits Incidence of Health Expenditure in Trinidad and Tobago
- Analysis of the Organisation of Health System in Trinidad and Tobago and Health Services Available to Children and Women. In, Situation Analysis of Children and Women in Trinidad and Tobago.
- Human Capital Formation: A Way Forward for the Organisation of the Eastern Caribbean States (OECS)

K. Gittens-Baynes

- A further examination of The Health Poverty Nexus: Poverty And Non Communicable Diseases In The Caribbean: A Casual Link?

K. Gittens-Baynes, C. Metivier and P. Edwards-Wescott.

- The Impact of Poverty on the Health Status of the Elderly in the Caribbean: The Case of Jamaica.

A. La Foucade

- Equity and Health in the Caribbean.
- Sufficiency in the Provision of Social Insurance Benefits in the Caribbean: Implications for Provision of A Benefit Package of Health Services Through NHI

R. McLean, K. Theodore, C. Metivier, A. La Foucade, C. Laptiste, K. Gittens-Baynes, V. Beharry.

- HIV and Tourism in the Caribbean: A Study of the Relationship between HIV and Tourism in Selected Caribbean Territories. A research paper for submission to the United Nations Development Programme, 2009-2010.

C. Metivier

- The Impact of Poverty on the Health Status of the Elderly in the Caribbean: The Case of Jamaica
- National Health Insurance Systems and their Application in Caribbean Countries
- Road Traffic Crashes: Health Costs and Investment Implications
- Chronic Non-Communicable Diseases: A Caribbean Perspective of the Trends and Preventive/Corrective Mechanisms

K. Greigg

- An Econometric Analysis of Labour Demand by Sector in Trinidad and Tobago.
- Review of the 2010/2011 National Budget
- Are we there yet!?! The socioeconomic and political lessons learnt from the post independence experience of Trinidad and Tobago
- Country Context: Demographic, Economic and Socio-political. In, Situation Analysis of Women and Children in Trinidad and Tobago.

K. Greigg, H. Ali, T. Simone

- The Child's Right to An Adequate Standard of Living. In, Situation Analysis of Women and Children in Trinidad and Tobago.

Teaching Programmes

The Centre began offering a PhD in Health Economics and is in the process of further developing its training programme with a phased implementation targeted to coincide with the completion of its Conference Facility and Regional Training Centre in 2010/2011. In continuing development efforts, the Centre has also facilitated a Master's in Public Health offered to personnel in the various fields of Health Management.

Teaching and Learning

Students' and Young Scholars

Internship Programme

The objectives of the Internship Programme are three-fold. For the interns, the programme offers hands-on experience in the world of work, as well as significant opportunities to interface with experienced health

economists, professionals and senior researchers at national and regional levels. The programme also assists interns in determining their future career and professional development particularly as it pertains to reading for higher degrees. For the HEU, the Internship Programme which facilitates the training of persons by way of hands-on experience, is an avenue for short-term support to the Centre's research activities and provides an opportunity to identify longer-term resource persons.

Four candidates, including two MSc Economics students, participated in the Internship Programme during the period February 2010 to June 2010. They assisted in the conduct of research initiatives and carried out surveys related to HIV/AIDS, Inflation, Health Sector Reform and Unemployment.

Graduate Studies

A total of 14 theses were supervised by the HEU during the review period - three MSc, six MPhil and five PhD papers. Topics included the relationship between health service costs and a variety of factors such as wealth, the prevalence of chronic diseases and tourism.

Outreach

During the second quarter of 2010, staff at the HEU planned and executed in-country visits to Health Sector Organisations in Jamaica, Barbados, Antigua and Dominica to ascertain training requirements in each country. They also coordinated and supervised the execution of HIV/AIDS sensitization exercises across the University campuses at Mona, Cave Hill and St. Augustine providing benefits to a large number of university students, secondary school students and health care professionals.

Strengthening Regionality

Montserrat

The Government of Montserrat had earlier indicated interest in the report entitled, “*An Analysis of the Feasibility of Introducing a National Health Insurance (NHI) System in Montserrat*” submitted by the HEU, Centre for Health Economics and subsequently a request for a Proposal for the “*Review of Health Financing in Montserrat*” was made by the Montserrat Government. The HEU, submitted that proposal in November 2009.

British Virgin Islands

In March 2010, the HEU, Centre for Health Economics signed an Agreement with the Government of the British Virgin Islands for the Completion of the Design and Implementation Support of a National Health Insurance System for the country. This signing signified the continued commitment of the Government to the implementation of the National Health Insurance system for its population – a move that was initiated several years earlier and commenced by the HEU during the period 2006-2007 (phase one). In April, 2010 work began on the second phase of the project.

Supported by a team of experts from Trinidad and Tobago and the wider Caribbean, as well as expertise sourced from as far as Argentina and Ireland, a project office was established in the British Virgin Islands and a team is based in-country for the eighteen-month duration of the project.

While a National Health Insurance system is a tool used to ensure the proper financing of a country’s health care system, each system materialises with its own uniqueness. The design is underpinned by the need for increased access to and improved quality of health care services by the population. For the people of the British Virgin Islands, the National Health Insurance system will ensure that all eligible persons (working adults, elderly, children, indigent, etc.) are guaranteed access to a specified package of health care services.

The project is targeted for completion at the end of 2011.

Antigua & Barbuda, Dominica, Grenada and St. Kitts & Nevis

During the academic year 2009/2010, the HEU began work on KAPB for selected OECS countries. *The Knowledge, Attitudes, Practices and Behaviour on HIV/AIDS in four OECS Territories (Dominica, St. Kitts & Nevis, Grenada and Antigua & Barbuda)* project was commissioned by the OECS, HIV/AIDS Programme Unit. The Knowledge, Attitudes, Beliefs and Practices (KABP) Surveys provide a measure of the current impact of HIV/AIDS prevention efforts and inform the development of programmes aimed at encouraging and sustaining behaviour change, as part of a continuing plan of action in response to the growing threat of HIV/AIDS. The study also aims to provide key indicators to inform the UNGASS and OECS Global Fund Projects in these countries and provide empirical data that assess the impact of current prevention efforts.

The project is resourced by a team of experts from Trinidad and Tobago and the wider Caribbean.

Strengthening the National Engagement Processes

The Centre continued to support the work of the Trinidad and Tobago National AIDS Coordinating Committee (NACC) through its various sub-committees. The HEU also supported two studies under funding received from the World Bank:

- Estimating the Impact of HIV/AIDS on Households in the Caribbean: Theoretical Framework and Model. –Ewan Scott April 2010.
- Using an Orthogonal Design to elicit an EQ-5D Value Set. The purpose of this study was to test the feasibility of using a set of EQ-5D health states based on an orthogonal experiment design.- Henry Bailey April 2010.

Outreach

Conferences and Seminars Hosted

A major highlight of the Centre’s activities was the hosting of a Guest Lecture entitled, “*The Challenges of Caribbean Public Health*” by Sir George Alleyne (Chancellor, The University of the West Indies). HEU Conference Facility, UWI. April 17, 2010.

The HEU continued its outreach activities through the CHES which was initiated in 2008. During the academic year 2009/2010, the HEU hosted presentations by students enrolled in postgraduate programmes of the Faculty of Social Sciences, as well as for members of the HEU’s academic staff.

Project / Financing Proposals

YEAR	CLIENT/AGENCY	PROJECT	STATUS
July 2010	Government of St. Vincent and the Grenadines	Consulting Services for the Conduct of a Behavioural Surveillance Survey for St. Vincent & the Grenadines	Awaiting Response
July 2010	UNICEF	Situation Analysis of Children and Women in Trinidad and Tobago	Successful
April 2010	IDB	Comparative Analysis of the Impact of Chronic Disease Prescription Drug Programs in Jamaica and Trinidad and Tobago, 2003—2009.	Successful
March 2010	World Bank	Development of Proposal for Needs-Based Training of HIV/AIDS Personnel in the Caribbean	Successful
November 2009	UNDP	Revised Proposal on HIV and Tourism in the Caribbean: A Study of the Relationship between HIV Disease and Tourism in Selected Tourism Territories	Successful
August 2009		World Bank - The Pan Caribbean Partnership against HIV/AIDS Project	Successful

Projected Activities for 2010/2011

Proposed Areas of Research Activity

- Situation Analysis of Children and Women in Trinidad and Tobago – A Project to be done for UNICEF.
- Provision of Consulting Services to undertake a Comprehensive Costing of Health Services throughout Health Institutions in Trinidad and Tobago – A project to be done for the Ministry of Health, Trinidad and Tobago.
- Benefits Incidence of Health Expenditure in Trinidad and Tobago
- An Assessment of the Efforts at Integrating HIV Services into Primary Health Care (PHC) in the Caribbean – The Case of Aruba, Barbados, Grenada and Trinidad & Tobago
- An Evaluation of Post Abortion Care Services in Trinidad and Tobago
- The Chronic Disease Problem in the Caribbean: Economic Impact and Investment Requirement
- Adolescent Fertility and Intergenerational Poverty- A Review of Policies in 5 Caribbean Countries.
- Knowledge, Attitudes, Practices and Perceptions about Cervical Cancer in Trinidad & Tobago

Distinguished Visitors to the Department

Sir George Alleyne

Chancellor, The University of the West Indies

Shiyan Chao

Senior Economist, Task Team Leader,
The World Bank, Washington D.C

Dr. Anton Cumberbatch

Chief Medical Officer, Ministry of Health,
Trinidad and Tobago

Willy De Geyndt

Institutional and Implementation Arrangements, The
World Bank, Washington D.C

Mr. Edward Emmanuel

Programme Manager, PANCAP Coordinating Unit,
CARICOM Secretariat, Guyana

Ms. Nicole Hazel

Monitoring and Evaluation Officer, Organization of the
Eastern Caribbean States (OECS), HIV/AIDS Project
Unit (HAPU), St. Lucia

Ms. Sandra Jones

Permanent Secretary, Ministry of Health,
Trinidad and Tobago

Judith Morroy

Procurement Consultant Latin America and the
Caribbean Region, The World Bank, Washington D.C

Mr. Salim October

Program Officer/Analyst (HIV & AIDS),
United Nations Development Program (UNDP),
Trinidad and Tobago

Mr. John Primo

Procurement Specialist, PANCAP Coordinating Unit,
CARICOM Secretariat, Guyana

Dr. Alafia Samuels

Senior Lecturer, The University of the West Indies,
Cave Hill Campus, Barbados

Mr. Gladstone Skeete

Project Officer, Donor Resources, PANCAP
Coordinating Unit, CARICOM Secretariat, Guyana

Dr. James St. Catherine

Director, Organization of the Eastern Caribbean States
(OECS), HIV/AIDS Project Unit (HAPU), St. Lucia

Centre for Language Learning (CLL)

Programmes

Beginning 2009/2010 the Centre offered Level 1A and 1B Spanish, and Level 1A and 1B French FOR CREDIT.

With a foreign language now a requirement for fulfilment of their degree, from the Faculty of Social Sciences, some 40 students reading for the BSc International Relations, registered for French; and more than 50 reading for the BSc Tourism Management, registered for Spanish. An increased number of students registered from the Faculty of Medical Sciences, and the Faculty Science and Agriculture. Noteworthy, too, were better-organized Spanish courses for International Relations (Diploma) and for Management (MSc Management Studies) postgraduates, which lead to an early start of teaching. French for International Relations proceeded in a timely manner.

Staff

The administrative office of the Centre for Language Learning functioned with a full complement of staff. The team worked well and improved job performance was evident across the board. During the year, the Clerical Assistants availed themselves of training opportunities in Microsoft programmes, hosted by Campus IT Services (CITS).

The Centre participated in the UWI Life/Info Village mounted by the Campus. Newly-acquired posters on display gave information on offerings of the Centre, as well as guidelines for registration. A video on the CLL compiled by the Centre's Audio-Visual Technician (Ag.) was shown at the CLL booth. CLL bookmarks were distributed to visitors. The posters would be displayed subsequently at the CLL. The registration process went smoothly, and new Student Handbooks and CLL bookmarks were given to registrants.

Facilities

The facilities at the CLL continued to house many classes and meetings. In addition to numerous student group events on Thursdays, requests for a myriad of events were received for the Auditorium in particular - seminars and workshops (Campus community, Ministries, and Associations/Organizations), professorial lectures, film screenings, Arts-in-Action productions, filming projects by students in the Film Programme - to name a few. Such activities have given more importance to the need for a proper sound system in the auditorium.

The CLL is also a testing venue for the British Council IELTS examinations, held monthly on a Saturday. The number of candidates exceeded the capacity of the CLL rooms, and additional space had to be arranged. This matter was reviewed and it was decided that the Centre could no longer comfortably accommodate the examinations.

The TOEFL and TS examinations were also conducted by the Senior Administrative Assistant at Student Admissions, in the Centre's computerized language laboratory. The Centre's physical and technical requirements for these tests have been adequate.

Outreach

International Collaboration

The Centre for Language Learning has entered into an agreement with the Instituto Cervantes, Spain whereby the CLL is now an examination centre for the Diplomas in Spanish as a Foreign Language (DELE) in Trinidad and Tobago. CLL will conduct both the registration and examinations for all diploma candidates as the international qualification is not restricted to students of the Centre.

English as a Foreign Language

The EFL section successfully ran its standard General English course in each of the two semesters; September – November 2009 and January – March 2010 with 12 and 6 participants respectively. Additionally, three cohorts of Cuban Health Care Professionals, 116 in total, received English language training. The first group was hosted August to September 2009. The second cohort had their training in October 2009. The final group was trained in February 2010. In-house materials were created for this programme and special credit goes to the Clerical Staff, the AV technician and student assistants at the CLL.

As part of the Semester 3 (“Summer”) offering, the CLL received a group of staff members from the Universidad Nacional de Colombia for English language training over a six week period June- July 2010. Participants benefited from an intensive but varied programme which included weekly visits to sites of interest in Trinidad. Upon the request of a corporate client, the EFL section also mounted an intensive individual tuition programme of one month’s duration in July 2010. A total of 250 contact hours were administered.

On-site courses

The CLL works with corporate and government entities to provide language training to meet the specific needs for their staff. This year our clients included the Ministry of Trade & Industry, Eastern Credit Union and Citibank (Spanish Level 1A), and the Ministry of National Security (Conversational Spanish).

Caribbean Interpreting and Translation Bureau

The CITB continues to flourish as the demand for language services increases. There are regular translation requests from individuals seeking to regularise their status in Trinidad, as well as those wishing to pursue higher education or employment abroad. Corporate clients use the service in application for international designations or to expand market share in non-English speaking territories. Institutional clients make requests as necessary in the dispatch of their international duties.

CITB provided services for the state visit of the French President during the CHOGM meeting in November 2009. Of special note are the French and Spanish interpreting services provided at the Bureau’s expense, to the Annual General Meeting and Conference of The Association of Universities and Research Institutes of the Caribbean (UNICA) March 2010 held at the UWI St. Augustine campus.

The list of CITB clients this year includes:

- UNICA conference and encounter on Haiti
- Rotary Club of Trinidad and Tobago
- Happi Products
- Peake Industries Limited
- Ministry of Foreign Affairs
- Ministry of National Security

- Ministry of Health
- Ministry of the Attorney General
- Trinitrain
- Bouygues Travaux Publiques
- International Organisation for Migration
- Pan American Health Organisation
- The Embassy of the Republic of France in Port-of-Spain
- L'Association Internationale d'Archéologie de la Caraïbe (AIACA)
- Caribbean Meteorological Organisation
- Caribbean Union of Teachers
- Caribbean Disaster Emergency Management Agency
- Arthur Lok Jack Graduate School of Business
- Caribbean Court of Justice

Events

Brazilian Film Week.

September 30 – October 4, 2009

The five-day event to feature Brazilian cinema was jointly hosted by the Embassy of Brazil and the CLL. A cocktail reception was held on the opening night, which along with the screening that night was strictly by invitation. The other four nights were open to the public. The Ambassador of Brazil and his staff expressed satisfaction with the film week and there is the possibility that this could become an annual event.

Japanese Cultural Days.

November 13 and 14 2009.

Bunka no hi (Culture day) is a Japanese national holiday and is celebrated on November 3. Wishing to recognise the day here in Trinidad and in keeping with the stated objectives of 'promoting culture, the arts

and academic endeavour', the students of Japanese and their tutors organised the cultural days at the Centre for Language Learning. The interest generated was significant and it is estimated that in excess of 400 persons visited the centre during the two days.

Hindi Film screenings.

From March 2010.

The Film Section of the Faculty of Humanities and Education, The Indian High Commission and the Centre for Language Learning entered into a collaborative initiative to have screenings of Indian films on the last Thursday of every month. Offerings such as *Taare Zameen Par*, *Cheeni Kum* and *Omkaara* were well-received.

Research

Beverly-Anne Carter was involved in a research projection on the development of a foreign language policy for Trinidad and Tobago under the auspices of the Ministry of Education's Seamless Education Policy Unit with Ian Robertson (Principal Investigator).

Maria Landa prepared a paper on "Spanish in contact with Bantu languages. A comparison between Palenquero and the Spanish Interlanguage of Native speakers of Swahili", to be presented at the International Colloquium "Mediaciones Transculturales en Espacios Iberoamericanos" (20-22nd May 2010), at the Department of Modern Languages, University of Montreal.

Regis Kawecki prepared a paper on Un corpus antillais d'apprenants de français for presentation at the 6 Journées de Linguistique de Corpus, Université de Bretagne - Sud, held in Lorient, France in September 2009.

Institute for Gender and Development Studies (IGDS)

Executive Summary

Major staff changes took place during the year which saw a change of Headship from Dr. Grace Sirju-Charran to Dr. Piya Pangsapa, as well as the addition of new support staff Mr. Keshan Latchman, Research Assistant. Staff members were assigned the task of documenting the services they provided, an exercise which was seen to be important for developing the Quality Assurance Manual. The physical space of the Institute was also reorganized and refurbished to allow for better work flow and comfort.

Staff

Awards, Honours & Distinctions

Professor Patricia Mohammed

- Awarded AFETT WOMAN OF INFLUENCE AWARD – Association of Female Executives of Trinidad and Tobago March 8th International Women's Day Award, 2010, Port of Spain.
- Award by Sports Club, Barrackpore, Trinidad for High Achievement in the Sphere of Education, March, 2010.

Appointments, Promotions, Resignations & Retirements

Tisha Nickenig was promoted to Research Project Officer III

Students

Overall there was a 30% increase in demand for courses offered by the IGDS. The most popular, based on

percentage increases were Introduction to Women's Studies (GEND 1103), Men and Masculinities in the Caribbean (GEND 2013) and Sex, Gender and Society (SOC 13031), all of which saw more than a 30% increase in the number of registered students. The greatest decline was seen for the course, Cinema and Gender (FILM2101) where there was a 48% drop in the number of students registered compared with the previous year.

Most Outstanding Graduate Students for the year:

- *Camille Samuel* – PhD Interdisciplinary Gender Studies – High Commendation
- *Anusha Raqbir* – MSc Gender & Development Studies – Distinction
- *Louise Ebbesson* – MSc Gender & Development studies - Distinction

Most Outstanding Undergraduate Students for the year:

- *Shrinagar Francis* – BA African & Asian Studies – First Class Honours
- *Karima Pragg* – BSc Sociology – First Class Honours
- *Kema Dillon* – BA Communication Studies - First Class Honours
- *Geeta Manoo* – BA Communication Studies - First Class Honours

Graduate Studies

The new postgraduate programme continued to work with the first cohort of graduate students. During the review year the graduate students (except the Postgraduate Diploma students) took the core course Research Design and Methods. The course was designed to help students to develop their research proposals and to prepare them to work with their supervisors and committees once they had completed the final core course.

At the end of this academic year, seven graduate students were ready to graduate in October 2010. The IGDS MSc Programme placed its first intern at the Ministry of Community Development, Culture and Gender Affairs. The period of internship was February 2010 – May 2010. This was a collaborative activity between the Gender Affairs Division and the IGDS to provide a practical learning space for Graduate students of the IGDS.

Research and Innovation

The Institute as a whole and individual staff members have been engaged in a number of research projects on topics such as women and trade; Caribbean feminisms; global democracy; gender, development and empowerment; gender, labour, migration and environmental issues; gender, ethnicity, and identity; gender-based differentials in secondary and tertiary education systems in T&T; and gender, sexuality and the implications for HIV/AIDS.

Research Completed

D. McFee

- *UNDP Guyana EPSTI Baseline Survey*
The Institute of International Relations was contracted to conduct a baseline survey consultancy to enhance public trust security and inclusion programme in Guyana. It was funded by UNDP Guyana. Prof. Parpart and Ms. McFee formed part of the research team to undertake preliminary data collection in Guyana. Primary data was collected from an extensive cadre of stakeholders throughout Guyana. (August 27th – September 7th 2009).

Research in Progress

P. Mohammed

- *A Caribbean Studies Virtual Museum*
Funded through the Government of Trinidad and 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.
- *Conceptualizing Global Democracy, Project of the Centre for Study of Globalisation and Regionalisation, The University of Warwick, Coventry.* This is a five-year, \$1.5 million initiative to explore how ‘rule by and for the people’ can operate when addressing global challenges of the present age.
- *Online Data Base*

Research towards the Publication of an Online Open Access Gender Data Base titled *CULTURAL CROSSINGS*. A searchable image data base with comparative images between the Caribbean and West Africa. A joint project between 2003-2006 with Professor Edna Bay, Emory University, Atlanta. UWI Researchers on project – Kimberly Byng, Shelene Gomes and Michelle Seeraj. Final Entries in project completed May 2007. Website access at: <http://sta.uwi.edu/cgds/uwiemory>

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.*

J.L. Parpart

- *Transnational Migrant Coping Strategies in the Current Economic Crisis: a pilot study (Jane Parpart, Deborah Mohammed and Marianne Marchand)*

This study will establish a base-line review of existing literature and carry out field research on the impact of the current crisis on these migration patterns. The sites will initially focus on Trinidadian and Mexican migration to Canada and the United States, with the aim of establishing a larger project once the pilot studies are completed. A paper will be presented at the International Studies Association meeting to discuss initial findings.

Service to UWI-12 Countries and Other Underserved Communities

Break the Silence Workshops: 2009 - 2010

The IGDS in collaboration with the T&T Coalition Against Domestic Violence and Arts in Action implemented a series of workshops in 2009/2010 throughout T&T aimed at educating community members and service providers about the effects of CSA (Child Sexual Abuse) /incest and HIV. Funding and technical support came from UNICEF and the UN Trust Fund to End Violence against Women.

Strengthening Regionality

- **15th Anniversary of the IGDS**

A Public lecture and programme was hosted by the IGDS SAU, to mark the end of the 15th Anniversary of the CGDS and the International Day Against Violence Against Women. Professor Eudine Barriteau delivered a Public Lecture entitled *What Love has to do with it?: Sexuality, Work and Power in Caribbean Gender Relations* (November 2009)

- **International Women's Day**

The IGDS commemorated International Women's Day 2010 with a Seminar entitled *From One to Many: Techno-Politics, Revolution and the Art of the Possible*; held on March 11th at the Centre for Language and Learning Auditorium, UWI. The feature speaker was Dr. Alexis De Veaux from the Department of Global Gender Studies, University at Buffalo, State University of New York (SUNY).

- **WINAD – Research Training Workshop**

The Women's Institute for Alternative Development (WINAD) requested the design and delivery of a research training workshop entitled *Research Methods for Civil Society* from the IGDS for members of the Caribbean Coalition for Development and the Reduction of Armed Violence (CDRAV).

- **Caribbean Review of Gender Studies – Online Open Access Journal**

Executive Editor - Patricia Mohammed, Associate Editor - Gabrielle Hosein, Editorial Assistant - Donna Drayton.

The 3rd issue, completed in November 2009, focussed on “Sexual Rights, Practices and Identities in the Caribbean”. A Special Issue completed in February 2010 was themed “Interrogating the Culture of Violence in Trinidad & Tobago”. The journal staff solicited submissions for a General Issue to be published in November 2010 as well as two Special Issues. The CRGS has also completed its template of responsibilities for the journal staff. The CRGS can be accessed at www.sta.uwi.edu/crgs.

- **Solidarité Haiti Relief Drive**

The IGDS hosted a successful Haiti relief collection and donation drive on the UWI campus from January 24th – April 30th 2010. The goal of the initiative was to gather feminine protection and hygiene products for women and girls who were victims of the January 12th earthquake.

- **Enhancing Public Security & Trust Initiative (EPSTI) in Guyana**

The Institute of International Relations conducted a baseline survey consultancy, funded by the UNDP, Guyana to enhance public trust security and inclusion programme in Guyana. IGDS staff developed the gender component of the research and also undertook preliminary data collection

in Guyana in August – September 2009. The final report was presented to members of the Guyanese Cabinet in March 2010.

- **Building Responsive Policy: Gender, Sexual Culture and HIV & aids in the Caribbean**

Rhoda Reddock, Sandra Reid, Gabrielle Hosein, Tia Cooper, Project Coordinator: Tisha Nickenig

Project Partners: The University of West Indies HIV/AIDS Response Programme (UWI-HARP), Barbados; The ‘Ultimate Purpose,’ Suriname; and York University, Canada

Funding: The International Development Research Centre (IDRC) and the United Nations Fund for Women (UNIFEM), Caribbean Office.

Summary: 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 and Tobago.

Strengthening the National Engagement Process

This year the IGDS opened its three-week Ethnography Seminar: *The Poetics and Politics of Field Research* to the national community (August 2009) and held a number of workshops and panel discussions. Specific projects aimed at which included the following:

- ***Breaking the Silence: A Multi-Sectoral Approach to Preventing and Addressing Child Sexual Abuse in Trinidad and Tobago***

Rhoda Reddock, Sandra Reid, Jane Parpart, Tisha Nickenig, Kathryn Chan, Keshan Latchman

Project Partners: *Coalition Against Domestic Violence (CADV), Caribbean Health Research Council (CHRC) and Arts in Action (UWI Department of Creative and Festival Arts).*

Funding: *The UN Trust Fund to End Violence Against Women and the UN International Children's Emergency Fund (UNICEF), Trinidad and Tobago.*

Summary: The Project seeks to break the silence on the taboo subject of child sexual abuse (CSA)/incest and its implications for HIV throughout Trinidad and Tobago by empowering children, parents, communities, policy makers and service providers who work in child protection, HIV/AIDS and women's rights.

- ***Gender Sensitivity and Awareness Training – Civilian Conservation Corps***

The CCC hosted a skills training programme for vulnerable youths between the ages of 15-24 conducted by the Ministry of National Security responsible for training delivery and workshop programme design (October – Nov 2009).

Cross Faculty Modules

The IGDS continues to work with Faculties on the Campus to help students integrate Gender issues into their core disciplines. In 2009/2010 staff of the IGDS delivered guest lectures to students in the Department of Creative and Festival Arts, the Social Work Programme, Tourism and Economics.

Conferences & Seminars

There were five lunchtime seminars held during Semester 1 and 10 during Semester 2. Staff also presented or engaged in panel discussions at public events such as non-academic conferences and memorial lectures. Among them were:

G. Hosein

- *Deliberative Democracy and Global Governance (Discussant) Conceptualising Global Democracy Workshop, Cairo, December 2009*

T. Nickenig

- *“The link between child sexual abuse and HIV” Community Team Skills Building Workshop, SALISES, UWI, St. Augustine, 2009*

R. Reddock

- *Presentation to Entrepreneurial Seminar CHOGHM (Commonwealth Heads of Government Conference) Spouses Dialogue: The Diplomatic Centre, Prime Minister's Residence, Port of Spain, November 2009.*

Revenue Generating Activities/ Cost Containment Activities

The Institute generated some revenue from the following projects:

- Water for Life: Trinidad & Tobago Initiative a Model for Community Participation funded by The Royal Bank of Canada in the amount of TT\$377,304.00.
- IGDS' Graduate Programme: \$220,500.00.

Distinguished Visitors to the Department

Professor Eudine Barriteau

- Professor of Gender and Public Policy/ Deputy Principal, The University of the West Indies, Cave Hill, Barbados.

Dr. Alexis De Veaux

- Associate Professor of Women's Studies, Department of Global Gender Studies, University at Buffalo, SUNY, USA.

Professor Thomas Glave

- Professor of Creative Writing, English, Latin American & Caribbean Studies, Binghamton University - SUNY, USA.

Dr. Michelle Rowley

- Assistant Professor of Women's Studies, University of Maryland – College Park, USA.

Institute of International Relations (IIR)

Executive Summary

The Institute achieved a new footing during the year under review as both regional & global affairs intensified in the wake of the Fifth Summit of the Americas (SOA) and the Commonwealth Heads of Government Meeting (CHOGM), both held in Trinidad & Tobago in 2009. This was followed up in 2010 with the Institute's participation in a foreign policy retreat for hosted by the Ministry of Foreign Affairs and the new Minister. Meanwhile, we increased our programming to maximize synergies on several fronts: post-graduate degrees, research & publications, alumni development, outreach & income generation.

Extension of Postgraduate Programmes

Postgraduate programming was extended in relation to both the region and number of semester sessions. The Institute graduated the first cohort in the MSc International Relations from Suriname and began to offer the programme in Guyana in September 2010. "Summer" classes were offered for the first time in mid-2010. The latter included the first-ever UNU Global Seminar in the Caribbean on 'Regional Governance' animated by Dr Obi Aginam (www.unu.edu). The MPhil/PhD degree was advanced by a series of formal and informal seminars, some in collaboration with the Arthur Lok Jack Graduate School of Business, and some of our post-graduate students had their work published in a special issue of *Caribbean Dialogue* from SALISES.

Workshops

The Summit year included pre-SOA and CHOGM workshops. The edited proceedings are to be published by Palgrave Macmillan as *Inter-American Cooperation at a Crossroads*, Mace, Cooper & Shaw (eds) (www.palgrave.com). Other workshops included a celebration of *The Round Table's* 199th year which featured an address by Sir Shridath Ramphal.

Calendar year 2010 opened with a workshop with Project Ploughshares, CARICOM-IMPACS and CD-RAV on SALW² and concluded with another involving the same partners to launch a new collaboration funded by DFAIT³ in Ottawa. Discussions revolved around the theme 'Strengthening CARICOM Cooperation to Reduce Gun Crime', and our focus was on civil society and private security companies in the region in particular (www.ploughshares.ca).

Together with the UNDP, the Institute organized a mid-2010 workshop on 'Armed Violence & the MDGs'. This was followed up later that year with the launch of the 20th anniversary edition of the UNDP's Human Development Report (<http://hdr.undp.org/en>).

Consultancies

A team from the Institute has been subcontracted to collect interview data in a half-dozen CARICOM member countries for the proposed *Caribbean Human Development Report 2011* on 'citizen security'. This project comes in the wake of two similar projects successfully completed in 2010 – LAPOP⁴ opinion polls in Suriname and Trinidad & Tobago for Vanderbilt University, and an EPTSI (Enhance Public Trust, Security & Inclusion) baseline survey in Guyana also for the UNDP (www.undp.org/gy). At the end of 2010, the Institute won a consultancy on regional integration from DfID⁵.

Events

During the review year the Institute received a high-level delegation from the School of International Studies at Peking University; the US Assistant Secretary of State for Hemispheric Affairs, Professor Arturo Valenzuela (in conjunction with the Office of the Campus Principal) and co-hosted a lecture by President Bharrat Jagdeo (Guyana) on the Copenhagen climate change summit. Other events hosted by the Institute during the 2009/2010 academic year included:

- a symposium with the Trinidad and Tobago Coalition of Services Industries on the Canadian-CARICOM FTA negotiations
- A seminar with Caribbean Policy Research Institute (CaPRI) on the EU/CARIFORUM Economic Partnership Agreement.
- A series on Canadian-CARICOM relations with CPDC⁶ and NWCT⁷.
- The launch of two edited collections on the region from Ian Randle - *CARICOM and New Worlds*.
- the first ACUNS⁸ AGM (#22) to be held in the Caribbean (www.acuns.org)
- two CARICOM workshops on UN Security Council Resolution #1540 on Weapons of Mass Destruction with O'Neil Hamilton
- the launch of the T&T Transparency Institute report on the Corruption Perception Index 2010

¹ *The Round Table is the Commonwealth Journal of International Affairs* (<http://www.moot.org.uk/index.asp>)

² CARICOM Implementation Agency for Crime and Security (IMPACS), Coalition for Development and the Reduction of Armed Violence (CDRAV), Small arms and light weapons (SALW)

³ DFAIT - Department of Foreign Affairs and International Trade (Canada)

⁴ Latin American Public Opinion Project (LAPOP)

⁵ DFID - UK Department for International Development

⁶ Caribbean Policy Development Centre (CPDC)

⁷ National Working Committee on Trade (NWCT)

⁸ Academic Council on the United Nations System

- the only Edulink NETRIS workshop outside Africa for UNU-CRIS in March 2010 (www.netris-acp.org)

The Institute performed a key role in the assistance provided by the UWI to the Government of St. Lucia in organising the World Association for Sustainable Development (WASD) Eighth International Conference in St. Lucia. (www.worldsustainable.org).

Ahead of the campus' 50th anniversary in October, the institute held an IIR Day with five IIR Senior Research Fellows – Anthony Bryan, Anselm Francis, Johann Geiser, Peter Gonzales & Rosina Wiltshire – the six MSc candidates to receive distinction at graduation in October 2010 and eminent alums. The Library nominated 44 of the latter for special mention - one for each year of the Institute's existence.

In late-2010, Professor Ramesh Ramsaran was recognized through the award of emeritus status. A year earlier, Professor Girvan had received an honorary degree at the University of Havana. Professor Girvan was appointed to the UN Committee for Development Policy and as the UN Secretary-General's Special Representative for the Guyana-Venezuela Border Controversy.

Occasional seminars were given by Ben Richardson (Warwick), Sheridan Hill (OAS), Taivo Taivenen (Helsinki), Stephen Woolcock (LSE) *et al.*

Faculty

Appointments, Promotions, Resignations & Retirements

Dr. Michelle Scobie, Lecturer – new appointment

Dr. Matthew Bishop, Lecturer – new appointment

Professor Ramesh Ramsaran – retired as of 30th September, 2009

Professor Ramsaran was offered a post-retirement contract starting 1st October 2009 - 30 September 2010.

Honorary Senior Research Fellows

Academic Year 2009/2010 and 2010/2011

- *Dr. Anthony Bryan*
- *Dr. Anthony Peter Gonzales*
- *Dr. Rosina Wiltshire*
- *Dr. Johann Geiser*
- *Mr. Anselm Francis*

Students

At the commencement of Academic Year 2009/2010, 132 students were registered at the Institute. This figure includes 19 M.Phil and eight Doctoral candidates. As the year progressed there was 25% decrease in registration.

IIR Library

Summary

At the IIR Library the year 2009/2010 was marked by the transition to online circulations. Staff engaged in all training opportunities presented with the objective of “going live” on January 12, 2010. As such, the Library retained the services of two Temporary Library Assistants who are dedicated to the exercise of populating the Integrated Library Catalogue.

The Library launched its information literacy programme during orientation week by hosting an orientation session for newly enrolled students. The session included the re-enactment of the common habits of students. The highly successful orientation exercise was a precursor to a ten week information literacy programme which was offered in this format for the very first time to the postgraduate Diploma, Masters and MPhil students. This session which required the involvement of all Library Staff Members in selected programme slots, came to a close on November 13, 2009 with an overview session and an evaluation exercise. A summary of the evaluations revealed that three sessions in particular – Endnote, the Research Process and Information Ethics, were the most popular and attracted a 70% attendance rate.

The Librarians continued apace with thesis checking, with pre-submission consultations now an ongoing exercise to support continuous thesis checking prior to the final submission. Information was solicited from the Library for the Library's link on the Institute's revamped website. The Library's *My elearning* site was recently revamped and is enjoying popular use among faculty and students. The content covers the Information literacy modules, research proposal guidelines, literature reviews, the Master's/ PhD thesis guide, the Chicago Manual of Style and the Library's Recent Acquisitions.

The IIR Library's input was solicited for the UWI (STA) Accreditation Exercise, Working Group 3 – Teaching and Learning. Data was provided on the following:-

- The Library's role in sanctioning new programmes / course offerings over the last five years
- A statement on the current holdings of the Library
- A brief statement on Information Literacy activities
- A statement on current physical facilities

Outreach

The IIR Library was the site for the training of six graduate students to attend the first ever Global Model United Nations hosted in Geneva. The Library also facilitated a debriefing exercise on the return of the students, who attended the Global Model United Nations hosted in Geneva from the 3rd to 7th August, 2009.

In October 2009 in keeping with the observance of the International Day of Peace, the Library became the guardians of the UN Travelling Peace Ribbon. Members of the Campus Community were invited to engage in a campaign entitled "*Right to Peace, Write Your Piece*". The Ribbon now displays over 100 signatures and quotations from Students and Staff of the Campus community, including the Principal, Professor Clement Sankat.

Distinguished Visitors

The Honourable Dr. Feleti Sevele
Prime Minister, The Kingdom of Tonga

The Honorable Neil Parsanlal
Minister of Information,
Government of Trinidad and Tobago

Seismic Research Centre

The Seismic Research Centre is the regional agency responsible for monitoring earthquakes and volcanoes for the English-speaking islands of the Eastern Caribbean. The Centre has been providing governments in the Caribbean with expert advice on geologic events and associated hazards affecting these islands for over fifty years. It is one of the few specialised research institutions of the University and its work directly impacts vulnerable island communities throughout the Eastern Caribbean. In addition to the day to day monitoring of 19 live volcanoes and a seismically active region, the Centre collaborates with local, regional and international agencies on research projects relevant to its core areas of operation (seismology, volcanology and education & outreach). All aspects of the research undertaken by the Centre are of direct relevance and importance to the region. Our research program is driven by the need to better understand geologic processes so as to reduce risk.

Executive Summary

Geologically the period was a busy one for the Centre as the seismograph network recorded a minimum of 790 earthquakes in the area of responsibility. There were 25 significant felt events for the period, the strongest of which was a magnitude 5.6 event for an earthquake located east of Trinidad. The densest concentration of epicentres for the year was seen in the vicinity of the Paria Peninsula. Apart from the ongoing eruption of the Soufriere Hills Volcano on Montserrat volcanic activity in the Eastern Caribbean was relatively quiet with most of the volcanoes exhibiting low levels of activity.

In addition to routine monitoring operations, the key events of the period were:

- Selection of a single architectural firm to be engaged in the design of a facility for housing the Seismic Research Centre and other campus related facilities at the SRC compound on Gordon Street St. Augustine. This process was supervised by the St. Augustine Campus Projects Office.
- Reconstruction of the SRC workshop which was severely damaged by an early morning fire in May 2008. It should be noted that this was caused by old and faulty electrical wiring and underscored the vulnerability of the monitoring network to the hazards posed by the existing old building stock and gave further impetus to our urgent call for a new building.
- Completion of all activities regarding a project funded by the International Development Research Centre (IDRC) of Canada and administered by CDERA re: ICT Applications in Disaster Management. The project provided funding for a 2-year MPhil Studentship in Seismology at the SRC.
- Completion of recruitment of the full staff complement for managing the Montserrat Volcano Observatory (incl. 5 full-time & 2 part-time staff). It should be noted that the MVO Management Contract extends from April 2008 - March 2013, is for a fixed sum of EC\$23 million and includes 10% common service fee that amounts to EC\$1.6M.

- Implementation of the C.O.R.E. (Creating Opportunity from Research Experience) Programme. The SRC introduced an eight week summer internship program for highly motivated university level students interested in pursuing geoscience careers. Students were provided with an opportunity to work closely with SRC staff on current research project. The programme is funded entirely from the SRC Departmental Consultancy Fund.

Completion of a joint research project entitled “*Assessment and Mitigation of Seismic Risk in the Eastern Caribbean*” undertaken in collaboration with the European Centre for Training and Research in Earthquake Engineering (EUCENTRE) and co-funded by the Municipality of Milan in the year 2009. This has resulted in updated and IBC-compliant Probabilistic Seismic Hazard Maps for the Eastern Caribbean Islands, especially the islands of Dominica, Barbados and Trinidad.

Seismograph Networks

The seismograph network, operated by the Seismic Research Centre in the eastern Caribbean Currently consists of over 52 instruments that comprise a mixture of short period and broadband seismic stations and accelerometers. All seismic stations send their data to an FTP server from where they are automatically sent to the SRC Headquarters at St. Augustine, Trinidad. The system data can be processed locally in real time if deemed necessary.

Ground Deformation Networks

The SRC now operates a network of seven continuous GPS stations (cGPS stations) in the Eastern Caribbean. These stations, located in Dominica, Grenada, St Vincent, Antigua, St. Kitts, St. Vincent and Tobago were all fully operational throughout the period under review. They have been used along with other reference stations within the Caribbean Basin to investigate the tectonic velocity of this region. The network also aids in executing the campaign style GPS measurements used in our volcano monitoring networks. Data from the cGPS network is available online on request. Two new cGPS stations were installed in northern Dominica: one at Ross University and the other on a ridge near Penville village on the eastern flanks of Morne Aux Diabes volcano. These stations were installed to augment the Centre’s volcano monitoring capabilities on Dominica and strengthen the Eastern Caribbean cGPS network. The SRC has fully implemented an automated system for GPS processing of the cGPS stations using GAMIT/GLOBK that routine produces high precision GPS solutions and velocities.

Geothermal Monitoring

The Seismic Research Centre initiated geothermal monitoring (measurement of temperature, pH, and chemical composition) of hot springs and fumaroles associated with Lesser Antilles volcanoes in 2001. Routine sampling in islands including Dominica, Saint Lucia, Grenada, St. Vincent, St. Kitts, and Nevis have taken place on a regular basis. Geothermal field investigations were conducted in Dominica during the reporting period (December 2009 and January 2010 respectively). These trips were undertaken as part of the programme of regular geothermal monitoring in

Dominica, as well as in response to increased seismic activity in northern Dominica. Sampling of the hot springs and bubbling pools associated with volcanic systems were carried out across the island (Fig. 3). No major anomalies in temperature, pH or geothermal activity were observed at the sites sampled, as compared with previous data. The results of the chemical analyses, when complete, will provide more details of the chemical composition of the geothermal fluids sampled and reveal any changes that may have occurred since the last visit to these sites.

Seismic Activity 2009/2010

The seismograph network recorded a minimum of 757 earthquakes in the area of responsibility, of which a total of 513 events were located (68%), using our own data and the data contributions from Martinique, Guadeloupe, Puerto Rico and Venezuela. The pattern of seismicity seen in the Eastern Caribbean has been changing in recent years from the distribution of previous decades. While activity in the Paria Peninsula area was maintained at its usual high level, there continues to be a marked absence of a similar concentration of events in the Antigua-Barbuda area. The elevated output level in the vicinity of Dominica-Martinique, apparent since the 29 November 2007 magnitude 7.3 earthquakes in the area, persists. The elevated activity seen in mid-September through mid-December arose from an increase in background seismicity along with earthquakes recorded in the northern Dominica area. The largest event for the period occurred on 7 May 2010, east of Guadeloupe with magnitude 5.3. There were 9 earthquakes with magnitude higher than 4.5, 24 events in the 4.0-4.5 magnitude range and 88 in the 3.6-3.9 magnitude range. There were 30 events reported felt for the period.

Volcanic Activity 2009/2010

With the exception of the Soufriere Hills Volcanic centres of the Eastern Caribbean exhibited low levels of activity throughout the review period. After a 10 month pause, activity restarted at the Soufrière Hills Volcano in Montserrat on 4 October 2009. This marked the beginning of the fifth main phase of volcanic activity in the 14.6 years of the eruption.

The fifth phase has involved ash venting, dome growth and piecemeal collapse of the lava dome, producing pyroclastic flows in all main valleys that drain the volcano. Activity was marked by its cyclicity and involved vulcanian explosions. The first of these explosions occurred on 8 January 2010 and sent pyroclastic flow further down the Belham valley (the drainage valley closest to populated areas), than ever before during the entire eruption. The phase of activity culminated in a partial collapse of the lava dome on 11 February 2010. This event impacted the north and northeastern flanks of the volcano and extended the pre-existing coastline by more than 650 m. Since then activity has been low. There were some minor ash venting in late June and July 2010 associated with VT earthquakes. Due to the presence of a large residual lava dome with steep vertical or overhanging walls in several areas, rockfalls and pyroclastic flows have continued despite the absence of lava extrusion. All indications are that the volcano is in a period of pause continuing the overall pattern of activity that has been ongoing since the eruption began in 1995.

Staff

Appointments, Promotions, Resignations and Retirements

Christian Eligon

(Research Fellow – Geophysics),

Jonathan Stone

(Research Assistant – Outreach),

Roderick Steward

(Research Assistant – Computer Science)

Caroline Murrell

(Contract Officer II – Environmental)

all held a short-term posts of varying durations mainly to assist with the management of the Montserrat Volcano Observatory.

Clevon Ash

(Research Assistant – Outreach) – new appointment

Omari Graham

(Research Assistant – Seismology) – new appointment

Research

The research effort of the Centre is focused primarily on seismology, volcanology and outreach with a view towards an improvement in our ability to provide accurate and up-to-date information about earthquake and volcanic activity in the Eastern Caribbean.

Major Projects Completed 2009/2010

Seismic Hazard Assessment:

The Centre concluded a major collaborative project with the European Centre for Training and Research in Earthquake Engineering (EUCENTRE), IUSS and the University of Pavia of Italy during 2010. This project involved probabilistic seismic hazard assessment of the Eastern Caribbean. As part of this project Dr. Walter

Salazar was attached to the EUCENTRE in Pavia, Italy as a visiting faculty researcher for three months at the end of 2009. During his visit Dr Salazar focused on seismicity evaluation and strong ground motion estimation for the Eastern Caribbean. Working with colleagues at the EUCENTRE a new earthquake catalogue was compiled for magnitudes above 5.0 for the period 1530-2009 and fifteen seismogenic sources indentified in the region. A comparison was made of the available strong motion data cited in the catalogue with some attenuation relationships proposed for subduction and upper-crustal earthquakes for the peak ground acceleration and spectral ordinates. Seismic hazard analysis and related maps (see Figure 9) were created through the use of approaches that can account for the uncertainties of the estimates employing the logic tree approach through updated computer codes with a validation procedure using a seismic hazard program developed at SRC by Dr. Salazar. The results of the investigation will be useful to local engineers and authorities for the purposes of structural design and construction practices. It has direct linkages to the global effort to determine seismic hazard and risk models and tools, and also presents a framework for future seismic hazard assessment initiatives sponsored by the World Bank and the *CARICOM Regional Organisation for Standards and Quality (CROSQ)*.

Caribbean Disaster Emergency Management Agency (CDEMA)/ International Development Research Centre (IDRC) Project

The main objective of this project was to test and analyze the role of Information and Communication Technologies (ICT's), to strengthen community knowledge and support in the collection of post

information for earthquakes in the Eastern Caribbean. One of the final outputs for the project was a system to automatically collect, analyze and illustrate the results using GIS technology.

Ongoing Research and Projects

Radon monitoring

This research seeks to investigate the utility of radon monitoring as a precursor to earthquakes. Its application in Tobago is the first instance of its use in the Eastern Caribbean. Tobago was chosen for this research project, due to observations made in the past that there were significant changes in groundwater flow associated with the 1997 magnitude 6.1 event. In 1997, the fracture network within which groundwater is held in Tobago appeared to have narrowed or closed in response to the earthquake, thus driving water out of the system (Latchman 2009). We postulate that changes in strain on the fault system projected to carry the next significant earthquake near Tobago could result in precursory changes in the local groundwater fracture network. This could produce anomalies in radon output which we hope to observe through the sensors deployed by this project. PI: Drs J. Latchman and E. Joseph.

Geophysical survey of submarine debris avalanche deposits offshore from Montserrat

The objective of the project was to identify and map the distribution of large submarine debris avalanche deposits on the seafloor between Montserrat and Guadeloupe. In May 2010, the RRS James Cook, a UK Research vessel was used to conduct detailed 2D and 3D seismic surveys and sidescan sonar imaging of the sea floor deposits. The project was a major collaboration between researchers in the UK (National

Oceanography Centre, University of Southampton), France (Institut de Physique du Globe de Paris) and Germany (University of Kiel). It was funded by the Natural Environment Research Council in the UK. The project is expected to further our understanding of the generation of large submarine landslides and their relationship with volcanic activity in the Lesser Antilles such as the ongoing eruption of the Soufriere Hills Volcano on Montserrat. It also includes identifying links with tsunamis. The results of the research would be of potential interest and benefit to the coastal communities in the Caribbean. Dr A. Stinton (SRC Volcanologist based at the Montserrat Volcano Observatory) participated in the cruise as an observer and consultant on the recent volcanic activity on Montserrat. The cruise/project was led by Dr Pete Talling from the National Oceanographic Centre, Southampton, UK.

Montserrat Volcano Observatory Management Contract

The SRC/IPGP contract with the Government of Montserrat for management of the Montserrat Volcano Observatory (MVO) for the period 2008 – 2013, is ongoing. During the period in review the full staff complement to manage the observatory was achieved and the programme of work proposed by SRC/IPGP in their Technical Proposal well underway. In addition to managing the routine operations of the volcano the SRC team based at the MVO have effectively managed a significant period of elevated activity which occurred during the period.

New SRC building project

The preliminary design and estimates for the new building to house the Centre was completed. A completely new, purposefully designed building is urgently required to house the SRC, in order to address the present congestion and to halt deterioration of valuable equipment, books, records, journals and other materials that are not properly stored at present. The new building should allow for adequate accommodation of present activities and make provision for the planned developments in terms of geosciences at the Centre.

Outreach

The Education and Outreach arm of the Centre provides the bridge between the science and societal application of improved knowledge and understanding of the geological hazards.

Earth Science Week

In October 2009, the SRC chose *Understanding Tsunamis* as the main theme for its Earth Science Week celebrations and targeted two schools for raising awareness on tsunamis. During Earth Science Week, the SRC in collaboration with the Office of Disaster Preparedness and Management (ODPM) sponsored a group of geography students from Mayaro Secondary School - a small town on Trinidad's east coast - to attend a student workshop at the SRC in St. Augustine. At the workshop, the students learned about the causes of tsunamis and also how to recognize a tsunami's natural warning signs. Students were encouraged to share the information with family and friends.

Students of Cedros Secondary School benefited from a similar educational activity when a team from the

SRC visited Bonasse Village - a fishing village located along Trinidad's south-western peninsula - during Earth Science Week. In addition to learning about tsunamis, Cedros Secondary students planted trees along the beach as part of the SRC's Tsunami Ready Environment & Education (TREE) event. According to the Food & Agriculture Organization of the United Nations (FAO) coastal forests can reduce the depth, force and velocity of a tsunami and other large wave events.

In executing this activity the SRC partnered with the Department of Forestry in the Ministry of Agriculture, Land & Marine Resources and the Trinidad & Tobago Meteorological Service and received generous sponsorship from First Citizens, ODPM, Neal & Massy Foundation, Scrip-J and Cool Connections Ltd.

Since October 1998, the US-based American Geological Institute has organized this national and international event to help the public gain a better understanding and appreciation for the Earth Sciences and to encourage stewardship of the Earth. Earth Science Week promotes understanding and appreciation of the value of Earth Science Research and its application and relevance to our daily lives.

Haiti Earthquake

Demand for information was so high following the devastating earthquake in Haiti on 12 January 2010, that the Centre held its first press conference at its premises on 14 January, 2010. This event was well attended by local media and provided an efficient means of disseminating the information that was being sought. A live video stream of the press conference was made available via the Internet. The demand for

information was reinforced when the magnitude 8.8 earthquake on 27th February occurred off the coast of Chile. Following these events, the SRC sought to capitalize on the heightened interest in tsunamis and earthquake safety by facilitating numerous interviews for local, regional and international media and by providing relevant tsunami and earthquake preparedness information on the Centre's web media (web site and Facebook).

Tsunami and Other Coastal Hazards

Warning System Project

For the majority of the reporting period the E&O team was heavily involved in implementing the Public Awareness and Education (PAE) component of the Tsunami and Other Coastal Hazards Warning System Project (TCHWS). Funded by the USAID Office of US Foreign Disaster Assistance (USAID/OFDA) and executed by the Caribbean Disaster Emergency Management Agency (CDEMA), the PAE component of the TCHWS Project sought to increase public awareness about tsunamis and other coastal hazards within communities in the CDEMA Participating States this was achieved through the production and dissemination of public awareness and teacher materials, as well as the execution of public awareness campaigns. A key component of the project strategy was the development of a branding concept (called 'Tsunami Smart') used for promoting tsunami awareness across the region. The Strategy focused on promoting awareness of a tsunami's natural warning signs (strong earthquake, withdrawal of the sea, unusual roar from the ocean) and appropriate responses to these signs. Given that the most likely scenario for a tsunami in the Caribbean is one that is locally generated with little or no time for official

warning and currently a tsunami warning system for the Caribbean is still in the developmental stages; it was thought that promotion of self-evacuation in the event of a tsunami would be most prudent. The *Tsunami Smart* concept was based on this rationale.

A suite of region-specific multi-media public awareness material (pamphlets, media kit, Public Service Announcements, etc.) was produced under the *Tsunami Smart* brand together with a teacher resource kit which included four lesson plans and accompanying teaching charts. The material was launched during on-island public awareness and education campaigns at several *Tsunami Smart Sessions*, which were essentially stakeholder meetings in three (3) pilot states – Antigua, Barbados, Trinidad & Tobago. During these campaigns comments and suggestions for improvement of the material were provided. Feedback received from the Workshop participants, the Public Awareness and Education Sub-Committee and the *Tsunami Smart Sessions* was incorporated in the final material, electronic versions of which will be made available from the CDEMA and SRC web sites.

At the end of the Project a Final Report was submitted to CDEMA which included Project activities implemented, challenges faced and recommendations for follow up activities. Such as mass production and dissemination of the information material to non-pilot countries, development of a strategy and communication tools for the boating community and creation of a model end-to-end system with all elements completed (i.e. inundation maps, protocols, PAE materials etc.). The SRC hopes to begin implementation of some of these follow up activities in the last quarter of 2010.

Earth Day 2010

The Seismic Research Centre celebrated Earth Day for the first time this year with an Art & Illustration competition for lower secondary school students in Trinidad & Tobago. Co-ordinated by the Earth Day Network, Earth Day is celebrated each year on April 22 across the globe and it is intended to broaden the base of support for environmental programmes, rekindle public commitment and build community activism around the world through a broad range of events and activities.

The theme for the SRC Earth Day Art & Illustration competition was “Understanding Earth Systems”. The objective was to raise awareness on Geo-hazards (earthquakes, volcanoes, and tsunamis) that affect the Caribbean and students were judged on their ability to use the visual arts to communicate the connections between the different systems, the effects of their impact on populations and how to mitigate against these hazards. Over seventy (70) entries were received from students across Trinidad.

Prizes were awarded to the top three winners from each form (Forms 1, 2, and 3) as well as the top twelve entries were selected for publication in the Seismic Research Centre’s 2011 Earth Day calendar. Partial funding was provided by First Citizens Ltd.

CORE Internship Programme

Following the success of the first CORE (Creating Opportunity from Research Experience) Internship Programme in 2009, the SRC offered two internship placements for Summer 2010. The CORE Internship Programme seeks to identify future geoscientists and communications practitioners by providing

undergraduate and post-graduate students with the opportunity to gain hands-on work experience during an 8-week internship at the Seismic Research Centre. Two internship placements were offered for this year’s Programme which ran from May 17th –July 9th. Ramon McVorrán and Jenalee Samaroo, both 2010 graduates of the University of the West Indies, Mona and St. Augustine respectively, secured these positions. The CORE 2010 projects were:

- *Magnitude Derivation and Regression Analysis - Dr. Joan Latchman, Seismologist*
This project sought to derive duration magnitude formulae using regression analysis. Three software packages were used - Matlab, NLREG and Microsoft Excel.
- *Modeling of Geothermal Systems - Deborah Robertson, Geophysicist*
This project involved comparison studies of three geothermal models using state-of-the-art Finite Element Method (FEM). The intern was given the opportunity to assist in the development of a numerical model using TOUGH2 multiphase-flow code.

The CORE programme is designed to give successful candidates a full understanding of how the SRC attains its objectives through collaboration within the department. Four days per week, interns worked directly with supervisors on research projects with one day each week being reserved for information sessions. These one-day sessions gave the interns an opportunity to interact with other departments within the SRC, which included electronics, seismology, volcanology and education/outreach.

Seminars

During the reporting period, at least 14 seminars, involving all members of the scientific staff, were given to various groups requesting them. This included schools and offices based in Trinidad as well as an earthquake presentation in Barbados to Mission Disaster Response Officers from the USAID Office of US Foreign Disaster Assistance (USAID/OFDA). This year also marked the launch of a series of earthquake safety seminars with staff on the UWI St. Augustine campus, Trinidad. This initiative was spearheaded by the Human Resources Department and eight sessions were completed.

Media

In the aftermath of the Haiti Earthquake (12th January) and Chile Earthquake (27th February), the SRC continued to receive numerous requests for interviews from local, regional and international media. In addition to news features, four staff members also participated in two documentaries. The first documentary required information on earthquakes and volcanoes in the Caribbean and it was produced by a Barbadian production company, Digiscapes. The programme will be broadcasted throughout the English-speaking Caribbean and it seeks to provide regional viewers with pertinent information on the various natural hazards to which the Caribbean is vulnerable. The second documentary focused on tsunami preparedness in the Caribbean. The programme was produced by the United States Geological Survey (USGS) and will be made available on DVD and via the Internet.

The Seismic Research Centre and the Office of Disaster Preparedness and Management (ODPM) partnered to host a national consultation relevant to the broad topic “Earthquake Safety in Trinidad and Tobago – A call for action!” The objective of this consultation was to identify the measures necessary to improve earthquake safety in Trinidad and Tobago.

Student Outreach

Caribbean Youth Science Forum (CYSF) 2009

The National Institute of Higher Education, Research, Science and Technology (NIHERST) hosted sixth form science students from across the region for the 8th Session of the Caribbean Youth Science Forum (CYSF) 2009. The SRC facilitated one CYSF interactive student visit to the Centre and Dr. Erouscilla Joseph represented the Centre at the CYSF “Meet a Scientist” event.

Creating Opportunity from Research Experience (C.O.R.E.) Intern Programme

In May 2010, the SRC recruited two interns for its inaugural paid internship programme. The eight-week programme was designed for highly motivated tertiary-level students interested in pursuing a career in the Geosciences. The interns were recruited from the UWI St. Augustine campus. During the internship, Interns were required to submit weekly reflection journals, attend weekly information sessions in sections outside of those to which they were assigned and also deliver a presentation to SRC staff of work completed during the programme. The programme was highly successful in offering a rich experience for students and the SRC intends to offer it again in summer 2011.

Projected Activities 2010-2011

The single most important activity for the Centre for the next three years is the construction of a new building. The SRC currently occupies a building which is long past its expected lifespan (>50 years old) and has a multitude of major structural problems such that it is now deemed most urgent that the existing building be condemned and a new facility constructed within the next 2-3 years.

The Centre will continue to manage its monitoring operations, seek external funding and undertake research and other projects and also continue to develop its outreach programmes as can best be done given current limitations. However, the focus for the Centre over the next biennium will be to secure the construction of a new building.

Some of the other specific projects which are either planned or already underway are summarised below.

- *GFDRR Disaster Vulnerability and Risk Assessment Modelling Jamaica and the Greater Caribbean Basin Project* – a project managed by the Disaster Risk Reduction Centre and funded by the World Bank to produce a regional scale Risk Atlas for Flood, Hurricane and Earthquake and high resolution maps for similar hazards for four islands. The SRC involvement in this project amounts to US\$80K and will result in the development of an Earthquake Loss Estimation method for use in the Caribbean.

- Installation of five strong motion instruments in Trinidad and Tobago as part of a project funded by the Trinidad and Tobago government entitled “Strong Ground Motion Studies in Trinidad and Tobago”.
- Installation of new continuous GPS stations (cGPS) in Nevis and Saint Lucia and additional stations in Dominica. All stations were funded from the SRC Departmental Consultancy Fund.
- Production of a 2011 Calender on the theme “Understanding Earth Systems” – a project funded by the SRC Departmental Consultancy Fund and the Office of Disaster Preparedness and Management (ODPM) of Trinidad and Tobago.

The budget received from contributing territories provide only sufficient funds for basic, routine monitoring and all other work, including most research, Major developments in the network and outreach, has to be undertaken through grant funding mainly from external sources or from applications to the SRC Departmental Consultancy Fund. Since 2008 such funds have enabled the recruitment of new technical and professional staff and the purchase of equipment. The proposals that have been submitted and which may come on-stream during the 2011-2013 period are summarised below:

- *Seismic Microzonation Studies in Trinidad and Tobago* – a proposal submitted to the Ministry of Planning, Government of Trinidad and Tobago to undertake microzonation of major cities and population centres in Trinidad and Tobago over the next 10 years.

- *GEM Caribbean Regional Programme* – a proposal submitted to the Secretariat of the Global Earthquake Model (www.globalquakemodel.org) to implement a Caribbean Regional Programme. GEM is a global collaborative effort that brings together state-of-the-art science, national, regional and international organisations and individuals aimed at the establishment of uniform and open standards for calculating and communicating earthquake risk worldwide. Funding has been approved by GEM for recruitment of one Research Fellow post at SRC for 2 years in order to execute this programme.
- *A new accelerometric network to evaluate and mitigate seismic risk in the Caribbean* – a proposal submitted to the Caribbean Catastrophic Risk Insurance Facility (CCRIF) that seeks to reinforce (in the case of Jamaica) and establish (in the case of the English speaking Eastern Caribbean), a network of sensors to record strong ground movements in the Caribbean, to be used in technical studies for the benefit of the region. The project will be done in collaboration with the Earthquake Unit at Mona Campus, Jamaica.
- *VUELCO (Volcanic Unrest in Europe and Latin America: Phenomenology, eruption precursors, hazard forecast, and risk mitigatiOn)*: A collaborative project (with xx other participants) submitted to the European Commission under its 7th Framework Programme. The proposal falls under the small/medium-scale focused research project category designed for specific cooperation actions (SICA) dedicated for international cooperation partners countries (focus on Latin American).
- *REAKT (for Real Time EArthquake Risk ReducTion)* – A collaborative project (with xx other participants) submitted to the European Commission under its 7th Framework Programme. The proposal falls under the large-scale integrating research project category.

Sir Arthur Lewis Institute of Social and Economic Studies (SALISES)

Errata

In compiling the 2008/2009 Faculty Report, the submission from the Sir Arthur Lewis Institute for Social and Economic Studies (SALISES) was inadvertently omitted. The full report of the SALISES for the 2008/2009 academic year is therefore presented following this year's report, that it may be included in the public record of the Campus and the University.

(2009/2010)

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 2009/2010 is in keeping with the mission and vision of the SALISES and with the core objectives of the University's Strategic Plan 2007-12. Reference in this report is to SALISES (St Augustine) unless explicitly stated otherwise.

The SALISES enjoyed a very successful academic year 2009/2010. 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, one student upgraded from the MPhil to the PhD degree, and it is expected that more shall follow in his footsteps in the 2009/2010 academic year. The Institute welcomed 12 new students into its MPhil/PhD programme and 13 into the second cohort of the MSc Development Statistics. The latter continues to be targeted at the Caribbean region but will be offered worldwide after a few years.

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. In particular, work was advanced on the IDRC funded project Managing Adaptation to Coastal Environmental Change: Canada and the Caribbean.

The St Augustine Campus hosted this year's annual SALISES conference on the theme “Turmoil and Turbulence in Small Developing States: going beyond survival”. The President of the Republic of Trinidad & Tobago, Professor George M. Richards, opened the Conference and hosted a cocktail reception in honour of conference participants. The Sir Arthur Lewis Distinguished Lecturer was Professor Robert Barro, Paul M. Warburg Professor of Economics, Harvard University. He delivered a lecture on “Macroeconomic Effects from Government Purchases and Taxes”. There was a record 111 papers presented, some of which are currently being reviewed for publication by (1) the Commonwealth Secretariat and (2) Social and Economic Studies. Participants came from many countries: Barbados, Jamaica, Germany, UK,

USA, Spain, France, Fiji, Guadeloupe, Guyana, Italy, Canada, Switzerland, New Zealand, Netherland Antilles and Aruba.

It is the Institute's intention to go even further, in the 2010-11 and later academic years, in these and other ventures.

Staff

Transforming Leadership, Culture and Processes

A major activity of the SALISES during the 2009/2010 Academic Year was the Quality Review. The SALISES prepared its self assessment report which was submitted to the Review Team comprising Professor Percy Hintzen (Team leader) of the University of California at Berkeley; Professor Colin Kirkpatrick of the Institute for Development Policy and Management, University of Manchester; Dr Terrence Farrell, Chief Executive Officer, One Caribbean Media and Professor Rupert Lewis of the Department of Government, UWI, Mona. The Review Team visited the St. Augustine Campus over the period February 22-24, 2010 and submitted its final report (for all three campuses) in May 2010. The SALISES (all three campuses) were carded to meet in August 2010 to prepare a schedule to implement the recommendations of the QR Team.

Significant training initiatives

Roy McCree participated in the International Program for Development Evaluation Training (IPDET) at Carleton University, Ottawa, Canada, 7 June - 2 July 2010. The program was jointly held by World Bank and Carleton University.

Students

The SALISES (SA) continued its drive to recruit more students at the MPhil/PhD level with an intake of 12 such students in the 2009/2010 academic year, the largest number since the programme began. Thirteen students were admitted into the MSc Developmental Statistics programme in 2009/10 compared to seven in 2008/9.

Top/outstanding undergraduate/postgraduate students for the year

John Cozier upgraded from the MPhil to the PhD in Economic Development Policy in the 2009/10 academic year.

Teaching & Learning and Graduate Studies

Teaching at the SALISES is strictly at the Graduate level so all teaching and learning outcomes are related to Graduate studies.

The SALISES (STA) continued its drive to recruit more students at the MPhil/PhD level with an intake of 12 such students in the 2009/2010, compared to eight in the previous academic year, the largest number since the programme began. Those already in the programme continued to make strides as evidenced through their seminar presentations, their attendance at and presentations to conferences, and the number of candidates upgraded from the MPhil to the PhD. It is the policy of the SALISES that all students in the MPhil programme seek to upgrade in the shortest possible time to the PhD.

Thirteen students were admitted into the MSc Developmental Statistics programme in 2009/2010 compared to seven in 2008/2009 but only one of these

students was full-time. From the cohort of 2008/2009, four part-time students completed their course requirements. They are yet to complete their research reports and as such did not graduate as promised in or before the end of the academic year. Nonetheless, the four students from 2008/2009 and the full-time student from 2009/2010 have made commitments to submit their research reports and so complete the programme during Semester 1 of 2010/2011.

Research & Innovation

The SALISES research programme continued apace resulting in the publication of articles in regional and international journals, book chapters and Technical Reports. These covered areas, all related to the Caribbean, such as social risk management, sport policy, climate change, tourism, crime and violence, Caribbean productive development policies, Migration, cross-border equity flows and stock market efficiency.

The Institute conducted surveys in Grand'Riviere (Trinidad) and Georgetown (Guyana) as part of the IDRC/SSHRC CAN\$2.0million funded programme on climate change.

The Institute began or continued work on

- a. The establishment of a Domestic Violence Registry for Trinidad and Tobago,
- b. Climate change and its impact on tourism,
- c. Poverty;
- d. Health care provision;
- e. Energy efficiency;
- f. Ageing;
- g. Biodiversity;
- h. Sport tourism;
- i. Elderly victimization.

Service to UWI-13 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 the Barrier Reef in Belize while the UN ECLAC project on climate change land tourism specifically addresses some of these countries. One of the published articles looks specifically at social risk management in St Lucia.

Outreach

The SALISES continued its very popular and informative Forum, a public education exercise which deal with topics of national, regional and international interest. The topics treated were

- "Proposed Constitutional Reform: One Step Forward or Two Steps Backward?",
- "The Uff Commission: to be or not to be?",
- "Whither Air Jamaica? Meeting the Challenges of the Aviation Industry in the Caribbean",
- "The UNC Internal Elections: implications for national politics" and
- "The 2010 General Elections in Trinidad & Tobago: analysis and aftermath".

Distinguished panellists included Mr. Ramesh Lawrence Maharaj, SC, (Member of Parliament), Professor Selwyn Ryan (Political Scientist and Former Director of the SALISES), Mr. Douglas Mendes, SC (Head of the Faculty of Law, UWI, St Augustine), Professor Dennis Pantin (Spokesperson Constitution Reform Forum), Mr. Victor Hart, (Chairman, Trinidad & Tobago Transparency Institute), Dr Bishnu

Ragoonath (Senior Lecturer in Political Science, UWI), Mr. Vernon de Lima (Attorney-at-Law), Professor Norman Girvan (Institute of International Relations, UWI), Mr. Ian Bertrand (Aviation Consultant and Former CEO of BWIA International), Dr. Indira Rampersad (Lecturer in International Relations, UWI), Mr. Garvin Nicholas (Executive Member, Movement for National Development), Mr. Winston Dookeran (Political Leader, Congress of the People), Ms. Penelope Beckles (former Deputy Speaker, Parliament of Trinidad & Tobago) and Mr. Peter O'Connor (Journalist).

Projected Activities for 2010/2011

The SALISES (SA) intends in the coming years to strengthen itself in the following areas:

- Begin the implementation of the recommendations of the Quality Assurance Review Team;
- 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, so increasing the number of full-time research students;
- Publishing even more in international refereed journals;
- Improving the profile of the Caribbean Dialogue and gradually transforming it into an online journal;
- Recruiting more graduate students from the now 13 non-campus 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;
- Contributing to national and regional policy discussions through research and publications;
- Establishment of a Summer Programme of the MSc Development Statistics, principally to facilitate attendance by candidates from the UWI-13 countries.

Distinguished Visitors

Mr. Yasuyo Araki

Embassy of Japan, Trinidad and Tobago

Professor Robert Barro

Paul M. Warburg Professor of Economics
Harvard University

Ms Penelope Beckles

Former Deputy Speaker,
Parliament of Trinidad & Tobago

Mr. Ian Bertrand

Aviation Consultant and Former CEO of BWIA
International

Mr. Debra Coryat-Patton

Political Assistant / Attorney-at-Law,
Embassy of the United States of America,
Trinidad and Tobago

Ms. Gloria de Mees

ACS Director of Sustainable Tourism,
Trinidad and Tobago

Mr. James Dolan

Press & Public Affairs Officer,
British High Commission, Trinidad and Tobago

Mr. Winston Dookeran

Political Leader, Congress of the People

Mr. Victor Hart
Chairman, Trinidad and Tobago Transparency
Institute

Ms. Emily Luck
Second Secretary, Australian High Commission,
Trinidad and Tobago

Mr. Ramesh L. Maharaj S.C.
Member of Parliament of Trinidad and Tobago

Ms. Maria Eugenia Marcano
Ambassador, Embassy of the
Bolivarian Republic of Venezuela,
Trinidad and Tobago

Ms. Karen McDonald
High Commissioner,
Canadian High Commission
to Trinidad and Tobago

Mr. Garvin Nicholas
Executive Member,
Movement for National Development

Mr. Peter O'Connor
Journalist, Trinidad and Tobago

Mr. Patricio Alberto Pradel
Ambassador, Embassy of Chile,
Trinidad and Tobago

Mr. Humberto Rivero
Ambassador, Embassy of Cuba,
Trinidad and Tobago

Professor Joseph E. Stiglitz
2001 Nobel Laureate in Economics,
Columbia University

Mr. Ricardo Thompson
Ambassador, Embassy of Costa Rica,
Trinidad and Tobago

Sir Arthur Lewis Institute of Social and Economic Studies (SALISES) – (2008/2009)

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 2008/2009 is in keeping with the mission and vision of the SALISES and with the core objectives of the University’s Strategic Plan 2007-12. Reference in this report is to SALISES (St Augustine) unless explicitly stated otherwise.

The SALISES enjoyed a very successful academic year 2008/9. Once again, staff participated in the teaching programmes of the wider Institute and Faculty and continued supervision of MSc, MPhil and PhD students. This year, three students upgraded from the MPhil to the PhD degree, and it is expected that more shall follow in their footsteps in the 2009/10 academic year. The Institute began delivery of the MSc in Development Statistics with a modest cohort of seven, coming from different countries. The programme continues to be targeted at the Caribbean region but will be offered worldwide after a few years.

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 collaborated with other units of the wider Faculty of Social Sciences in hosting the biennial conference of Business, Banking and Finance, the Sir Arthur Lewis Memorial Conference held and the Sir Arthur Lewis Distinguished Lecture Series. It also collaborated with BHP Billiton and the Turtle Village Trust of Trinidad & Tobago to put on an international conference on Turtle Conservation. The Institute introduced a seminar series where members of its staff and other researchers were invited to present the results of their most recent research activity. The SALISES was part of a consortium with the C-FOAM (University of Ottawa, www.C-FOAM.management.uottawa.ca) that won CAN\$2 million in funding over 5 years for a project entitled Managing Adaptation to Environmental Change from the SSHRC-IDRC ICURA. There were four awardees out of an initial field of over 200 and after 9 “finalists” were chosen to submit full proposals.

It is the Institute’s intention to go even further, in the 2009/10 and later academic years, in these and other ventures.

Staff

Appointments, Promotions, Resignations and Retirements

The Title of Professor of Applied Economics was conferred on *Dr Patrick Watson*, Director.

Transforming Leadership, Culture & Processes

The SALISES (SA) began to ready itself for its first ever Quality Assurance exercise to be conducted by the Quality Assurance Unit.

Students

The SALISES (SA) continued its drive to recruit more students at the MPhil/Phd level with an intake of eight such students in the 2008/9 academic year, the largest number since the programme began.

The SALISES introduced the MSc programme in Developmental Statistics. Ten students were admitted into the programme although three withdrew following pressures of work.

Top/outstanding undergraduate/postgraduate students for the year:

Three students - *Varuna Ramlal*, *Sacha John-Charles* and *Antoinette Stewart* – were upgraded from the MPhil to the PhD programme.

Graduation

Two of the seven MSc Development Statistics students in the very first cohort of this programme had completed the programme by the end of the academic year.

Honours and Awards

Antoinette Stewart was awarded a PhD scholarship and *Carlos Hazel* was awarded an MPhil scholarship.

Teaching & Learning and Graduate Studies

Teaching at the SALISES is strictly at the Graduate level so all teaching and learning outcomes are related to Graduate studies. The SALISES (SA) continued its drive to recruit more students at the MPhil/PhD level with an intake of eight such students in the 2008/2009 academic year, the largest number since the programme began. Three students were upgraded from the MPhil to the PhD programme. It is the policy of the SALISES that all students in the MPhil programme seek to upgrade in the shortest possible time to the PhD.

The SALISES introduced its long awaited MSc programme in Developmental Statistics during the review period. This programme came into being based upon numerous presentations on Training in Statistics by Dr. Godfrey St. Bernard during past Annual Meetings of the Standing Committee of Caribbean Statisticians (SCCS) and subsequent direct requests from the National Statistical Offices of the CARICOM region. Dr. St. Bernard is the co-ordinator of the programme and of the 10 students who were admitted into the programme during its first intake, three withdrew following pressures of work. One of the seven who remained was from the Eastern Caribbean (St Vincent & the Grenadines) and two were from Tobago. Two of the seven had completed the programme by the end of the academic year. The programme, which is self financing, yielded a modest surplus in the 2008/2009 academic year.

The course, Public Policy Analysis and Management, was introduced as one of the compulsory courses in the MSc in Development Statistics. The course

was seen as essential for students doing this MSc program as it exposes them to the importance of the empirical data or research to the process of public policy formulation, implementation and evaluation and the ways that politics can facilitate or frustrate this process.

Research & Innovation

The SALISES research programme continued apace resulting in the publication of articles in regional and international journals, book chapters and Technical Reports. These covered areas, all related to the Caribbean, such as the informal sector, Crime and Justice, the financial sector, migration and return migration, taxation systems, sports and sport policy, casino gambling, occupational segregation and economic growth. The Institute also bid for and won awards to conduct research into

- the impact of sea level rise on the Caribbean (a CAN\$2.0million award from the IDRC/SSHRC) Lead Researcher: *Patrick Watson*
- Industrial policies in Latin America and the Caribbean (a research project done in collaboration with the Foundation for Latin American Economic Research, Buenos Aires, Argentina, funded by the Inter-American Development Bank) Lead Researchers: *Patrick Watson* and *Sandra Sookram*
- Homicidal Patterns in Trinidad & Tobago: 2000-2009 (UWI Campus Research and Publication Fund) Lead Researcher: *Godfrey St Bernard*

- Climate Change, the Macroeconomy and the Tourism sector in the Caribbean Basin: Analysis and Projections to 2100 (a research project funded by the UN Economic Commission for Latin America and the Caribbean) Lead Researchers: *Patrick Watson* and *Sandra Sookram*.

The SALISES is also involved in Pilot Testing the Establishment of a Domestic Violence Registry for Trinidad and Tobago. This initiative will contribute towards institutional strengthening to support research initiatives geared toward understanding the dynamics of this scourge in Trinidad and Tobago and is also expected to provide a framework for similar undertakings in other Caribbean jurisdictions. The Project is funded by the Ministry of Community Development, Culture and Gender Affairs, The Government of the Republic of Trinidad and Tobago. Lead Researcher Godfrey St Bernard.

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. For example, three of the students who had been admitted into the first cohort of the MSc Development Statistics are from UWI-12 countries and one of the MPhil students is the first to be allowed to pursue the programme at a distance (through a special arrangement with the Sir Arthur Lewis Community College of St Lucia).

The third and fourth cohorts in the current cycle of the Regional Demography Workshops were

conducted during the months June-July 2008 and June-July 2009 respectively. This programme was done in collaboration with the CARICOM Secretariat and was geared to satisfying the professional needs of CARICOM member states and associated territories. Each of these cohorts consisted of 20 professionals drawn from the entire CARICOM region. The IDRC/SSHRC funded project alluded to above pays particular attention to the island of Bequia in St Vincent and the Grenadines and to the Barrier Reef in Belize while the UN ECLAC project on climate change looked at the effects of climate change on nine Caribbean counties inclusive of St Lucia and Montserrat.

The SALISES also engaged in research that focused on population and development issues in Montserrat. The ideas expressed in such research have been presented at a Special Open Campus Forum in Montserrat and have since been submitted for publication.

Outreach

The SALISES continued its very popular and informative Forum, a public education exercise which deal with topics of national, regional and international interest. The topics treated were:

- “A Looming Financial Crisis in the Caribbean?”
- “President-Elect Barack Obama: The Challenge of Change in the Caribbean, the United States and the Wider World”
- “Climate Change and the Caribbean: a clear and present danger?”
- “The State of the Financial Sector in Trinidad & Tobago”
- “Is Calypso Dying?”

Distinguished panellists included Dr. DeLisle Worrell (Executive Director, Caribbean Centre for Money and Finance, UWI), Ms. Catherine Kumar (Chairperson, Bankers' Association of Trinidad & Tobago), Mr. Carl Hiralal (Inspector, Financial Institutions, Central Bank of Trinidad and Tobago), Dr. Indira Rampersad (Lecturer, Political Science/International Relations, Department of Behavioural Sciences, UWI), Mr. Martin Daly (SC, Attorney-at-Law), Dr. Kenneth Mease (Professor of Political Methodology, University of Florida), Mr. Clyde Weatherhead (Attorney-at-Law), Professor John Agard (Professor of Marine and Environmental Sciences, University of the West Indies and former Chairman, Environmental Management Authority of Trinidad & Tobago), Dr Alan Bachan (Chief Executive Officer, Turtle Village Trust), Honourable Mariano Browne (Minister in the Ministry of Finance), Mr Winston Dookeran (Former Governor of the Central Bank of Trinidad & Tobago), Mr David Dulal-Whiteway (Managing Director of Republic Bank Ltd and immediate past President of the Bankers' Association of Trinidad & Tobago), Ms Francine Edwards (Singing Francine, Veteran Calypsonian), Dr Louis Regis (Lecturer in Literatures in English and Calypso Aficionado), Mr Lutalo Masimba (Brother Resistance, General Secretary of Trinbago Unified Calypsonians' Organization and Originator of Rapso), Mrs Elizabeth Montano (mother of Machel Montano; Director, Xtatik Limited).

Projected Activities for 2009/2010

The SALISES (SA) intends in the coming years to strengthen itself in the following areas:

- 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, so increasing the number of full-time research students;
- Publishing even more in international refereed journals;
- Improving the profile of the Caribbean Dialogue and gradually transforming it into a refereed online journal;
- Recruiting more graduate students from the UWI-13 countries and promoting greater research on the 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;
- Contributing to national and regional policy discussions through research and publications.

Distinguished Visitors

Mr. Allan Bachan

Chief Executive Officer, Turtle Village Trust,
Trinidad and Tobago

The Honourable Mariano Browne

Minister of Finance, Government of Trinidad and
Tobago

Mr. Martin Daly SC

Attorney-at-law, MG Daly and Partners, Trinidad
and Tobago

Ms. Francine Edwards

Calypsonian, Trinidad and Tobago

Marlene de Estrella

Director, External Relations, INCAE, Costa Rica

Mr. Carl Hiralal

Inspector, Financial Institutions,
Central Bank of Trinidad and Tobago

Ms. Catherine Kumar

Chairman, Bankers' Association of Trinidad &
Tobago

Professor Dan Lane

University of Ottawa, Canada

Mr. Lutalo Masimba (Bro Resistance)

Rapso Artiste & General Secretary, Trinbago Unified
Calypsonians' Organization (TUCO), Trinidad and
Tobago

Mrs. Elizabeth Montano

Director, Xtatik Limited, Trinidad

Professor Sue Nichols

University of New Brunswick, Canada

Mr. Thomas O'Keefe

Mercorsur Consulting Group,
Stanford University, USA

Mr. Adesesan Olatmale

Minister Plenipotentiary,
Nigerian High Commission, Trinidad and Tobago

Dr. Louis Regis

Lecturer, UWI, St. Augustine

Ms. Anne Sénémaud

Regional Counsellor for Cooperation,
French Embassy, Trinidad and Tobago

Mr. Ricardo Thompson

Ambassador, Embassy of Costa Rica,
Trinidad and Tobago

Dr. DeLisle Worrell

Executive Director, Caribbean Centre
for Money and Finance, Trinidad and Tobago

Sport and Physical Education Centre (SPEC)

The Director and staff were instrumental in the successful hosting of several landmark activities during the year:

- The UWI SPEC International Half-Marathon attracted the total participation of 1000 runners which comprised, local and international athletes and the sponsorship of many well positioned corporate bodies in Trinidad and Tobago. First Citizens was our Presenting Sponsor. We also had The Sport Company of Trinidad and Tobago as our Corporate Sponsor.
This year, the race was also featured on the major television stations. Many UWI Staff attended including the Campus Principal and Deputy Principal. The Minister of Sport & Youth Affairs was also in attendance.
- The UWI – St. Augustine Human Resource Department in collaboration with SPEC provided a number of new activities for the Wellness program which is offered for staff and faculty.
- One issue (volume 7) of SPED journal and magazine was published.

Staff

Appointments, Promotions, Resignations and Retirements

Ms. Karen Wickham - promoted to Sports Coordinator
Female

Obituary

Mr. Jesse Blackman Administrative Assistant (Sports) passed away

Academic Programmes

The Centre continues to offer the following academic programmes:

- The Bachelor of Education in Physical Education - Secondary with a total of 76 in-service physical education teachers. This ground breaking degree is an initiative between The University of the West Indies Sport & Physical Education Centre and the Ministry of Education. These student-teachers are scheduled to graduate in October 2010.
- A Certificate in The Art & Science of Coaching (under the aegis of the School of Education)
- A minor in Sport Management (under the aegis of the Department of Management Studies)
- A BSc in Sport Management (under the aegis of the Department of Management Studies)

Staff and Student Services

There continues to be growth in student organized sporting competitions. The Engineering Student Society, Management Society of UWI, Inter-Hall Sports and the Student Guild have organized futsal, table tennis, basketball, cricket and aerobic tournaments. Staff and students continue to use

the facility five days per week. Students work in the weight room and attend aerobic dance classes and spin cycling sessions. The indoor facility is currently opened from 6:00 am – 10:00 pm. A conditioning and weight control programme is offered for our athletes.

Both the outdoor fields at SPEC and the Administration East and West fields were lit through a programme with T&TEC. This will extend the outdoor usage of these playing areas to 10:00 p.m. Staff and students have use of the outdoor fields mainly for cricket, football, rugby, track & field, hockey and sporting festivals. Scheduled recreational use of all SPEC fields is allowed on specific days for use by students until 10.00pm.

Coaching programmes, led by our part-time coaches, in excess of ten disciplines, have also continued. These disciplines include Abs, Aerobics, Aqua Aerobics, Badminton, Basketball, Cricket, Football (Men & Women), Futsal, Gym, Hockey, Karate, Martial Arts, Massages, Netball, Rugby, Stretch Classes, Spin Classes, Table Tennis, Taekwondo, Track & Field, Volleyball.

Students continue to be awarded credit for participation in the **MINDING SPEC** co-curricular module.

Strategy Appraisal

SPEC has instituted academic degree programs outlined in the strategic plan and has positioned the University of the West Indies on the international sporting stage through the successful staging of the annual Half-Marathon.

Contribution to the Overall Efficiency of the University

The demand for use has been extremely high, but we were unable to satisfy this demand because of the increased student activities during the period.

- Seminars and workshops
- International Sporting Tournaments
- Graduation Ceremonies
- Rental of the outdoor fields
- Dance & Creative Arts Shows
- Career Fairs

SPEC provides an arena for staff and students to recreate and to participate in competitive sports. The Centre hosts many of the university's activities including Graduation and the World of Work programs, thereby raising the portfolio of university.

Outreach

SPEC has been working with the Community on a number of initiatives, which include:

- Hosting the Protective Services of Trinidad & Tobago's Physical Training Instructors programme
- Hosting the Vice Chancellor XI Cricket match at the Sir Frank Worrell Field
- Allowing Lucia's Primary School to use our facilities for cricket, Tennis and Football
- Facilitating the St. Francois Girls' College world-of-work Internship programme and the UTT Service Learning Interns
- Providing coaches for the UWI Vacation Camp 2010
- Working with several National Sporting Organisations on Administrative initiatives

- Providing technical support and a training facility for several national elite athletes
- The Trinidad and Tobago Senior Cricket Team used the Sir Frank Worrell Cricket Pitch as part of their training and also for competition
- UWI/SPEC Football Academy for Women continues to facilitate training for both the women National Under 17 and Under 20 teams. The National Under 17 team is preparing for the FIFA Under 17 World Cup which will be held in Trinidad and Tobago in September 2010.

Revenue Generating Activities

SPEC was able to generate sponsorship for the UWI SPEC International Half-Marathon. First Citizens was again the presenting sponsor of the 2009 International Half-Marathon having contributed over \$350,000.00 towards the event. There were several other sponsors.

Corporate Partners (\$230,000)

The Sport Company of Trinidad & Tobago
Blink
TDC

Special Trade-off Sponsors (commitment of product)

Blue Waters
Gatorade
Nestle Trinidad & Tobago Limited

Other Sponsors

Building Maintenance Services Ltd.
Lease Operators Limited
NAAA
Narine Sound Company
National Gas Company Ltd.
Trinidad and Tobago Unit Trust Corporation
Unilever Caribbean Ltd.
UWI Credit Union
Wanter Enterprises Ltd.

Hampers

Hadco Ltd
Vemco Ltd
Nestle Trinidad & Tobago Limited
A.S. Bryden
Sacha Cosmetics Ltd
Marketing and Distribution
Bermudez Biscuits Limited
Happi Food Ltd
Johnson & Johnson Trinidad Limited
Sports & Games Limited
Glaxo Smithkline
Holiday Foods
Unilever

SPEC facilitated the hosting of The Sport Company of Trinidad and Tobago Developmental Camps during the July/August 2010 period. These camps were in the disciplines of cricket, tennis, gymnastics and football for both boys and girls. The camps were sponsored by SPORTT to the value of forty thousand (\$40,000.00) dollars.

Projected Activities for 2010/2011

New Programmes

Introduction of a BSc in Sport and Exercise Science in the in 2011/12 academic year under the aegis of the Faculty of Medicine. An Msc in Sports Management, sponsored by FIFA, will begin in the 2010/11 under the aegis of the Management Studies Unit.

Special Events & Initiatives

- Building *internal capacity*
 - Human – acquire qualified coaches, technical staff and lecturers in specialized areas
 - Physical - install an all weather athletic track, a new multipurpose outdoor court, artificial football/hockey field and Olympic sized swimming pool
 - Financial – secure grants and foster partnership with private sector to secure funds for capital projects
- Building effective campus teams
To raise the level of the university track and field, cricket, hockey, netball and football teams to compete at the National level.
- Continue to build and maintain supportive, collaborative partnerships with
 - Australian Institute of Sport
 - Trinidad & Tobago Olympic Committee
 - Sport Company of Trinidad & Tobago
 - University of Massachusetts – Amherst
 - Kent State University, Ohio, USA
 - University of Wales, Bangor, UK
 - TTASPE
 - University of Canberra, Australia
 - University of Trinidad and Tobago
- Building quality in our plant, processes and outputs
- Strengthening the regional character of UWI at the St. Augustine Campus
- Positively impacting on the community we serve with communication and feedback at the centre
- UWI Annual International Half-Marathon to maintain an expected target of 1000 participants with a focus on increase spectatorship
- Developmental Sport Camps (Basketball, Hockey, Volleyball, Women's Football, Netball, Cricket)

Distinguished Visitors

The following distinguished guests lectured in the
BEd Physical Education - Secondary programme:

Mr. Allan Balfour

University of the West Indies

Major David Benjamin

University of the West Indies

Dr. John Campbell

Cambridge University, UK

Dr. Connie Collier

Ohio State University

Ms. Ann Edwards

Manchester University, England

Dr. Della Fazey

University of Wales Bangor, UK
(Academic co-coordinator)

Dr. Arthur Joseph

University of the West Indies

Dr. Judy Oslin

Ohio State University

Dr. Doris Watson

University of Nevada, USA

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B. Boufoy-Bastick

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B. Boufoy-Bastick

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S. Chinien

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L. Cowie

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Z. Dedovets

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K. Drayton

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H. Franco

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A. Garcia

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F. James

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C. Meir

Theorizing Co-Production.

Film Studies Association of Canada's annual convention
Montreal, Canada, June 3 2010.

D. Mideros and N. Roberts

'Post it Notes': Students' perceptions on assessment and reflective learning in the Foreign Language learning process using Wikis.

8th International Conference on Education and Information Systems (EISTA 2010) Orlando, June-July 2010.

S. Mitchell

Puede ser que hay un hilo de lo real mágico en el teatro inglés de Roderick Walcott?

12th Annual Islands-In-Between Literature, Language and Cultures of the Eastern Caribbean Conference
Dominica, November 2009.

P. Morgan

Rum Till I Die: Alcoholism and Death in Caribbean Discourses.

Caribbean Studies Association Conference on The Everyday Nature of Violence in the Caribbean
Barbados, 24-30 May 2010.

P. Morgan

The Womb of my Otherness: Creolization and its Discontents in Senior's 'View from the Terrace'.

29th Annual West Indian Literature Conference
The University of the West Indies, Mona Campus, Jamaica, 28-30 April, 2010.

Morgan, P.

Something Inside like a Wound laid Wide: Walcott's City of Pain and Promise.

Global Caribbean: Interrogating the Politics of Location in Literature and Culture University of Miami, 4-6 March 2010.

P. Morgan

Ancestral Murderers Poets and other Empire Builders: Walcott's Constructions of Masculinity.

Interlocking Basins of a Globe Conference in honour of Nobel laureate Derek Walcott

The University of the West Indies, St. Augustine Campus, Trinidad and Tobago, 13-15 January 2010.

P. Morgan

Slavery, Trauma & Narrative: Revisioning the Zong Massacre.

Visiting Lecture. Department of Pan African Studies
University of Louisville, Kentucky, November 2009.

G. Phagoo

Helen and the New Aegean: Caribbean Interrogation of a Foundation Myth. Conference in Honour of Derek Walcott's 80th Birthday entitled Interlocking Basins of a Globe

The University of the West Indies, St Augustine, Trinidad and Tobago, January 2010.

A. Pouchet

The mythification of the revolutionary heroine in Los de Abajo by Mariano Azuela.

Cien Años de la Revolución Mexicana: Revisiones y Balances

The University of the West Indies, St. Augustine Campus, Trinidad and Tobago, April 6-8, 2010.

A. Ramdeen

Naipaul's Use of Space and the Divided Self in The Mimic Men.

Annual West Indian Literature Conference

The University of the West Indies, Mona Campus, Jamaica, April 2010.

G. Rampaul

Landscape and Hybridity in Prospero's Daughter.

Annual West Indian Literature Conference

The University of the West Indies, Mona Campus, Jamaica, April 2010.

G. Rampaul

Appropriating Shakespeare: An Analysis of Selected Caribbean Revisionings.

3rd Annual International Conference on Philology, Literatures and Linguistics

Athens Institute for Education and Research, Greece, July 2010.

N. Roberts

A Saving Frame of Wholeness: Interrogating the Caribbean represented in selected works by Jennifer Rahim and Chiqui Vicioso.

Association for Caribbean Women Writers and Scholars Conference

Louisiana State University, Baton Rouge, April 2010.

N. Roberts

The agony of addressing their words: Reflections on the works of Derek Walcott and Jorge Luis Borges.

Interlocking Basins of a Globe Conference in honour of Nobel laureate Derek Walcott

The University of the West Indies, St. Augustine Campus, Trinidad and Tobago, 13-15 January 2010.

J. Sánchez & M. Landa Buil

Interview with John Lipski.

Hispanic Linguistics Symposium and Conference on the Acquisition of Spanish and Portuguese as First and Second Languages

Puerto Rico, 21-24 October 2009.

J. Sánchez

Reconstructing dialect in translation: Can dialect cross languages?

International Symposium "Transcultural Mediations in Iberoamerican Spaces – Languages, Literatures and Translation"

The University of Montreal, 20-22 May 2010.

N. Selvon-Ramkissoon

Imagining Caribbean Spaces- Perceptual and Psychological Perspectives in Nalo Hopkinson's Midnight Robber.

Annual West Indian Literature Conference

The University of the West Indies, Mona Campus, Jamaica, April 2010.

G. Skeete

Queerly Speaking.

Annual West Indian Literature Conference

The University of the West Indies, Mona Campus, Jamaica, April 2010.

G.A. Steele

Government funding of the academy: The UWI St Augustine case.

9th Conference of the Association of Caribbean Higher Education Administrators

Ocho Rios, Jamaica, July 8-11 2010.

G.A. Steele

Self and peer assessment in an undergraduate communication research class using mixed methods.

8th International Conference on Education and Information Systems, Technology and Applications (EISTA)

Orlando, Florida, USA, June 29 – 2 July 2010.

G.A. Steele

Student engagement in assessments.

SoTL Commons: An International Conference for the Scholarship of Teaching & Learning
Georgia Southern University, Statesboro, GA, USA,
March 10-12 2010.

G.A. Steele

Self and peer assessment in an undergraduate communication research class. Celebrating University Teaching

The University of the West Indies, St. Augustine Campus, Trinidad and Tobago, December 9 2009.

M. Toussaint *Race Relations in Trinidad and Tobago from an Historical Perspective: Allowing the Past and Present to Inform Our Way Forward.*

42nd Conference of the Association of Caribbean Historians

Barbados, 11-15 May 2010.

R. Walker

Reading Walcott with a transformative vision: A teaching strategy for the 21st century. Interlocking Basins of a Globe Conference in honour of Nobel laureate Derek Walcott

The University of the West Indies, St. Augustine Campus, Trinidad and Tobago, 13-15 January 2010.

D. Watson

The Reflective Practitioner in the Foundation English Classroom.

Poster Presentation at the IDU's Celebrating University Teaching Excellence Forum and Poster Exhibition: Setting the Research Agenda in Teaching and Learning

The University of the West Indies, St. Augustine Campus, Trinidad and Tobago, September 2009.

D. Watson

Mother the Architect of Caribbean Society: A post colonial gendered reading of Kamau Brathwaite's Mother poem.

Caribbean without Borders Conference
San Juan, Puerto Rico, March 2010.

D. Watson *"I Am Becoming a Teacher": Reflective Practice and Developing Professionalism.*

Cutting Edges: Creativity in Language Teaching and Teacher Training Conference
Canterbury, England. July 2010.

V. Youssef

A Sociolinguistic Perspective on Walcott's Differential Use of Language with specific reference to 'Pantomime'.

Interlocking Basins of a Globe Conference in honour of Nobel laureate Derek Walcott

The University of the West Indies, St. Augustine Campus, Trinidad and Tobago, 13-15 January 2010.

V. Youssef

The varilingual language use of Trinidadian teachers.

Third International Conference on the Linguistics of Contemporary English

St. Mary's College, University of London, 15-18 July, 2009.

V. Youssef

Hard Facts or Soft porn?

Caribbean Studies Association Conference on the Everyday Nature of Violence in the Caribbean

Barbados, 24-30 May 2010.

Published Conference Papers

Dedovets, Z. (2010). Theoretical and practical aspects of using logic problems at mathematics lessons. Materials of the International Scientifically-Practical Symposium: "Modern education: Scientific approaches, experience, problems, prospects." Penza, V.G. Belinsky Penza State Pedagogical University, Russia (PSPU), pp. 8-13.

James, F. (2010). School leadership in secondary schools in Trinidad and Tobago. New Zealand International Educational Leadership Conference, 7th -9th April 2010, Christchurch, New Zealand.

Translations

Mideros, D. and **Roberts, N.** (May 2010) translators: Ferreira, J. The history and future of Patuá in Paria: Report on initial language revitalization efforts for French Creole in Venezuela. *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. *Romanitas*, Vol. 4 no. 1.

Jairo Sánchez, translator: Short stories by James Thurber *Saltana: A Journal of Literature and Translation* 3(1).

Exhibitions

Steve Ouditt exhibited at the International Art Exhibition in Guadeloupe in July 2010, a juried exhibition.

Non- Refereed Publications

Reviews

Antoine-Dunne, J. (June 2010) “**Seeing and Carib-being,**” Review of *Phenomenology’s Material Presence* by *Gabrielle Hezekiah*. *Trinidad and Tobago Review*. p.20-21.

Chinnen, S. (April 2010) A movie analysis on intertext in *Out of Africa* by Sydney Pollack is available online at the following address:

<http://www.africaine.org/index.php?menu=art&no=9403>

Meir, C. (2010) “Book Review: *Scotland: Global Cinema.*” *Transnational Cinemas* 1.2 (Summer 2010).

Reid, B. (May 2010) *The Archaeology of the Caribbean* by Samuel M. Wilson (2007), Cambridge University Press, 2007, 222 p, ISBN 978-0521626224 in *Archaeology and Anthropology: Journal of the Walter Roth Museum of Anthropology* edited by Jennifer Wishart, Mark G. Plew and George Mentore, Vol. 16, No. 2, pp. 55-58.

Other

Quamina-Aiyejina, L. School of Education (SOE) Repository in UWISpace. Currently, there are three collections in the repository with the following contents:

Conference Papers and Proceedings – 58

Published papers – 86

SOE Publications - 69

Quamina-Aiyejina, L. Three databases that were uploaded to the Internet—one full-text Caribbean Virtual Library (CVTLIB) and one bibliographical-Caribbean Educational Bibliography (CEDBIB)—and (MEDPRA)- a database which contains records of M.Ed. projects conducted at the School of Education for which students obtained an ‘A’ grade, were continuously updated during 2009/2010. One hundred and thirty nine records were added to the CVTLIB online database; 541 were added to the CEDBIB database; and 71 added to MEDPRA.

Ramesar, R. (Yao) Feature Film, *Stranger in Paradise* directed by Yao Ramesar, 2010.

Faculty of Medical Sciences

Journal Publications

Department of Preclinical Sciences

Auguste A.J., P. Lemey, O. G. Pybus, M. A. Suchard, R. A. Salas, **A. A. Adesiyun,** A. D. Barrett A.D, R. B. Tesh, S. C. Weaver, **C. V. Carrington.** (2010) Yellow fever virus maintenance in Trinidad and its dispersal throughout the Americas. *Journal of Virology* 84(19):9967-9977. Epub 2010 Jul 14.

Brown C.R., A. Padhi A, A. T. Moore, M.B. Brown, **J.E. Foster,** M. Pfeffer, V. A. O’Brien, N. Komar. (2009). Ecological divergence of two sympatric lineages of Buggy Creek virus, an arbovirus associated with birds. *Ecology* 90(11):3168-79.

Brown C.R., S. A. Strickler, A. T. Moore, S. A. Knutie, A. Padhi, M. B. Brown, G. R. Young, V. A. O'Brien, J. E. Foster, N. Komar. (2010). Winter ecology of Buggy Creek virus (Togaviridae, Alphavirus) in the Central Great Plains. *Vector Borne Zoonotic Dis.* 2010 May; 10(4):355-63.

Nayak B.S., Kanhai J., David M.M., William H.S., Mayers S., Eversley M., **Rao A.V.C.**, (2010) Evaluation of the wound healing activity of *Carapa Guianensis* L. (Meliaceae) bark extract in rats using different wound models. *J Med Food* 13:1141-1146.

Nayak B.S., Sakhamuri S.M., Raghunanan B., Allison A., Upalapati K., Patcha K. (2010) The Role of Serum Markers in Assessing the Severity and Outcome of Community Acquired Pneumonia in Trinidadian Population. *Journal of Public Health and Epidemiology* 22: 20-24.

Nayak B.S., Marshall J.R., Godwin I. (2010) Wound healing potential of ethanolic extract of *Kalanchoe Pinnata* Leaf. *Indian Journal of Experimental Biology* 48: 572-576.

Padhi A, Moore A.T., Brown M.B., Foster J.E., Pfeiffer M., Brown C.R. (2010). Isolation by distance explains genetic structure of Buggy Creek virus, a bird-associated arbovirus. *Evol Ecology*. DOI: 10.1007/s10682-010-9419-9. Epub 10 Sep 2010.

Stone, T. W., C. Lui, & **J. I. Addae.** (2010). Effects of ethylenediamine - a putative GABA-releasing agent - on rat hippocampal slices and neocortical activity in vivo. *European Journal of Pharmacology*, Epub ahead of print.

Suepaul S.M., C.V. Carrington, M. Campbell, G. Borde, A.A. Adesiyun. (2010) Study on the efficacy of *Leptospira* vaccines developed from serovars isolated from Trinidad and comparison with commercial vaccines using a hamster model. *Vaccine* 28(33):5421-5426. Epub 2010 Jun 19.

Uche-Nwachi, E.O., Odekunle, A., Welch, M., Bowleg, D., Cardron, B., Gaebolae, K., Humes, T., Mordise, K., and Tlale, L. (2009). The Incidence of Fibromyoma and Polycystic Ovary Syndrome in Women in Trinidad (2000 – 2003). *Online Journal of Biological Sciences* 9 (4): 86-92.

Uche-Nwachi, E.O., Odekunle, A., Jacinto, S., Burnett, M., Clapperton, M., David, Y., Durga, S., Greene, K., Jarvis, J., Nixon, C., Seereeram, R., Poon-King, C., Singh, R. (2010). Anaemia in Pregnancy and its Associations with Parity, Age, Gravidity, Previous Abortions and Child Spacing in Primary Healthcare Clinic Attendees in Trinidad and Tobago (January 2000 - December 2005) *African Journal of Health Sciences* 10 (1): 66-70.

Youssef, F., S. Manswell, & L. Homeward. (2009) Neuronal activity and acute changes in glucose concentration in the rat hippocampal slice *West Indian Medical Journal* 58(5):410-6.

Department of Paraclinical Sciences

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Clement, Y. (2009) Factors affecting the pharmacokinetics of herbal preparations and their impact on the outcome of clinical trials. *Focus on Alternative and Complementary Therapies* 14(2): 87-91.

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- Ezenwaka, C.,** Nwagbara, E., Seales, D., Okali, F., Hussaini, S., Raja, Bn., Sell, H., Avci, H. and Eckel J. Insulin resistance, leptin and monocyte chemoattractant protein-1 levels in diabetic and non-diabetic Afro-Caribbean subjects. *Archives of Physiology & Biochemistry*, 115(1): 22-27, 2009.
- Ezenwaka, C.,** Nwagbara, E., Seales, D., Okali, F., Hussaini, S., Raja, Bn., Jones-LeCointe, A., Sell, H., Avci, H. and Eckel J. Prediction of 10-Year Coronary Heart Disease Risk in Caribbean Type 2 Diabetic Patients Using the UKPDS Risk Engine *International Journal of Cardiology*, 132: 348-353, 2009.
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- Pinto Pereira, L.,** Boodoo, S., Dindial, K., Hosein, A., Seemungal, T. and Bekele, I. Evaluation of asthma control using patient based measures and peak expiratory flow rate. *West Indian Medical Journal* 2009; 58(3): 214-218
- Pinto Pereira, L.,** Seemungal, T. Comorbid disease in asthma: the importance of diagnosis. *Expert Rev Resp Med*.2010; 4(3), 271-274.
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- Department of Clinical Medical Sciences
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- Dan, D., Harnanan, D., Seetahal, S., Naraynsingh, V., Teelucksingh, S. (2010) Bariatric Surgery in the Management of Childhood Obesity: Should there be an age limit? *Obesity Surgery* Jan 20(1):pp114-7. Epub 2009 Oct 21.

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Abstracts

School of Dentistry

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School of Veterinary Medicine

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Yacob, H. T., Ziyad, D. S. and **Basu, A.** (2009). Ectoparasites and gastrointestinal helminthes of chickens of three agro-climatic zones in Oromia region, Ethiopia. *Animal Biology*, 59: 1-9.

School of Pharmacy

Rajesh, R., Patel, N., Vidyasagar, S., **Pandey, S.**, ManjuVarghese, S. (2010) Sodium Glucose Co transporter 2 (SGLT2) Inhibitors: A New Sword for the Treatment of Type 2 Diabetes Mellitus. *International Journal of Pharma Sciences and Research (IJPSR)* Vol.1 (2), 139-147, 2010.

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Conference Presentations

Department of Preclinical Sciences

A. J. Auguste, S. Volk, N. Arrigo, R. Martinez, V. Ramkissoon, A. Adams, A. Adesiyun, D. Chadee, J. Foster, A. Da Rosa, R. Tesh, S. Weaver, C. Carrington.

Isolation and Phylogenetic Analysis of Mucambo Virus (Venezuelan equine encephalitis virus complex subtype IIIA) in Trinidad.

Annual Meeting of the American Society for Tropical Medicine and Hygiene
November, 2009.

B. A. Mueller, M. Paidi, M. O. M. Allicock, C.V. Carrington, D. J. Gubler, S. N. Bennett

Phylogeography and Molecular Evolution of Dengue Virus Type 1 in Puerto Rico, 1981-1998.

Annual Meeting of the American Society for Tropical Medicine and Hygiene
November, 2009.

J. Addae, N. Ali and T. W. Stone T. W.

Interactions between Alpha-amino-3-hydroxy-5-methylisoxazole-4-propionate and N-methyl-D-aspartic acid receptors in rat neocortex in vivo – implications for control of epileptiform discharges.

Society for Neuroscience
Chicago, USA, October 2009.

J. Morren, G. Davis, N. Baboolal, A. McRae
Assessment of Treatment Goals Attained by Patients According to CHRC/PAHO Guidelines for Diabetes Management in Primary Care Centres in North Trinidad
55th Caribbean Health and Research Council Scientific meeting.

N. Baboolal, R. Stewart, G. Davis, A. McRae
Prevalence of Dementia in Persons attending Social Welfare Services in Trinidad and Tobago: Preliminary Findings
55th Caribbean Health and Research Council Scientific Meeting.

N. Baboolal, G. Davis, R. Stewart, J. Ramesar, A. McRae
Pioneering Study on Caregiver Burden and Dementia in the Southern Caribbean
International Conference of Alzheimer's and Related Disorders
Honolulu, Hawaii, July 2010.

O. M. Allicock, J. E. Foster, B. A. Mueller, S. N. Bennett, C. V. Carrington
Phylogenetics of Dengue Viruses Types 1 and 3 in the Americas.
Poster presented at 15th International Bioinformatics Workshop on Virus Evolution and Molecular Epidemiology
Rotterdam, The Netherlands, September 2009.

O. M. Allicock, P. Lemey, A. J. Tatum, O. G. Pybus, B. A. Mueller, S. N. Bennett, M. A. Suchard, J. E. Foster, C. V. Carrington
Phylogeography of Dengue Viruses in the Americas
Oxford Virology Symposium, From Theory to Therapeutics
Christ Church College, U.K. April 2010.

S. Nayak, D. Ramsingh, D. Ramdath, S. Gooding, S. Bissram, A. Mohammed, A. Raychaudhuri, B. Sahadeo, V. Pandohie, K. Figaro
Plasma Adiponectin Levels are Related to Obesity, Inflammation, Blood Lipids and Insulin Resistance in Type 2 Diabetic and Non diabetic Trinidadians.
55th Caribbean Health and Research Council Scientific Meeting.

S. Nayak, D. Ramdath, J. Marshall, G. Isitor, M. Eversley, S. Xue, J. Shi
Wound Healing Potential of the skin of the Common Grape (Vitis Vinifera) Variant, Cabernet Sauvignon
55th Caribbean Health and Research Council Scientific Meeting.

S. Nayak, D. Ramsingh, D. Ramdath, S. Teelucksingh
Plasma Adiponectin Levels are Related to Obesity, Inflammation, Blood Lipids and Insulin Resistance in Type 2 Diabetic and Non-diabetic Trinidadians
AACC Meeting
California.

Department of Clinical Medical Sciences

A. Lum Lock, C. Bodkyn and Z. Ali
Parent Perceptions of Paediatric Oncology Services at the Eric Williams Medical Sciences Complex (EWMSC), Trinidad
55th Annual Meeting of the Caribbean Health and Research Council (CHRC)
Trinidad, April 2010.

A. Lum Lock, C. Bodkyn and Z. Ali
Challenges of providing a comprehensive, multidisciplinary paediatric oncology service at the (EWMSC), Trinidad
16th Annual Medical Research Update Conference of the Trinidad & Tobago Medical Association (TTMA)
Trinidad, June 2010.

J. Brown

The Empty Delta Sign – Can we see it without IV contrast?

Caribbean Society of Radiologists Meeting
Santo Domingo, Dominican Republic, June 2010.

J. Brown

How reliable is ultrasound in the diagnosis of pyelonephritis

Caribbean Society of Radiologists Meeting
Santo Domingo, Dominican Republic, June 2010.

L. Pinto Pereira, T. Seemungal, S. Teelucksingh and S. Nayak

Markers of Lung Function and Inflammation in West Indian Diabetics

European Respiration Society.

R. Birbal, M. Rios M, N. Bhim, S. Mohammed, B. Elcock, W. Welch and **T. Seemungal**

Pandemic H1N1 Influenza and Dengue Fever: A Case Report

55th Annual Meeting of the Caribbean Health and Research Council (CHRC)

Trinidad, April 2010.

S. Reid and R. Reddock R, T. Rogers and T. Nickenig
Child Sexual Abuse, Incest and HIV: The perspective of service providers in Trinidad and Tobago

Poster presentation at XVIII International AIDS Conference

Vienna, Austria, July 2010.

Z. Ali, A. Nartker, S. Bluemer, A. Lum Lock, G. Deane and D Picou

Poster Presentation: 'Distance Learning and eLearning Resources for Training Healthcare Providers in Trinidad & Tobago'

55th Annual Meeting of the Caribbean Health and Research Council (CHRC)

Trinidad, April 2010.

Z. Ali, G. Deane, A. Lum Lock, L. Archibald, N. Philip and E. Phillip

Upskilling Health Care Providers for the 21st Century: The Role of the Trinidad & Tobago Health Training Centre

16th Annual Medical Research Update Conference of the Trinidad & Tobago Medical Association
Trinidad, June 2010.

School of Dentistry

R. Balkaran, R.S Naidu, S. Teelucksingh, T. Seemungal, L. Pinto-Pereira, E. Prayman, A. Bissoon

A preliminary investigation of periodontal disease and diabetes in Trinidad

Caribbean Health Research Council (CHRC) Annual Scientific Conference and Meeting

April 2010, Trinidad.

School of Veterinary Medicine

Z. Bakos

Babesiosis and Theileriosis – World Perspective

Intermediate Meeting of the World Equine Veterinary Association

Debrecen, Hungary, 2010.

Z. Bakos and R. Bridgelal

Ultrasonographic description of the caudal and ventral lung borders in normal Warmblood horses (poster)

Fourth World Equine Airways Symposium

Berne, Switzerland, 2009.

School of Advanced Nursing Education

C. A. Shavers, L. M. Green, M. Price, J. E. Onyskiw and C. A. Archer-Gift

Promoting the Healing and Restoration of Children and Adolescents Exposed to Adverse Environments, Conditions, or Situations

Honor Society of Nursing Sigma Theta Tau International (STTI) 21st International Nursing Research Congress: Global Diversity through Research, Education and Evidence-Based Practice

Orlando, Florida, July 2010.

C. A. Shavers, L. M., Green, M. Price, J. E. Onyskiw and C. A. Archer-Gift

Promoting the Healing and Restoration of Adolescents, Children, and Families Exposed to Adverse Conditions or Environments

Sigma Theta Tau International 40th Biennial Convention

Indianapolis, Indiana, October/ November 2009.

C. A. Shavers, L. M. Green, M. Price, J. E. Onyskiw and C. A. Archer-Gift

Injury Prevention and Violence Reduction Project

Second International Conference on Violence in the Health Sector

De Meervaart-Amsterdam, Netherlands, October 2010.

C. A. Shavers, C. A. Archer-Gift, L. M. Green, J. E. Onyskiw and M. Price

Exposure or Exposures to Violence and Trauma among Children, Adolescents, and Families who Reside in Adverse Conditions, Situations, Environments or Communities

6th European Congress on Violence in Clinical Psychiatry

Stockholm, Sweden, October 2009.

C. Ingram, M. Price, O. Wahoush, P. Siewdass and D. Israel-Richardson

Profile of an International Oncology Nursing Education Partnership

16th International Conference on Cancer Nursing

Atlanta, Georgia, March 2010.

School of Pharmacy

A. S. Adebayo

Personalized Medicines – Scientific Basis, Prospects and Problems

UTECH's Annual Health Professional's Conference

Kingston, Jamaica, July 2010.

C. Ezenwaka, A. Jones-LeCointe A, O. Okali, R. Extavour

Self-monitoring of blood glucose improved both the glycaemic control and 10-year coronary heart disease risk profile of Afro-Caribbean type 2 diabetic patients in Trinidad and Tobago.

Poster presentation at 20th World Diabetes Congress Montreal, Canada, September 2009.

Dr. P. Sealy

Medicines Regulation in the Caribbean Region: Strengthening of National Medicines Regulation Authorities

PAHO Workshop

Barbados, September, 2009.

Rian M. Extavour, J. Griffith

Pharmacy Preceptor Workshop

Caribbean Association of Pharmacists

Dominica, August 2009.

Rian M. Extavour

Safe Selection of Non-prescription Analgesics

Nassau, Bahamas, May 2010.

Rian M. Extavour

Pharmacoepidemiology and Drug Safety course

University of Utrecht Summer School

June/ 2nd July 2010.

V. Gouripur

Ethical Considerations in Clinical Research

Department of Pharmacology, KLE University Workshop on Clinical Research

Belgaum, India, June 2010.

Faculty of Social Sciences

Journal Publications

Department of Behavioural Studies

Alea, N., Thomas, R. A., Manickchand, B., Ramirez-Cole, M., Renaud-Simon, C., & Bacchus, K., (2010). The emotional quality of childhood memories and depression in Trinidadian older adults. *Caribbean Journal of Psychology*, 3, pp. 4-24.

Alea, N., Vick, S. C., & Hyatt, A. (2010). The content of older adults' autobiographical memories predicts the beneficial outcomes of reminiscence group participation. *Journal of Adult Development*, 17, pp. 135-145.

Alea, N. (2009). The prevalence and quality of silent, socially silent, and disclosed autobiographical memories. *Memory*, 18, pp. 142-158.

Bluck, S. & Alea, N. (2009). Characteristics of positive autobiographical memories in adulthood. *International Journal of Adulthood and Human Development*, 69, pp. 247-265.

Bluck, S., & Alea, N. (2009). Thinking and talking about the past: Why remember? *Applied Cognitive Psychology: Special Issue: Baddeley Revisited: The Functional Approach to Autobiographical Memory*, 23, pp. 1089-1104.

Bissessar, Ann Marie. Competency Testing in the Public Service of Trinidad and Tobago *Public Personnel Management*, Volume 39 No. 2 Summer 2010 :127-145

Bissessar, Ann Marie. Challenges Facing Senior Public Servants in a Plural Society. *Public Personnel Management*. Volume 38. Spring 2009: 1-15.

Bissessar, Ann Marie. An Institutional Review of Planning Budgeting and Monitoring in the Caribbean: Challenges of Transformation- *International Journal of Public Sector Management IJPSM/667*. Volume 23, Issue 1 in January 2010: 22- 37

Lee, Y-L., & Hadeed (2009). Intimate partner violence among Asian immigrant communities: Health/Mental Health Consequences, Help-Seeking Behaviours, and Service Utilization. *Trauma, Violence & Abuse* (10), 143-170.

Sookram, S., M. Basdeo, K. Sumesar-Rai and G. Saridakis. 2010. Serious Crime in Trinidad and Tobago-An Empirical Analysis using Time Series Data Between 1970-2007. *Journal of Eastern Caribbean Studies*. 35(1): 60-75.

Ragoonath,B. Yes to Local Government, No to Participatory Democracy: The Local Government Reform Dilemma in Trinidad, St Lucia and St Vincent. *Commonwealth Journal of Local Government*. Issue 3, May pages 31-50

The Social Work Unit- SONDAI Project, *HIV/AIDS and Social Work Practice in the Caribbean*, J. Cameron Padmore, A Jones and P Maharaj (eds) – Ian Randle Publishers, (2009).

Rampersad. I. Multiplex Layers of Controversy: Realist and Liberalist Impulses in the 5th Summit of the Americas. *Pensaminetos Propios*. No. 29, Ano 14. Jan-June 2009.

Rampersad. I. Turbulence within the Cuban American Community in South Florida. *Practicing Anthropology*, Volume 31. no. 2, Spring 2009.

Wahab, A., D. Plaza. (2009). Queerness in the Transnational Caribbean Canadian Diaspora. *Caribbean Review of Gender Studies: Special Issue on Critical Sexualities*, Vol. 3.

Williams, D. (2009). Racial, Cultural and Sociopolitical Disparities in Mental Health Administration in the United States in *Social Pathology: An Introduction*: Icfai University Press

Williams, D. (2009). Conceptualising Restorative Justice in the Caribbean: The Philosophy, The Policy and the Practice. *Caribbean Journal of Criminology and Public Safety*. January&July, 2009. 14(1&2). 186-213. Ed. Professor Ramesh Deosaran (Emeritus). ISSN 2073 5405

Department of Management Studies

Bhatnagar, C. (2010) Cross-listed cross-currency assets and arbitrage with forwards and options, *Global Finance Journal (USA)*, Vol. 21, Issue 1, pp. 98-110.

Bhatnagar, C. (2009) International Equity Portfolios: Diversification and Disconnect, *The International Journal of Finance* (in collaboration with Philadelphia University, USA), 2009, Vol. 21, No. 3, pp. 6181-6200.

Ramlogan, R. (2010), Using the Law to Achieve Environmental Democracy and Sustainable Development: an Elusive Dream for Trinidad and Tobago, *Electronic Green Journal*, University of California, Vol. 1: Issue 30.

Ramlogan, R. (2009), Creation of International Crimes as a Means for Ensuring Effective Protection of the Environment, *Temple International & Comparative Law Journal*, Vol. 22 No. 2, pp. 345 -407.

Department of Economics

Alghalith, M., Preferences estimation without approximation. *European Journal of Operational Research*, 2010, 207, pp 1144-1146.

Alghalith, M., Introduction to the theory and applications of uncertainty. (with A. Dalal) *Annals of Operations Research*, 2010, 176, 1-5.

Alghalith, M., A new theory of hedging. *Journal of Derivatives and Hedge Funds*, 2010, 16, pp83-84.

Alghalith, M., The theory of the firm under multiple uncertainties. *Economics Bulletin*, 2010, 30, pp 2075-2082.

Alghalith, M., The limitations of prospect theory and the expected utility theory: a new theory. *Atlantic Economic Journal*, 38, 2010, 243-244.

Alghalith, M., A new stochastic factor model: general explicit solutions, *Applied Mathematics Letters*, 2009, 22, pp 1852-1854.

Alghalith, M., Empirical comparative statics under price and output uncertainty, *Journal of Applied Statistics*, 2009, 36, pp 1097 – 1100.

Henry, L. and N. Bissessar (2010) Trouble in Paradise: The impact of the Global Financial Crisis on the Caribbean, *Global Development Perspectives*, Maryland, USA: International Development Options, Winter 2009- Summer 2010, Vol. 6, No.1-2.

Mohammed, A. and Strobl E. (2010) Good Governance and Growth in Developing Countries: A Case Study of Regulatory Reforms in the Telecommunications Industry -- *Journal of Industry, Competition and Trade*.

Theodore K. (2010) Employment, Growth and Social Stability in a Developing Economy. *Social and Economic Studies Vol. 58: Nos. 3 & 4(2009) Pgs. 63-74. ISSN: 0037-7651.*

Theodore K. (2010) Income Deficiency, Transfers and Development: A Microeconomic Perspective, *Current Research Journal of Economic Theory*, 2 (2).

Books & Chapters in Books

Department of Behavioural Studies

Alea, N., McLean, K., C. & Vick, S. C. (2010). The story of us: Examining marital quality via positive and negative relationship narratives. *Marriage: Roles, Stability and Conflicts*. Hauppauge, NY: Nova Science Publishers, Inc.

Bissessar, Ann Marie. “Regeneration or redevelopment? The Case of East Port of Spain, Trinidad, West Indies.” In *Urban Regeneration Management International Perspectives*. Edited by John Diamond, Joyce Liddle, Alan Southern and Philip Osei. Routledge, New York. 2009. (115-132).

Bissessar, Ann Marie. Breaking the Glass Ceiling: East Indian Women and Educational Mobility in Trinidad and Tobago. In R.L Hanloo Black and White Publishers, Delhi, India. /2010 (110-130).

Bissessar, Ann Marie. E-Governance Challenges in a Plural Society. In *Comparative E-Government: An Examination of E-Government Across Culture*. By Chris Reddick. Springer Integrated Series in Information Systems (<http://www.springer.com/series/6157>)- 201

Bluck, S., Alea, N., & Demiray, B. (2010). You get what you need: the psychosocial functions of remembering. In J. Mace (Ed.), *The act of remembering: Toward an understanding of how we recall the past*. Cambridge University Press.

Mustapha, N. *Sociology for Caribbean Students: Revised Edition*, Jamaica: Ian Randle Publishers, September 2009, (458 pages).

Wahab, A. (2010). Colonial Inventions: Landscape, Power and Representation in Nineteenth-Century ‘Trinidad.’ Newcastle: Cambridge Scholars Publishing. P. 299.

Williams, D. & K. Lynch (2009) The Increasing Influence of Islamic Fundamentalists on the African-American Community. In *The Ethics of Terrorism*. Ed. Gilly, Gilinskiy and Sergevnin. Charles C Thomas Publishers ISBN 13-978-0398078669.

Department Of Management Studies

Chambers, D., Roberts, S. and Lewis-Cameron, A. (2010) (eds) Papers from Conference Proceedings of the 1st International Tourism Conference – Beyond the Boundary: Creating New Epistemologies in Tourism, Tourism and Hospitality Research, 10, 4.

Lewis-Cameron, A. and Roberts, S. (2010) (eds) *Marketing Island Destinations: Concepts and Cases*, London: Elsevier.

Pacheco, B.G. and A. Lewis-Cameron (2010) “Weathering the Storm – Crisis Marketing for Small Island Tourism Destinations” in *Marketing Island Destinations* edited by Acolla Lewis-Cameron and Sherma Roberts, Elsevier Publishers.

Pacheco, B.G. (2010) “D-Bamboo Home and Garden Shop” case and teaching note, Ivey Publishing.

Ramlogan, R. And N. Persadie (2010) *Commonwealth Caribbean Business Law*, 2nd edition, Routledge/Cavendish Press, London.

Department of Economics

Henry, L. (2010) Firm Weaknesses and Regulatory Reform in the Non-Bank Financial Sector, In *Caribbean Trade and Development Report: Strategies for Recovery, Renewal and Reform*, Chapter VI, pg. 188-225.

Hosein R. (2010) Trade Policy in the Caribbean in *Caribbean Trade Policy and Development* Chapter 7, edited by Caribbean Development Bank.

La Foucade A. *Human Immunodeficiency Virus & Acquired Immune Deficiency Syndrome. A Reference Text of Major Milestones, Key Events and Developments in the Caribbean.* First Edition. Editors Althea La Foucade, Karl Theodore, Ewan Scott, Christine Laptiste, Kimberly-Ann Gittens-Baynes, Charmaine Metivier.

Scott E., Howard M., and La Foucade A., *Public Sector Economics for Developing Countries: 2nd edition.* UWI Press, Mona, Jamaica

Theodore K. *HIV/AIDS In Small Countries: When Small is Not Beautiful – A Study of Countries in the Pacific, Southern Africa and the Caribbean- Developmental Changes of HIV/AIDS in Small States* – authored jointly with Mahendra Reddy, Happy Siphambe for the Commonwealth Secretariat, London – Published July 2010.

Conference Presentations

Department of Behavioural Studies

A Bissessar.

“Governance is it for Everyone.”
World Congress of Political Science
Santiago Chile 12- 17th July 2009

Bissessar.

“Beyond Money Laundering: The Case of Trinidad and Tobago.”
Government, regulation and Financial Crime Prevention organized by the International Governance and Risk Institute
August 9- 13th 2010 Hyatt Regency Hotel.

A. Bissessar.

“The introduction of a Ministry of Justice.”
11th Annual Conference of the Sir Arthur Lewis Institute of Social & Economic Studies (SALISES).
Port of Spain, Trinidad, March 24-26, 2010.

Alea, N., Arneaud, M. J., & Ali, S.

The quality of self-continuity, social-bonding, and directing-behavior memories across adulthood in a Trinidadian sample.

Invited paper presentation at the International Institute for Reminiscence and Life Review Conference, Atlanta, GA. (November 2009).

Chadee, D.

“Fear of Crime: Assessment of Personality Traits, Time Perspective, Well-Being and Ethnicity,”
Association for Psychological Sciences Annual Convention,
Boston. May 2010

Chadee, D.

“Fear of crime, general fear and ethnicity: Assessing the relationship.”
Paper presentation at the *Association for Psychological Sciences Annual Convention,*
Boston. May 2010

I.Rampersad.

“Energy Security, Sustainability and Survivability: Caribbean Initiatives or Lack Thereof.”
11th Annual Conference of the Sir Arthur Lewis Institute of Social & Economic Studies (SALISES).
Port of Spain, Trinidad, March 24-26, 2010.

A. Wahab *Subjects of the State: Race, Colonial Liberalism and the Government of Modern Freedom.* Caribbean Studies Association Barbados, May 2010.

D. Williams. Evidence-Based Corrections – What does that Mean? Association of Caribbean Heads of Prisons and Correctional Services 4th Regional Corrections Conference Nassau, Bahamas, June 2010.

D. Williams, K. King, W. Wallace. *Towards a Caribbean Criminology.* Academy of Criminal Justice Sciences. San Diego, CA, February 2010.

Conference paper

Alea, N., Arneaud, M. J., & Ali, S.

The quality of self-continuity, social-bonding, and directing-behavior memories across adulthood in a Trinidadian sample.

Invited paper presentation at the International Institute for Reminiscence and Life Review Conference, Atlanta, GA. (November 2009).

Conference posters

Alea, N., Ali, S., & Arneaud, M. J.

A Caribbean tale: The use and adaptive function of autobiographical memory in adulthood.

Poster presented at the 62nd Annual Scientific Meeting of the Gerontological Society of America, Atlanta, GA. (November 2009).

Bluck, S. & Alea, N.

Why remember? Adult age differences in functional use of the personal past.

Poster presented at the 62nd Annual Scientific Meeting of the Gerontological Society of America, Atlanta, GA. (November 2009).

Baron, J. M., Bluck, S., & Alea, N.

Off target speech in autobiographical narratives: Wandering words or elaborative additions?

Poster presented at the 62nd Annual Scientific Meeting of the Gerontological Society of America, Atlanta, GA. (November 2009).

Baron, J. M., Bluck, S., & Alea, N.

"I meant to say that! Age group differences in sharing personal stories."

Poster presentation at the International Institute for Reminiscence and Life Review Conference, Atlanta, GA. (November 2009).

Chadee, D., Belcon, H., Burroughs, S., De Souza, S., Ng Ying, N., Santal, P., Seescochan, R. & Singh, K.

"Media's influence on male body image, self-esteem and lifestyle choices."

Poster presented at the Association for Psychological Sciences May 2010 Annual Convention, Boston. (2010).

Chadee, D., Brewster, D., De Gannes, A., Knott, D., Lee Pow, J., Palmer, D. & Subhan, S.

"Attitude change towards male homosexuality in a Caribbean country"

Poster presented at the Association for Psychological Sciences Annual Convention, Boston. May 2010

Chadee, D., Baksh, A., Charles-James, M., Harrypersad, C., Ogiste, S., Pierre, N. & Seegobin, D.

"Determinants of adolescent aggression in secondary school students in a Caribbean country."

Poster presented at the Association for Psychological Sciences Annual Convention, Boston. May 2010.

Chadee, D., Ashford, A., Edmund, J., Kirpalani, N., Ramsubhag, P., Wakefield, K., & Wilson, K. (2010).

Violent music and aggression in adolescents: Moderating Role of Trait Aggressiveness.

Poster presented at the Association for Psychological Sciences Annual Convention, Boston. May 2010.

M.Sogren.

"Insights to the Caribbean Family: Legacy, Tradition and Culture."

9th Biennial Conference of Caribbean and International Social Work Educators. Guyana. July 2009.

M.Sogren.

"Family and Community Responses to Child Sexual Abuse."

Regional Symposium, UNICEF and the University of Huddersfield, U.K. Barbados May 2009.

Cameron-Padmore

"Knowledge/Attitudes, Prevalence and Patterns of Drug Use/Abuse in Primary School Students in Trinidad and Tobago"

Presentation at Caribbean Studies Association Conference, Barbados. May 2009.

Department of Management Studies

Bhatnagar, C.

“The Capital Asset Pricing Model versus the Three Factor Model: A United Kingdom Perspective,” Paper presented at the 17th meeting of the Global Finance Conference held at Poznan University of Economics, Poznan, Poland between June 27-30, 2010.

Lewis, A. and Clauzel S.

Community Development through Tourism: Feasibility and Demonstrativeness – Lessons Learned from the St. Lucia Heritage Tourism Programme, Paper presented at the 1st International Tourism Conference on ‘Beyond the Boundary: Creating New Epistemologies in Tourism’, UWI, Cave Hill, Barbados, December 8-11, 2009.

Ramlogan, R.

Public Interest Environmental Litigation: Perspectives from the Caribbean. Paper presented at a panel discussion on “Public Interest Environmental Litigation: Perspectives from Abroad” at the 28th Annual Public Interest Environmental Law Conference University of Oregon School of Law, Eugene, Oregon. 2010.

Department of Economics

Hosein, R. and Franklin M.

M. Dutch Disease, Ecotourism and Development Funding. Third Conference on the Economy (COTE), UWI, St. Augustine. October 2009.

Henry, L.

Ponzi Schemes, Crashes and Other Issues Affecting the Financial Services Sector in the Caribbean, with Special Reference to Trinidad and Tobago. Third Conference on the Economy (COTE) UWI, St Augustine .October 2009.

Henry, L.

Issues Affecting the Onshore and Offshore Financial service sector in the Caribbean since the Onset of the Global Financial Crisis. Caribbean Center for Money and Finance, Monetary Studies Conference, Georgetown, Guyana, November 12-14th 2009.

Joseph, S., Franklin, M. and Hosein, R.

The Caribbean Diaspora – An untapped resource for impacting economic development in the Caribbean through investments. SALISES Annual Conference. March 2010.

Joseph, S., Franklin, M. and Hosein, R

Remittances and Economic Development- the developmental impact of remittances in the Caribbean: a comparative analysis: evidence from St. Lucia and Trinidad and Tobago. 4th Annual Monetary Studies Conference, Georgetown, Guyana. November 2009.

Theodore K.,

Chronic Disease Research Agenda: A Perspective from the English-Speaking Caribbean. PAHO Regional Workshop on the Economic, Fiscal and Welfare Implications of Chronic Diseases in the Americas. Washington, D.C., 23 - 24 November, 2009

Department of Behavioural Sciences

M. Basdeo. Certificate of Participation at the Summer School University of Bamberg, On Parliaments. Germany. 2010

M. Basdeo. Certificate of Participation at the 9th Workshop University of Hull. 2010. On Parliaments

Technical Reports

Department of Economics

Hosein R. (2010) Corporate social responsibility, MNCs in the oil sector and domestic agricultural production in host economies.

Hosein R. (2010) Corporate Governance in the Caribbean (Consultancy done with Havelock Brewster for CARICOM)

Hosein R. (2010) Consultant to CARICOM on Public Private Partnerships in the Caribbean- Opportunities and Challenges (Consultancy done with Havelock Brewster for CARICOM)

Hosein R. (2009) Technical Consultant on Terms of Reference for CARTFund by various applicants

Mohammed, A., Moya R. and Sookram S. (2010). Productive Development Policies in Trinidad and Tobago: A Critical Review with *IDB Working Paper Series #115*. Washington, D.C.: Inter-American Development Bank

Scott E., Theodore K., Stoddard D, La Foucade A. (2009) *A Brief on Equity in Health and Health Care: The Jamaican Experience since EquiLAC I*. Pan American Health Organization, Washington, DC.

Scott E., (2009) *Measuring and Explaining Health and Health Care Inequalities in Jamaica 2001 to 2007*. Ewan Scott and Karl Theodore. Paper prepared for Pan American Health Organization., Washington, DC.

Other Input

Department of Behavioural Sciences

Lascelles, K.R.R., & Nugent, R. (2009). *ECExperiment: Double dissociation* [Computer program and manual]. 5 page document.

Lascelles, K.R.R., & Nugent, R. (2010). *ECExperiment: Counterconditioning* [Computer program and manual]. 8 page document.

Lascelles, K.R.R., & Nugent, R. (2010). *Implicit Association task (for body-shapes)* [Computer program].

Ronald Marshall. 2010: Guest Lecturer on Street Children and Counselling. Department of Education University of the West Indies: February 11th, 2010.

Department of Economics

Hosein R., (2010). Booming Mineral Resources and the Imperative of Economic Diversification, *West Indian Journal of Engineering*.

Hosein, R., Franklin, M. and Joseph, J. *Oil boom, rebuilding a culture of entrepreneurship and the need for microfinancing in a petroleum rich sub economy*. January 2010.

Hosein, R. and Franklin, M. *Suitcase Trading in Rx Medicines in the Caribbean: Evidence from Trinidad and Tobago*. July 2010

Joseph, S., Franklin, M. and Hosein, R. The Impact of the Global Financial Crisis on Remittances: The Implications to the English Speaking Caribbean. June 2010

Joseph, S., Franklin, M. and Hosein, R. Caribbean Home Town Associations: An untapped resource for impacting development in the Region. July 2010.

Scott E. *Employment and Earnings in Caribbean economies*. Applicability: Labour market policy formulation through identification and explanation of labour market differentials within and across Caribbean economies.

Scott E. *Poverty measurement methods*. Applicability: Enhancement of monitoring of poverty alleviation/eradication efforts through simplified but comparable measurement method.

ANSA McAl Psychological Research Centre

Conference Presentations

Chadee, D

Fear of Crime: Assessment of Personality Traits, Time Perspective, Well-Being and Ethnicity

Association for Psychological Sciences Annual Convention,

Boston, May 2010.

Chadee, D. (2010)

Fear of crime, general fear and ethnicity: Assessing the relationship.

Association for Psychological Sciences Annual Convention,

Boston, May 2010

Chadee, D., Belcon, H., Burroughs, S., De Souza, S., Ng Ying, N., Santlal, P., Seesochan, R. & Singh, K. (2010).

Media's influence on male body image, self-esteem and lifestyle choices

Association for Psychological Sciences Annual Convention,

Boston, May 2010.

Chadee, D., Brewster, D., De Gannes, A., Knott, D., Lee Pow, J., Palmer, D. & Subhan, S. (2010)

Attitude change towards male homosexuality in a Caribbean country

Association for Psychological Sciences Annual Convention,

Boston, May 2010.

Chadee, D., Baksh, A., Charles-James, M., Harrypersad, C., Ogiste, S., Pierre, N. & Seegobin, D.

Determinants of adolescent aggression in secondary school students in a Caribbean country

Association for Psychological Sciences Annual Convention,

Boston, May 2010.

Chadee, D., Ashford, A., Edmund, J., Kirpalani, N., Ramsubhag, P., Wakefield, K., & Wilson, K.

Violent music and aggression in adolescents: Moderating Role of Trait Aggressiveness

Association for Psychological Sciences Annual Convention,

Boston, May 2010.

Caribbean Centre for Money and Finance (CCMF)

Conference Presentations & Reports

A Birchwood. *Monetary Policy Rule in the Presence of Persistent Excess Liquidity: The Case of Trinidad and Tobago.* 41st Annual Monetary Studies Conference. Bank of Guyana, November 10-13, 2009.

A Birchwood. *Financial Aspects of Growth and Development in the Caribbean.* Presented at CDB and COTE conference. September 2009

A Birchwood. *Caribbean Financial Statistics Project.* CCMF/CARICOM/CARTAC Workshop on Regional Financial Stability. Trinidad. March 2010.

A Birchwood and A. Brackin. *Financial Aspects of Growth and Development in the Caribbean.* In Growth and Development Strategies for the Caribbean. Caribbean Development Bank, 2010. Pp 185-97.

D. Seerattan. *Monetary Policy Effectiveness in the Caribbean – Objectives, Effectiveness and Challenges.* CARICOM Central Bank Governors Meetings. Central Bank of Haiti. October 30th, 2009.

D. Seerattan. *Report on the Economic Performance and Convergence of the CARICOM Region (January-June 2009.)* CARICOM Central Bank Governors Meetings. Central Bank of Haiti. October 30th, 2009.

D. Seerattan and N. Spagnolo. *Intervention in the Foreign Exchange Market, Market Turnover and the Impact on Exchange and Interest Rate Dynamics*. 41st Annual Monetary Studies Conference. Bank of Guyana, November 10-13, 2009.

D. Seerattan. *A Caribbean Financial Stability Report (FSR): The CCMF Project to Develop Appropriate FSIs and EWSs for the Region; FSR Reporting Framework and the Preparation of the Regional FSR*. CCMF/CARTAC/CARICOM Regional Financial Stability Workshop – A Caribbean Architecture. Hyatt Regency, Port of Spain, Trinidad and Tobago. March 3 – 5, 2010.

J. Jhinkoo. *Financial Systems of the Caribbean – An Overview*. 41st Annual Monetary Studies Conference. Bank of Guyana, November 10-13, 2009.

J. Jhinkoo. *The Managed Funds Industry in Trinidad and Tobago*. Team member for a report commissioned by the Trinidad and Tobago Securities Exchange Commission. July 2010.

T. Polius. *Do Archipelagic States have Bigger Governments?* 41st Annual Monetary Studies Conference. Bank of Guyana, November 10-13, 2009.

T. Polius. *Price Rigidity in Saint Lucia: Evidence from CPI data*. CCMF Price Formation Seminar. Barbados, July 22-23, 2010.

T. Polius. *Achieving Regional Financial Stability: A Model for Success*. Regional Financial Stability Workshop. Trinidad and Tobago, March 3-5, 2010.

T. Polius. *Caribbean Economic Performance Report: “Fiscal and Financial Sections”* as well as Boxes titled; *“International Donors Conference: Towards a New Future for Haiti”* *“Comparative Stock Exchange Performance CARICOM and the US”* and *“Some trends in Caribbean Tourism.”* Team member. Caribbean Centre for Money and Finance. December 2009

T. Polius. Caribbean Economic Performance Report June 2009. *Fiscal, public debt and financial sections*. Worked on Box titled; *Impact of Global recession on fiscal accounts and debt dynamics in the Caribbean*.

T. Polius. *The Managed Funds Industry in Trinidad and Tobago*. Team member for a report commissioned by the Trinidad and Tobago Securities Exchange Commission. July 2010.

Journal Publications

Derick Boyd, Comment: (2010) “The nature of the ADAS model based on the ISLM model” *Cambridge Journal of Economics*, Volume 34, Number 3, pp. 587-590.

Seerattan, D and N. Spagnolo. (2009). Central Bank Intervention and Foreign Exchange Markets. *Applied Financial Economics*. Volume 19, pp. 1417-1432.

Sonny Nwankwo, Kazem Chaharbaghi, **Derick Boyd**. (2009) “Sustainable Development in Sub-Saharan Africa: Issues of Knowledge Development and Agenda Setting”, *International Journal of Development Issues*, Vol.8, Issue 2.

Awards

Derick Boyd: *Highly Commended Award* at the *Literati Network Awards for Excellence 2010* for article co-authored with Professor Sonny Nwankwo and Professor Kazem Chaharbaghi, entitled “Sustainable Development in Sub-Saharan Africa: Issues for Knowledge Development and Agenda Setting” published in *International Journal of Development Issues*, , 2009, Vol.8, Issue 2. Emerald Group Publishing Ltd.

Centre for Health Economics (HEU)

Books and Chapters in Books

Michael Howard, Althea La Foucade and Ewan Scott. *Public Sector Economics for Developing Countries: 2nd edition*. Mona Jamaica: **UWI Press**, 2009, pages 399.

Journal Publications

Karl Theodore. (2009) *Employment, Growth and Social Stability in a Developing Economy*. Article in *Social and Economic Studies* Vol. 58: Nos. 3 & 4 Pgs. 63-74. ISSN: 0037-7651.

Karl Theodore. Income Deficiency, Transfers and Development: A Microeconomic Perspective, *Current Research Journal of Economic Theory* Vol. 2 No. 2 ISSN: 2042-4841 March 2010.

Conference Presentations and Publications

Karl Theodore

Towards a UWI Research Programme in Health
The University of the West Indies faculty of Medical Sciences Research Day
December 2nd, 2010

Karl Theodore

Economics and Crime: Spectators Today, Victims Tomorrow
HEU Post-Graduate Seminar.
September 17th, 2009

Karl Theodore

Chronic Disease Research Agenda: A Perspective from the English-Speaking Caribbean.
PAHO
Regional Workshop on the Economic, Fiscal and Welfare Implications of Chronic Diseases in the Americas.
Washington, D.C.,
23 - 24 November, 2009.

Karl Theodore

Employment, Growth and Social Stability in a Developing Economy.
Article in *Social and Economic Studies* Vol. 58: Nos. 3 & 4 (2009)
Pgs. 63-74.
ISSN: 0037-7651.

Karl Theodore

A Brief on Equity in Health and Health Care: The Jamaican Experience since EquiLAC I.
Paper prepared for Pan American Health Organization
Co-authors: Scott E., Stoddard D, La Foucade A.
Washington, DC. August 2009.

Vyjanti Beharry

Comparative Analysis of Impact of Chronic Disease Drug Programs in Jamaica and Trinidad & Tobago
Presentation to Inter-American Development Bank (IDB)
Workshop on Encouraging the Better Performance in the Management of Chronic Diseases
Buenos Aires, Argentina, September 28 - 30, 2009

Kyren Greigg

The Department of Economics Post Budget Forum
Panelist
Demas Rampersad Seminar Series
UWI, St. Augustine – September 2009

Institute for Gender and Development Studies (IGDS)

Journal Publications

Reddock, R., S.D. Reid, A.L. Nielsen (2010) Changes in HIV needs identified by the National AIDS Hotline of Trinidad and Tobago, *Rev Panam Salud Publica*. Vol. 27, No. 2, pp. 93-102 (with S. D. Reid and A. L. Nielsen).

Books and Chapters in Books

Hosein, G. (2009) *Insider Experiences and Ethnographic Knowledge: Reflections from Trinidad, in Fieldwork Identities in the Caribbean*. Ed Erin Taylor. Florida: Caribbean Studies Press. 2009.

Mohammed, P. (2009) *Imaging the Caribbean: Culture and Visual Translation*, Macmillan Education, Oxford, New York, 387 pages 391 images, Palgrave Macmillan. ISBN 978-0-230-02149-3.

Pangsapa, P., Smith, M.J. (2009) Look up: environmental governance and reforming global institutions, in P. Jehlicka and P. Sarre (eds), *Prospects and Possibilities for Environmental Change*, Open University, Milton Keynes.

Pangsapa, P., Smith, M.J. (2009) Look down: environmental movements, NGOs and participatory research”, in P. Jehlicka and P. Sarre (eds), *Prospects and Possibilities for Environmental Change*, Open University, Milton Keynes.

Pangsapa, P., Smith, M.J. (2009) Buddhist virtues and environmental responsibility in Thailand, in C. Blackmore, M. Reynolds and M. J. Smith (eds), *Environmental Responsibility: Ethics, Policy and Action*, London, Zed.

Pangsapa, P., Smith, M.J. (2009) Corporate environmental responsibility and citizenship, in C. Blackmore, M. Reynolds and M. J. Smith (eds), *Environmental Responsibility: Ethics, Policy and Action*, London, Zed.

Pangsapa, P., Smith, M.J. (2009) Strategic thinking and the practices of ecological citizenship: A Reply to Dobson, in C. Blackmore, M. Reynolds and M. J. Smith (eds), *Environmental Responsibility: Ethics, Policy and Action*, London, Zed Books.

Parpart, J.L. (2010) Preface: Engendering Global Restructuring in a Post-9/11 World, pp. xx – xxii, in Marianne Marchand and Anne Sisson Runyon, eds., *Gender and Global Restructuring: Sightings, Sites, and Resistances 2nd edition*, (London: Routledge).

Parpart, J.L. (2009) Choosing Silence: rethinking voice, agency and women’s empowerment, pp. 15-29, R. Ryan-Flood and R. Gill (eds), *Secrecy and Silence in the Research Process: feminist reflections* (London: Routledge).

Conference Presentations

G. Hosein
Introducing Women’s Studies: Twenty-first Century Dilemmas for Feminist Teaching in the Caribbean
Feminist Review 30th Anniversary Conference, UK, 2009.

G. Hosein
Women’s Values: What Matters Now and Why
Caribbean Institute for Women in Leadership Launch
Barbados, 2009.

G. Hosein
Young Women and Leadership: Gender Issues
Workshop on Gender and Leadership: The Nexus between Academia and Activism. Caribbean Studies Association Conference (Jamaica)
Jamaica, 2009

G. Hosein
Child Sexual Abuse and Incest in Trinidad and Tobago: Fieldwork Findings
Caribbean Studies Association Conference (Jamaica).
Panel title: Gender, HIV and the Implications for Trinidad and Tobago
Trinidad & Tobago, 2009 .

D. McFee
Beyond Simple Notions of the Little Black Boy
Women’s Institute for Alternative Development (WINAD), UNICEF and the Ministry of National Security
Breakfast Meeting
Trinidad & Tobago, November 2009.

D. McFee
Locating Gender in our Discourse on Peace Conflict and Development
Panelist in Commonwealth People Forum panel on Peace and Conflict
November 2009.

P. Mohammed

Gender Politics and Global Democracy: Insights from the Caribbean

Workshop on Conceptualizing Global Democracy
Cairo, Egypt, December 2009.

P. Mohammed

Gender Equality and Gender Policies

11th Annual SALISES Conference,
Port of Spain, Trinidad & Tobago, March 2010.

T. Nickenig

The link between child sexual abuse and HIV
Community Team Skills Building Workshop, SALISES,
UWI St. Augustine, 2009.

T. Nickenig

Building Responsive Policy: Gender, Sexual Culture
and HIV/AIDS: Trinidad Preliminary Findings
UNIFEM Project Advisory Team two-day workshop
Barbados, October 2009.

T. Nickenig

Child Sexual Abuse, Incest and HIV: Perspectives of
Service Providers in Trinidad and Tobago
International AIDS Conference 2010
Vienna, July 2010.

P. Pangsapa

Environmental justice and ecological citizenship in the Caribbean

Environment and Citizenship in Latin America Project Workshop, Simon Fraser University, Vancouver, Canada, April 2010.

P. Pangsapa

'Mai phen rai ('No problem'): The Consequences of and Responses to the Global Economic Crisis for the Thai Textile and Garment Industry'

Center for Asia Pacific Social Transformation Studies (CAPSTRANS), University of Wollongong, Wollongong, Australia, January 2010.

J. Parpart

Choosing Silence: Rethinking voice, agency and women's empowerment

Workshop for Silence and Secrecy, London School of Economics and Politics
London, UK, October 2009.

J. Parpart

Choosing Silence: Rethinking voice, agency and women's empowerment

International Studies Association
New Orleans, USA, February 2010.

J. Parpart

Fine Words, Failed Policies: gender mainstreaming in an insecure and unequal world

Political Studies Postgraduate Seminar, University of the Western Cape
South Africa, April 2010.

J. Parpart

Masculinity, Poverty and the New Wars

Feminist Research Institute, Aalborg University
Denmark, April 2010.

J. Parpart

Engendering (In) Security and Conflict in African IR

Canadian Congress of Learned Societies, Canadian Association of Development Studies
Montreal, May/June 2010.

R. Reddock

Panel Presentation on Race Relations, JFK Auditorium,
UWI-STA, Dept. of Behavioural Sciences, October 2009

R. Reddock

Chair and Presentation to Opening Session Gender Section – Commonwealth Peoples' Forum
Cascadia Hotel, November 2009.

R. Reddock

Presentation to Entrepreneurial Seminar CHOGHM (Commonwealth Heads of Government Conference) Spouses Dialogue
The Diplomatic Centre, Prime Minister's Residence, Port of Spain, November 2009.

R. Reddock

New Ways of Understanding Social Stratification in Trinidad and Tobago
Presentation to Final Year B. Education Programme University of Trinidad and Tobago, Valsayn Campus, April 2010.

J. Roach Baptiste

Understanding the Everyday Occurrence of Violence in the Cultural Life of the Caribbean: Where Do We Go From Here? Criminalising the Muslimeen: Semiotics and Epistemic Violence on [Black] Muslim Bodies.
Caribbean Studies Association 35th Annual Conference
St. Peter, Barbados, May 2010.

J. Roach Baptiste

Turmoil and Turbulence in Small Developing States: Going Beyond Survival. The Pillar of Zakat: A Lesson from the Jamaat al Muslimeen.
SALISES 11th Annual Conference
Port of Spain, Trinidad, March 2010.

J. Roach Baptiste

No: Subjectivity and Agency in Muslim Rights/Rites of Negation. Piety and Subjectivity: Formation of Muslim Women's Identity at the Jamaat al Muslimeen in Trinidad.
Graduate Students Islamic Conference
North Carolina, USA, February 2010.

Non-Refereed Publications and Related Works
Chapters in Books

Mohammed, P., J. Wedderburn, C. Babb (2010) *Gender-sensitive policy making in the Caribbean: A Manual 2nd Edition.* Friedrich Ebert Stiftung Caribbean Office, Jamaica, Caribbean Policy Development Centre, Barbados with the Institute for Gender and Development Studies, University of the West Indies, St. Augustine.

Parpart, J. L. (2010) Silenced Visions of Citizenship, Democracy and Nation: African MPs in Rhodesian Parliaments, 1963-1978' in Sabelo Ndlovu- Gatsheini and James Muzondidya, eds., *Redemptive or Grotesque Nationalism? Rethinking Contemporary Politics in Zimbabwe* (Oxford: Peter Lang).

Parpart, J.L., H. Veltmeyer (2010) Critical Development Studies: the Itinerary of an Idea" and Jane Parpart, "Gender, empowerment and development," in Henry Veltmeyer (Ed), *Tools for Change: a handbook for critical development studies* (Halifax: Fernwood Press).

Parpart, J.L. (2010) Masculinity, Poverty and the 'New Wars', in Sylvia Chant (ed), pp. 674-679, *The International Handbook on Gender and Poverty* (London: Elgar).

Parpart, J.L. (2009) Fine Words, Failed Policies: Gender mainstreaming in an insecure and unequal world, in Jacqui Leckie (Ed), *Development in an Insecure and Gendered World* (Farnham, UK: Ashgate).

Film Production

The S Factor (2010) Documentary, 15 mins. Directed by Patricia Mohammed and Edited by Michael Moolleedhar for the Family Planning Association of Trinidad and Tobago, on the rights of sex workers and policies pertaining to sex and sexuality. Featuring original interviews.

Coolie Pink and Green (2009), Director and main script writer, Edited by Michael Mooleedhar, Director of Photography, Franklyn St. Juste, Original music Score by Sharda Patasar, Editorial and production assistance by Christopher Din Chong, Script Assistance, Nazma Muller, 25 mins. Co Producers Patricia Mohammed and Rex Dixon, supported by an Award from the Trinidad and Tobago Film Co. Won Most popular local short film at the Trinidad and Tobago Film Festival, September 2009 and screened as the opening ceremony film at the Pravasi Film Festival, New Delhi, India, January 2010.

Seismic Research Centre

Journals Publications

Axel K. Schmitt, Daniel F. Stockli, Jan M. Lindsay, **Richard Robertson**, Oscar M. Lovera and Roman Kislitsyn (2010): Episodic growth and homogenization of plutonic roots in arc volcanoes from combined U–Th and (U–Th)/He zircon dating. *Earth and Planetary Science Letters*, Vol 295, Issues 1–2, pp. 91–103, doi: 10.1016/j.epsl.2010.03.028.

Cole, P.D and Scarpati, C (2010): The 1944 eruption of Vesuvius, Italy: combining contemporary accounts and field studies for a new volcanological reconstruction. *Geological Magazine*. 147(3) 391–415.

Fournier, Nicolas, Moreau Magali & **Robertson Richard** (2010): Disappearance of a crater lake: implications for potential explosivity at Soufriere volcano, St. Vincent, Lesser Antilles. *Bulletin of Volcanology*, Vol. 42, doi: 10.1007/s00445-010-0422-3.

Komorowski J-C, Legendre Y, **Christopher T**, Bernstein M, **Stewart R**, **Joseph E**, **Fournier N**, **Chardot L**, **Finizola A**, **Wadge G**, **Syers R**, **Williams C**, and **Bass** (2010): Insights into processes and deposits of hazardous vulcanian explosions at Soufrière Hills Volcano during 2008 and 2009 (Montserrat, West Indies). *Geophysical Research Letters* Vol. 37, no., 2010, doi: 10.1029/2010GL042558.

Le Friant, Anne, Boudon, Georges, Arnulf, Adrien and **Robertson Richard** (2009): Debris avalanche deposits offshore St Vincent (West Indies): impact of flank-collapse events on the morphological evolution of the island. *Journal of Volcanology and Geothermal Research*, Vol. 179, Issues. 1–2, doi:10.1016/j.jvolgeores.2008.09.022.

R.D. Vargas Franco, J.-C. Thouret, G. Delaite, C. van Westen, M.F. Sheridan, C. Siebe, J. Mariño, T. Souriot, and **A. Stinton**, (2010): Mapping and assessing volcanic and flood hazards and risks, with emphasis on lahars, in Arequipa, Peru, *Geological Society of America Special Paper* 464, pp 265–280, doi:10.1130/2010.2464(13).

Teeuw, R., Rust, D., Solana, C., Dewdney C. and **Robertson, R.** (2009): Large Coastal Landslides and Tsunami Hazard in the Caribbean. *EOS*, Vol. 90, No. 10, 81–88.

Book Chapters

Robertson R.E.A. (2009): Geology of the Lesser Antilles. In: Rosemary Gillespie and David Clague *Encyclopaedia of Islands*. University of California Press. 111p.

Technical Reports

E Joseph. 2009. Geothermal monitoring: Northern Dominica: 28th January – 3rd February, 2010. Internal report: Seismic Research Centre, UWI. St. Augustine, Trinidad.

E Joseph. 2009. Geothermal monitoring: Northern Dominica: 2nd December, 2009. Internal report: Seismic Research Centre, UWI. St. Augustine, Trinidad.

P Cole, **V Bass**, **T Christopher**, **C Eligon**, **M Fergus**, **L Gunn**, **H Odbert**, **R Simpson**, **R Stewart**, **A Stinton**, **J Stone**, **R Syers**, **R Robertson**, **M Bernstein**, **R Watts**, **P Williams**. Report on Activity between 15 August 2009 and 28 February 2010. MVO Open File Report 10/01a. Montserrat Volcano Observatory, Flemmings, Montserrat.

Abstracts and Posters

Cole, P.; Odbert, H.; Stinton, A.; Christopher, T.; Stewart, R.; Stone, J.; Gunn, L.; Eligon, C.; Bass V.; Syers R.; Robertson, R. (2010) *Renewed Volcanic Activity at Soufrière Hills Volcano*, Montserrat 2009-2010. Cities on Volcanoes 6, Tenerife, Spain, May 2010. Oral.

Cole, P.D.; Stewart, R.; Odbert, H.; Stinton, A.J.; Christopher, T.; Eligon, C.; Bass, V.; Syers, R.; Bernstein, M.; Stone, J.; Williams, C.; Robertson, R.; Watts, R. (2010) *Combining Traditional Observational Methods and Multiparameter Monitoring Of Renewed Activity At Soufriere Hills Volcano*, Montserrat. Cities on Volcanoes 6, Tenerife, Spain, May 2010. Oral.

Bozzoni, F., M. Corigliano, C. Lai, L. Scandella, **W. Salazar, J. Latchman, L. Lynch & R. Robertson** (2010) *Probabilistic Seismic Hazard Assessment Study for the Eastern Caribbean Region*. Paper 920, 14th Conference of European Earthquake Engineering, Macedonia. Oral.

Wadge, G.; **Cole, P.; Stinton, A.**; Komorowski, J.-C.; **Stewart, R.** (2010) High Resolution Radar Monitoring of Soufriere Hills Volcano, Montserrat with TerraSAR-X. Cities on Volcanoes 6, Tenerife, Spain, May 2010. Poster.

Stone, J.; Edwards, S.; Levieux, G.; **Robertson, R.**; and **Cole, P.** (2010) MVO Staff Web based communication at the Montserrat Volcano Observatory. Cities on Volcanoes 6, Tenerife, Spain, May 2010. Poster.

Scarpati, C.; Valentina, C., Catalani, M.; **Cole, P.**; DeDonna, G.; Lepore, S., Perrotta, A.; and Pilley, V. (2010) Volcanic Risk Perception in the towns around Mt. Vesuvius. Cities on Volcanoes 6, Tenerife, Spain, May 2010. Paper.

Watts R.; Robertson R.; Abraham W.; **Cole P.**; Corriette D.; de Roche Thesser.; **Edwards S.; Higgins M.**; Isaacs N.; **Johnson M.**; Joseph Bernard, **Joseph E.; Latchman J.; Lynch L.; Nath N.; Ramsingh C.**; and **Stewart R.** (2010) Elevated Seismic Activity Beneath

The Slumbering Morne Aux Diaboles Volcano, Northern Dominica. Cities on Volcanoes 6, Tenerife, Spain, May 2010. Poster.

Joseph E and Lindsay J. Geothermal Geochemistry And Potential Health Hazards Of The Sulphur Springs Geothermal Field, Saint Lucia. Cities on Volcanoes 6, Tenerife, Spain, May 2010. Poster.

Oscar M. Lovera, Axel K. Schmitt, Daniel F. Stockli, Jan M. Lindsay, **Richard Robertson**, Roman Kislitsyn. (2009): Zircon dating and spectral analysis as a new tool for unraveling the chronology of magmatic events. *Oral Presentation*.

Robertson D, Lewis N, **Joseph E**, **Fournier N**, and Witham F. Numerical modeling of the Boiling Lake in Dominica. *IAVCEI-Commission of Volcanic Lakes Workshop 7: Costa Rica 10 – 19 March, 2010*. Oral.

Croweller, S. Barclay, J., Simmons, P., Lorenzoni I., **Robertson, R.** (2009): Risky beliefs in a volcanic crisis – The importance of context-specific information. **UCL DRR Conference 4-6 November 2009**

Lowe C.J., Haklay, M., McGuire, W.J. and **Robertson, R.E.A.** (2009): Practicalities of Vulnerability Analysis: Lessons from St. Vincent, Caribbean. **UCL DRR Conference 4-6 November 2009**. *Oral Presentation*.

Sir Arthur Lewis Institute of Social and Economic Studies (SALISES)

ERRATA

In compiling the 2008/2009 Faculty Report, the submission from the Sir Arthur Lewis Institute for Social and Economic Studies (SALISES) was inadvertently omitted. The full list of publications and conferences of the SALISES for the 2008/2009 academic year is therefore included below, that it may be included in the public record of the Campus and the University.

Journal Publications

2009/2010

Henry-Lee, Aldrie, Philip Osei, P.K. Watson and Sharon Trezelle. 2010. Social Risk Management in a Small Island: The case of St. Lucia. *Social and Economic Studies*. 59(1&2): 61-89.

McCree, Roy. 2010. Female Boxing and Violence in Trinidad. *Journal for the Study of Sports and Athletes in Education*. 4(2): 43-58.

Sookram, S. 2009. The Impact of Climate Change on the Tourism Sector in Selected Caribbean Countries. *Caribbean Development Report*. 2(30): 204-225.

Sookram, S., M. Basdeo, K. Sumesar-Rai and G. Saridakis. 2010. Serious Crime in Trinidad and Tobago-An Empirical Analysis using Time Series Data Between 1970-2007. *Journal of Eastern Caribbean Studies*. 35(1):

Sookram, S., P.K. Watson and F. Schneider. 2009. Structure and Size of the Household Sector of the Hidden Economy in Trinidad and Tobago. *Applied Economics*. 41(27): 3545-3559.

St. Bernard, Godfrey. 2009. Firearms and Reported Homicide in Trinidad and Tobago: A Socio-Demographic Perspective. *Caribbean Journal of Criminology and Public Safety*. 14(1 and 2): 81-109.

Watson, P.K. 2009. The Efficiency of the Stock Market in the CARICOM sub-region: an Empirical Study. *Journal of Applied Financial Economics*. 19(23): 1915-1924.

2008/2009

Agozino, B., B. Bowling; **G. St. Bernard** and E. Ward. 2009. Guns, Crime and Social Order in the West Indies. *Criminology and Criminal Justice*. 9(3): 287-305.

Conway, D., R.B. Potter and **G. St. Bernard**. 2009. Transnationalism Personified: Young Returning Trinidadians 'in Their Own Words' *Tidschrift Voor Economische en Sociale Geografie*. 100(1): 101-113

Mc Cree, R. 2009. Sport Policy and the New Public Management in the Caribbean: Convergence or Resurgence? *Public Management Review*. 11(4): 461-476.

Potter, R. B; D. Conway and **G. St. Bernard**. 2009. Repetitive Visiting as a Pre-Return Transitional Strategy among Youthful Trinidadian Returnees. *Mobilities*. 4(2): 249-273.

Sookram, S. and E. Strobl. 2009. The Role of Educational Choice in Occupational Segregation: Evidence from Trinidad and Tobago. *Economics of Education Review*. 28(1): 1-10.

Sookram, S. and G. Saridakis. 2009. The Effect of Economic Factors on the Tax Ratio in Trinidad and Tobago. *Journal of Developing Areas*. 42(2): 111-128.

Sookram, S. and **P.K. Watson**. 2008. Small Business Participation in the Informal Sector of an Emerging Economy. *Journal of Development Studies*. 44(10): 1554-1576.

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Sandra Sookram

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Godfrey St Bernard

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