



UWI  
ST. AUGUSTINE  
CAMPUS

# FACULTY REPORT

LEADERSHIP. ACTION. IMPACT. FUTURE.

2014  
2015



LEADERSHIP. ACTION. IMPACT. FUTURE.

UWI  
St. Augustine  
is a dynamic campus  
operating in an increasingly  
turbulent environment. Its growth  
and development take place in  
layered bands of actions and impacts  
where initiatives move forward each  
at their own time and pace, but are  
all kept radiating around a core  
mission by a leadership that  
is focused on the  
future.

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# ENGINEERING



Professor Stephan Gift  
Faculty Dean



## EXECUTIVE SUMMARY

In the 2014/2015 academic year the Faculty of Engineering's major accomplishments included the re-accreditation of the BSc programme and first-time accreditation of the MSc programme, both in Electrical and Computer Engineering by the Institution of Engineering and Technology for five years up to the 2019 intakes (the MSc backdated to the 2012 intake). The Institution of Mechanical Engineers of the UK also accredited the MSc programme in Engineering Asset Management. In the period under review, the Department of Mechanical and Manufacturing Engineering won the Faculty's Best Productive Research Award 2014.



# ENGINEERING

## EMPLOYEE ENGAGEMENT

Members of academic staff attended CeTL workshops/seminars. Some pursued the Certificate in Undergraduate Teaching and Learning (CUTL). Members of Administrative, Technical and Service (ATS) staff attended seminars/courses within Campus (e.g. CeTL, Institute of Critical Thinking), and externally (e.g. Trinidad and Tobago Bureau of Standards) including; Quality Assurance for the Analytical Laboratory; Helping Research Facilities Achieve Safe, Energy Efficient and Sustainable Laboratories; Stress Management and Reducing Workplace Risk; Advanced Business Writing and Communication; Programme and Project Management; Minute Writing; and the Postgraduate Diploma in Mediation. The technical team continued to rise to all challenges, and designed and developed several new laboratories to meet the expanding needs and increase the teaching/research outcomes at both undergraduate and postgraduate levels.

## ACCREDITATION STATUS

The accreditation status of all BSc programmes and those MSc programmes for which accreditation was sought include the following:

### Chemical Engineering

- BSc Chemical and Process Engineering
  - (2011-2015 and 2012-2016): iChemE
- BSc Petroleum Geoscience
  - (2012-2016): The Geological Society
  - (2014-2018): The Energy Institute
- MSc Chemical and Process Engineering
  - (2010-2015): iChemE
  - (2012-2016): CACET
- MSc Petroleum Engineering
  - (2010-2014): IOM<sup>3</sup>
  - (2014-2018): The Energy Institute, UK
  - (2011-2013): iChemE

### Civil and Environmental Engineering

- BSc Civil Engineering and BSc Civil with Environmental Engineering
  - (2009-2012): JBM
  - (2012-2016): CACET
- MSc Civil Engineering, MSc Civil with Environmental Engineering and MSc Construction Management
  - (2009-2012): JBM
  - (2012-2016): CACET

### Electrical and Computer Engineering

- BSc Electrical and Computer Engineering
  - (2015-2019): IET
- MSc Electrical and Computer Engineering
  - (2015-2019, Backdated to 2012): IET

### Mechanical and Manufacturing Engineering

- BSc Industrial Engineering, BSc Mechanical Engineering, BSc Mechanical Engineering with a minor in Biosystems
  - (2015): IMechE
  - (2012-2016): CACET
- MSc Engineering Asset Management
  - (2015): IMechE
- MSc Engineering Management, MSc Production Engineering and Management and MSc Production Management
  - (2015): IMechE
  - (2012-2016): CACET

### Geomatics Engineering and Land Management

- BSc Geomatics: CICES

## ENROLMENT

For the academic year 2014/2015 the Faculty's undergraduate intake for all programmes was 413 students, a slight increase from the 411 students enrolled during the 2013/2014 academic year. The Faculty saw a marked increase of 45% in the enrolment of undergraduate students within the Geomatics and Land Management programmes.

The Faculty attracted 248 new students into its taught Postgraduate Diploma/Masters programmes; a 9% increase from the last academic year which recorded an enrolment of 235 new postgraduate students. New postgraduate enrolment in Faculty's MPhil and PhD programmes decreased from 16 students in 2013/2014 to 10 students in the 2014/2015 academic year.

Enrolment for each department was as follows:

- Chemical Engineering - MSc/MASc: 42, MPhil: 3
- Civil and Environmental Engineering - MSc/MASc: 100, MPhil: 3
- Electrical and Computer Engineering - MSc/ MASc: 15, MPhil: 1
- Geomatics Engineering and Land Management - MSc/MASc: 10, PhD: 1
- Mechanical and Manufacturing Engineering - MSc/MASc: 21, PhD: 1
- Office of the Dean: MSc Project Management - MSc/MASc: 50, MPhil: 1

According to official figures compiled by the Campus, total enrolment in the Faculty has plateaued over the past three academic years to an average of 2,600 students per year.

## GRADUATION

A total of 20 students from the Department of Electrical and Computer Engineering graduated with first-class honours, which represented just over 6% of the graduating class and was an improvement from 4% during the last academic year. Six students graduated with the Certificate in Geomatics and Land Information Systems compared to four in 2013/2014.

Although the performance trends have marginally declined over the past three years, there were improvements in the classification of the degrees awarded, as evidenced by 85% of the graduates obtaining second-class honours degrees or better when compared to just over 80% in 2013/2014.

Additionally, 59 graduates, (19% of the Faculty's graduates) achieved first-class honours degrees in 2014/2015 as opposed to 37 in 2013/2014 – a 7% improvement. These graduates were placed on the Dean's Honour Roll and presented with Dean's Awards at the Faculty's Prizes and Awards function in October 2015. The following are the top undergraduate students in the various programmes for the 2014/2015 academic year:

- **Jon Russ Jhingoorie:** Chemical and Process Engineering
- **Mildred Boneo:** Civil Engineering
- **Esther Joy Ochieng:** Civil with Environmental Engineering
- **Jude Jeffrey Nanton:** Electrical and Computer Engineering
- **Vishal Daniel Balraj:** Geomatics Engineering
- **Salini Mahabir-Birbalsingh:** Industrial Engineering
- **Akua Sasha Clerfond:** Land Management (Valuation)
- **Khadija Sherece Usher:** Mechanical Engineering
- **Shannon Latoya Steele:** Mechanical Engineering/Bio Systems
- **Yadava Persad:** Petroleum Geoscience

During the academic year 2014/2015 the Faculty graduated 247 MSc students – a 60% increase over the previous year. Thirteen students graduated from the diploma programmes, and two MPhil and two PhD students graduated in the fields of Geoinformatics Engineering and Mechanical Engineering.

## TEACHING, LEARNING AND STUDENT DEVELOPMENT

Food Science and Technology Unit (FSTU) student intake for the 2014/2015 academic year was seven, bringing the Unit to a total enrollment of 33 students. The Unit collaborated with the Faculty of Food and Agriculture in that faculty's hosting of the International Breadfruit Conference on Commercialising Breadfruit for Food and Nutrition Security in July 2015.

Collaboration continues with the Trinidad and Tobago Ministry of Trade Industry Investment and Communication, The UWI's Departments of Life Sciences, Food Production, and Cocoa Research Centre, the International Institute for Cooperation in Agriculture (IICA), the Caribbean Agricultural Research and Development Institute (CARDI), the Trinidad and Tobago Ministry of Food Production and certain food processing industries.

# ENGINEERING

The Unit began reviews of its food laboratories and facilities; the existing MSc Food Science and Technology programme; the opportunities for an industry-focused undergraduate food manufacturing programme and the further development of a coherent research portfolio. Opportunities for accreditation were also explored.

In July 2015, **Dr Gerrit Meerdink** took up his position as professor of Food Science and Technology while **Dr Gail Baccus-Taylor** continued to function as an adjunct lecturer in the MSc Agri-Food Processing Technologies programme in the Department of Chemistry at The UWI, Mona Campus, Jamaica.

## **Petroleum Studies Unit (PSU)**

A successful re-accreditation exercise for the MSc Petroleum Engineering programme was conducted by the IOM<sup>3</sup> in 2014/2015 with the programme being re-accredited for the period 2015 to 2019. Fifty-six applications were received for the MSc Petroleum Engineering (PE) and 10 for the MSc Reservoir Engineering (RE). From among these, 26 applicants were selected for the MSc PE and eight 8 for the MSc RE. The Unit is working on its marketing materials (brochures, website links, Facebook Page, etc.). Eleven students were expected to graduate in 2015 with the MSc Petroleum Engineering degree. During the period under review, the Postgraduate Diploma in Petroleum Engineering and Management was re-introduced and CeTL approved courses in Strategic Petroleum Management and Organisation, and Petroleum Production Management and Control.

The Unit negotiated an agreement with SHELL for scholarships and research equipment and a Memorandum of Understanding is due to be signed.

## **Department of Electrical and Computer Engineering**

The Department's main accomplishment during the period in the area of teaching and learning was the successful re-accreditation of the BSc programme and the successful, first time accreditation of the MASc programme, both by the Institution of Engineering and Technology and both for five year periods, up to and including the 2019 intakes.

## **Department of Geomatics Engineering and Land Management**

The academic staff, as well as graduate assistants and demonstrators have all been encouraged to use web-based applications such as MyElearning and Web CT to support the teaching and learning process. In addition, online tutorials and virtual tutorials are now used extensively in delivering hands-on training to students. The use of Camtasia Studio to prepare videos and PowerPoint presentations has been encouraged. The use of Problem Based Learning approaches is also being encouraged.

## GRADUATE STUDIES

### **Department of Civil and Environmental Engineering**

The graduate programme in Coastal Engineering initiated a review process that targeted a shift in programme emphasis from near shore and coastal zone dynamics to embrace off-shore and ocean engineering, aimed at increasing the enrolment catchment and establishing a new life cycle for the revised programme.

### **Department of Chemical Engineering**

Graduation statistics in the MSc programmes were as follows:

- MSc Chemical and Process Engineering - nine (two with distinctions)
- MSc Food Science and Technology - 12 (five with distinctions)
- MSc Petroleum Engineering - 22 (seven with distinctions)
- Diploma in Petroleum Engineering - three

### **Department of Geomatics Engineering and Land Management**

At present, the number of students registered in the various programmes at the graduate level is at the highest in the Department's history. More than 111 students are registered in the MSc programmes, with 30 students registered in the MPhil and PhD programmes. The Department has embarked on an aggressive drive to recruit more research students. At the same time, it is working towards reducing the throughput time for MSc students, so that a more manageable number is registered for the programmes. The nature of research undertaken by students is also being reviewed to ensure a better fit with the Department's research priorities.



### **Department of Mechanical and Manufacturing Engineering**

The MSc programme in Engineering Asset Management, which started three years ago, graduated its first batch of seven students during this academic year. The MSc Production Management, MSc Production Engineering and Management, MSc Engineering Management, and MSc Engineering Asset Management were all offered.

## **RESEARCH AND INNOVATION**

### **Department of Chemical Engineering:**

Research collaboration with the IICA, CARDI, the Ministry of Food Production, the Ministry of Trade, Industry, Investment and Communication, The UWI Cocoa Research Centre and certain food processing industries, were on-going. Research continued in the different disciplines within the Department—Chemical and Process Engineering, Food Science and Technology, and Petroleum Studies—resulting in several publications and conference presentations from staff members. The Department also continued to collaborate with local, regional and international institutions and agencies. Research advanced in the areas of reservoir characterisation, heavy oil and oil recovery from Trinidad tar sand, EOR and CO<sub>2</sub> sequestration and gas hydrates, all funded by private and public sector partners.

#### ***Funding secured by the Department of Chemical Engineering:***

- The Effects of Fracture Damage and Anisotropy on Static and Dynamic Elastic Properties of Rocks: (TT\$650,000.00).
- Research on Coastal Erosion Flooding, Coastal Structure Response to various loads, Coastal/Offshore Vulnerability, Probabilistic Design Development and Offshore Hydrodynamics: (TT\$785,815.00).
- Supercritical Fluid Extraction Work in the Department of Chemical Engineering: (TT\$995,360.00).
- BSc Petroleum Geoscience programme and the Postgraduate Diploma in Petroleum Engineering and Management: (TT\$3,000,000.00).

The *Petroleum Studies Unit (PSU)* secured funding from a number of organisations to pursue research. They include:

- Methanol Trinidad Holdings Limited Chair - US\$150,000.00 per annum
- BPTT Chair - US\$140,000.00 per annum
- BHP Scholarship - TT\$14,000.00 per month for three years
- Ministry of Energy and Energy Affairs, Trinidad and Tobago - TT\$2,431,175.00
- SHELL agreed to fund a PhD student in the Petroleum Studies Unit
- BPTT for PGSC recurrent expenses - TT\$1,300,000 for 2015

### **Department of Electrical and Computer Engineering**

The Department continued to publish scholarly research in international refereed journals and to deliver presentations at national, regional and international seminars and conferences. There was a noticeable increase in the number of student papers accepted and presented at international conferences. Research was conducted in image processing, biomedical engineering applications, mobile applications for small-scale fisheries, multi-processor systems, linear circuit applications, steelpan technology, energy efficiency and renewable energy. The mFisheries project, the Phi pan and the commercialisation of the brushless DC motor patent are innovations that continued to be actively pursued.

### **Department of Mechanical and Manufacturing Engineering**

The Department continued to publish scholarly research in international refereed journals. Major projects completed include three industrial feasibility studies and several quality management projects. Research continues in several areas including studies in lean manufacturing, process modelling, local soil characteristics and quality management.

### **Department of Geomatics Engineering and Land Management**

The Department continued to publish scholarly research in international refereed journals and to deliver presentations at national, regional and international seminars and conferences.

# ENGINEERING

## *Funded Research in Geomatics Engineering:*

### **Raid Al-Tahir:**

- Analysis of Land Cover Changes and their Impacts on GLM's Ecological Management (Funded by Grand Lake Meadows Endowment Fund, University of New Brunswick, Canada).

### **Charisse Griffith-Charles:**

- Caribbean Handbook for Risk Information Management (CHARIM) (Funded by World Bank).
- Upgrade of the Cadastral Management System (CMIS) for the Surveys and Mapping Division (Funded by IDB).
- Documenting Experiences on Piloting the STDM (Social Tenure Domain Model) in Saint Lucia and St. Vincent (Funded by UNHabitat).

### **Bheshem Ramlal:**

- HIV/AIDS Rapid Mapping Project, with The UWI Health Services Unit and the Office of Research Development and Knowledge Transfer for the Office of the Prime Minister, Government of the Republic of Trinidad and Tobago, (TT\$650,000.00).

### **Bheshem Ramlal, Keith Miller, Earl Edwards:**

- Caribbean Platform of Territorial Information for Disaster Prevention (PITCA) project. (A collaborative project involving the National Institute of Statistics and Geography of the United Mexican States (INEGI), The Caribbean Disaster and Emergency Management Agency (CDEMA), The UWI St. Augustine Campus, the University of Guyana and the Caribbean Chapter of the Urban and Regional Information Systems Association (URISA) (US\$4.5M over three years).

### **Asad Mohammed:**

- Supporting the Development of the Caribbean Planning Association and CPD in the Caribbean (UNHabitat/ Commonwealth Association of Planners, US\$80,000.00).
- The UWI Lead Edulink Programme: Maintaining Energy Efficiency Change and Climate Change in Built Environment Training and Research in the Caribbean (ACP funded, \$575,000.00 Euros).

### **Asad Mohammed, Bheshem Ramlal:**

- Leveraging Built and Cultural Heritage for economic development in East Port of Spain (The UWI-Trinidad and Tobago Research and Development Impact (RDI) Fund (TT\$800,000.00).

## *Major projects completed:*

Completed research included projects such as a Comprehensive Gap Analysis to Assess the OECS Secretariat and Member States in Land Management Capacity; Agricultural Rural Systems in the LACC: the collective challenge of governance and forestry-poverty alleviation (funded by the European Union ACP Caribbean and Pacific Research Programme for Sustainable Development).

Michael Sutherland completed a project on Managing Adaptation to Environmental Change in Coastal Communities: Canada and the Caribbean. This was an International Community-University Research Alliance (ICURA) five-year project, funded by the Social Sciences and Humanities Council and the International Development Research Centre, Canada (The UWI Sir Arthur Lewis Institute of Social and Economic Studies (SALISES), and University of Ottawa, Canada).

Michael Sutherland and Michelle Mycoo wrapped up projects on physical adaptation: a Global Climate Change Alliance (GCCA) project on Climate Change Adaptation (CCA) and another on Sustainable Land Management (SLM) in the Eastern Caribbean, Organisation of Eastern Caribbean States (European Union-funded).

Also coming to an end was Michelle Mycoo's CASCADE: Climate Change Adaptation Strategies for Water Resources and Human Livelihoods in the Coastal Zones of Small Island Developing States (The UWI Sir Arthur Lewis Institute of Social and Economic Studies (SALISES), and Fondazione Eni Enrico Mattei (FEEM), Italy).

## **Department of Civil and Environmental Engineering**

The Department's research agenda addresses sustainable infrastructure (for the Caribbean) for the range of natural hazards and disasters the region is subjected to over the uncharacteristic weather and natural phenomena experienced.

In this regard, Hurricane-Resistant Housing, Coastal Zone Integrity, the Environment and Construction Materials and Management form the major areas of endeavour. The first phase of research on Hurricane Resistant Housing has been completed, and received a national award. The Sustainability of Building Envelopes is also nearing completion and due for publication this year.

***Funding secured by the Department of Civil and Environmental Engineering:***

The Ministry of Energy and Energy-based Industries of Trinidad and Tobago awarded the Coastal Engineering group TT\$785,000.00 to support capacity building in research on energy infrastructures in the coastal zone of Trinidad and Tobago; and The UWI Office of Research Development and Knowledge Transfer awarded the group TT\$685,000.00 to support research on the hydrodynamic behaviour of the eastern coastal zone of Trinidad.

**OUTREACH****Department of Electrical and Computer Engineering**

The Department maintained collaborative arrangements with several regional and international institutions including the Caribbean Telecommunications Union, the Latin American and Caribbean Collaborative Research Initiative, IBM, NASA, Boeing, MIT's NextLab, the Institute of Electrical and Electronic Engineers (IEEE), Trinity College Dublin, University of Calgary and Nvidia Corporation. The results have included joint research programmes leading to journal publications, student exchanges and inputs to curriculum development. Level I student, Jason Renwick, went through a highly competitive selection process to win a summer internship at NASA's Ames Research Laboratory. As a result of his excellent performance, he went on to receive a 2015 Ames Honour Award for outstanding technical contributions to electronics prognostics and for unprecedented support to NASA's education mission.

**Department of Mechanical and Manufacturing Engineering**

The Department's outreach programme is carried out through the Mechanical and Manufacturing Engineering Enterprise Research Centre (MMERC), a unit within the Engineering Institute. The MMERC is a hub for industry-academia collaboration within the Department and wider Faculty. It serves as a nexus for collaborative applied projects between

the Department and industrial, business, and public partners in the region. Concurrently, it bolsters regional innovation efforts by encouraging the commercialisation of innovative products and technologies and engaging regional industry leaders in fore-sighting activities to advance the innovation discussion.

Some of the companies currently facilitating MMERC projects are Petrotrin, Advanced Foam Ltd., Massy-CAT (formerly known as Tracmac Engineering Ltd.), CARILEC, Methanex, and InvestT. MMERC also works with local industries to provide industrial projects for final year undergraduate students.

**Department of Civil and Environmental Engineering**

The Department held a major consultation in 2014 with industry to shape the review and restructuring of the undersubscribed courses in the Environmental-Water group. Seventeen participants from both local and regional organisations attended the consultation, which was held at The UWI, St. Augustine Campus. The outputs are being incorporated into the revised courses. The Department signed an MOU with the Ministry of Works and Infrastructure (MWI) to provide a platform for innovation and knowledge transfer in the development and design of specialised civil infrastructures. The project titled IKEP will be housed in the Faculty of Engineering over the next five years.

The Department intends to continue its community service effort through re-appointment of staff as reviewers for refereed journals; technical engineering committee membership; support for the ICE West Indies professional engineering body; participation in MOU arrangements with governmental and non-governmental organisations; and technical support for the development of specialist solutions for pressing infrastructure issues associated with the planning, design and service performance of the spectrum of physical infrastructure elements.

# ENGINEERING

## REVENUE GENERATION/COST CONTAINMENT

The Environmental-Water group in the Department of Civil and Environmental Engineering held two two-day short courses on River Mechanics which earned approximately TT\$160,000.00 in revenue.

## PROJECTED ACTIVITIES FOR 2015/2016

Overall, the Faculty plans to establish internship programmes, research and innovation centres; expand the Engineering Institute and upgrade the laboratory and physical environment.

In the 2015/2016 academic year the Department of Chemical Engineering will prepare for the visit of the Institute of Chemical Engineers for re-accreditation of the BSc and MSc programmes in Chemical Engineering and the re-accreditation of the BSc Petroleum Geoscience by the Geological Society of London.

The Department of Electrical and Computer Engineering plans to introduce a new BSc programme in Software Engineering and a part-time BTech programme while labs are to be renovated and expanded.

The Department of Civil and Environmental Engineering will undergo an external quality review conducted by The UWI Quality Assurance Unit, St. Augustine in 2015/2016, as well as accommodate a full visit by the JBM in the same year. Currently work is on-going to restructure the MSc programmes to include specialisations that would enhance professional practice in Structural Engineering and Offshore Engineering. A research group in Fracture Mechanics of Construction Materials is being formed to complement the infusion of numerical methods in the degree offerings. The focus is on asphaltic materials and concrete materials, and publications are expected within two years.

Between 2016 and 2018 the Department intends to increase the offering of online programmes, particularly the self-financing programmes, to embrace a wider catchment of applicants; establish a centre for research and development in Coastal Zone Engineering, a Centre for Engineering Architecture, and introduce a new MSc Architecture that is under the final stages of development. Other future activities include the establishment of a Centre for Transportation Studies; training of all ATS staff; and pursuit of the accreditation of all of its programme offerings on a continuous basis.

## DISTINGUISHED VISITORS

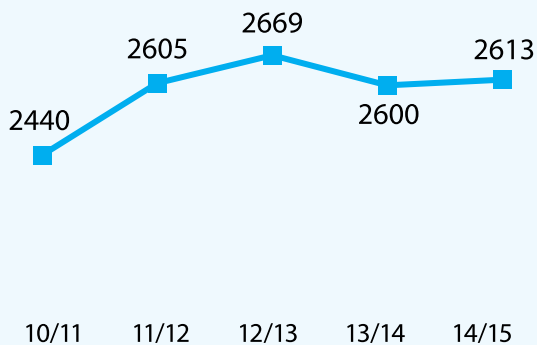
### Mr Bill Tinsley

Panel Chair  
The Institute of Materials, Minerals and Mining  
UK

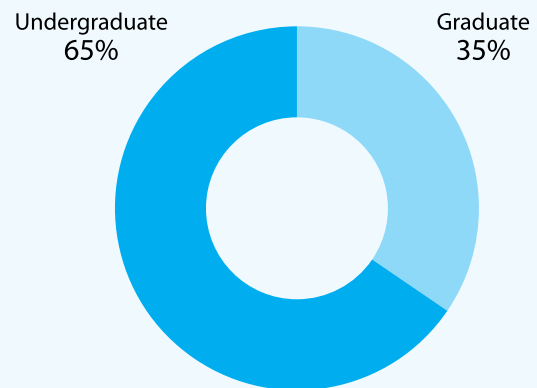
### Euring Ian Bowbrick

Panel Member and Secretariat  
Director, RD  
The Institute of Materials, Minerals and Mining  
UK

GROWTH IN ENROLMENT  
2010 – 2015



GRADUATES BY PROGRAMME  
2014 – 2015



# FOOD & AGRICULTURE



Dr Isaac Bekele  
Faculty Dean



## EXECUTIVE SUMMARY

The 2014/2015 period in the Faculty of Food and Agriculture (FFA) was focused on further consolidation, the continued development of internal resources and creation of other partnerships with institutions, as well as a further focus on enhancing the University Farms for teaching and learning. The Faculty also concentrated on the University's strategic perspectives – financial, teaching and learning, student development, graduate studies and research, outreach and employee engagement. In summation, the last four years in the life of the Faculty has been one of building and consolidation. The Faculty continued to focus on income diversification by expanding and upgrading the farms and marketing of the Faculty to increase student enrolment.



# FOOD & AGRICULTURE

## **University Farms**

In the period under review, the Faculty continued to concentrate on building capacity for relevant and innovative research, as well as income diversification, by expanding and upgrading the farms under its purview. The Faculty sought to improve the level of operations and services at the University Field Station in Mount Hope, while strengthening the level of financial benefit derived from activities such as sales of produce and other service offerings. Milk production, which had previously been in a state of decline, started moving in a positive direction, resulting in increased revenue. The purchase of new gilts at the piggery improved both activity and productivity of the unit. A new meat goat operation was established as part of the Faculty's effort to initiate a breeding programme to develop new lines of high performance meat goats suitable for the region, while providing a future source of income generation. Additional forages were also established to ensure availability of diverse nutrient sources to meet the demands of various livestock species under production in the farm.

The development of the new farm at Orange Grove continued in 2014/2015. Apart from expansion of acreage under crops, irrigation and road infrastructure also received attention. The farm now has an excellent irrigation network with water supplied from the well through three ponds, which serve as holding bays. Most service roads were repaired and upgraded and drainage work was also undertaken. Construction of a farm building began in the middle of 2015 but is yet to be completed and handed over. The most important activity on the new farm is the construction of new greenhouses covering an area of 2,234 m<sup>2</sup>. These greenhouses were customised for local conditions based on information provided by the Faculty to experts at the China Agricultural University (CAU). The Chinese Government through its Ministry of Agriculture provided funding for the greenhouses, while the Faculty covered the construction cost from its revenue accounts. On October 21, 2015, the three newly installed greenhouses were commissioned. These will be evaluated for suitability under local conditions and used to test the performance of vegetable crops from China, and introduced to local farmers, once proven to be successful.

The Faculty's effort at capacity building through partnership has led to this significant milestone, less than two years since developing the master plan for the Agricultural Innovation Park (AIP) on this site. With this advancement and other associated activities, the Faculty is well poised to be an effective player in tropical crop research and innovation, outreach and higher education. It is hoped that this AIP will serve as a development model for Caribbean greenhouse agriculture.

Remarkable progress has been made so far in the collaboration between The UWI and the China Agricultural University (CAU) in just two years. Looking to the future, there is a need to consolidate the progress made so far while identifying and prioritising critical areas of future collaborative engagement.

## **Department of Agricultural Economics and Extension (DAEE)**

In line with the core strategic focus of the University embodied in its Strategic Plan 2012-2017, the Department is focusing its research activities in specific areas such as nutrition and food security, the impact of climate change on food systems, and natural resource and environmental management. Under teaching and learning, the Department's activities emphasised curriculum renewal, quality assurance, reducing student/staff ratios – especially in agribusiness, and reducing the content of the degree programmes offered in the Faculty of Social Sciences (FSS) because of the pressure for places in over-subscribed FSS courses and part-time teaching. The Department continued work both to expand PhD and MPhil degree programmes especially in the area of human sciences and to improve graduate teaching particularly in the MSc Agricultural Economics and MSc Marketing and Agribusiness programmes.

## **Department of Food Production**

The Department of Food Production held several employee and student engagement activities. Agri-Fest, held in July 2014 encouraged the sale of seedlings, small ornamentals and agro-products. The "My UWI, My Future" campus tour programme held from January 5-16, 2015 featured demonstrations, exhibition of animals and interaction with secondary school students who came out in their numbers. Additionally, a nation-wide school visitation drive was undertaken in an effort to market the Department. With regard to funding and revenue generation, several staff members and postgraduate students received funding from the Campus Research and Publication Fund, and additional earnings generated from the sales of crops, livestock, laboratory coats and an agouti training workshop.



### Department of Geography

In this, the third year of its existence, the Department of Geography continued to perform well. Research projects in progress received funding of approximately TT\$1.6 million, and a new research project was awarded TT\$300,000.00 in funding. Staff and postgraduate students continue to publish extensively. The Department finalised the new BSc Geography programme with the launch of Level III of the programme. The major outreach activity was the hosting of the 3<sup>rd</sup> Geography Awareness Week for Trinidad and Tobago, which was again a great success and helped to develop linkages with local schools.

From its inception in August 2012, the Department faced a serious lack of resources, particularly staff offices, administrative support and limited academic staffing. While improvements have been made – most notably through the provision of one secretary – human resources remain a particular challenge as they are still at a critically low level, which makes administration difficult and places the sustainability of the Department at risk. In spite of this, the Department has continued to expand and develop programmes. This academic year, the Department took on the management of the new revised Major in Environmental and Natural Resources Management programme, with no additional administrative resources. Despite the popularity of its programmes, the Department has been unable to secure additional academic staff positions to enable its expansion.

### ENROLMENT

The Faculty has begun an intensive marketing campaign in secondary schools locally and across the region to market its programmes to increase student enrolment. This effort will be sustained, as it will take time to sensitise stakeholders of valuable areas of training available in FFA.

The Department of Geography reported significant growth in its student numbers since the teaching of the subject commenced in 2005. During the 2014/2015 period, 203 persons enrolled in the Department for the undergraduate degree and 14 for the postgraduate degree.

Compared to 2013/2014, the Department of Agricultural Economics and Extension (DAEE) saw a drop in overall enrolment by approximately 10%. This was due primarily to the decline in the numbers of students taking the Agribusiness Management degree and the Major in Agribusiness. The proposed Major in Entrepreneurship and BSc Entrepreneurship and Innovation have the potential to reverse this trend. Notwithstanding the above, the Department recorded five first-class honours graduates and generally, more than 95% of graduates completed their programmes within three years of entering The UWI. Additionally, 12 students earned distinctions in the Diploma in Institutional and Community Dietetics and Nutrition (DICDN). This reflects the diligence of both student and staff as well as the creation of the optimal student-driven learning environment.

At the Department of Food Production, 128 students enrolled in the BSc General degree, 27 in the BSc Agriculture/General Agriculture, two in the Tropical Landscaping Major and four in the Agricultural Science/Technology Major. At the postgraduate level, 41 persons enrolled in the MSc, MPhil and PhD degrees combined.

### GRADUATION

During the period under review, six students from the DAEE received first-class honours. Twelve received distinctions from the DICDN programme; while two MPhil Agricultural Economics were awarded to **Antoinette Brown** and **Malcolm Wallace**; two MScs to **Marc Garcia** and **Treasure Alcindor** and the PhD Human Ecology was awarded to **Anisa Ramcharitar-Boume**.

The Department of Geography focused on expanding student numbers and improved graduation times on the MPhil and PhD degree programmes. During the year in review, 60 students graduated with a Major in Geography.

# FOOD & AGRICULTURE

Outstanding undergraduate students in the Department of Food Production for 2014/2015 included:

- **Lekisha Ernest:** The Head of Department Prize (for the best Year I performance in BSc Agriculture (Spec))
- **Andre Thomas:** The Head of Department Prize (for the best Year II performance in Agricultural Technology Major)
- **Amanda Lee Ying:** The Head of Department Prize (for the best Year I performance in Tropical Landscaping)
- **Saeed Ali:** The Head of Department Prize (for the best Year II performance in BSc Agriculture (Spec))
- **Marinus Jules:** The Head of Department Prize (for the best Year II performance in Agricultural Technology Major)
- **Danielle De Freitas:** The Head of Department Prize (for the best Year II performance in Tropical Landscaping)
- **Neila Ramjattan:** The Richard A.I. Brathwaite Prize (for the best performance in the BSc General Agriculture Year III)
- **Ariel Mohan:** The Head of Department Prize (for the best Year III performance in Agricultural Science Major)
- **Shanaz Khan:** The Head of Department Prize (for the best Year III performance in Tropical Landscaping)
- **Fadil Khan:** Frederick Hardy Prize (to the Level III student who obtains the highest marks in courses taken in Soil Science over Years II and III including the project)
- **Reah Gonzales:** W.E. Freeman Prize (for the best undergraduate final year project in Cocoa – joint Faculty of Agriculture and Faculty of Science and Technology)
- **Neila Ramjattan:** Principal's Prize (Awarded for the best performance in BSc Agriculture General over Year I to III)

## Special Prizes

- **Mariah Boodoo and Kinda Williams:** The Agricultural Development Bank (ADB) Prize (for the best Livestock Project)
- **Mitch Jno Charles:** Currie Memorial Prize (for the student who excelled in extra-curricular activity subject to satisfactory academic performance)
- **Shanaz Khan:** The Garden Club of Trinidad and Tobago Prize (for the best practical paper on horticulture-related topics)
- **Neila Ramjattan:** Norman Girwar Award for Excellence: (to the academically excellent student with the best final year project in Food Production)
- **Neila Ramjattan:** The Professor Gary Wayne Garcia Livestock Prize (to the best graduating student in Livestock Science)

- **Jaron Baird:** The Professor Lawrence Wilson Prize (for the best undergraduate final year project in Post-Production Technology)
- **Neila Ramjattan:** Thompson, Badrie-Maharaj & Associates Attorney-At-Law Prize (to the best final year undergraduate project in Microbiology or Food Safety in the School of Agriculture)
- **Amanda Lee Ying:** TECU Credit Union Prize (for the best Year I Tropical Landscaping Major)

Outstanding postgraduate students for 2014/2015

- **Shaneisha Onfry:** The Honourable Minister of Food Production, Land and Marine Affairs Prize (for the best performing student in the mandatory research project of the MSc Agri-Food Safety and Quality Assurance) and the Muriel Turnbull Prize (for the best oral presentation in the MSc Agri-Food Safety and Quality Assurance Research Project)
- **Samuel De Costa:** The Professor Richard A.I. Brathwaite Prize (for the best performing student in the Research Project of the MSc Tropical Crop Protection)
- **Gail Young:** PhD Livestock Science
- **Deneil Lara and Renaldo Belfon:** MPhil Soil Science
- **Reashad Ali, Marissa Bain-Kent** (Distinction) and **Cameedra Ram** (Distinction): MSc Tropical Animal Science and Production
- **Samuel De Costa** (Distinction), **Raymond Macoon** and **Samantha Ramlal:** MSc Crop Protection
- **Winston Scott** and **Russell Smith:** MSc Tropical Crop Protection
- **Postgraduate Diploma and MSc Agri-Food Safety and Quality Assurance**
  - o Nandrani Bridglal (Distinction)
  - o Tenille Fanovich (Distinction)
  - o Shantelle Henry (Distinction)
  - o Sean Lorde (Distinction)
  - o Shaneisha Onfry (Distinction)
  - o Roopnarine Siewnarine (Distinction)
  - o Narita Singh (Distinction)
  - o Shivam Rampersad
  - o Kylon Ransome
  - o Sarah Dharoo
  - o Wilfrid François
  - o Vivian Henry
  - o Jean Robert Nobert
  - o Donnette Pierre

## STUDENT ACHIEVEMENTS

**Luanne Manzanero**, and **Kristen Mohammed** who are both pursuing the MPhil Crop Science were awarded UWI Postgraduate Scholarships. **Nolana Lynch** received the Commonwealth Youth Award for Excellence in Development Work for the Caribbean Region: "Climate Change and Environmental Sustainability."

**Renaldo Belfon**, a recent MPhil graduate in Soil Science, received the "Green Talents 2015 Award" from the Government of Germany. Each year the German Federal Ministry of Education and Research (BMBF), invites young researchers from all over the world to take part in the "Green Talents – International Forum for youngsters of High Potentials in Sustainable Development". Submissions were received from 550 applicants from more than 90 countries. The winners (27 winners, representing 20 countries) were awarded for their creative and intelligent solutions to some of the pressing problems of these times, and invited to participate in a two-week science forum during which they also visited top institutions for sustainable research in Germany.

## TEACHING, LEARNING AND STUDENT DEVELOPMENT

Trinidad and Tobago, more than any other country in the region, has the greatest potential to build a knowledge-based agricultural economy and spearhead the development in sister countries of the region. However, without a highly skilled indigenous, innovative scientific and technical staff, developing a knowledge-based agricultural economy will not be possible. So the interweaving of graduate level training in plant genetics and breeding as one of the main pillars of the collaborative effort between The UWI and CAU is a critical element necessary for setting the project on a sustainable footing. Tied to the Agricultural Innovation Park (AIP) development arrangement is a plan, which is already underway to train plant biotechnologists, geneticists and breeders to support the region's effort to embark on sustainable development of the agriculture sector. The effort includes having graduates spend two years in CAU pursuing MSc level training in genetics and breeding followed by joint PhD training in plant breeding in The UWI through joint supervision.

MSc level training in CAU is fundamental to the success of this project. Through this process, participants acquire up-to-date knowledge in genetics, molecular genetics and breeding while mastering breeding skills through laboratory and fieldwork. So far the focus has been on vegetable and corn breeding, but the plan is to include root crops breeding in the future, contingent upon discussions with CAU. The plan envisions annual placement of three graduates for MSc level training in CAU (vegetables, root crops and corn breeding) for the next 4 to 5 years for which funding will be secured through an agreement with CAU.

So far, four recent graduates have participated in this programme (three on vegetable breeding, one on corn breeding). Two are now in their final year of MSc level training in CAU and are expected to return by August 2016. Another two started their training in CAU in August/September 2015, one of whom is enrolled directly in the PhD programme (having already been awarded an MPhil from the FFA).

Funding for living expenses and tuition has been provided through scholarship facilitated via CAU while the Faculty has provided return tickets for each participant. As the first group will be returning to The UWI St. Augustine Campus soon, the necessary infrastructure and resources must be put in place for the next phase of the training at the PhD level. This would require involvement of joint supervisors from FFA and CAU. In this regard, discussions with the visiting team in October 2015 focused on the best way forward for the PhD level training and structuring the MSc level engagement.

Overall, during the reporting period, the Faculty taught 759 undergraduate and 221 postgraduate students. The Faculty also introduced a new Major in Entrepreneurship, which is already gaining traction among applicants and showing promising Preliminary Entrance Committee figures for this major.

# FOOD & AGRICULTURE

## **Department of Agricultural Economics and Extension (DAEE)**

The DAEE introduced the new Major in Entrepreneurship, and the first year commenced with the September intake of students. In addition, several new courses have been developed and approved for offering in the MPhil/PhD in Human Ecology programme. The DAEE is currently developing an MSc Public Health Nutrition.

The DAEE proposes to continue revisions of all its programmes to ensure quality of content and delivery. These revisions would consider course content and competencies that are congruent with the development of the desired UWI graduate. The possibility of reducing the total number of credits to around 90 is to be explored. The programmes for consideration over the next two years include the BSc Agribusiness Management; BSc Agribusiness Major; BSc Human Nutrition and Dietetics and the BSc Human Ecology. Plans also exist to upgrade the Minor in Sports Nutrition to a major.

## **Department of Geography**

In the areas of teaching and learning, the Department's focus was mainly on curriculum renewal and quality assurance, with specific regard to the continued development of the existing BSc/BA General (Geography Major) and BSc Geography degree. Other priority areas included the management and development of the Environmental and Natural Resources Management Major as well as a Master's level programme, but limited staff resources make this difficult. During the period under review, Level III of the BSc Geography programme was successfully launched.

## **GRADUATE STUDIES**

During the reporting period, nine MSc degrees, one Postgraduate Diploma and one MPhil degree were awarded from FFA. The Department of Geography in particular concentrated on expanding student numbers, improving graduation times on the MPhil and PhD degree programmes and on developing core courses at the postgraduate level.

## **RESEARCH AND INNOVATION**

The Faculty continues to significantly increase the output of research and publications. Given the staff complement and the fact that the Faculty has been in operation for only three years, the high level of annual productivity is extremely encouraging.

### **UWI RDI Fund – Promoting Agriculture**

The University of the West Indies-Trinidad and Tobago Research and Development Impact (RDI) Fund is a primary source of national funding for The UWI St. Augustine Campus research agenda. Established in 2012, the Fund's primary purpose is to support research projects, which address pressing development-related problems in society. Since the Fund's establishment, the Faculty has been successful in securing awards. During the 2014/2015 academic year, five staff members from FFA have been successful in winning UWI RDI grants.

### **Department of Food Production**

The Department of Food Production is involved in research issues on food, agriculture, soils and its related environment. The mission of the Department is to contribute to the sustained improvement of the region's well being through outreach, provision of relevant education and research in tropical food and agricultural production and utilisation, sustainable environment, and to adopt a holistic approach to agri-food safety and quality assurance.

The Department's six major research pillars are; soil chemistry, physics and its environment; food and nutrition security and agricultural diversification; food safety, microbiology and quality assurance; tropical crop production, biotechnology breeding and protection; tropical livestock production, breeding and technology; tropical commodity utilisation and post-harvest physiology and technology.

### Department of Geography

The Department focused on the development of the Advanced GIS Laboratory as a resource for the Campus, Faculty and Department to enhance research into climate and environmental change, as set out in the Geography Research Agenda document.

Research in the Department of Geography focused on *Climate Change and Society in SIDS Environments: Towards a Sustainable Strategy for 'Good Governance' and Local Resource Management in Vulnerable States*, and contributed to nine of the 15 major research clusters of The UWI Strategic Plan 2012-2017, namely: biodiversity and environmental protection; biotechnology, climate change and sustainable development; crime, security and justice; cultural and entertainment industries; governance and management of the Caribbean sea; health and wellness; natural hazards management; sustainable tourism, small island developing states (SIDS); and education. As a department and a discipline, Geography is excellently placed to bridge the physical and human sciences. The following research themes are identified as priority:

- Theme 1: "*Society, nature and culture*", particularly; environmental laws, environmental impacts and political economy; tenure rights, the movement of goods and public involvement in the urban and rural sectors; environmental knowledge, geographical education and cultural conceptualisations of landscape; and the public and private spheres in Trinidad and Tobago government and accountability.
- Theme 2: "*Environmental processes, climate and sustainability*", particularly; land cover and land use patterns and change in Trinidad and Tobago; environmental change, climate change and climate adaptation; and hazard perception and management, with particular reference to hydrological and coastal hazards.

### Major Research in Progress

- **Dr Matthew Wilson** and **Dr Priya Kissoon**: "Terrestrial Flood Risk and Climate Change in the lower Caroni River Basin, Trinidad: Adaptation Measures for Vulnerable Communities". (Funded by The UWI RDI Fund: TT\$550,000.00).
- **Dr Priya Kissoon, Dr Jennifer Collymore** and **Dr Matthew Wilson**: "A Matter of Survival: A Life-Course Approach to Understanding the Decision-Making and Economic Livelihoods of School Dropouts in Trinidad and Tobago". (Funded by The UWI RDI Fund: TT\$500,000.00).
- **Dr Matthew Wilson** (collaboration with Dr Arpita Mandall): continued work on the project "Climate Change and Inland Flooding in Jamaica: Risk and Adaptation Measures for Vulnerable Communities" (Funded by a Climate and Development Knowledge Network (CDKN): US\$78,660.00).
- **Dr Junior Darsan** and **Dr Matthew Wilson**: "Society, Turtles and Environmental Change in Grande Riviere Bay – Towards Sustainable Management of a Vulnerable Community". (Funded by The UWI RDI Fund: TT\$300,000.00).

### OUTREACH

Many exciting activities were undertaken with respect to outreach in 2014/2015. *In Vitro Clonal Propagation of Tropical Plants* was the title of a regional training workshop offered through a collaborative effort between the Faculty of Food and Agriculture and the Yucatan Centre of Scientific Research (CICY) and funded by the Mexican Government through IICA. The signing of a Memorandum of Understanding preceded the workshop, which was held from June 15-26, 2015 in the Faculty's newly installed *E J Duncan Tissue Culture Laboratory*.

The Faculty welcomed participants from 13 English-speaking countries: Antigua, Bahamas, Barbados, Belize, Dominica, Grenada, Guyana, Jamaica, St Kitts, St Lucia, St Vincent, Suriname, Tobago and Trinidad. Facilitators were Professor Carlos Borroto and Dr Manuel Roberts from the CICY. Currently, two members of staff are undergoing specialised training in CICY as part of an effort to building capacity in micro-propagation and biotechnology.

# FOOD & AGRICULTURE

The Faculty also successfully hosted the 5<sup>th</sup> UWI Regional Plant Quarantine Officer Training workshop entitled Principles and Procedures for participants from Anguilla, Antigua and Barbuda, Aruba, Bahamas, Barbados, Belize, British Virgin Islands, Dominica, Grenada, Guyana, Haiti, Jamaica, Montserrat, St Kitts, St Lucia, St Vincent, Suriname, Trinidad and Tobago, and Turks and Caicos. The course, which officers praised highly, continues to have positive impacts on their job performance.

The success of the course was as a result of the collaborative effort among The UWI, the United States Department of Agriculture, Animal and Plant Health Inspection Service (USDA APHIS), Greater Caribbean Safeguarding Initiative, the Inter-American Institute for Cooperation on Agriculture, Food and Agriculture Organisation of the United Nations, the Centre for Agricultural Bioscience International, Ministry of Food Production of Trinidad and Tobago, Ministries of Agriculture of Jamaica and Barbados, and other regional partners. The course took place from July 27-August 7, 2015. These collaborative training sessions are made possible through an MOU signed by The UWI and the USDA-APHIS office.

The Faculty has benefited from donations of laboratory equipment as a result of the downsizing of the Centre for Agriculture and Biosciences (CABI) International office in Trinidad and Tobago. In addition, discussion is underway for the use of the space in the CABI building for activities related to plant health and diseases.

## The International Breadfruit Conference and Expo

“Commercialising Breadfruit for Food and Nutrition Security” was the theme of an international breadfruit conference, hosted by the Faculty, in Port of Spain, Trinidad and Tobago, from July 5-10, 2015. The ultimate goal of the conference was to realise the potential of breadfruit to contribute to the region’s food and nutrition security through enterprise and value-chain development. Over 103 participants came from 24 countries spread across the Caribbean, the Pacific, Africa, Asia, the Indian Ocean, Central and North America. Participants included farmers, processors, and exporters—several of whom were members of Caribbean Farmers Network (CaFAN) and researchers, including postgraduate students, entrepreneurs, nutritionists, doctors, policy makers and trade specialists.

The funding for the conference and expo was generously provided by PCS Nitrogen, Trinidad Ltd. and the Caribbean Development Bank. The conference successfully achieved its objectives through a very strong participation, especially of the private sector and regional organisations.

**Professor Fitzroy Henry**, Professor of Public Health Nutrition at the University of Technology, Jamaica set an excellent platform for the conference with his feature address on “Agriculture, Health and Development”, while keynote speaker, **Dr Diane Ragone**, Director of the Breadfruit Institute at the National Tropical Botanic Garden in Hawaii, delivered an inspiring presentation on “Breadfruit for Food and Nutrition Security in the 21st Century”. Areas covered during the conference included research and development, entrepreneurial activities in health and nutrition, plant propagation and germplasm description, evaluation and utilisation, tree management, production systems, post-harvest handling, product development, equipment development, marketing and consumer acceptance, financial analysis, agrotourism and climate change.

Local and regional exhibitors’ exciting samples of breadfruit products showcased the entrepreneurial opportunities at the Breadfruit Exhibition and Festival – liqueur, ice-cream, cheesecake, kuchela, pancake mix, granola, paper products, lotions and art. Two recipe books, *Breadfruit Flavours – The Ultimate Breadfruit Cookbook*, prepared by the FFA, and *Bread for Life – Breadfruit* were also launched to encourage increased breadfruit consumption.

This Expo created an opportunity for regional, small-scale breadfruit value-chain operators to showcase the breadfruit-based products to the public, business entrepreneurs and researchers gathered from different parts of the world. It created an atmosphere for business networking, in addition to introducing their innovative breadfruit products to key stakeholders. It also provided an opportunity for small machinery manufacturers to present their products to breadfruit processors.

### Caribbean Breadfruit Network (CBN)

An International Breadfruit Network was launched at the Breadfruit Conference and the Caribbean participants passed a resolution to establish a Caribbean Breadfruit Network (CBN). The aim of the Network is to sustain efforts to support breadfruit consumption for food and nutrition security and development of the breadfruit industry in the Caribbean. A Working Group (WG) was established for the management of the Network. National focal point representatives identified by governments of their respective countries in the Caribbean, representatives of CaFAN and PCS Nitrogen Trinidad Limited and the Faculty make up the core of the Working Group. The Faculty was also designated as the regional focal point for breadfruit research, development, training and outreach, and coordinator of the CBN. Subsequently, the Network was officially launched on November 12, 2015 in the Faculty of Food and Agriculture at The UWI, St. Augustine Campus with representatives from seven Caribbean countries in attendance. The Faculty serves as the secretariat and the focal point of the Network.

### Caribbean Extension Practitioners Network (CAEPNet)

The Caribbean Extension Practitioners Network (CAEPNet) was launched at the Faculty in February 2013 with a meeting of Caribbean Extension directors with the secretariat being provided by the Faculty. Since then, much work has been on going to put the Network on a strong footing and to really build a sustainable network. The Faculty through the Extension Unit provided secretariat support for the Network. The second meeting of the Network took place in the Faculty in July 20-22, 2015. External financial support is provided by Global Forum for Rural Advisory Services (GFRAS).

### CACHE Secretariat

The CACHE (Caribbean Council of Higher Education in Agriculture) is a regional network of public and private educational institutions, organised to enhance their contribution toward fostering human resource development for sustainable transformation of agriculture in the Caribbean. In accordance with the Board's request for the Faculty to host the secretariat, the Faculty has taken the necessary steps to implement the request putting the CACHE Secretariat under the Office of Deputy Dean, Outreach and Internationalisation in the Faculty's Business Development Unit.

### Departmental Outreach

**Dr Laura Roberts-Nkrumah** of the Department of Food Production conducted a training workshop in Trinidad and Tobago on Sustainable Breadfruit Production, at PCS Nitrogen Trinidad Ltd and was the Co-Convener of the International Breadfruit Conference 2015 and Chair of Organising and Scientific Committees. Her colleague, **Professor Gary Garcia**, hosted a successful 11<sup>th</sup> Xcimfauna Neo-tropical Animal Wildlife Conference at The UWI, St. Augustine Campus from August 17-22, 2014. The conference consisted of 14 mini-courses with 107 registered participants from 15 countries. The Department of Geography focused on outreach to improve pre-degree and post-degree contact through schools liaison, alumni development and the mapping of graduate employment trajectories. Geography Awareness Week held on the St. Augustine Campus from November 17-21, 2014, employed stakeholders as guest-speakers to facilitate networks for students and to introduce stakeholders to opportunities of research collaboration with the Geography Department.

## REVENUE GENERATION/COST CONTAINMENT

The Department of Food Production generated additional income through the sale of livestock, vegetables as well as the provision of consulting services. Other areas of funding were in the form of grants listed below:

#### Dr Saravanakumar Duraisamy:

- *Exploring Native Plant Growth Promoting Rhizobacteria for Growth Promotion and Disease Free Quality Seedling Production in Hot Pepper and Tomato.* (Grant award TT\$75,000.00)
- *Promoting Agriculturally Important Microorganisms to Address the Challenges in Food Safety and Food Security in the Caribbean* (Grant award TT\$600,000.00).

#### Dr Isaac Bekele:

- *Impacts of Forest Species and Age Microbial Community Structure and Function in Teak and Pine Forests of Trinidad.* (Grant award TT\$40,000.00).

#### Dr Mark Wuddivira:

- *Impact of Land Use Changes on Soil Natural Capital and Ecosystem Services in Aripo Savanna.* (Grant award TT\$54,824.00).

# FOOD & AGRICULTURE

## **Dr Laura Roberts-Nkrumah:**

- **First International Breadfruit Conference.** (Grant award TT\$25,000.00 for hosting; Grant award TT \$75,000.00 for research towards the publication of two books: *Ethnobotanical Studies of Breadfruit and Breadfruit Germplasm in the Caribbean – Morphological Characteristics and horticultural performance of the breadfruit accessions*).

## **Dr Ravindra Ramnarine:**

- **Improving Crop Production and Productivity through novel techniques that span the value chain.** (Grant award TT \$30,000.00)

## **Dr Wendy Isaac:**

- **Establishment of a Medicinal Plant Garden in Trinidad and Tobago.** (Grant award TT\$30,000.00) **Leader** for *Evaluation of appropriate structural design and varietal screening for Protected Agriculture systems and Reducing Chemical Use, Improving Rural Livelihoods: Towards the sustainable production of fair trade bananas, food crops and alternative markets in St. Vincent.* **Team Leader** for *Improving Rural Livelihoods: Using ICTs to promote Sustainable Production of Food Crop in rural farming communities in selected islands.*

## **Professor Neela Baddrie:**

- Publication with student Riad Hosein *Physicochemical Effects and Sensory Characteristics of Pomerace (Malay apple: Syzygium malaccense) wine: Effects of Varying Pectolase Concentration.* (Grant award US\$137.00)

## **Graduate Studies Research Grants**

- **Mr Cicero Lallo:** for Mr Martin Hughes – PhD Livestock Science Student's conference presentation entitled *Optical chlorophyll methods as tools for rapid and accurate nutritional assessment of pasture herbage: A Review.* (Grant award TT\$10,000.00)
- **Professor Gary Garcia:** for Mrs Michele Singh – PhD Livestock Science Student's, Fieldwork/Data Collection and purchase of Software for Research Purposes. Area of Research: *Reproductive Characteristics of the Female Agouti (Dasyprocta leporine), A Neo Tropical Rodent with Potential for Captive Rearing Systems.* (Grant award TT\$35,000.00)

- **Professor Gary Garcia:** for Ms. Stacey-Marie Syne – PhD Livestock Science Student's Fieldwork/Data Collection. Area of Research: *Neo-tropical Animal Production Models and User Experience Design of Knowledge ePortal.* (Grant award TT\$9,824.00)
- **Dr Laura Roberts-Nkrumah:** for Mr Oral Daley – PhD Crop Science Student's, Postgraduate Training: *Meeting Agricultural Challenges in a Changing World: Biotechnology and Bioinformatics.* (Grant award TT\$10,000.00)

## **PROJECTED ACTIVITIES FOR 2015/2016**

### **Department of Food Production**

The Department has a number of activities planned for the 2015/2016 academic year. Several staff members will be engaging in areas of research beneficial to the University. These include:

#### **Dr Wendy-Ann Isaac:**

- *Technological Solutions for Improved Agro-environment and Sustainability of Agricultural Development; Sustainable and Organic Weed Management in Horticultural Crops, namely Banana in the Windward Islands.*
- Research trials for product distributors using plant bio-stimulants and screening of new vegetable varieties and research work in Pisa, Italy at the Scuola Superiore Sant'Anna (SSSUP) and the University of Pisa (DAGA) under the supervision of Professor Paolo Bàrberi. This research will include mechanical and physical weed management techniques for use in vegetable production systems.
- **Sub-theme Leader** for "Protected Agriculture and Field Crops Diversification" project under the IDRC funded project entitled: *Improving the Nutrition and Health of CARICOM Populations.* Principal Investigator/Project Leader – Dr Isabella Granderson. Research team members include Dr Wayne Ganpat, Professor Neela Badrie, Dr Marquitta Webb, Dr Hazel Patterson-Andrews and Dr Carlisle Pemberton.



- **Team Leader** for CDB funded project entitled: *Research and Training in Protected Agriculture Systems*. Collaborators: CARDI (2012 – present).

**Dr Saravankumar Duraisamy:**

- *Promoting Agriculturally Important Microorganisms to Address the Challenges in Food Safety and Food Security in the Caribbean.*

**Dr Nandakumar Puliyaath:**

- *Genetic Evaluation and Propagation of Germplasm for the Development of Dairy Goat Industry in Trinidad and Tobago.*

**Dr Reynold Stone:**

- *CariWatNet Project – Strengthening the Caribbean Scientific Community in Natural Resource Management and Developing Integrated Watershed Management Plans.*

**Dr Gaius Eudoxie:**

- Sustainable soil practices (conservation and management) with particularly emphasis on the use of composted soil amendments in tropical soils; composting as a recycling and reuse system ideal for small islands.
- Agricultural waste management and environmental protection.
- Protected agriculture systems, and the use of local organic substrates as rooting media combined with correct fertigation protocols; soil physical condition and alteration under various land uses; specifically agriculture and sports and rehabilitation of degraded sporting surfaces, particularly from applied stresses.

**Dr Ravindra Ramnarine:**

Research activities are geared towards protection and enhancement of soil and water quality at the local, national and regional scales. Soil Biogeochemistry (Soil Carbon, Soil Organic Matter dynamics), Soil Management (Tillage), and Soil Fertility (Integrated Nutrient Management); the effects of soil on climate change (Carbon Sequestration/CO<sub>2</sub> fluxes), sustainable agricultural practices using green technologies (Composting), and the restoration of degraded lands.

• **Composting:**

- o “Efficacy of Neem (*Azadirachtin indica*) compost and compost teas as a biopesticide and biofertilizer on greenhouse pepper production”. The objectives of this research are to assess the effects of Neem compost and compost teas on growth and yields of greenhouse peppers, and to investigate the level of suppression Neem compost and compost teas will provide towards pest and diseases that affect greenhouse pepper production.
- o “Relationship of composting system and increasing Neem leaf content on compost quality”. The objectives of this research are to compare compost quality between vermicomposting and thermophilic composting of Neem leaves, and to investigate increasing Neem leaf content on compost properties, especially Azadirachtin and related limonoid content. Since composting results in a safe organic endproduct it can be used as an option for replacing chemical fertilizers and pesticides which can have severe negative impacts on sustainable food production practices, human and environmental health.

- **Carbon Sequestration:** This area of research focuses on evaluating factors affecting the carbon sequestration potential and quality characteristics of farm soils ameliorated with agricultural lime. The objective of this research is to investigate the CO<sub>2</sub>-C sink potential and soil ameliorating effects of agricultural lime applied to a range of soils in Trinidad and Tobago which can aid in developing standards for lime use, aimed at mitigating CO<sub>2</sub>-C emissions and improving soil quality. This research therefore seeks to address issues of climate change mitigation and adaptation in the agricultural sector of Trinidad and Tobago and the broader Caribbean region.

# FOOD & AGRICULTURE

- **Technological Solutions for Improved Food Production:** The UWI RDI funded project titled “Technological Solutions for improved Agro-environment and Sustainability of Agricultural Development”. This project looks at improving the sustainability of the Protected Agriculture (PA) industry through improving the contribution of PA produce to food security goals. One of the goals is to implement non-traditional systems for small-scale farming, aimed at strengthening local food security and adapting traditional open field farming methods in the face of rapidly changing climates. **Dr Ravindra Ramnarine** will be in the role of the soil fertility specialist advising on fertigation systems and fertility management for production systems.
- **Soil Inorganic Carbon:** This project is a joint effort between **Dr Ravindra Ramnarine** and researchers at Agriculture and Agri-Food Canada and is titled “Do agricultural effects on soil inorganic carbon create a significant source or sink of carbon to the atmosphere?” Soils are a major reservoir of inorganic carbon with the global soil inorganic carbon (SIC) pool estimated at 700–950 Pg C to the 1-m depth. Due to its significant size, changes in SIC storage and fluxes can affect the global carbon balance, the atmospheric CO<sub>2</sub> concentration, and climate change. This research attempts to bridge the information gap and provide a better understanding of SIC stocks and fluxes, together with how agricultural activities can impact CO<sub>2</sub> emissions to and removals from the atmosphere through their effect on SIC.
- **Tillage management:** This a long-term project geared towards understanding the effects of no-tillage and conventional tillage on the contributions of soil and plant carbon pools to CO<sub>2</sub> emissions. Soil management practices such as tillage may impact CO<sub>2</sub> emissions in agricultural soils due to their effect on the decay of soil organic matter (SOM). This research seeks to identify the carbon substrates contributing to CO<sub>2</sub> emissions, by measuring the δ<sup>13</sup>C signatures of the constituents of soil organic carbon and of crop residue carbon inputs by using the <sup>13</sup>C natural abundance isotope labelling technique.

## Department of Geography

During academic year 2015/2016, the new Environmental and Natural Resource Management Major programme commences from Level III. New department space will be developed in the accommodation formerly occupied by the Journal of Tropical Agriculture, which requires renovation and should be ready to occupy by the end of 2015/2016 which will allow for the creation of a centralised Department Office space (currently the secretary is residing in an academic staff office); the expansion of the GIS research lab facility; the provision of a research projects support office for the Department (this currently exists, but is occupying an additional academic office); the provision of a small kitchen and lunch area; and the provision of two additional academic staff offices. While this is likely to fit the needs of the Department in the short term, it does not meet requirements as planned through Department expansion.

Two UWI RDI Fund projects in the Department are continuing during academic year 2015/2016: **Dr Priya Kissoon, Dr Jennifer Collymore** and **Dr Matthew Wilson** are working on the project *A Matter of Survival: A Life-Course Approach to Understanding the Decision-making and Economic Livelihoods of School Dropouts in Trinidad and Tobago* (September 1, 2013–April 30, 2015, TT\$500,000.00); and **Dr Matthew Wilson** and **Dr Priya Kissoon** are working on the project, *Terrestrial Flood Risk and Climate Change in the lower Caroni River Basin, Trinidad: Adaptation Measures for Vulnerable Communities* (September 1, 2013–August 31, 2015, TT\$550,000.00). In addition, a new UWI RDI Fund project will start, led by **Dr Junior Darsan** in conjunction with **Dr Matthew Wilson: Society, Turtles and Environmental Change in Grande Riviere Bay – Towards Sustainable Management of a Vulnerable Community**. Each of these projects is in line with the Departmental research strategy and are expected to develop benefits for The UWI and Trinidad and Tobago.

For outreach activities, the Department will continue to build geography awareness in secondary schools through an initiative intended to introduce high school students to the different aspects of the discipline and provide information on geography at the university level.

## DISTINGUISHED VISITORS

### **Department of Food Production**

#### **Dr Angela Alleyne**

Department of Biological & Chemical Science  
The University of the West Indies  
Cave Hill, Barbados

#### **Dr T. Nomura**

Yamaguchi University  
Yamaguchi, Japan

#### **Professor Masayoshi Shiyo**

Faculty of Agriculture  
Yamaguchi University  
Yamaguchi, Japan

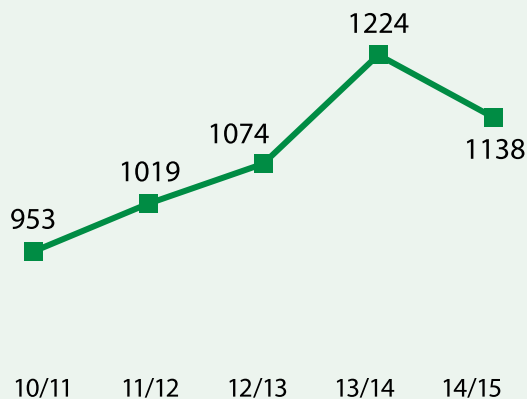
#### **Dr Y. Tonooka**

Life Science Support Office  
Yamaguchi University  
Yamaguchi, Japan

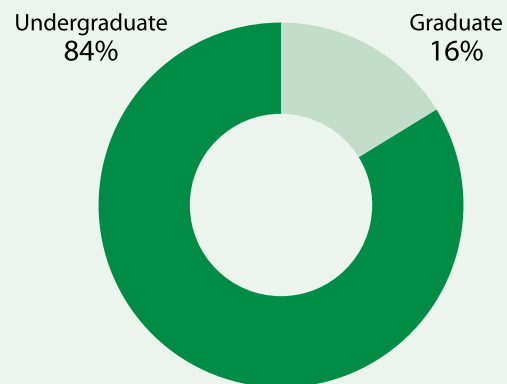
#### **Professor Emeritus Peter van Straaten**

Ontario Agricultural College of the University of Guelph  
Canada

### GROWTH IN ENROLMENT 2010 – 2015



### GRADUATES BY PROGRAMME 2014 – 2015



NOTE: Prior to 2012/2013, the Faculties of Science & Technology and Food & Agriculture were schools in the Faculty of Science & Agriculture.

# HUMANITIES & EDUCATION



Dr Heather Cateau  
Faculty Dean



## EXECUTIVE SUMMARY

The Faculty of Humanities and Education (FHE) remains committed to its operational plan for The UWI Strategic Plan for 2012-2017. In the academic year 2014/2015, the Faculty concentrated on its strategic plans. In the area of Finance, the Continuing Professional Development and Outreach Unit, a self-financing unit of the School of Education, won a significant consultancy in the amount of TT\$2 million. The Department of History was awarded some TT\$600,000.00 in consultancies. At the Centre for Language Learning the IELTS Test Centre firmly established itself as demonstrated by the increase in the number of examination candidates. The Caribbean Interpreting and Translation Bureau was very active in 2014/2015 and continued to be a profitable business venture and the Film Programme was solicited for several Campus projects that generated income for the Faculty. With regard to the Faculty's Internal Operational Processes, the Department of Creative and Festival Arts (DCFA) finalised negotiations and plans to construct a new home for the DCFA at Gordon Street. The first of two phases will start in 2015/2016.



# HUMANITIES & EDUCATION

The Faculty also made significant progress in the area of Teaching, Learning and Student Development, particularly with the development of new programmes. The FHE designed and obtained approvals for six new courses in History, Linguistics and Visual Arts and also designed a BA Journalism degree.

A variety of Outreach activities were undertaken this year. These included workshops delivered by School of Education; History Fest hosted by the Department of History; Campus Literature Week hosted by the Department of Literary, Cultural and Communication Studies; and The Communication Studies Research Day and Podcast series from the Literatures in English section.

The units or sub-disciplines of the Department of Creative and Festival Arts produced close to 40 arts related activities, productions, exhibitions, concerts and events for the University and national community.

FHE staff produced a number of publications during the review period. These included eight books, 30 chapters in books, 40 articles, one review, an interview, a non-refereed article and two technical reports. In addition, members of the Faculty presented 103 papers at conferences.

## GRADUATION

The Faculty awarded 339 undergraduate degrees of which 49 were first-class honours degrees, compared with 55 first-class honours degrees in 2013/2014. The number of undergraduate diplomas and certificates declined from 129 in 2013/2014 to 76 this year.

The top undergraduate student in the 2014/2015 academic year was **Indira Nowbut** who graduated with a Bachelor of Arts degree, Major in Spanish and a Minor in Brazilian Studies.

The Faculty awarded 245 postgraduate degrees, as compared to 382 in 2013/2014, of which 12 were MPhil degrees and three were doctorates. The three doctoral degrees were awarded to **Kwynn Simone Johnson** (Cultural Studies), **Nicha Selvon-Ramkissoon** (Linguistics) and **Rhonda Harris** (Literatures in English).

At the Centre for Language Learning (CLL), 482 persons were examined in IELTS. Another 25 persons were examined in the Diploma of Spanish as a Foreign Language (DELE).

## STUDENT ACHIEVEMENTS

The Trinidad and Tobago Film Festival awarded a prize for outstanding student achievement to **Romarlio Anderson Edghill**, a Film Programme student.

Seven CLL students realised their go-global dream to study in China, while Jennifer De Silva received a scholarship to do a summer programme in Japan in the 2015/2016 academic year.

## TEACHING, LEARNING AND STUDENT DEVELOPMENT

All departments continued to review and revise curriculum to ensure that courses and programmes are relevant and marketable. A continuous curriculum review was also conducted with the aim of consolidating and/or eliminating undersubscribed courses.

At the **Department of Creative and Festival Arts** (DCFA), courses with low enrolment have been temporarily withdrawn from the course offerings and curriculum reviews have been carried out for some courses in Theatre Arts and Visual Arts, to make them more attractive to prospective students. A committee was established to review the Carnival Studies programme – from the name of the programme, to the way the courses are marketed and the intake. The philosophical grounding of the Carnival Arts programme is also being considered, taking into account the entrepreneurial elements, mas' history and development, and how stronger links can be created with other DCFA units (e.g. Visual Arts). A proposal was drafted to change the name of the Minor in Cultural Studies to a Minor in Carnival Studies, and to add three extra courses. Work also progressed at the DCFA to design an Advanced Certificate in Drama/Theatre-in-Education. This was done at the request of the Ministry of Education, to meet the need for more Theatre Arts teachers in secondary schools.

Looking at the rest of the **School of Humanities**, the **Department of History** moved forward with plans to introduce new courses in Heritage Studies and began a review of the MA History degree. The **Department of Literary, Cultural and Communication Studies** drafted a BA Journalism, and minors in Cultural Studies as well as Communication Studies as part of their curriculum renewal.

These projects are at various stages of the design and approval process. In the **Department of Modern Languages and Linguistics** a new programme in Brazilian Studies was drafted and a new course in Language and Social Identity was designed and approved.

Staff at the **School of Education** were engaged in reviews of the re-designed Diploma in Education and of ECCE courses in progress; creation of a new template to record submission dates for assignments to reduce student work overload in the BEd programme; and approval of both the Master's in Tertiary Education in Leadership and Institutional Effectiveness and the MEd in Measurement, Evaluation and Assessment. A new Pre-Service BEd programme is being planned, the Diploma in Education programme is being reorganised and the MA Leadership in TVET and Workforce Development is being reviewed. The School is also collaborating with the DCFA to develop a joint Master's in Music Education.

The **Department of History** hosted nine academics from the University of Vienna and eight academics from the University of Graz, Austria for two weeks of intensive seminars and workshops on the theme, 'The First World War in the Caribbean'. The Department convened five senior academic seminars and received approval for the appointment of one lecturer to teach Cultural History/Heritage. The Department also introduced a Departmental Graduate Liaison Committee and a Departmental Undergraduate Mentoring Committee.

The Faculty's robust approach to academic advising and training of advisors continued in 2014/2015 under the guidance of the Office of the Dean. To this end a Faculty Academic Advising Committee was established, chaired by the Deputy Dean Undergraduate Student Affairs and the Deputy Dean, Graduate Studies and Research.

The **Department of Modern Languages and Linguistics** saw an increase in the number of foreign students participating in study abroad programmes. In this vein, the Department began negotiations with two new universities: Universidad de São Paula (USP) and Grupo Coimbra de Universidad Brasileiras, and also signed MOUs with various international institutions. As a result, the Department is looking forward to welcoming language assistants from France in 2015/2016 and Brazil in 2016/2017.

## RESEARCH AND INNOVATION

The **Centre for Language Learning** continued research and projects following the award of The UWI-Trinidad and Tobago Research and Development Impact (RDI) Fund for Languages and Competitiveness: Positioning Trinidad and Tobago for Sustainable Development. The **Department of Modern Languages and Linguistics** collaborated with the **Department of Literary, Cultural and Communication Studies** to offer staff seminar series to showcase staff members' research.

The Faculty and the **Department of Literary, Cultural and Communication Studies** co-hosted one conference titled, "Towards Social Integration: Rights, Roles, Recognition of Persons with Disabilities" in April 2014 and another international conference this time with the **Department of History** and the University of Vienna on the global impact of the Congress of Vienna, 1814-1815. The Department of History also hosted an international conference titled, "Indian Diaspora: Identities, Trajectories and Transnationalities".

New research clusters were developed in the **School of Education**, such as the Resulting in Sustainable Education (RISE) project. The **Department of Literary, Cultural and Communication Studies** produced a third issue of *Tout Moun: Caribbean Journal of Cultural Studies* on the theme Cultural Policy and Practice and the **Department of History** launched a series of cross-campus seminars at the senior academic level which saw the successful participation of The UWI, Mona Campus in two seminars via Skype.

The **Department of History** conducted an academic tour to Brazil and Venezuela as an international venture, involving The UWI, the Federal University of Roraima (UFRR), the Anton de Kom University of Suriname and the Bolivarian University of Venezuela. Highlights of the tour included an international seminar on the Guyanas held on the campus of the UFRR, in Boa Vista, Brazil, and the documentation of the Trinidad diaspora in El Callao, Venezuela. The preliminary findings were presented to the campus community in a presentation in the audio-visual room of The UWI Alma Jordan Library.

# HUMANITIES & EDUCATION

The **Department of Modern Languages and Linguistics** and the **Department of History** took up an invitation to participate in a visit to Cuba for the 24<sup>th</sup> International Havana Book Fair in February 2015.

## **Research Collaborations: International and National Partners**

A number of staff members engaged in collaborative research with international and national partners.

- **Elna Carrington-Blaides** was involved in on-going collaborative research with the Department of Inclusive and Special Education at the State University of New York at Potsdam and a regional collaboration with counterparts at The UWI, Cave Hill and Mona campuses with a view to rationalising programmes and sharing expertise where Inclusive/Special Education is concerned.
- **Jerome De Lisle** was the lead researcher (Trinidad and Tobago) in an international project on Data Driven Decision-making. This is an international comparative data use study involving ten countries, including, USA, Canada, Britain, Belgium, South Africa, and Trinidad and Tobago. The Principal Investigator is Kim Schildkamp – University of Twente (Netherlands).
- **Freddy James** participated in a research project involving 11 countries, focusing on understanding school participation in processes and practices from the perspectives of the teachers and the students and how those issues of participation may or may not connect with students' and teachers' motivation to learn. He was also involved in the worldwide 1,000 schools project to develop leadership capacity in these schools. Organised by the Commonwealth Council for Educational Administration and Management (CCEAM), it is being funded by the Commonwealth Foundation, the British Educational Leadership Management and Administration Society (BELMAS), the University Council for Educational Administration (UCEA), and the International School Leadership Development Network. He also took part in the Cultural Diasporas Project: A Connecting Cultures Project funded by the Commonwealth Foundation. The project aims to identify the uniqueness of diaspora groups within each of nine selected countries globally and to capture the voices of youth and women elders.
- **Carol Logie** secured an agreement in May 2015 whereby New Jersey City University (NJCU) and The UWI would provide reciprocal assistance in teaching, research, exchange of faculty and students as well as staff development. Dr Logie was also instrumental in securing an MOU in December 2015 between the Queen Maud University College of Early Childhood Education, Trondheim, Norway and The UWI, St. Augustine Campus for the purpose of furthering cooperation in both education and research.
- **Jeniffer Mohammed** partnered with Professor Dennis Conrad of Potsdam SUNY on a research project using biography and life history to study education.
- **Sharon Phillip** collaborated with Cambridge University and The UWI Cave Hill and Mona campuses on a Caribbean Poetry project to research and develop a programme for English teachers.
- **Nalini Ramsawak-Jodha** collaborated with Dr Peter Yee Han Joong from The UWI, Mona Campus on the topic "An Investigation into the Perceptions of Teachers and Students in Jamaica and Trinidad on the Implementations of Secondary Reforms and TVET in Secondary Schools in Trinidad – A comparative study between five countries: Jamaica, Trinidad, China, Taiwan and Canada."

## **Research Collaborations: Local Partners**

Members of staff have been engaged in collaborative research with local partners. Topics of research include:

### **S. Ali, S. Geofroy, D. Barras and B. Bitu:**

- Social Sciences Teachers' Perceptions of Transformatory Learnings from an Initial In-Service Professional Development Programme.

### **B. Mitchell and S. Harry:**

- The eConnect and Learn Curriculum Change in Three Secondary Schools.
- Confronting/Conquering the Technology Implementation Challenge: Experiences in Curriculum Implementation.

### **F. James and D. Augustin:**

- Teachers Learning Through Inquiry: The Experience of Conducting Action Research in an In-Service Diploma in Education Programme.



**J. Yamin-Ali, D. Augustin, S. Phillip and S. Ali:**

- Are We There Yet? Expectations and Efficacy: Heads Of Department Perspectives of the School of Education's Dip Ed. Programme.

**J. Lawrence and E. Carrington-Blaides:**

- Inclusive Education: An Investigation into the Inclusion of Students with Severe to Profound Hearing Impairments at Three General Education Secondary Schools.

**A. Marcelle and E. Carrington-Blaides:**

- Experience Speaks: A General Education Teacher's Experience of Teaching a Child with Autism.

**S. Figaro-Henry and F. James:**

- Mobile Learning in the 21<sup>st</sup> Century Higher Education Classroom: Readiness, Experiences, Challenges.

**F. James, D. Williams, L. Keith, and K. Glasgow-Charles:**

- The Impact of School Violence on Selected Secondary Schools in Trinidad and Tobago.

**S. Herbert, J. Yamin-Ali, and F. James:**

- Investigating the Nature of Graduates' Classroom Practice: One Step in Transforming the Dip Ed Programme.

**J. Yamin-Ali, S. Herbert, F. James, S. Ali, D. Augustin,**

**S. Phillip, and J. Rampersad:**

- Quality Assurance in Teacher Education through Insider Evaluation and Stakeholder Involvement: A Case of Programme Renewal.

**S. Figaro-Henry and L. Boisselle:**

- Management of a Student Run Virtual Space in a Postgraduate Teacher Education Programme.

**S. Figaro-Henry and S. Phillip:**

- Blogs as Blended Classroom Management, Assessment and Linguistic Tools in a Teacher Education Programme in Trinidad and Tobago.

**Research Projects Completed or in Progress**

Staff within the Faculty engaged in a number of research projects, which have been completed or are still in progress.

**Department of Modern Languages and Linguistics**

**B. Braithwaite:**

- "A Website of Medical Terms for Deaf Adults in Trinidad and Tobago".
- "Corpus-based electronic Dictionary of Trinidad and Tobago Sign Language".
- "Documentation and Digital Development of Heritage Languages in Trinidad and Tobago" (with **J. Ferreira**).

**K. Drayton:**

- "Early Literacy Development of Deaf and Hard of Hearing Children".
- "Trinidad and Tobago Child Language Corpus (TTCLC)".

**S. Evans:**

- "Linguistic Advocacy in Legal Systems in the Creole-speaking Commonwealth Caribbean".
- "Sociolinguistic Profile of St. Lucia".
- "Guynawala: A Study of Transplantation and Survival of St. Lucian French-lexicon Creole in Guyana" (with **I.E. Robertson**).

**R. Figuera:**

- "The Development of Short Story Discourse in Trinidad 1838-1919: A Study in Historical Pragmatics."

**D. Mideros and B. Carter:**

- "Naoki's story: one autonomous learner's journey through time and space" book chapter in *Space and Place in Learner Autonomy* for *Research in Language Education* series.

**N. Roberts and B. Carter:**

- "Assessing the Socio-Economic Value of Foreign Language Study Abroad for Language Students at The UWI, St. Augustine Campus".

**J. Sánchez:**

- "Expanding corpora: Tracing Language Variation in the Caribbean Short Story: The Anglophone Caribbean" (Ongoing).

# HUMANITIES & EDUCATION

## Centre for Language Learning

### J. Bukari:

- The UWI-Trinidad and Tobago Research and Development Impact (RDI) Fund project entitled Language and Competitiveness with the theme: "Economic Diversification and Sector Competitiveness." This sub-project examines the role of foreign language proficiency in the socio-economic development of Trinidad and Tobago, as well as the interface between university level language learning and industry.
- Contributed to a chapter entitled, "Language Policy and Education in Central and West Africa, in the 3<sup>rd</sup> edition of the Encyclopedia of Language and Education entitled "Language Policy and Political Issues in Education" by Professor Teresa L. McCarty, GF Kneller, Chair in Education and Anthropology, University of California, Los Angeles, USA.

### B. Carter:

- The UWI-Trinidad and Tobago Research and Development Impact (RDI) Fund project entitled Language and Competitiveness: Positioning Trinidad and Tobago for Sustainable Development. Dr Carter is project leader of this two-year project to investigate the value addedness of foreign language and intercultural competence to companies and individuals in Trinidad and Tobago.

### M. Landa-Buil:

- The UWI-Trinidad and Tobago Research and Development Impact (RDI) Fund project entitled Language and Competitiveness: Positioning Trinidad and Tobago for Sustainable Development. Dr Landa-Buil leads the sub-project "Maximising workplace plurilingualism". This sub-project examines the role of foreign language proficiency in the socio-economic development of Trinidad and Tobago, as well as the interface between university level language learning and industry.

### A. Daly:

- Language and Competitiveness: Positioning Trinidad and Tobago for Sustainable Development. A multidisciplinary research project currently underway which aims to evaluate the added value of linguistic and cultural skills to certain key sectors.

## Department of History

### C. Cwik:

- Sephardics and New Christians in the Caribbean: The History of an Atlantic Minority, 1500-1700.
- Independent 'Peripheries' in the Circum-Caribbean, 1750-1820.

### C. Fergus:

- Abolitionism and Imperialism in Britain, Africa, and the Atlantic.
- "Impact of the Vienna Congress 1814-1815 on Akan/Koromantee Leadership in Slave Revolts in the Americas".
- 'Towards a new student-centred dynamic in the pedagogy of teaching and learning of history'.

### A. Garcia:

- 19<sup>th</sup> Century Cuban Independence and José Martí's Relations with African Diaspora Global Perspectives.
- 'Trinidad under the Spanish Empire and Tobago under French rule'.

### G. Matthews:

- "History of the Church of the Nazarene in the Windward Islands of St. Lucia, St. Vincent, Grenada and Dominica".
- Rosy View of Women Via Calypso: *Continuities, Challenges and Transformation in the Caribbean Gender Relations*.
- "Global Perspectives of Black Power" (with **R. Pemberton, M. Toussaint and J. Teelucksingh**).

### D. Mc Collin:

- Exploring the use of the Digital World to showcase Caribbean History.
- Public Health and Alternative Medicine in the West Indies and Health and Medicine in Trinidad and Tobago since the 20<sup>th</sup> Century (with **R. Pemberton**).

### B. Reid:

- Pre-Columbian Archaeology of the Caribbean, Archaeology and Geoinformatics, Landscape Archaeology and Historical Geography.
- *Caribbean Time* (5000 B.C. to the 21<sup>st</sup> Century).
- The Archaeology of the Red House Site (Port of Spain, Trinidad).

**S.A. Singh:**

- Indo-Caribbean Religious Patterns.
- Social, Religious, Cultural Reconstruction in the Indian Diaspora in the Caribbean and The Global Indian Diaspora.

**J. Teelucksingh:**

- Caribbean Diaspora in Europe and North America.
- Labour Relations and Trade Unions in Trinidad and Tobago.
- Party Politics in Trinidad and Tobago during the 1920s and 1930s.
- The Impact of Marcus Garvey on Trinidad during the 1920s.

**P. Timothy:**

- The History of the PNM in the Constituency of San Fernando West, 1956-2007.
- The History of Secondary Schools Football in Trinidad and Tobago.

**M. Toussaint:**

- Africans in the Americas before Columbus.
- The Congress of Vienna and its Impact on the Caribbean and Latin America and Afro-West Indian Migration to South America.

**Research Grants/Funding Received**

**Department of Modern Languages and Linguistics**

**B. Braithwaite:**

- "A Website of Medical Terms for Deaf Adults in Trinidad and Tobago". (USAID funded project: US\$10,000.00).

**B. Braithwaite and J. Ferreira:**

- "Documentation and Digital Development of Heritage Languages in Trinidad and Tobago". (Supported by The UWI RDI Funding of TT\$249,768.00).

**N. Roberts and B. Carter:**

- "Assessing the Socio-Economic Value of Foreign Language Study Abroad for Language Students at The UWI, St. Augustine Campus." (Campus Research and Publication Award TT\$30,000.00).

**The Department of Literary,**

**Cultural and Communication Studies**

**M. Forde:**

- Organisation of a workshop on Political Anthropology in the Caribbean, June 11-12, 2015. (Campus Research and Publication Funding TT \$25,000.00).

**G. Rampaul:**

- Publication of Postscripts: Caribbean Perspectives on the British Canon from Shakespeare to Dickens. (Campus Research and Publications Funding).
- "The Spaces between Words: Conversations with Writers" podcast series. (Campus Research and Publications Funding).

**OUTREACH**

The Office of the Dean made significant progress in the re-design of the Faculty Office website which includes a Faculty news channel. This was in addition to the conferences, workshops and performances hosted by the Faculty, many of which are now highly anticipated annual events.

**Conferences**

The **Department of Literary, Cultural and Communication Studies** co-hosted a conference titled "Towards Social Integration: Rights, Roles, Recognition of Persons with Disabilities" in April 2014. The **Department of History** co-hosted an international conference with the University of Vienna on the global impact of the Congress of Vienna (1814-1815) and hosted an international conference titled "Indian Diaspora: Identities, Trajectories and Transnationalities".

# HUMANITIES & EDUCATION

## *Lectures, Seminars, Forums, Workshops, Camps, Open Days And Theatre Festivals*

### **Department of Creative and Festival Arts**

Every July and August, **Discovery Camp**, coordinated by Arts-in-Action, allows children to explore a holistic arts experience during the school vacation. Some 200 children participated in this programme on the DCFA grounds at Agostini Street.

**The Republic Bank Pan Minors** moved its entire vacation programme to the Department of Creative and Festival Arts at Gordon Street in July 2015. Alumna, Michelle Amoroso was the coordinator and supervised over 200 students. Music lecturer, Satanand Sharma designed the assessment materials for the students.

The **Visual Arts Unit's** second **Visual and Carnival Arts Vacation programme** attracted 60 students. The programme was supported by the Division of Culture and was coordinated by adjunct lecturer in Visual Arts, David Collymore.

The **Community School of the Arts**, coordinated by an alumna, Cheryl-Anne Broomes, continued to provide Saturday classes during each semester for children to explore their talents in Music, Dance, Drama and Visual Arts. The school is held at the DCFA on Gordon Street.

Some of the courses offered by the DCFA require students to formulate projects that involve and impact communities.

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

**The Bridge Foundation and Guyaguayare RC School – Art Education project:** Visual Arts students in Fine Arts and Design worked on this art education project to stimulate reading. Results were presented at outdoor exhibition in Independence Square during the Bocas Lit Fest – led by Ken Crichlow and David Collymore. In July 2015 the Department committed to the renewal of the programme which would continue in the 2015/2016 academic year.

### **Esabella Foundation/Tablepiece Government Primary School**

was a "Murals on Bus Sheds" project with students of the Visual Arts Unit, Les Coteaux, Tobago.

### **Department of Literary, Cultural and Communication Studies (LCCS)**

#### *Communication Research Day*

Communication Studies Research Day was held on April 9, 2015 in The UWI Daaga Auditorium at St. Augustine. The theme was "Communication beyond Perception". The Research Day featured the work of Communication Studies majors who pursued the mandatory course COMS 3099: Language and Communication Seminar. The programme included poster presentations by students, an address by Mr Errol Fabien and a keynote address by Judge Laura D. Blackburne.

#### *Campus Literature Week*

The Campus Literature Week was organised by students of the MFA programme. From April 13-16, 2015, a host of writers including 2013 Commonwealth Short Story Prize winner, Sharon Millar and the spoken word poetry group, The Two Cents Movement delivered lunchtime readings at The UWI Alma Jordan Library. The week of readings and discussions ended with a tribute to Professor Funso Aiyejina, professor, Literatures in English and African and Asian Studies, and former Dean of the Faculty of Humanities and Education. Dr Karen Lord, Writer-in-Residence, gave a special reading at the closing Gala of the Campus Literature Week on April 17, 2015.

#### *Writer-in-Residence*

The LCCS department was delighted to host Dr Karen Lord as Writer-in-Residence in March-April 2015. Dr Lord is the multiple award-winning and nominee speculative fiction author of *Redemption in Indigo* (2010) and the critically-acclaimed, *The Best of All Possible Worlds* (2013). Both novels won the Frank Collymore Literary Award in 2008 and 2009, respectively. Lord has also written a number of short fiction and non-fiction works, and produced academic publications specialising in the sociology of religion. She has been previously a guest author at the NGC Bocas Lit Fest in 2012 and will also be a featured speaker in 2015. Dr Lord was also a guest-of-honour at Acon, Finland (2014). Born in Barbados, she attained her Bachelor of Science from the University of Toronto, Canada, and her PhD in Theology and Religious Studies at Bangor University, in the United Kingdom. Since 1992, Dr Lord has worked with various academic institutions, including The University of the West Indies, as a tutor. In January 2015, Lord published her third novel, *The Galaxy Game*, with Del Ray Books/Random House.

### **Literatures in English Open Day**

The Open Day took place on October 31, 2014 in the Teaching and Learning Complex, Lecture Theatre E. This popular event featured 'Ah' Peeling Feelings Playback Theatre Company.

### **Professional Development Workshop for SERVOL Counsellors**

This half-day workshop was held at The UWI Open Campus, on May 19, 2015. It was organised by Dr Maarit Forde and facilitated by The UWI Open Campus and gave SERVOL counsellors and community officers working in impoverished areas in Trinidad an opportunity to learn about the professional support and development available from The University of the West Indies.

### **Department of Modern Languages and Linguistics (DMLL)**

#### **Portuguese and Brazilian Cultural Day**

The Portuguese section hosted the **Dia Cultural BRASPO** on April 16, 2015. Students pursuing the Minor in Brazilian Studies as well as Portuguese language, presented poster displays of research work carried out on Portugal, Brazil and the Portuguese in Trinidad. In addition, there were dance and capoeira workshops, a repeat performance of the Brazilian play presented at the Theatre Festival, special items of jewellery and craft, as well as foods prepared for sale by students in the programme. This year, the nation of Mozambique was the guest nation and visitors were treated to a special exhibit of literature, art and cultural artefacts from Mozambique.

#### **The 15<sup>th</sup> Annual UWI Inter-Campus Foreign Language Theatre Festival**

The Department was represented at the festival held on March 23-25 2015 at The UWI, Cave Hill Campus in Barbados. Three plays were presented by the St. Augustine delegation. They comprised the French comedy by Dominique Vilbert - *Les ambitions d'Aglaé*, directed by Mathilde Dallier; the Portuguese production, *Trair e Coçar é só começar*, by Marcos Caruso, and directed by Eliete Sampaio Farneda; and the Spanish language *La Spanishcicleta*, an original musical comedy was written and directed by Wilmar Hernández, Milena Hincapié, Suly Corredor and Carolina Arrieta.

Partial funding came from the FHE and the DMLL for The UWI, St. Augustine Campus delegation of 12 students and three members of staff to Barbados. The DMLL is looking forward to hosting the 16<sup>th</sup> edition of the festival at St. Augustine in 2016.

#### **24<sup>th</sup> International Havana Book Fair**

Three members of staff of the DMLL (Dr Nicole Roberts, Diego Mideros and Paola Palma) were part of a UWI six-person delegation to Havana, Cuba from February 16-20, 2015 to the International Havana Book Fair. As part of the week of activities, there was a panel discussion at the Centro de Estudios Martianos on February 18, 2015. Throughout the remainder of the week, there were visits to the Book Fair, the Union de Escritores y Artistas de Cuba (UNEAC), Casa de las Americas as well as tours of the city.

#### **Day of the Brazilian Flag**

The Brazilian Embassy hosted a group of UWI Students of Portuguese and Brazilian Studies to commemorate the Day of the Brazilian Flag on November 19, 2014. The Brazilian National Anthem was performed on Steelpan by Ms. Shanice Harrigin, a Portuguese Language and Brazilian Studies student.

#### **Linguistics Research Day**

The annual Linguistic Research Day took place on November 7, 2014. The forum allowed members of staff, as well as postgraduate students to come together to share their research work and to receive feedback. This year, seven members of academic staff presented their work.

### **Department of History**

The Department hosted a History Festival around the theme, "Honouring our Pioneers". The festival ran for eight days. Among the many highlights were; a commemorative service to deceased faculty, a long-service awards function to honour both academic, and administrative, technical and service (ATS) staff, several historical and archaeological displays and five academic sessions.

### **Centre for Language Learning**

The third iteration of the Centre's triennial Open House was held in March 2015.

# HUMANITIES & EDUCATION

## Office of the Dean

The Office produced Faculty promotional videos including a news channel and a feature titled *Colours of FHE*, which highlighted undersubscribed programmes in the Faculty. It also produced a feature titled *Footprints*, which highlights Faculty alumni impacting communities and society.

## Productions and Exhibitions

### Department of Creative and Festival Arts

Staff and students of the **Department of Creative and Festival Arts** have all contributed to one or more special University events (exhibitions, workshops, productions) during the academic year 2014/2015. Highlights include:

#### September 2014

- **UWI Arts Chorale** performance at The **UWI Matriculation Ceremony** at The UWI Quadrangle. (Jessel Murray; conductor).

#### September-October 2014

- **Chinese Calligraphy and Painting Exhibition and Workshops** held at the Confucius Institute.

#### September-November, 2014

- **Community School of the Arts:** Classes for the public in Adventures in Art, Recorders, Singing, Music Learning Activities, Steel Band, Dance and Drama.
- **The UWI Steel** performance at The **UWI Graduation Ceremonies** at The UWI SPEC. DCFA students of Voice, Percussion, and Dance provided performance interludes at five of the six graduation ceremonies. (Directors: Mr Jessel Murray and Khion De Las).

#### October 2014

- **The UWI Steel** performance at the **FHE Faculty Award Ceremony** at The UWI LRC. (Directors: Jessel Murray and Khion De Las).

#### November 2014

- **Cultural Research Colloquium:** Interrogating Contemporary Caribbean Culture: Traditional Impacts, Contemporary Meanings. (Coordinator: Dr Jo-anne Tull).
- **Fête De La Dance:** Showcase Dance Production featuring staff and students. (Artistic Director: Mr Jorge Morejón).

- **Music Staff Recital:** Lecturers of the Musical Arts Unit showcased Western and Eastern music, using instruments such as the piano, sitar, voice, marimba, santoor, steelpan and bansuri. (Coordinator: Satanand Sharma)
- **UWI Guitar Ensemble:** performed *Kultur: Orientalism to Postmodernism* concert. (Director: Anthony Williams)
- **New Directors Forum: A Festival of Plays** at LRC, The UWI. Students pursuing the BA Theatre Arts staged theatrical presentations for public viewing, as part of the Directing II course. (Chaired by Dr Lester Efebo Wilkinson)

#### December 2014

- **UWI Arts Chorale and The UWI Steel** presented *Glorious Christmas* including a performance of the entire J.S. Bach 'Magnificat' – at Daaga Auditorium, The UWI, and Santa Rosa Anglican Church, Arima. (Conductor: Jessel Murray).
- **The UWI Arts Chorale and National Steel Symphony Orchestra** performed at *Carols by Candlelight* at the President's Grounds. (Music director and conductor: Jessel Murray).
- **Festival of Scenes:** Students pursuing the BA Theatre Arts staged theatrical presentations at DCFA, as part of the Directing I course.

#### January-April 2015

- **Community School of the Arts:** Classes for the public in Adventures in Art, Recorders, Singing, Music Learning Activities, Steel Band, Dance and Drama among others.

#### February 2015

- **The Old Yard:** Held at DCFA, The UWI, St. Augustine. The Old Yard features traditional Mas characters. (Chair: Dr Jo-anne Tull)

#### March 2015

- **UWI Festival Dance Ensemble** performed 'Fire and Water' by Ms Deboleena Paul and Dr Sally Crawford at the 2015 *Tobago Contemporary Dance Festival*.
- **We Does Draw:** Public Drawing Studio. Visual Arts Drawing Studio, DCFA, Gordon Street.

#### March-April 2015

- **Theatre Arts Unit:** Presentation of Earl Lovelace's *Salt* adapted by Rawle Gibbons and directed by Louis Mc Williams. Held at Fort King George, Tobago and DCFA, Agostini Street.

*April 2015*

- **UWI Steel** performed with the USC Chorale at the *USC gala concert* at the Central Bank Auditorium, Port of Spain. (Directors: Jessel Murray and Khion De Las).
- **UWI Arts Chorale** (with the National Steel Symphony Orchestra) presented *Seasons I* at Our Lady of Fatima Grounds, Curepe. (Conductor: Jessel Murray).
- **UWI Guitar Ensemble in Concert** at the Centre for Language Learning (Coordinator: Mr Anthony Williams).
- **More than Just Jazz**: The UWI Caribbean Contemporary Workshop and UWI Jazz Ensemble. (Directors: Rellon Brown and Khion De Las).
- **Percussion on the Greens**: The UWI Festival Dance Ensemble. (Director: Jeannine Remy; Choreographer: Deboleena Paul).
- **Music of the Diaspora**: The UWI Intermediate Steelpan Ensemble, Members of the 'Introduction to World Music Course', and The UWI Indian Classical Ensemble. (Directors: Deryck Nurse, Patrice Cox-Neaves, and Shivanand Maharaj).

*May 2015*

- **Dance Unit Students** performed a piece choreographed by Ms Deboleena Paul as part of the opening ceremony for the Indian Diaspora Conference.
- **Soul to Sole**: Showcase Dance Production featuring staff and students. (Coordinator: Jorge Morejón).
- **Student Recital**: Mark Forde Steelpan and Orchestra Percussion and Jamaal Morgan, Trumpet.
- **BA Visual Arts Student Exhibition**, DCFA Gordon Street. The body of work on display by the graduating students of the BA degree and Certificate in Visual Arts programme was completed over a rigorous multi-disciplinary foundation programme and represented some of their experiences from the programme. These include a selection of drawings, paintings, products and graphic design.
- **Certificate Visual Arts Students Exhibition**
- **Visual Arts Students Exhibition – Movie Night** (Director: Stefano Caines).
- **Ministry of Design – Design Colloquium and Exhibition** (Visual Arts Unit), at DCFA Gordon Street. (Directors: Lesley-Ann Noel and Michael Lee Poy)
- **Theatre for Children**: a student-led Theatre Arts production primarily for viewing by children ages 6 to 12, Black Box, DCFA.

*May-June 2015*

- **Brock University Student Portrait Exhibition at The UWI with Visual Arts Unit Student Portraits** at the DCFA Gordon Street. (Directors: Lesley-Ann Noel and Michael Lee Poy).

*June 2015*

- **Student Recital**: Demika Guevara, percussion with members of the National Steel Symphony Orchestra, at The UWI Open Campus Auditorium, St. Augustine. (Conductor: Jessel Murray)

*July 2015*

- **Dance Unit Students** performed a piece choreographed by Dr Sally Crawford for the *SMART Start Orientation* programme for new students.
- **UWI Steel** performed at The *UWI, Penal-Debe Topping Off Ceremony*. (Conductor: Jessel Murray)
- **8<sup>th</sup> Residential Creative Writers Workshop**: The Cropper Foundation's 8<sup>th</sup> Residential Creative Writers' Workshop, held in collaboration with the Department of Creative and Festival Arts. (Chair: Dr Dannielle Lyndersay).
- **Intro to Graphic Design**: Illustrator and Photoshop Course, held at DCFA, Gordon Street.

**Film Festivals and Screenings****Film Programme**

Six students showed films at the 2014 Trinidad and Tobago Film Festival (TTFF/14). The Film Programme screened a number of the films from the TTFF/14 at the Film Building. The Film Programme collaborated with the Indian High Commission and screened bi-weekly Indian films as part of the Indian Cine-Clud initiative held January-April 2015. In May 2015, the Film Programme held its end-of-year students' film screening which saw an audience of over 200 persons.

The Film Programme partnered with Africa Film Trinidad and Tobago (AFTT) and hosted a Festival of African Film Classics over two days in July 2015. AFTT is an annual film festival that showcases the very best of contemporary and classic films from the African continent.

# HUMANITIES & EDUCATION

## REVENUE GENERATION/COST CONTAINMENT

The **Continuing Professional Development and Outreach Unit**, a self-financing unit of the School of Education, was awarded a two million TT dollar consultancy from the Ministry of Education to conduct an independent review of the primary school curriculum revision exercise and the implementation plans and approaches.

The **Department of Creative and Festival Arts (DCFA)** provided over 30 arts-related activities, productions, exhibitions, concerts and events for the university and national community in 2014/2015. The DCFA holds the view that attention to the imaging of the Department is essential since the public at large sees, judges and comments on The UWI experience through the many public activities and events of the DCFA. The DCFA acquired/appointed an Administrative Assistant specifically for marketing and communications and to effectively promote events, source funds and present a media friendly department to connect with the marketing and branding of The UWI.

The **Centre for Language Learning** offered the Cambridge certification in Teaching English as a second/foreign language for the first time. The IELTS Test Centre of the Centre for Language Learning continued to become firmly established as demonstrated by the increase in the number of examination candidates. From January to December 2014, 1936 persons enrolled in Centre for Language Learning courses.

The **Film Programme** continued to generate income by renting equipment and film production services to the Campus and general public. The Caribbean Interpreting and Translation Bureau was very active and continued to be a tremendously profitable business venture.

## PROJECTED ACTIVITIES FOR 2015/2016

The Faculty's projected activities for 2015/2016 are mostly a continuation of initiatives started in 2013/2014. The activities and initiatives are set out in accordance with the University's Strategic Plan 2012-2017 and form the Faculty's Operational Plan 2012-2017.

### Income Earning Units

The Faculty plans to continue to support and develop the units that earn income for the Faculty such as; the Continuing Professional Development and Outreach Unit at the School of Education, the Caribbean Interpreting and Translation Bureau, the Centre for Language Learning (expansion of its Language Testing facilities) and the Film Programme (rental of equipment and production services).

### Income Earning Programmes

The FHE plans to develop programmes that will generate income for the Faculty, which include the Summer Programme; Mid-year Festival Arts courses for international students and special workshops for students enrolled for special examinations for English Language Foundation courses for graduation. The Faculty will also be considering rigorously pursuing tenders for research and programme consultancies.

### Employee Engagement and Development

In the area of employee engagement and development, the FHE has plans to release staff, reorganise workloads or recommend weekend training for staff regarding Leadership and Supervisor Management Training; continue to link training needs/requirements to Staff Appraisal System; develop staff appraisal tool/form; develop Faculty Administration Manual to document and track job descriptions, requirements for job to inform recruitment, talent management, training, promotion, compensation and succession planning. Several units are planning staff retreats for 2015/2016, including the School of Education, the Department of Creative and Festival Arts, and the Department of Modern Languages and Linguistics.



### **Internal Operational Processes**

Future plans within this area include, the development of a Terms of Reference for all Faculty Boards and Committees; the establishment of a Learning Content Management System (LCMS) for all courses in the Department of History, to allow speedy and effective collaboration in teaching and learning. The LCMS will act as a repository for teaching material, thus creating effective teaching aids and reducing wasteful resource redundancies across courses. The School of Education plans to establish a Management Committee to oversee academic programmes and to promote staff awareness of academic processes.

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

Within this area, the Faculty plans to develop critical thinking skills through the teaching of Philosophy at The UWI, St. Augustine Campus. Additionally, a curriculum review will be done in the Carnival Studies courses/programme, (with respect to the philosophical grounding of the programme regarding the entrepreneurial elements; mas' history and development; and to create stronger links with other DCFA units) and the Visual Arts, Theatre Arts and Dance programmes. The Department of History plans to continue its curriculum review towards expanding its Level III course offerings and towards introducing new courses in Heritage Studies.

New programmes will be designed for the 2015/2016 period. These include an Advanced Certificate in Drama/Theatre-in-Education (at the request of the Ministry of Education, in order to facilitate the need for more Theatre Arts Teachers in secondary schools), a BA Journalism, Minor in Cultural Studies and a Minor in Communication Studies, a Master's programme in Music Education, a Master of Fine Arts (MFA) in Film Production and an MA Heritage Studies in line with The UWI Mona and Cave Hill campuses. The Diploma in Arts and Cultural Enterprise Management will be upgraded to a Master's programme.

With regard to student development activities, the Faculty plans to develop "The Ole Yard" as a tool for CSEC and CAPE Theatre Arts Education. Work has already started with the Ministry of Education to align The UWI and CAPE Theatre Arts. Plans also exist to develop "Caribbean Experience" niche programmes to attract international students. The Department of History is currently designing a short course for the University of Kraz students who will visit from Vienna. The Department

of Literary, Cultural and Communication Studies has started discussions with Trinity College to identify special interests in Caribbean Literature and Heritage.

An increase in student participation in study abroad programmes for incoming students to The UWI will also be pursued. The Department of Modern Languages and Linguistics is close to an agreement with Porto in Portugal. Other plans include the enhancement of teaching skills within the discipline of History for teachers delivering the new CAPE syllabus; the establishing of a Discipline Advisory Committees and more blended learning courses.

### **Research and Innovation**

Continued research in several areas that the Faculty was awarded funding include, but are not limited to, Language Competitiveness, Steelpan History, Medical Terms for Deaf Adults, Heritage Languages in Trinidad and Tobago and Topics in the History of Trinidad and Tobago.

The FHE plans to establish a Faculty Committee to identify products in the Faculty that have commercial value as well as a Faculty Production Centre. All departments are expected to complete projects on graduate student throughput for the last five years, which will be presented in a Faculty Report on Graduate Throughput and standardise graduate seminars across departments. They are also expected to review supervisor/student ratio across departments, ensure compliance with existing postgraduate research instruments, policies and regulations and train graduate supervisors.

### **Outreach**

The Faculty plans to continue negotiations to access more exchange programmes with regional and international universities; enhance the study abroad programmes in the Department of Modern Languages and Linguistics, by widening the scope of existing programmes both for credit and not for credit.

Several conferences are being planned in the Faculty including: Pan Conference, Indian Diaspora – Health Challenges in India, Spanish Conference, Turning the Tides, Caribbean Intersections with the Americas Conference, in collaboration with Trinity College. Future events include an "Academic Weekends" alumni engagement from the Department of History and a continuation of the DCFA's creative arts productions.

# HUMANITIES & EDUCATION

## **DISTINGUISHED VISITORS**

### **Jean-Luc Mure**

Regional Cultural Counsellor  
French Republic

### **Hédi Picquart**

Ambassador  
French Republic

### **Eduardo Porretti**

Director of the English-speaking CARICOM  
Ministry of Foreign Affairs and Worship  
Argentine Republic

### **Marcelo Salviolo**

Ambassador  
Argentine Republic

### **Antoine Trarieux**

Director of the Alliance Française  
French Republic

## ***Department of Creative and Festival Arts***

### ***Visual Arts***

### **Yang Chongguang**

Chinese Calligrapher

### **David Gumbs**

Contemporary Artist  
Martinique

### **Maria de Mater O'Neill**

Fine Artist and Designer and Educator  
Puerto Rico

### **Frank Wuenstal**

Jeweller – Academy of Jewellery and Art

### **Zhao Yanbin**

Chinese painter

### ***Musical Arts***

### **Andrés Bello**

String Quartet  
Chile

### **Los Sensacionales De Codazzi**

Childrens' Ensemble  
Colombia

### **Forbidden City Orchestra**

China

### **Ray Funk**

Researcher and Author on Calypso Music

### **Julie Hill**

President Percussive Arts Society  
USA

### **Andy Martin**

Percussion  
USA

### **Harvey Price**

Associate Professor of Percussion  
University of Delaware

## ***Department of Literary,***

## ***Cultural and Communication Studies***

### **Karen Lord**

Writer-in-Residence

**Department of Modern Languages and Linguistics**

**Mauricio Núñez Rodríguez**

Researcher at the Centro de Estudios Martianos  
Havana, Cuba

**Dean's Office, Film Programme**

**Nalini Akal**

Film Producer  
Trinidad

**Nicholas Attin**

Director  
Trinidad

**Albert Bailey**

Production Sound

**Dean's Office, Caribbean Civilisation**

**Selwyn Cudjoe**

Professor, History/Literature

**Centre for Language Learning (CLL)**

**Mr Jean-Luc Mure**

Regional Cultural Counsellor

**His Excellency Mr Hédi Picquart**

Ambassador  
French Republic

**Minister Eduardo Porretti**

Director of the English-speaking CARICOM  
Ministry of Foreign Affairs and Worship  
Argentine Republic

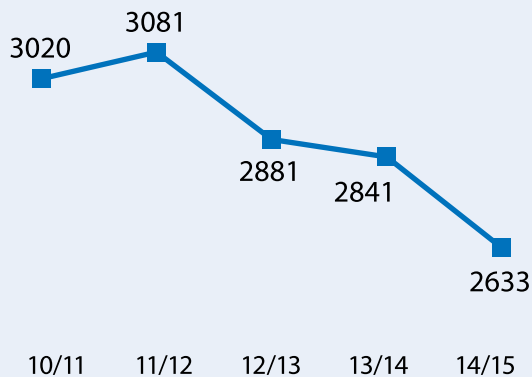
**Mr Marcelo Salviolo**

Ambassador  
Argentine Republic

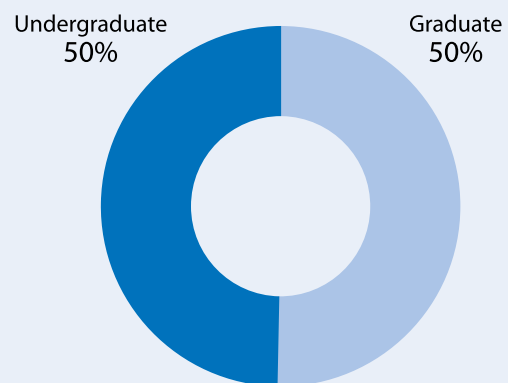
**Mr Antoine Trarieux**

Director of the Alliance Francaise

**GROWTH IN ENROLMENT**  
2010 – 2015



**GRADUATES BY PROGRAMME**  
2014 – 2015



# LAW



Professor  
Rose-Marie Belle Antoine  
Faculty Dean



## EXECUTIVE SUMMARY

The Faculty of Law at The UWI, St. Augustine Campus is a new faculty with old roots, namely, an academic tradition of quality, transplanted from Cave Hill. Staff inherited from The UWI, Cave Hill Campus joined others to bring fresh dimensions, giving the benefit of proven paths, but with the flexibility and hindsight to learn from previous experiences. The Faculty launched an ambitious building and consolidation phase with the aim of creating an enabling environment to enhance the academic culture, imbuing it with the requisite rigour, professionalism, relevance and dynamism to procure the excellence expected of a first-rate faculty of law. In the reporting period, the metamorphosis of the Faculty continued with several key projects witnessing successful outcomes of important aspects of the Operational Plan.

# LAW

The Faculty's staff delivered on the promise of a dynamic, cutting edge curriculum, spearheading exciting new courses previously lacking in The UWI's syllabus, and successfully launched signature law workshops to complement these, thereby deepening continuing regional legal education options. This piggybacked onto creating instrumental partnerships with important stakeholders (both private and public sector) through outreach activities. The Faculty also commenced its graduate programme and engaged in other far-reaching outreach activities. The underlying aim was to make its presence felt in the country and region. **Mrs Elias-Roberts**, a lecturer within the Faculty designed a programme in Oil and Gas Law; an Oil and Gas workshop was also launched successfully in April 2015, with vital partners BP and the Ministry of Energy. This flagship programme is already being emulated.

**Dr Chumah Amaefule** came on board as a commercial law specialist and designed a Banking Law course; and soon after, its complement, the Banking Law workshop, was inaugurated in February 2015, which saw the distinguished Sir Ross Cranston, leading banking law author, former Solicitor General of the UK, MP, and current judge, as the main facilitator. This was a successful and important entry into the commercial sector. These workshops also realised significant income earning objectives. Vital stakeholders, such as Embassies, the ILO, EU, OECS, Parliament, CCJ, increasingly invite the Faculty to partner with them, an important sign of legitimacy.

The Faculty is committed to empowering and developing staff and students. Accordingly, an equitable workload policy was implemented, innovative initiatives taken to stimulate research and publication, including PhD completion, and faculty practices that emphasise participatory, collegiate approaches to Faculty activities, undertaken, including the hiring new staff, an on-going exercise. The publication output is impressive, with the promotion of **Dr LeGall** and **Dr Bulkan** to senior lectureships.

Meaningful decisions were taken to enhance students' interests, including the formation of a student-staff liaison committee, awarding high performers, active support and direction for student publications and activities aimed at civic responsibility, provisions to enhance the temporary physical space – including benches, water-coolers, desks, computers, etc. until the Faculty can take up residence in its permanent home.

## ENROLMENT

The Faculty continues to attract applicants from the top percentile of the graduating classes of CAPE and similar qualifying programmes for matriculation. Total student enrolment for the Faculty in 2014/2015 was 309 students with 297 students enrolling in undergraduate programmes and 12 students enrolling in postgraduate programmes.

### **Most outstanding undergraduate LLB students 2014/2015**

- Level I: **Thomas Vaughn**
- Level II: **Crystal Chetram-Braveboy**
- Level III: **John Lee**

## GRADUATION

In 2014/2015, the Faculty of Law awarded 64 undergraduate LLB degrees, of which six were first-class honours degrees; 32 were upper second-class; 15 were lower second-class and 11 were pass degrees.

The first-class honours awardees were; **John Lee, Tara Fitzwilliam, Odette Clarke, Esther Gaston, Maria Sawh and Shalini Teekasingh.**

## STUDENT ACHIEVEMENTS

The Faculty participated successfully in three international, competitive and prestigious moots during the period under the direction of co-course directors **Mr Timothy Affonso** and **Mrs Alicia Elias-Roberts**. In the Phillip C Jessup International Law Moot, with participants from over 550 law schools in more than 80 countries, the Faculty's team won the prize for the **Best New Team** in 2014. In the Inter-American Moot Competition in Washington, the team performed very well, with two students, **Nyla Kungiesingh** and **John Lee** being exceptional in that their written arguments ranked 14<sup>th</sup> out of 101 teams. Their oral ability and scores resulted in The UWI team being ranked 7<sup>th</sup> overall out of 101 teams, making it the Faculty's best performance to date. The Faculty congratulates the students and their course directors, Mrs Elias-Roberts and Mr Affonso for this excellent work.

The Faculty also participated in the Caribbean Court of Justice's VII Annual International Law Moot in March 2015. The UWI, St. Augustine team won a special prize for **Best Team from an Academic Institution**. Eight teams participated in the moot. The Faculty was represented by **Shane Pantin**, as lead counsel, **Maria Sawh** as junior counsel and **Neetu Lalsingh** as the researcher/reserve. The team worked very hard and deserve to be congratulated on their success.

## STRATEGY APPRAISAL

The Faculty embarked on a number of activities to propel them forward in accordance with The UWI Strategic Plan and the Faculty's own Operational Plan. Following are the Faculty of Law's most significant achievements at the end of the period 2014/2015 as related to the key perspectives of the University's Strategic Plan 2012-2017.

### Commitment to Core Values

The Faculty is deeply committed to The UWI's core values. Already, much of its curriculum reflects these, particularly in relation to Human Rights, and Discrimination Law. During the period, the Faculty promoted a Policy of Admissions that involves a quota for more mature students, persons in law enforcement and regional students. In addition, the Students' Law Society continues to engage in activities to promote civic responsibility which is actively supported by the Office of the Dean.

### Stakeholders and Partners

The Faculty made significant strides in developing its 'Friends of the Faculty' initiative, building important relationships with key stakeholders and partners, including:

- The **British Petroleum Group of Companies**, which partnered with the Faculty to launch its Inaugural Oil and Gas Workshop and donated TT\$75,000.00, together with expertise.
- The **Canadian Embassy of Trinidad and Tobago**, which invited the Faculty to collaborate to host the CCIJ Symposium in January 2015, also partnering with the ILO, the UNDP and the OAS, Trinidad and Tobago, to host the event.
- The **Ministry of Energy**, Trinidad and Tobago, which partnered on the Oil and Gas Workshop.
- The **Hugh Wooding Law School**, which partnered with the Faculty in the *Trayvon Martin Panel*; and which participated in the Faculty's workshops, receiving pro-bono registrations for selected students.
- The **Caribbean Court of Justice**, which invited the Dean on to a select committee and also participated in several activities of the Faculty during the period.
- The **Eastern Caribbean Supreme Court** and the **Saint Lucia Bar Association**.

In June 2015, the Faculty signed a Memorandum of Understanding with the Inter-American Commission on Human Rights, with a view to future collaboration. The Faculty also made successful overtures to the Law Association of Trinidad and Tobago with a view to deeper engagement in the future. In particular, the Faculty hopes to collaborate with the Law Association to host mandatory legal education workshops, a much needed initiative.

The Office of the Dean created an Outreach Database to build contacts to easily reach persons interested in the Faculty's activities, including conferences, public lectures, social events and other ceremonies and to easily identify potential partners, including civil society organisations. A Faculty Alumni Database was also created, laying the foundation for an active Alumni Association in the near future, despite being in the first stages of having graduates.

### Financial

At the start of Semester II, 2014/2015, the Faculty commenced its new self-financed graduate programmes. UWI LLM degree/Postgraduate diplomas are now offered in the areas of Corporate and Commercial Law; Public Law; Intellectual Property Law; General/unspecialised UWI LLM and Legislative Drafting (not offered in 2014/2015).

The Faculty successfully launched two cornerstone self-financing law workshops in Semester II. The Banking Law workshop, catered to law practitioners, insurance, financial and banking specialists with a conference fee of US\$450.00; and the Oil and Gas Law Workshop, catered primarily to law practitioners, Oil and Gas specialists, government stakeholders and energy professionals, with a conference fee of US\$800.00.

# LAW

## **Employee engagement and development**

An academic workload policy was formalised by the Office of the Dean to achieve equity in terms of workload and to decrease reliance on part-time teaching. The policy also took into account persons pursuing a PhD programme, or members of staff who needed encouragement to publish, given that the Faculty had several young members of staff. Staff development was therefore made a priority.

The Faculty hosted a staff social in December 2014 to welcome new members of staff to the Law family. This forum provided an opportunity for staff to socialise and deepen collegiality. In April 2015, the Faculty hosted a special function to celebrate its first faculty mother-to-be, Mrs Afiya France.

## **Internal Operational Processes**

In Semester II, 2014/2015 the Faculty of Law's new regional LLM graduate programme allowed for a mixture of face-to-face, online and/or teleconferencing modes of delivery. This format permits students pursuing the LLM/PG Diploma in Law to read for any course in any of the three campuses, while maintaining their registration and student status of their substantive Campus.

The Faculty built and established an interactive website which houses a repository of all major approved Faculty regulations, information on its academic staff, relevant activities taking place in the Faculty and information regarding the Law Society. There was significant investment in state of the art teleconferencing facilities in its Noor Hassanali Auditorium to enhance the LLB offerings and facilitate the regional UWI LLM programme.

A number of committees were formed to ensure the smooth operation of the Faculty. These include the Joint Consultative Committee (Staff/Student Liaison Committee), an Assessment and Promotions Committee, an Occupational Health, Safety and the Environment Committee, a Library Committee and an IT Committee.

## **TEACHING, LEARNING AND STUDENT DEVELOPMENT**

In 2014/2015 the Faculty of Law commenced its regional postgraduate LLM programme which is fee generating and allows for classroom teleconferencing. The Faculty instituted new cutting-edge LLB courses in the areas of Banking Law (two courses: undergraduate and postgraduate levels) and Oil and Gas Law and received accreditation for its MPhil/ PhD programme.

The Law Faculty hosted a special one-day seminar on Trade Law for interested students, facilitated by **Nicole Foster** of The UWI, Cave Hill Campus. Facilities were arranged to enable St. Augustine students to access EU Law from The UWI Mona Faculty and Oil and Gas Law from St. Augustine to Mona. Special 'after hours' study sessions were arranged for students, utilising overtime staff.

A Research Assistance Programme was initiated inviting lecturers to select candidates to carry out research tasks. Each lecturer is allowed to obtain student research assistance for academic research directly related to the Faculty's work, up to a sum of TT\$12,000.00.

The Faculty's Admissions Enrolment Criteria Policy, implemented a policy allowing law enforcement and social service personnel working formally with relevant institutions, to matriculate into the LLB programmes.

## **Student Research Fund**

The Faculty received approval to institute a Faculty student research fund for staff and graduate students in the form of a grant.



## OUTREACH

A number of key outreach initiatives were undertaken, responding in particular to continuing legal education needs and engaging important stakeholders, complementing dynamic new courses launched. The Faculty collaborated with the Student Representative Council of the Hugh Wooding Law School (HWLS), to host the attorney of Trayvon Martin, **Jasmine Rand** in a public lecture on *Criminal Justice and Race*. Chair of the Reparations Committee **Kafra Kambon** provided remarks to the forum. A number of television interviews accompanied the event and it attracted a significant amount of newspaper coverage after the event.

Three members of Faculty, **Afiya France**, **John Knechtle** and **Dean Antoine** participated in the Ministry of Justice's conference on Restorative Justice: Towards Policy and Practice, on October 13-14, 2014 at the Hyatt Regency Hotel. This provided a useful opportunity for the Faculty to make its presence felt in the community. John Knechtle served as a peer reviewer on the Oxford University Commonwealth Law Journal.

The Faculty of Law entered into a Memorandum of Understanding with the Inter-American Commission on Human Rights (IACHR). The Faculty stands to benefit from specialist expertise, training, exchanges and fellowships under this MOU.

On January 21, 2015, the Faculty partnered with the High Commission of Canada to host the **CCJ Symposium - Advancing the Case for Regionalism and Indigenous Jurisprudence: Positive Dialogue to Promote Accession to the CCJ**. The ILO, OAS and the UNDP also joined in hosting this important event to advance the cause for strengthening the Caribbean Court of Justice. Renowned judges and jurists from Australia, Canada, the UK and the US joined with regional experts from Belize, representatives from the Bar Association and the Dean of Law to make presentations on two panels. These included **Richard Blewitt**, UNDP; **Denys Barrow SC** (Belize), **Reginald Armour SC**, Law Association of Trinidad and Tobago; **Hon. Justice John Logan** (Australia); **Dante Negro** (OAS); **Professor Benoit Pelletier** (Canada); **Mark Guthrie**, Commonwealth Secretariat; **Riyad Insanally**, OAS; **Giovanni Di Cola**, ILO; and **His Excellency Gerard Latulippe**, High Commissioner for Canada to Trinidad and Tobago. The symposium drew a packed audience and extensive media coverage. **Alicia Elias-Roberts**, Deputy Dean, Faculty of Law, chaired the event and **Dean Antoine** presented a paper.

The Faculty successfully hosted the inaugural **High Level Banking Law workshop** on February 21, 2015. The workshop kicked off the new Banking Law course being offered for the first time at The UWI. This was the first commercial type workshop hosted by the Faculty and was viewed as a way to create a template for future workshops, to test the market and develop optimal strategies for such events. The workshop attracted over 100 participants. **Dr C. Amaefule** coordinated the academic programme for the workshop, which featured internationally renowned presenters. The lead facilitator was **Sir Ross Cranston**, former Solicitor of the UK, MP and Professor of the University of London, currently a judge of the High Court of the UK and leading author on Banking Law. The other main presenter was **Sir William Blair**, judge of the High Court of the UK, leading commercial lawyer, QC. Also presenting was **Dr Chumah Amaefule**, specialist in Banking Law, directing the Banking Law Course at the Faculty and **Professor Rose-Marie Antoine**, Professor of Offshore Financial Law & Labour Law and Dean.

The Faculty also organised a guest lecture by **Justice Cranston** and **Justice Blair** in Saint Lucia to the Members of the Saint Lucia Bar Association at a special luncheon on February 17, in collaboration with the OECS Court of Appeal headquartered in Saint Lucia and the Saint Lucia Bar Association. The Faculty records its appreciation to **Madame Chief Justice Pereira** and the Executive of the Saint Lucia Bar Association. **Justices Cranston** and **Blair** also took the opportunity to give an Open Lecture to students of The UWI Faculty of Law and the Hugh Wooding Law School on Friday February 20, 2015.

The Faculty also successfully hosted the inaugural Oil and Gas Law conference – Key Legal Issues in Oil and Gas Law: A Caribbean Perspective, on April 30 and May 1, 2015 at the Hyatt Regency, Port of Spain. This conference involved a subject of key interest to the Trinidad and Tobago industry and provided the opportunity to work with the important Oil and Gas private sector. BP provided valuable sponsorship and human resource support. The workshop attracted over 120 participants and was opened by the Honourable Minister for Energy of Trinidad and Tobago, and **Principal Sankat**, with **Dean Antoine** providing opening remarks. Two members of staff, **Dr Amaefule** and **Mr Knechtle** gave presentations while Deputy Dean **Alicia Elias-Roberts**, chaired and coordinated the event. The workshop was in keeping with the stated intention of the Faculty in its Strategic Plan to initiate an Oil and Gas course to be paired with a conference/workshop outreach programme.

# LAW

Administrative, technical and service staff (ATS), under the direction of **Ms Zennille Swann**, a team comprising of **Nicolette Noel, Reneesha Hodge, Alicia Phillip** and **Keith Medine**, were instrumental to the success of these workshops.

On Saturday March 7, 2015, the Faculty collaborated with the Professional Services Association and private practitioners to host, for the second time, a Law Clinic, offering pro bono legal advice to the public. The event took place in the Penal-Debe Market and catered to the South environs. It was organised by **Mr Timothy Affonso** and provided a refreshing addition to the Faculty's calendar.

## PROJECTED ACTIVITIES FOR 2015/2016

The Faculty's activities and initiatives are set out in accordance with the strategic perspectives, goals and objectives of the University's Strategic Plan 2012-2017 and the Faculty's Operational Plan 2015/2016.

### Proposed Academic Programmes

The Faculty will commence its PhD/MPhil programme in January 2016. It also plans to increase enrolment in its self-financed LLM/Postgraduate Diploma programmes in 2015/2016. An International Human Rights Clinic within the Faculty of Law will be developed. This clinic will drive an international human rights programme at the LLB level, with linkages to other course programming and be an impetus for collaboration with strategic partners including NGOs to serve community interests and spearhead public interest pro bono litigation.

### Proposed Areas of Research

In June 2015, the Faculty was selected by The UWI to bid for an EU grant, after successfully presenting a concept note for a competitive project; a first for UWI Law. The Faculty expects to roll out its project, which centres on Human Rights in 2015/2016. This project will involve several outreach activities, research and a film. The publication of proceedings of CCJ Symposium January 2015, in collaboration with The UWI Institute of International Relations, will also be realised.

### Research and Innovation

The Faculty intends to institute specialised legal training models for judiciary and practitioners as well as build a database of possible donors.

### Proposed General Activities

For the period, 2015/2016, the Faculty intends to host a ceremonial launch of the International Human Rights Clinic; as well as a Faculty Retreat. Additional activities include the hiring of additional permanent academic staff, and the rationalisation of ATS Staff.

### Teaching, Learning and Student Development

Within this area, the Faculty plans to initiate staff exchange and foreign fellowship programmes and improve diversity and multidisciplinary offerings in the areas of indigenous people; religious law; health; industrial relations/OSH; and language programmes.

### Outreach

Activities for the period 2015/2016 include the participation in UWI outreach in other countries of the region; the development of University and Bar Association linkages; the targeting of workshops and training sessions in Human Rights collaborating with stakeholders; hosting a second Oil and Gas workshop; and a Race and Religion conference in partnership with US partners, and a workshop on the Law of the Sea in collaboration with The Hague.

## DISTINGUISHED VISITORS

### Mr Reginald Armour SC

President of the Bar Association  
Trinidad and Tobago

### Mr Denys Barrow SC

Attorney-At-Law, Senior Counsel  
Belize

### Sir William Blair QC

Judge of the High Court of the UK  
London, UK

**Mr Richard Blewitt**

UN Resident Coordinator and UNDP Resident Representative to Trinidad and Tobago, Aruba, Curaçao, Saint Maarten and Suriname  
London, UK

**Sir Ross Cranston**

High Court Judge of the UK, MP and Professor  
The University of London  
London, UK

**Dr Giovanni Di Cola**

Head of the ILO office  
Trinidad and Tobago

**Mr Roger Gaspard**

Director of Public Prosecutions  
Trinidad and Tobago

**Mr Mark Guthrie**

Commonwealth Secretariat  
London, UK

**The Hon. Mr Timothy Hamel-Smith**

President of the Senate  
Trinidad and Tobago

**Mr Riyad Insanally**

Organisation for American States (OAS)

**Mr Kafra Kambon**

Head, Emancipation Committee  
Trinidad and Tobago

**His Excellency Gerard Latulippe**

High Commissioner for Canada to  
Trinidad and Tobago

**The Hon. Justice John Alexander Logan**

Distinguished Federal Judge of Australia  
Brisbane, Australia

**Mr Dante Negro**

Director of the Department of International Law  
Secretariat for Legal Affairs  
Organisation for American States (OAS)

**Professor Benoît Pelletier**

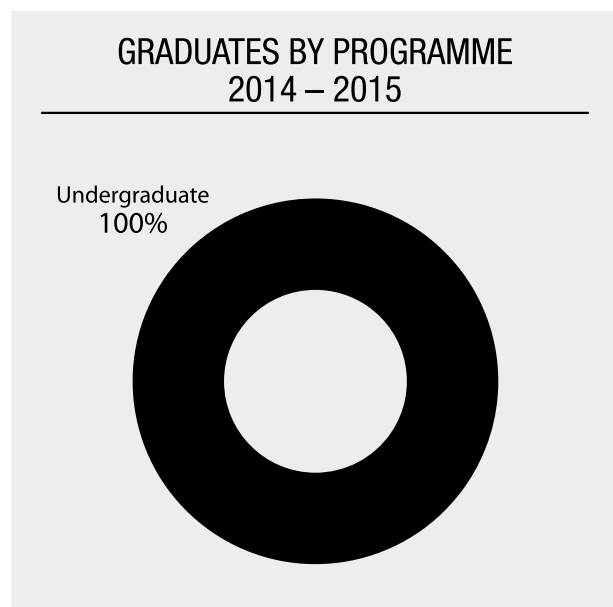
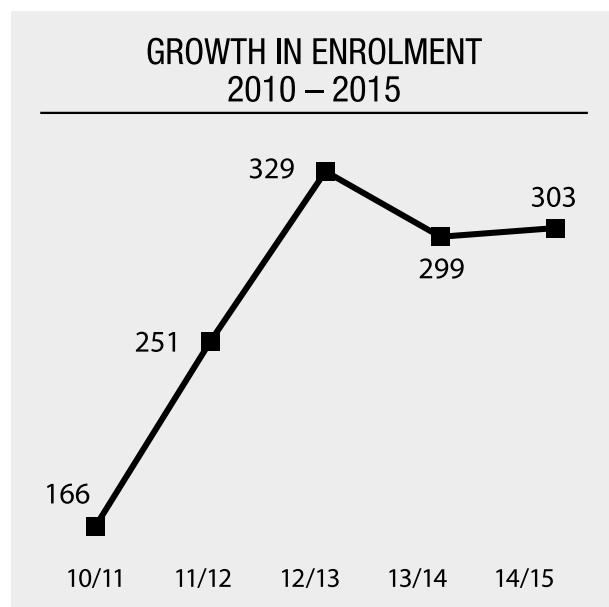
Professor of Law  
University of Ottawa  
Canada

**The Hon. Mr Anand Ramlogan SC**

Attorney General  
Trinidad and Tobago

**The Hon. Mr Kevin Ramnarine**

Minister of Energy  
Trinidad and Tobago



# MEDICAL SCIENCES



Professor Terence Seemungal  
Faculty Dean



## EXECUTIVE SUMMARY

Despite many challenges such as staffing and infrastructure, 2014/2015 has been a rewarding year for the Faculty of Medical Sciences (FMS) at the St. Augustine Campus. Particular mention must be made of the Faculty's 25<sup>th</sup> anniversary celebrations, which culminated with a week of activities that included a very well attended 'One Health' Fair, and Awards. A cocktail reception formed part of the celebrations and the Faculty took the opportunity to honour members of the first graduating class and a historical display by the Medical Sciences Library was featured.



# MEDICAL SCIENCES

Among the other highlights of the year was the appointment of three new directors in the Schools of Dentistry, Veterinary Medicine and Nursing. While the accreditation visit to the School of Veterinary Medicine was postponed pending the arrival of the new director, an accreditation exercise was conducted at the School of Dentistry, and the Vice-Chancellor recommended that the two Schools of Nursing at St. Augustine and Mona should proceed with preparations for joint Caribbean Accreditation Authority for Education in Medicine and other Health Professions (CAAM-HP) accreditation. The School of Nursing also underwent a quality assurance review exercise and its site was accredited by the Accreditation Council of Trinidad and Tobago (ACTT).

In response to the need for more teaching spaces and infrastructural improvements, the Faculty re-deployed classrooms in Building 42 at the Eric Williams Medical Sciences Complex (EWMSC) which formerly housed the Nursing School, as well as others in the new Students' Study and Recreation Centre. The gym in the Students' Study and Recreation Centre was opened for use and at the School of Veterinary Medicine, the expansion of the Steve Bennett Building was completed, which would also provide much needed classrooms. In May 2015, a sod-turning ceremony was held for the School of Dentistry expansion, which includes a 300-seat lecture hall and seminar rooms for use by other schools within the Faculty. The UWI and the North West Regional Health Authority (NWRHA) signed an MOU for the construction of a state-of-the-art teaching and student facility at the Port of Spain General Hospital, which will include student accommodation, office spaces, teaching and study areas.

Final approvals are pending for the introduction of the DM Medical Oncology and Paediatric Haematology/Oncology nursing programmes. The MPH programme was restarted following a comprehensive review and the BSc Optometry programme has been recognised by the General Optical Council of the UK, which means that graduates of the programme can now take the examination to practice in UK and Europe.

The Faculty is also proud of its staff, several of whom received various awards, including The UWI/Guardian Group Premium Teaching Award, The UWI-Trinidad and Tobago Research and Development Impact (RDI) Fund Award, Vice-Chancellor's Award for Excellence, ACTT Best Individual Teacher Award.

## **School of Dentistry**

The School of Dentistry at St. Augustine has been undergoing major transitions in several areas. The most significant transition for the School was the completion of the CAAM-HP accreditation process, which resulted in the School being placed on probation with one year to demonstrate progress.

Significantly modified plans for the new extension of the School were accepted and a sod-turning ceremony was conducted on May 15, 2015 with The UWI, NCRHA, and governmental dignitaries in attendance. The completion of the extension is crucial to the success of several initiatives, including the creation of three graduate specialty programmes, the growth of international intern programmes, enlargement of the DDS programme, and the planning for dental auxiliary programmes critically needed in the Caribbean region. Most importantly, the expansion and refurbishment of the School will help meet CAAM-HP requirements and enable the School to pursue full accreditation from the American Dental Association Commission on Dental Accreditation (ADA CODA) for its DDS programme.

Along with ADA CODA accreditation, significant inroads were made toward joining the Commission of Dental Competency Assessments to align the School with its sister school in Jamaica and to open markets for graduates in the United States and Canada. To complete the international branding of the School, planning for a Centre for Caribbean Oral Healthcare Studies was initiated.

**School of Nursing**

During the period under review, the human resource capacity was strengthened with the appointment of a number of academic staff including the director, senior lecturer, assistant lecturer as well as clinical instructors. To ensure that curricula remain needs oriented, the Curriculum Committee has been in the process of reviewing all curricula. One of the first activities entailed a review and development of core programme competencies in consultation with the Centre for Excellence in Teaching and Learning (CETL).

The School emphasises the importance of maintaining highest standards and compliance with quality assurance and evaluation principles. In this regard, most academic staff have either completed or are in the process of completing their Certificate in University Teaching and Learning. Further, the School continues to be positioned as a central institution for nursing education through representation at a number of fora locally, regionally and internationally. Some of these included the Regional Nursing Body (RNB), Global Advisory Panel for the Future of Nursing (GAPFON) and Sigma Theta Tau.

As an academic institution, the School instituted a number of activities to ensure that a robust research environment is maintained. In so doing, all members of faculty serve as research advisors to students and this has proven to be very successful in transitioning students through the research process. The School has also been represented at local, regional and international research conferences by both staff and students. The School is pleased to report that it has also achieved two research grants totalling TT\$50,000.00 for the conduct of research projects within the health and education sectors. Finally, notwithstanding challenges, the School remains resolute in its commitment to making this institution the premier academic institution for nursing and midwifery in Trinidad and Tobago and beyond.

**School of Veterinary Medicine**

Academic year 2014/2015 marked the 25<sup>th</sup> anniversary of the School of Veterinary Medicine (SVM). A veterinary medicine specific disability policy took effect, which seeks to provide guidance to applicants with disabilities, health problems and allergies as well as providing staff and students with guidelines related to the student who may be temporarily or permanently disabled subsequent to the commencement of the programme.

During the period under review, a number of goals were accomplished. During the second semester of the academic year 2014/2015, the new director of the School was appointed and assumed duties. Construction of a new building adjacent to the existing Steve Bennett Building was completed. This building houses a teaching laboratory, molecular biology laboratory and classroom. A multipurpose laboratory was also constructed. The School reviewed the Operational Plan for 2012-2014 and developed a new one, for the period 2014-2017.

The CAAM-HP accreditation visit that was due in March 2015 was deferred so as to allow the new director enough time to familiarise himself with the School and contribute meaningfully to the accreditation process.

**Department of Clinical Surgical Sciences**

The Department of Clinical Surgical Sciences had an extremely successful year. It once again held a range of postgraduate training workshops from different academic members in various surgical disciplines. These included surgical skills, laparoscopy, vascular, endoscopic sinusurgery as well as workshops held in anaesthesia and intensive care.

In addition, courses were jointly hosted with the Royal College of Surgeons and the School became a regional centre for the American Board of Surgery in Training Examination (ABSITE) with Professor Dilip Dan as Proctor. The Department members continue to present papers at several scientific meetings and have 51 papers in peer reviewed journals and four chapters published. The School looks forward to continued progressive work in the next year in the area of filling staff vacancies, increased publications and even a new DM programme in Neurosurgery.

# MEDICAL SCIENCES

## **BSc Optometry Programme**

During the review period, the programme saw its second cohort of 24 students graduate with the BSc Optometry degree in August 2014; the majority of whom have now started their careers.

The 2014/2015 academic year was again a difficult year for the BSc Optometry programme, the main difficulty being a staff of four lecturers to coordinate both the programme and an income-generating clinic. While graduate students did help to relieve the pressure, adequate remuneration remains a problem.

A new building hosting four lecturers' offices, a kitchen and a reception room was built at the back of the clinic and is now operational; a small step towards relieving the lack of space. The downstairs of the Centre for Agriculture and Biosciences International (CABI) building, next to the clinic is being presently used for labs dealing with optometric procedures.

## **ENROLMENT**

Total enrolment in postgraduate programmes within the Department of Clinical Medical Sciences was 133. At the School of Dentistry, 37 students were admitted to the DDS programme, 15 to the BSc Dental Hygiene/Dental Therapy programme and 33 new students registered for the DVM programme in the Department of Veterinary Medicine. The School of Nursing has been reporting an increase in enrolment each year, particularly for the Bachelor of Science in Nursing (BSN Pre-Registration) programme. In the 2014/2015 academic year, 37 persons enrolled for that programme, 57 for the BSN (post-registration) programme and 26 in the postgraduate MSN programme.

## **STUDENT ACHIEVEMENTS**

### **School of Dentistry**

Twenty interns from the School of Dentistry received Certificates in Vocational Training. Of those, eight interns also received Certificates in Advanced Education in General Dentistry from the Lutheran Medical Centre programme. Dentistry students are very active in promoting public oral health and providing oral health care. Special mention should be made of an oral hygiene presentation delivered to the Down's Syndrome Family Network and a charitable event for the Just Because Foundation to restock their library, provide toys, puzzles and books to children, and provide food hampers to families. In collaboration with Colgate-Palmolive, oral hygiene drives were planned for the Paediatric Hospital at Mount Hope and an orphanage in Penal, Trinidad.

#### *Outstanding Undergraduate Students*

- **Chelsea Bissesar:** Best Overall Performance; Best Performance in Restorative; Best Performance in clinical examinations in Child Dental Health and Best Performance in Child Dental Health.
- **Chelsea Bissesar, Akeeta Baksh:** Best Performance in clinical examinations in Restorative Dentistry
- **Marta Ostromecki:** Best Performance in Oral Diseases and Best Performance in Preventative Dentistry/Dental Public Health
- **Kavita Dookie:** Best Performance in clinical examinations Oral Diseases
- **Toni Marie Small:** Best Performance in Human Disease

### **School of Nursing**

Eight students from the School of Nursing received first-class honours during the 2014/2015 period – **Melissa Balbosa-Craigwell, Simone Mohammed-Sealey, Rekitter Blackman-Spring, Jillian Edosomwan, Sophia James, Savitri Ramlakhan-Gopaul, Lisa Prince** and **Vanessa Ramdhan-Singh**.

### **School of Pharmacy**

The top undergraduate student in the school was **Brittany Rampersad** who won the Afzal Abdool Student Leadership Scholarship from the Caribbean Association of Pharmacists.



### Department of Veterinary Medicine

The new executive of the Veterinary Students' Association of Trinidad and Tobago (VSATT) introduced 'Vet Talks', where resource persons presented on topics such as career possibilities. The aim was to encourage increased student interest and participation.

### BSc Optometry Programme

The Student Volunteers in Optometric Service to Humanity (SVOSH) Chapter at The UWI, St. Augustine participated in an eye care mission to Jamaica during the first week of June 2015. Ten students, led by Dr John Randall, Senior Lecturer, participated in the programme. Eye care was performed at three different locations and over 500 persons were examined. More visual screening programmes were performed locally in St. James, El Dorado and San Fernando, where over 300 people were examined and referred where necessary.

#### *Outstanding Undergraduate Students*

- **Laura Tang Best:** Overall Academic Student
- **James Kendall:** Best Overall Clinician

### Department of Para-Clinical Sciences

The Gilead Science Inc., an internationally reputed manufacturer of medications for HIV and Hepatitis B&C, and a platinum sponsor at the CARPHA conference in Grenada in June 2015, provided full sponsorship to two students – **Lakshmi Maharaj** (MPhil Pharmacology) and **Khamiya Henry** (MSc Medical Microbiology) – to attend the said conference.

## GRADUATION

At the School of Veterinary Medicine, four of the 42 graduates were awarded the DVM degree with distinction. They were **Drs. Kavita Sant, Rhonda Tookai, Crystal Jerome** and **Justine John**. Fifty-six students from the School of Pharmacy were awarded the BSc Pharmacy degree, including 15 first-class honours. Twenty-five undergraduate students graduated with Doctor of Dental Surgery degrees from the School of Dentistry. At the postgraduate level, in the Department of Pre-Clinical Sciences, **Orchid M. Allicock** was awarded the PhD Molecular Genetics during the period under review.

## FINANCIAL

The Department of Para-Clinical Sciences offered a number of services within the period under review, such as renal immunofluorescence services for Nephrology and introduced Immunohistochemistry to its cancer testing services.

The Department of Clinical Surgical Sciences partnered with the Royal College of Surgeons to host the Basic Surgical Skills (Intercollegiate BSS), effective from 2015. The Department will act as the centre for the Caribbean and generate revenue yearly. The course which is held in the United Kingdom can be used for acceptance into the MRCS.

The BSc Optometry programme continued to operate a daily clinic with a reduced fee for service. Comprehensive eye examinations are performed using standard and specialised equipment. Binocular vision assessment, low vision rehabilitation as well as contact lens examinations and dispensing are also offered. These services are provided to UWI staff and students as well as to the general public.

## TEACHING, LEARNING AND STUDENT DEVELOPMENT

The Department of Para-Clinical Sciences, in collaboration with CeTL designed a new form for the assessment of academic staff, which is administered to the students at the end of each semester. Student feedback is obtained and analysed each year through an exit questionnaire administered at the end of Year III. The Masters' in Public Health (MPH) restarted with a new cohort in January 2015 after a three semester hiatus to facilitate restructuring of the programme. The introduction of the MSc in Forensic Science as a four-semester taught programme is currently in progress and a DM programme in Haematology is being considered.

# MEDICAL SCIENCES

The Department of Clinical Medical Sciences established an MBBS Review Subcommittee to review the MBBS Medicine and Therapeutics results; to look for any predictors of failure; to determine if there were any Objective Structured Clinical Examinations (OSCE) station failure rates that suggested a need for a change in the delivery of the curriculum in that area of study; to look for any correlates of failure at St. Augustine; to determine what were the reasons for the high failure rate at St. Augustine this year and whether there was a relationship between transfer students and the failure rate; to make recommendations for improvement of the pass rate at St. Augustine and to report its results to the Department through the Chair.

## GRADUATE STUDIES

The School of Nursing assigned course coordinators for each cohort of students to encourage greater monitoring of students' progress and to provide timely feedback and support. The CeTL was engaged to conduct a curriculum review of the pre-registration programme curriculum. Meanwhile, discussions continued between the Schools of Nursing at Mona and St. Augustine for the realignment of the BSc Nursing (pre-registration) curriculum with the needs of the Nursing Council of Trinidad and Tobago. Meanwhile, at the Department of Clinical Medical Sciences, the Diploma in the Management of HIV Infection was converted to a blended learning programme. For its part, the Department of Pre-Clinical Sciences established a regular bi-weekly departmental seminar series with presentations by graduate students and academic staff.

## INTERNAL OPERATIONAL PROCESSES

The School of Nursing established committees to oversee curriculum, research and examination matters to ensure high quality monitoring of all academic activities in the School. Discussions continued with SickKids International for the implementation of an undergraduate diploma in Paediatric Haematology/Oncology for registered nurses. The programme is currently being developed for submission for the required approvals.

School of Pharmacy introduced Team Based Learning (TBL) in two courses (PHAR2105 - Immunology, Microbiology and General Pathology; and PHAR3106 - Complementary/Alternative Medicine and Non-prescription Drugs) and saw an improvement in student performance in those courses.

With TBL, students stand a better chance of retention/recall of course content, making it more likely that not only will they achieve learning outcomes but also that they will recall and apply what they have learned upon entry to the practice environment.

A draft, 'Accidental Exposure to Infections and Environmental Hazards' policy was developed by the School of Veterinary Medicine and submitted to the UWI/OSHE for review. A position paper on the Change of the Management and Operational Structures of the Veterinary Teaching Hospital was also developed and submitted. It was noted that Caribbean Accreditation Authority for Education in Medicine and other Health Professions (CAAM-HP) recommended that the School take over the hospital.

## RESEARCH AND INNOVATION

### Department of Pre-Clinical Sciences

Research within the Department of Pre-Clinical Sciences involved the following areas of study:

- Underlining mechanisms of chronic non-communicable diseases (e.g. diabetes, hypertension, stroke, epilepsy, migraine, dementia and anxiety) and exploring new modalities of diagnosis and treatment. The studies involve identification of molecular biomarkers for diseases and the use of novel compounds and extracts of Caribbean foods and plants for treatment
- Assessment of vascular changes in chronic non-communicable diseases
- Evaluation of the wound-healing activity of selected plants from Trinidad and Tobago

### Major Research Completed

**S. Nayak:** Relationship of lifestyle, quality of sleep with and cardiovascular risk in Trinidadian Type 2 diabetic subjects. The study showed that persons having high risk of CVD had a lower average AHA score thus deducing that the lower the lifestyle scores the higher the 10-year risk for CVD. Persons with lower sleep scores had higher systolic blood pressures than those with higher sleep scores, revealing a link between sleep habits and CVD in diabetics.

**S. Nayak and J. Addae:** Effects of Jasmine leaf extract on rodent models of epilepsy, motor coordination and anxiety. The project has demonstrated that an extract of Jasmine grandiflorum leaves reduced grand mal seizures but not petit mal seizures in animal models of epilepsy. Additionally, at doses that did not affect motor coordination, the extract reduced anxiety in rats using an elevated plus maze method. Jasmine grandiflorum is a common plant in Trinidad and Tobago and the wider Caribbean region. The results of this project show a potential use of the leaves in managing anxiety and some types of epilepsy in humans.

*Major Research in Progress*

**J. Addae:** Developing a non-pharmacological method for the management of pain, especially those associated with vascular and musculo-skeletal disorders. This project will provide alternatives to pain relief from such conditions without the use of oral or injected medications.

**J. Addae:** Exploring the interaction of glutamate and cholinergic receptors in treating the spreading depression that accompanies migraine headaches. Migraine headache is a common debilitating condition affecting thousands of persons in the region and millions globally. A better understanding will pave the way for developing more effective treatment modalities.

### Department of Clinical Medical Sciences

The Department's researchers collaborate with other departments within the Faculty of Medical Sciences, other faculties of The UWI. Areas of research also vary widely and include mental health and neuroscience, as well as asthma and chronic obstructive pulmonary disease, regional non-communicable diseases surveillance on obesity, hypertension and hyperlipidemia in children.

*Major Research Completed*

**Professor G. Hutchinson:** INTREPID

This was a joint project of The UWI, Institute of Psychiatry King's College London, the SCARF Institute in Chennai, India and the University of Ibadan designed to investigate the experience and methods of help-seeking in different cultures with regard to first episode psychosis. It was funded by the Wellcome Trust.

**Dr A. Bastick and Professor G. Hutchinson:** Anger Management in Prisons.

This project was supported by the University of Birmingham. A model for anger management treatment was taught to prison officers so it could be used on inmates. There was pre- and post-testing with significant positive results. It was funded by The UWIRDI Fund.

*Major Research in Progress*

**Dr J. Brown:** Computed Tomography (CT) vs. Ultrasound in the evaluation of patients with suspected urolithiasis: A public health perspective with regards to cost effectiveness, radiation exposure and availability.

**Professor S. Teelucksingh:** Five-year Prospective Cohort Study – Body Mass Index and Its Associated Health and Educational Effects in Secondary School Age Students. The Helen Bhagwansingh Diabetes Education Research and Prevention Institute (DERPI) supports and conducts research on diabetes, to educate the national population about diabetes and related issues and to develop knowledge-based strategies for intervention and prevention throughout the life course.

DERPI began implementation of the study 'Body Mass Index and its associated health and educational effects in secondary school age students in a selected population of five secondary schools Trinidad and Tobago – a prospective cohort study' in early 2013 with expected completion in 2017. The study is now in its fourth successive year and data collection is on-going. The BMI cohort study has presented preliminary data as scientific abstracts on the associations of BMI, waist circumferences and *acanthosis nigricans*, physical activity correlates by gender and more recently, trends in lung function over the past three years in adolescents from this cohort.

**Professor S. Teelucksingh:** Hyperglycemia in Pregnancy in Trinidad and Tobago (HiPTT).

DERPI assessed that there is a need for the establishment of a national screening and treatment programme for diabetes in pregnancy. This programme will focus on the predictors of diabetes in the womb and the reduction of it, with improved health outcomes for both mothers and babies.

# MEDICAL SCIENCES

The Hyperglycemia in Pregnancy Trinidad and Tobago (HiPTT) application is an on-going project that sets out to develop and demonstrate a cost-sensitive, localised intervention in the health care system that stands to add economic as well as social value to the country. The HiPTT pilot study is currently being conducted in 1,000 women at three hospitals in Trinidad.

**Professor S. Teelucksingh:** Diabetes Educational Training Centre.

Professor Surujpal Teelucksingh developed the concept of a Diabetes Educational Training Centre to improve diabetes care through education. Currently the diabetes education curriculum has been approved as a postgraduate diploma course and software and hardware has been acquired with the intention to facilitate the training in the Skills Laboratory.

**Dr N. Baboolal, Dr G. Davis:** Prevalence of dementia in Trinidad and Tobago and the socioeconomic impact. Mitigating the tsunami of dementia.

According to our geographic position in the world, coupled with our special Chronic Neuroimmune Disease (CND) profile and health problems, Trinidadians are at a great risk for dementia. The World Health Organisation estimates the prevalence of dementia in the Caribbean and Latin America to be the highest in the world at 8.1 and 8.5% of all people of over 59 years of age respectively.

Trinidad and Tobago's population is following the worldwide ageing trend. What is looming for Trinidad and Tobago as its population ages? How will we cope with the dementia epidemic? Are we prepared and what measures will be adopted to meet the socioeconomic demands of dementia?

This project would make a significant contribution towards answering these questions. The fundamental purpose of this project was to determine the impact of dementia and its prevalence in persons aged 60 and above in all municipalities in Trinidad and Tobago. The results of this study will report on the associated cost and implications for the family and caregivers, health care system and economy of Trinidad and

Tobago. In accordance with the current concept of prevalence studies in addition to dementia diagnosis our investigations will generate information about the age, gender, education, amount of income, living circumstances, household assets, health conditions, possible risk factors associated with dementia, use of health facilities and social services, cost of dementia, and family care arrangements.

**Professor T. Seemungal:** The Burden of Obstructive Lung Disease in Trinidad and Tobago Study (The BOLD TT Study) The Burden of Obstructive Lung Disease (BOLD) Study explores the epidemiology of chronic lung disease in our population for the first time. The study is due to be completed in late 2016 and will allow us to assess the contribution of chronic lung disease to our national health burden.

**Professor S. Teelucksingh:** Regional Non-Communicable Diseases Surveillance System Project.

The overall goal of the project to develop a Caribbean Regional Non-Communicable Diseases (NCD) Surveillance System so as to contribute to better planning for, delivery of and monitoring of programmes and protocols targeting chronic disease prevention, control and health promotion. The system is intended to improve the collection, systemisation and analysis of data associated with NCD in the Caribbean countries.

## School of Nursing

The Campus Research and Publications Fund supported the following projects:

- **Dr Esther Daniel and Dr Ramachandra Hooli** (TT\$20,500.00): Predicting the use of smoking and smokeless tobacco among secondary school children and the efficacy of early nursing interventions in primordial prevention.
- **Dr Oscar Noel Ocho and Mrs. Kathy Ann Alphonso Lootawan** (TT\$30,000.00): Perceptions of registered nurses/midwives and obstetricians on having males as expectant fathers present in the delivery room at public hospitals in Trinidad and Tobago.

### School of Pharmacy

#### Major Research Completed

- **Dr P. Sealy and Dr Diane Ignacio:** 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.

The findings revealed that patients who received targeted educational and lifestyle interventions by the pharmacists showed a reduction in HbA<sub>1c</sub> ranging from 1.1 to 2.5 compared to a mean of 1.92 in the control group, which demonstrated that the intervention was successful and beneficial to the patient. The stakeholders (at the Regional Health Authorities and health planners) can offer incentives to pharmacists for greater participation in the management of patients with diabetes in various healthcare settings across Trinidad and Tobago.

### Department of Veterinary Medicine

#### Major Research Completed

- **Dr C. Sant:** A prospective study of trans-placental transmission of equine piroplasmosis.
- **Professor A. Basu:** Study on Giardiasis, a zoonotic disease of dogs in Trinidad.

#### Major Research in Progress

#### Professor A. Adesiyun:

- Determination of the efficacy of a local canine vaccine and production for use to prevent leptospirosis in dogs in Trinidad.
- Prevalence of nasal methicillin-resistant *Staphylococcus aureus* (MRSA) carriage in animals at slaughter houses and pluck shops, and in abattoir workers across Trinidad and Tobago.
- Detection of methicillin-resistant *Staphylococcus aureus* (ST 398) in pigs and pig farmers in Trinidad.

#### Dr Z. Asgarali:

- A study of the quality of life in patients with systemic lupus erythematosus (SLE) in Trinidad and Tobago.

#### Dr K. Mohan:

- Evaluation of semen for artificial insemination and use of novel estrus synchronisation protocol to improve reproductive efficiency in buffalypso (*Bubalus bubalis*) in Trinidad.

#### Professor C. Oura:

- Identification of the reservoirs of avian respiratory viruses in Trinidad and Tobago.
- Identification of *Eimeria* species in Trinidadian poultry and other avian species using molecular tools.
- Identification of *Culicoides* biting midge species and the viruses that they transmit within Trinidad and Tobago.
- Infectious causes of abortion in dairy cattle in Trinidad and Tobago.
- One Health, One Caribbean, One Love.

#### Dr R. Suepaul:

- Infectious organisms and pathology of fauna of Trinidad (opossum and mongoose).

#### Dr K. Georges:

- A prospective study of transplacental transmission of equine piroplasmosis.
- Detecting *sarcoptes scabiei* in domestic dogs in Trinidad and Tobago.
- A study on the welfare of dairy cattle in Trinidad Tobago, Antigua and Barbados.
- A retrospective study on antimicrobial resistance at the Veterinary Diagnostic Laboratory in Trinidad.

### BSc Optometry Programme

#### Major Research Completed

The National Eye Study of Trinidad and Tobago (NESTT) has come to an end with the last batch of genetic material sent to abroad. The authenticated data from the study is awaited to begin work in eye care in our communities.

# MEDICAL SCIENCES

## OUTREACH

### Department of Pre-Clinical Sciences

The Department of Pre-Clinical Sciences has created affiliations and linkages with a number of institutions. These include:

- Guelph Food Research Centre, Guelph, Ontario, Canada
- Institute for Human Infections and Immunity, Center for Tropical Diseases and Department of Pathology, University of Texas – Medical Branch, Galveston, Texas, USA
- Department of Pathology and WHO Collaborating Center for Tropical Diseases, University of Texas Medical Branch, Galveston, Texas, USA
- J. Craig Venter Institute, Maryland, USA
- Department of Microbiology and Immunology, Katholieke Universiteit Leuven, Leuven, Belgium
- University of Colorado, Denver School of Medicine, Colorado, USA
- Blood Systems Research Institute, San Francisco, USA
- Public Health England, London, UK
- Stanford University School of Medicine, Stanford, CA, USA
- Manipal University, India
- University of Glasgow, Institute of Neuroscience and Psychology

### Department of Clinical Surgical Sciences

Links were established between the Department of Clinical Surgical Sciences and a number of external institutions. They included the Royal College of Surgeons of England which signed a franchise with The UWI; the Advanced Life Support Group (United Kingdom); the Cardiac Life Support Training Group (Trinidad); the American Board of Surgery (for In-Training Examination); the International Council of Ophthalmology (United Kingdom) and the Orthopaedics In-service Training Examination.

### Department of Clinical Medical Sciences

Meetings were held with staff from Anton De Kom University, Suriname to discuss how the Department of Clinical Medical Sciences could provide support for the development of clinical programmes there. The Psychiatry Unit continued to provide a full inpatient service at the EWMSC with a Consultation Liaison Service. Three consultants who are all employed with the Department lead this service. The Unit also runs two outpatient clinics each week (Monday and Wednesday afternoons) and another at the St. Joseph Health Centre. The staff of the Adult Medicine Unit provides a full cardiology service to the

EWMSC Cath Laboratory. The lecturer in Adult Medicine at the Port of Spain General Hospital provides consultant coverage to the Medicine Department of the Port of Spain General Hospital. The Radiology lecturers are also fully integrated into the services at the EWMSC and provide on-call coverage for the EWMSC. The Child Health team offers some on call and outpatient services at the EWMSC.

#### *Links with other universities and organisations*

- Institute of Psychiatry, University of London
- Hospital for SickKids, University of 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
- Consortium of Universities for Global Health (CUGH)
- University of British Columbia
- University of Birmingham
- University of Westminster
- Dementia Awareness and Research Trinidad and Tobago

### School of Nursing

The MScN and BScN (Post-Registration) students are required to undertake a four- to six-week attachment as a core component of the programmes' final year. Education majors are attached to various schools of nursing; Administration majors are attached to health institutions in the public and private sector; Nursing majors are attached to the clinical area; Oncology majors are attached to public and private sector oncology units.

#### *Links with other organisations and industry partners*

- Nursing Council of Trinidad and Tobago
- Trinidad and Tobago Registered Nurses Association
- Trinidad and Tobago Association of Midwives

### School of Pharmacy

Policy and procedure documents for the MSc Clinical Pharmacy programme and protocols for the execution of Clinical Pharmacy were obtained from the Northern Ireland Centre for Pharmacy Learning and Development. The School also collaborated with the Professor of Pharmacy Practice, University of Central Lancaster (UCLAN) towards the development of a graduate programme in the School of Pharmacy.

As is the case across the Faculty, personnel attached to the School are often called upon to deliver public lectures and presentations on their area of specialisation. This year, **Dr P. Sealy** gave a feature address entitled, 'The Story of US' to the 2015 graduands of the South East Port of Spain Secondary School. He also addressed staff of the Eric Williams Medical Sciences Complex Pharmacy Services at their retreat. The topic of that presentation was 'Pharmacy – The way forward'.

#### **School of Veterinary Medicine**

**Dr A.C.N. Phillips** of the Aquatic Animal Unit, Department of Clinical Veterinary Sciences started an aquaponics project among the Guanapo community in Trinidad. It is a UNDP-funded, collaborative, community-development and environmental management project. The outcome of this project is featured in the film 'A Better Place', a Green Screen series that is currently screening across the country and the region.

#### **BSc Optometry Programme**

The optometry clinic receives referrals from the public hospitals, secondary school programmes, the Blind Welfare Association and private practices. Some of the programme's lecturers and instructors teach Ophthalmoscopy to students in the MBBS programme.

#### **Revenue Generating Initiatives**

Three programmes – the MSc Clinical Psychology, MSc Palliative Care and the Diploma in the Management of HIV – were conceptualised to be revenue generating. However, the Diploma in the Management of HIV was the only revenue generating programme offered during the period.

## **PROJECTED ACTIVITIES FOR 2015/2016**

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

The Department of Para-Clinical Sciences plans to introduce an MSc Forensic and Investigative Sciences, a DM Haematology and a Certificate in Infection Control.

#### **Department of Clinical Surgical Sciences**

The Department of Clinical Surgical Sciences is working towards introducing a DM Neurosurgery. The Department also has a number of workshops planned for the 2015/2016 period on topics such as American Board of Surgery In-Training Examination (ABSITE); Basic Skills Workshops of Royal College of Surgeons of England; Laparoscopic (Intermediate); Basic Endoscopic Sinus Surgery; Introduction to Emergency Ultrasound; and Advanced Paediatric Life Support (APLS); and Paediatric Life Support (PLS).

#### **Department of Clinical Medical Sciences**

The Department of Clinical Medical Sciences proposes to introduce a Certificate in Diabetic Screening and Management; a DM Medical Oncology and a Fellowship in Cardiology.

#### **School of Dentistry**

The Curriculum Committee at the School of Dentistry will start a new comprehensive review in 2015 to standardise all teaching materials, linking course content and assessments to learning objectives, creating proper electives and clerkships, and expanding outreach programmes. With the directive to increase the size of the dental class and to target prospective students from North America, significant changes will be required to enable those particular students to become board certified in their home countries.

Generally, new academic programmes are being planned for implementation when the new extension is completed in the areas of dental assisting and dental laboratory technology, both urgently needed in the Caribbean region.

Electives and clerkships will be made available to students who are interested in an academic career. Technical writing, research presentation, research assessment, and proposal writing programmes are being expanded within existing courses, and new electives will also be created for students and faculty alike.

# MEDICAL SCIENCES

## *Proposed Areas of Research Activity*

A professional mentorship programme is being created to help faculty develop research skills and projects. In particular, clinical research projects will be emphasised in areas where clinical faculty are knowledgeable but not necessarily prepared to research further. Five research initiatives are being developed:

- Establish baseline data for a psychometric assessment protocol that would be used as an objective substitute for the highly subjective interview protocols of the past (collaboration within the Faculty of Medical Sciences, with the Faculty of Social Sciences and with the support of Selector Incite Group in New Zealand).
- Harvest electrical power generated by the piezoelectric properties of the skeleton to power various in situ biomedical devices (collaboration with the Departments of Electrical Engineering and Computer Sciences).
- Production of dental restorations and prostheses using 3-D printer technology (collaboration project with the Faculty of Engineering).
- An international collaborative five-year research plan for population oral healthcare using advanced infinite-variable statistical methods to merge multiple psychological, sociological, marketing, and communications areas of expertise to reduce oral healthcare delivery costs and achieve more effective, efficient oral healthcare treatments.
- At the direction of the director, a proposal to initiate a Centre for Caribbean Oral Healthcare Studies is being developed to brand and market the School of Dentistry's teaching and research capabilities at an international level. In-service research training programmes are being developed to assist faculty.

## *Other Activities*

A significant effort is being made to prepare for the upcoming re-accreditation site visit by the American Dental Association (ADA) Commission on Dental Accreditation (CODA) for the Advanced Education in General Dentistry (AEGD) programme in collaboration with the Lutheran Medical Centre.

The School aims to become fully accredited by ADA CODA so that its graduates can practice in the United States and Canada. Discussions are also moving forward with the Dental Council of Trinidad and Tobago and with the Ministry of Health to make legislative changes that would enable a more complete learning experience for students and interns.

## **School of Nursing**

### *Proposed Academic Programmes*

The School plans to introduce an undergraduate Diploma in Paediatric Haematology/Oncology Nursing programme in collaboration with SickKids International. There are proposals to transfer the District Health Visitors programme from the School of Education in the Faculty of Humanities and Education, to the School of Nursing; to establish a BSc in Midwifery Curriculum Committee to develop curriculum; and another proposal for a review of the BScN (Post-registration) and MScN programmes.

### *Proposed Areas of Research Activity*

Moving forward, all MScN students will be required to conduct a research project focusing on chronic non-communicable diseases in 2015/2016. The outcome of these research projects will form the basis of a journal that is to be launched by the School.

### *Proposed General Activities*

Students pursuing the BScN (Post-registration) programme will be participating in a Research Day to present their research projects to key stakeholders including nurse leaders and professional and organisations. Negotiations continue between the School and other institutions to facilitate continuous professional development and capacity development workshops/programmes. These include the Centre for Medical Sciences Education (CMSE) and Johns Hopkins University.



### **School of Veterinary Medicine**

An accreditation site visit by the Caribbean Accreditation Authority for Education in Medicine and other Health Professions (CAAM-HP) that was postponed in 2015 is scheduled for February 2016. One major intervention that is expected to be close to implementation is a change in the management model for the operation of the Veterinary Teaching Hospital to ensure compliance with CAAM-HP standards.

### **BSc Optometry Programme**

The curriculum is to be reviewed to align it with that of North America so that the programme can then be changed to a Doctor of Optometry, making it more attractive to foreign students. Approval will be sought to upgrade to a School of Optometry. Infrastructural improvements to be completed include work on a lecture room, a student common room and an optical dispensing facility downstairs of the Centre for Agriculture and Biosciences International (CABI) building. The front of the clinic will be extended to house a patient waiting room and dispensing machine. A quality assurance review is also to be conducted.

## **DISTINGUISHED VISITORS**

### **Department of Clinical Surgical Sciences**

#### **Dr Fazal Ali**

FRCS (Tr & Orth)  
Consultant Orthopaedic Surgeon  
Honorary Senior Lecturer  
Specialist in Knee Surgery

#### **Dr Eric Drabble**

Consultant Oncoplastic  
Breast General Surgeon

#### **Professor Eddie Hoover**

Editor-In-Chief  
Journal of National Medical Council

#### **Professor Michael Parker**

FRCS and FRCS (Ed)  
Chairman of the Dental and Surgical Examinations Board of the College  
Chairman of the International Affairs Board

### **Department of Clinical Medical Sciences**

#### **Dr Rene Albers**

Member of the Scientific Board of Hospitals in the Netherlands

#### **Professor Yedatore Swamy Venkatesh**

MD, DM, FRCP (Edin.), FAAN, FACP  
Professor of Clinical Neurology  
Vice Chair of Medical Education  
Director, Neurology Residency Programme  
Department of Neurology  
University of South Carolina School of Medicine  
USA

# MEDICAL SCIENCES

**Dr Alfredo E. Walker**

FRCPath, DMJ (Path), MFFLM, MFSSoc, Dip Teach Train.  
Forensic Pathologist  
Staff Forensic Pathologist and Assistant Professor  
University of Ottawa  
Canada

**School of Dentistry****Professor David Bearn**

Associate Dean for Learning and Teaching  
University of Dundee Dental School  
Scotland  
UK

**Dr David Felix**

Department of Oral Medicine  
Glasgow Dental Hospital and School  
Scotland  
UK

**Dr Sonia Kohl**

Invisalign Educator  
Lutheran Medical Center  
USA

**Dr Alexander Milosevic**

Liverpool University Dental Hospital  
England  
UK

**Professor Anthony Pogrel**

Associate Dean of Hospital Affairs  
University of California  
San Francisco  
USA

**School of Nursing****The Honourable Mr Fazal Karim**

Minister of Tertiary Education and Skills Training  
The Republic of Trinidad and Tobago

**The Honourable Dr Fuad Khan**

Minister of Health  
The Republic of Trinidad and Tobago

**School of Pharmacy****Professor Yashwant Pathak**

College of Pharmacy  
University of South Florida  
USA

**School of Veterinary Medicine****Dr Gustave Borde**

External Examiner  
Food Animal Medicine, Surgery and Theriogenology

**Dr Kimberly Farfan**

Visiting Lecturer  
Anaesthesiology

**Dr Martin O. Furr**

Large Animal Medicine and Surgery  
College of Veterinary Medicine  
Virginia Tech  
Leesburg, VA  
USA

**Professor Basil O. Ikede**

Chair, Department of Pathology and Microbiology  
Atlantic Veterinary College, University of Prince Edward Island

**Dr Kate May**

Assistant Professor  
Large Animal Medicine and Surgery  
St. George's University  
Grenada

**Professor Lloyd Webb**

Director  
Institute of Public Health Studies  
Tuskegee University  
Alabama  
USA

**BSc Optometry Programme**

**Dr Mark Bullimore**

Optometry Educator

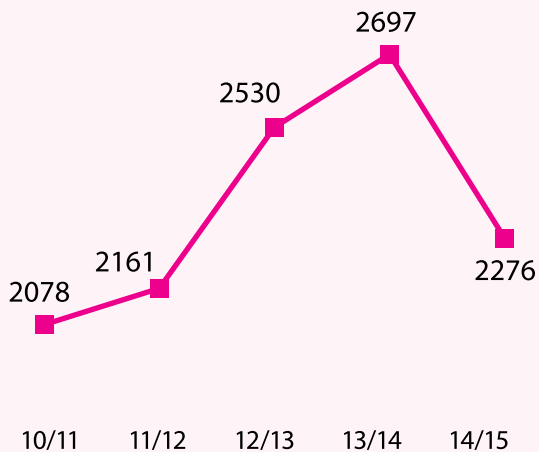
**Ms Tracy Crowley**

Head Orthoptist  
Hinchingbrooke Hospital  
UK

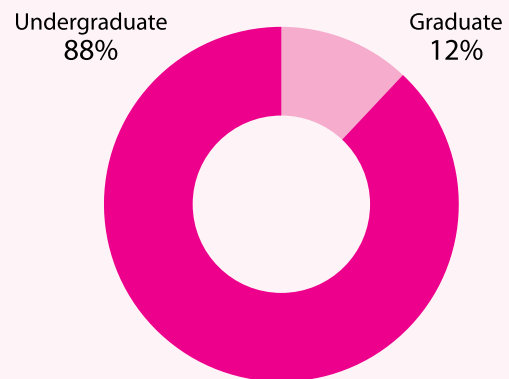
**Mr Cummins**

Clinical Optometrist  
Scotland  
UK

**GROWTH IN ENROLMENT**  
2010 – 2015



**GRADUATES BY PROGRAMME**  
2014 – 2015



# SCIENCE & TECHNOLOGY



Professor Indar Ramnarine  
Faculty Dean



## EXECUTIVE SUMMARY

The Faculty of Science and Technology (FST) has been successfully rebuilding and rebranding itself in terms of relevance and impact. Over the past three years the Faculty has firmly established itself as one of the leading faculties at The UWI, particularly due to the importance of science and technology in today's world. The goal is to make the FST a first-choice faculty in line with the faculties of Medical Sciences and Engineering. In order to achieve this, there is an aggressive initiative to evaluate existing programmes and terminate those that are neither longer relevant nor attractive. Together with this effort, the science offerings are being revised and benchmarked against international standards and in the exciting area of technology, new undergraduate and graduate level programmes are being introduced and aggressively marketed through school visits.

# SCIENCE & TECHNOLOGY

## Teaching and Learning

The FST consists of five departments – Chemistry, Computing and Information Technology, Mathematics and Statistics, Life Sciences and Physics. The Faculty's undergraduate programme offerings are the most diverse on the Campus. Over the past three years the Faculty has revised its curriculum and now delivers 11 BSc special options, 10 majors and 16 minors. At the postgraduate level, the FST offers two postgraduate diplomas, seven taught MSc programmes and 10 MPhils and PhDs. In the 2015/2016 academic year the Faculty will offer four new BSc degrees including a BSc Mathematics and Applied Statistics, a BSc Statistics, two new specialisations in the BSc Biology degree – Marine Biology and Microbiology, as well as a new MSc Biomedical Physics.

The FST is committed to providing curricula that are current and relevant and which satisfy national and regional development needs. The Faculty is also committed, through its research and development activities, to the creation of knowledge, finding solutions to problems and the transformation of intellectual capital into wealth creation. The FST is therefore geared towards producing graduates who would go out into the region and create employment, rather than seek employment. As a result of increased emphasis being placed on graduate studies, research and development in the Faculty, a number of multidisciplinary research clusters have been formed, thus enabling the FST to attract a significant portion of the competitive research funds from local, regional and international sources.

In the academic year 2014/2015, over 370 students graduated with the BSc degree in the FST. Of these, 9% graduated with first-class honours, 17% with upper second-class honours, 39% with lower second-class honours and 37% with pass degrees. The majority of students (80%) graduated within four years. One student, **Zahra Gomes**, graduated with an amazing GPA of 4.29 and was awarded a Rhodes Scholarship in November 2015.

## Graduate Studies, Research and Innovation

The number of students graduating with higher degrees was 78, which included four MPhil and four PhD degrees. The throughput rate, particularly in the research degree programmes, is still a challenge and strategies are being put in place to remedy this.

The FST attracted almost TT\$3 million in external research grants, including funding from the Ministry of Planning and Sustainable Development as well as the UNDP Global Environment Facility's Small Grants Programme (GEF-SGP). A number of staff members received awards during the academic year. **Dr Sephra Rampersad** received the Young Scientist Award from The World Academy of Sciences – Regional Office for Latin America and the Caribbean TWAS-ROLAC); while **Dr Judith Gobin** was recognised by the National Institute of Higher Education, Research, Science and Technology (NIHERST) with the Silver Julian Kenny Award for Natural Sciences; **Professor Dave Chadee** won the Caribbean Public Health Agency Award 2015 for "*Outstanding Contribution in the Area of Public Health including Vector Control*", as well as The UWI-National Gas Company Award for the Most Outstanding Researcher in the Faculty of Science and Technology (2012-2014) and The UWI Faculty of Science and Technology Award for Most Outstanding Researcher. **Professor Jayaraj Jayaraman** received the Commonwealth Travel Grant to attend the Royal Society's 2014 Conference at Bangalore, India; **Dr Jo-Anne Sewlal** won a CARPIMS Grant to study the spider fauna of Haiti; **Dr Judy Rouse-Miller** received the Pioneer Award for plant propagation and distribution at the International Breadfruit Conference held in July 2015; and **Professor Patrick Hosein** was recognised with the 2015 Anthony Sabga Caribbean Award for Excellence in Science and Technology.

In the 2014/2015 academic year the Faculty published over 80 papers in refereed journals, 3 patents, some 50 conference proceedings, 3 books, more than 20 book chapters and 5 technical reports. This averages 2.2 publications per academic staff member, which is above the level required by The UWI.

### **Financial**

In line with the University's Strategic Plan, the Faculty sought avenues to commercialise its intellectual capital and infrastructural resources through more aggressive and planned marketing of its services offered to both its internal and external stakeholders. In an effort to become more financially sustainable, various self-financing postgraduate programmes have been developed over the years, including the MSc Renewable Energy Technology, the MSc Computer Science and Technology, the MSc Biotechnology and the MSc Biomedical Physics.

The Department of Computing and Information Technology continued to mount various revenue-generating certification courses to its industry stakeholders. The Department was also successful in its collaborative projects with industry, with several revenue-generating projects being initiated and completed. The Department of Chemistry has also undertaken advertising of various revenue-generating services to external clients in areas such as environmental monitoring, waste management, corrosion science, agriculture and food security, and analytical and glassblowing services. Commercial services units were established to further this initiative – namely the **Computer Connections Unit** and the **Statistical Consulting Unit**.

### **Outreach and Public Service**

The Faculty continued to serve the national and regional communities through membership on state boards and regional/international organisations. These include membership on boards such as Caribbean Industrial Research Institute (CARIRI), Institute of Marine Affairs (IMA), National Institute of Higher Education, Research, Science and Technology (NIHERST), Asa Wright Nature Centre, Trinidad and Tobago Bureau of Standards, the Cropper Foundation, the University School Council and the Trinidad and Tobago Field Naturalist Club. Additionally, relationships with stakeholders were further strengthened with the goal of ensuring stakeholder contribution in all aspects of curriculum development and the cultivation of the ideal UWI graduate. Members of staff were also involved in training secondary school teachers, serving as moderators, curriculum developers and examiners for CSEC and CAPE science subject. Members of staff served as CAPE Chief Examiners for Biology, Chemistry and Computer Science. Training workshops were also conducted for the general public. Several members of staff served as reviewers for various international journals.

### **Greening of the Faculty**

The Faculty of Science and Technology is on the way to becoming a green faculty. The Faculty is very much committed to reducing its carbon footprint and electricity bills by turning off lights and air-conditioners when offices are not in use. Central air-conditioners that use the ozone-depleting refrigerant R22 are being replaced with new air-conditioners that use the ozone-friendly refrigerant R410A. Also, newly installed air-conditioners have been fitted with timers to go off at 9:00 pm and restart at 6:00 am. The Faculty is deeply committed to recycling paper, glass and plastic and to the collection of cardboard and aluminium cans (through the Biological Society) for recycling. The FST strongly discourages the use of plastic bottled water due to the serious environmental problems these plastic bottles create. The use of refillable glass and stainless steel water containers is encouraged. To this end, the Faculty has installed bottle-filling stations in several locations throughout the Faculty and has also recently acquired FST branded stainless steel water bottles that are sold at reduced cost.

### **Conclusion**

Curriculum reform will continue in the new Faculty of Science and Technology with strengthening of the science programmes and expansion of the technology offerings. New programmes developed or being developed for introduction in 2015/2016 include the MSc Biomedical Physics, MSc in Analytical Chemistry and a Certificate in Science. The Certificate in Science will be awarded to students pursuing courses in the preliminary programme. For the past few years, the Faculty's preliminary courses (Chemistry, Biology, Mathematics and Physics) have been offered through franchise by the School of Continuing Studies, now the Open Campus). The FST has recovered and expanded this programme effective August 2014, which will be an important feeder not only for the FST, but also for the faculties of Food and Agriculture, Engineering, Medical Sciences and Law.

# SCIENCE & TECHNOLOGY

## ENROLMENT

Enrolment in the undergraduate programme in the **Department of Chemistry** dipped over the past three years (2012-2015) from 272 to 215 and then 219 during the review period. The number of students enrolling in undergraduate courses within the **Department of Mathematics and Statistics** was also low, on average, with only five courses attracting more than 100 students and only three courses with registration numbers over 200. In the **Department of Life Sciences** undergraduate enrolment has also been on the decline since the 2013/2014 academic year. This year, courses such as the Diversity of Plants & Animals, Freshwater Biology and The Ecology of Freshwaters were particularly affected. There were however significant increases in enrolment figures for Preliminary Biology I and II, and Biochemistry IIA courses. Total undergraduate enrolment in the **Department of Physics** was just over 240 students.

At the graduate level, the **Department of Chemistry** registered 37 full-time and five part-time students. Three MPhil students graduated in 2014/2015 and four new students were accepted to the postgraduate programme. The Master of Science Occupational and Environmental Safety and Health maintained its average of 50 new students academic year. At the **Department of Life Sciences**, postgraduate enrolment included 23 PhD, 22 MPhil, and 58 MSc students and the **Department of Mathematics and Statistics** reported fairly low enrolment, such that at the individual courses level, the highest enrolment (two courses) was 13 students and the average enrolment for courses over the three semesters was 10 students. Postgraduate enrolment in the **Department of Physics** consisted of 12 PhDs and 11 MPhils.

## GRADUATION

The graduation ceremonies in 2015 saw the second cohort of graduates from the BSc Actuarial Science programme including seven students who obtained first-class honours.

At the graduate level, three students from the **Department of Chemistry** – **Sheldon Pilgrim, Shireen Seenarine** and **Shanelle Suepaul** – were awarded the MPhil Chemistry, and of the 38 graduates from the Master of Science Occupational, Environmental and Safety and Health programme, 12 graduated with distinction.

At the **Department of Life Sciences** an MPhil was awarded to **Nerissa Ali** whose dissertation was on the *Use of Seaweed Extracts For Disease Control in Field Tomatoes*. The PhD Environmental Biology degree was awarded to **Hanano Yamada** whose dissertation was on *The Development and Evaluation of an Effective and Reliable Sex Separation System for Mass Reared Mosquitoes for Enhanced Application of the Sterile Insect Technique in Integrated Vector Management Programmes*. Eighteen students from that department were awarded the Master of Science Biodiversity Conservation and Sustainable Development in the Caribbean – five of which were with distinction.

The **Department of Mathematics and Statistics** graduated two MSc Mathematics and six MSc Statistics candidates, while the **Department of Physics** graduated its first four students from the MSc Renewable Energy Technology programme and three PhD postgraduate students – **Xsitaaz Chadee, Andrea Joseph Hutchinson** and **Randy Koon-Koon**.

## STUDENT ACHIEVEMENTS

### Department of Chemistry

**Dave Samlal** was the most outstanding undergraduate student in Chemistry for 2014/2015. He was awarded two prizes at the Faculty's Annual Award Ceremony for 2014/2015: the Southern Systems Limited Prize for the best graduating student in Chemistry and the Massy Gas Products Trinidad Ltd. Prize for the best performance Year III performance in Chemistry.

**Charissa Harewood** represented the Department of Chemistry at The Miss UWlverse Pageant, a production of The UWI, St. Augustine Guild of Students. The titleholder is an ambassador of the University, representing the student body and working with the Guild as a voice for Campus and Hall life. Even though Charissa did not win the competition, all the preparations for her interviews and fitness challenge were in itself self-development exercises.

The **CHEM<sub>IA</sub>** (Chemists in Action) student group promotes awareness of the chemistry discipline. Their outreach activities for 2014/2015 included, lab coat sales and rentals and model kit sales. The Executive reported that financial constraints prohibited more activities for the year.



### Department of Life Sciences

The following students received awards at the Faculty's prize ceremony:

- **Gabrielle Fernandes:** The Asa Wright Nature Centre: (Best Year I Performance in Environmental Sciences)
- **Zia Z. Barnard:** Republic Bank Limited (Best Year I Performance in Biology)
- **Alisha M. Singh:** Professor E.J. Duncan (Best Research Project – Plant Science)
- **Sarah R. Mathura:** The Bryden PI Limited (Best Year II Performance in Biochemistry)
- **Jiwani J. Peters:** The Massy Group Prize (Best Year II Performance in Biology)
- **Beana L. Joseph:** The Asa Wright Nature Centre – Thomas Carr (Best Year II Performance in Environmental Science)
- **Alicia V. Mathura:** The Seeterram Book Centre (Best Overall Performance in Biology), and The Massy Group Prize (Best Year III Performance in Biology)
- **Danielle C. Gordon:** The Angostura Limited Prize (Best Year III Performance in Biochemistry)
- **Kasha K. JN Baptiste:** The Asa Wright Nature Centre – Ian Lambie (Best Year III Performance in Environmental and Natural Resource Management)
- **Rissa S. Rampersad:** The Environmental Management Authority (EMA) (Best Research Project – Zoology)
- **Tiye A. Charles:** The Julian Kenny Prize in Natural History (Final Year student majoring in a Life Science discipline and displaying a strong interest in Natural History)

Five students received awards for their oral presentations at the Department of Life Sciences 2014/2015 Research Symposium.

### Department of Computing and Information Technology

Final year Computer Science student, **Inzamam Rahaman** was awarded an Internship to NASA. This is the second year that the internship was made available to Trinidad and Tobago through NIHERST and he is the second intern to be selected from the Department.

At the FST Annual Prize Ceremony, the following awards were made:

- **Hanaa Mohammed:** Atlantic LNG Co. of Trinidad and Tobago Prize for the Most Outstanding Graduate, BSc General (Major: Computer Science).
- **Inzamam Rahaman:** Medullan Inc. Prize for the graduate with the highest GPA BSc General (Major: Computer Science).
- **Inzamam Rahaman:** Fujitsu Caribbean (Trinidad) Ltd. Prize for the Best Year III Performance in Computer Science.
- **Donique John:** Digi-Data systems Ltd. Prize for the Best Year III Performance in Information Technology.
- **Matthew Stewart:** Tucker Energy Services Holdings Ltd. Prize for the Best Year II Performance in Computer Science.
- **Jason Mungal:** RBC Royal Bank Prize for the Best Year II Performance in Information Technology.
- **Karin Singh:** IBM World Trade Prize for the Best Year I Performance in Computer Science.
- **Mickel Mc Millan:** Mindbase Consulting Ltd. Prize for the Best Year I Performance in Information Technology.

The most outstanding postgraduate student for the year, **Lawrence Henderson**, was awarded the Head of Department Prize for the Best MSc Research Project in Computer Science 2014/2015. He was also awarded the Trinidad and Tobago Network Information Centre Prize for the MSc Computer Science graduate with the highest examination average in the academic year.

### Department of Mathematics and Statistics

**Zahra Gomes** was the top undergraduate in the Department of Mathematics and Statistics for 2014/2015 academic year. She received the Harold Ramkissoon Prize for the Best Year II and III Performance in Mathematics; the TATIL Group Prize for the Best Year III Performance in Mathematics, and a First Class Honours Award at the FST Annual Prizes Award Ceremony.

# SCIENCE & TECHNOLOGY

**Jagdesb Ramnanan** was the top postgraduate student in the Department of Mathematics and Statistics for 2014/2015 academic year.

The following students also received awards:

- **Robert Guerrin:** The Powergen Prize (for the Best Year I Performance in Mathematics)
- **Nalini Dookie:** The Guardian Life of Trinidad and Tobago Prize (for the Best Year II Performance in Mathematics)
- **Zahra Gomes:** The Tatil Group Prize (for the Best Year III Performance in Mathematics) and the Harold Ramkissoon Prize (Awarded for the Best Year II and III Performance in Mathematics)
- **Parvani Latchman:** The Winston A. Richards Prize in Statistics (for the Best Year II and III Performance in Statistics)
- **Orlena Thomas:** Head of Department Prize (for the Best Year I Performance in Actuarial Science)
- **Kafi Warner:** Head of Department Prize (for the Best Performance in Year II Actuarial Science)
- **Anastasia Timson:** Head of Department Prize (for the Best performance in Year III Actuarial Science)

## Department of Physics

- **UWI Stargazers Club:** The Russell Barrow Memorial Prize in Astronomy (Student showing most initiative and effort in Astronomy outside of the classroom).
- **Farrah Mathura:** The Head of Department Prize (Best Year I performance in Physics).
- **Chenelle Bruce:** The Azad W. Harripaul Prize (Highest marks in the Level II performance in Physics)
- **Nalini Dookie:** The Berger Paints Trinidad Ltd Prize (Best Year II performance in Physics)
- **Sahra Gomes:** The Deva Sharma Prize (Best performance by a female student graduating with a major in Physics)
- **Shridevi Mohan:** The PCS Nitrogen Prize (Best Year II performance in Material Science) and The Trinidad Aggregate Products Prize (Best performance in Ceramics Science)
- **Amrita Heeraman** and **Jason McIntyre:** The Anthony Campbell Memorial Award (Best performance in the Physics Major Research project)
- **Sapphire Rahim:** The Head of Department Prize: (Best Year III performance in Materials Science)
- **Jon-Michael O'Brien:** The Diagnostic Nuclear Medicine Ltd Prize (The most outstanding student in Advanced Medical Physics and Bioengineering)

## STRATEGY APPRAISAL

### Department of Chemistry

During the period under review, the Department embarked on a number of measures to increase efficiency and productivity among staff. These included **generating income** from consultancies using the Research, Outreach, Consultancy and Analytical Services Unit (ROCAS). The unit generated TT\$195,000.00 for the 2014/2015 period under team leader **Dr Leonette Cox**. The Department also won a green technologies project funded by the United Nations Development Programme Global Environment Facility Small Grants programme (UNDP GEF-SGP) in the sum of US\$50,000.00 in November 2014.

One of the objectives for the period under review was the implementation of the green policy through the conservation and reduction in waste solvent and other chemical waste. The revision of lab exercises saw a 60% reduction of the lab experiments to a minimum practical scale in 2014/2015, 10% more than anticipated.

As it relates to **employee engagement**, members of staff participated in the FST Cricket competition held in May 2015. The Department also organised its own in-house football competition held on June 11, 2015, which featured ATS staff competing against academics and postgraduate students and served as a team building exercise.

**Internal operational processes** were also fine-tuned by the appointment of staff members to committees to carry out the functions of the Department. Staff members at all levels were appointed to committees such as Website, Social Affairs, Outreach, Safety, Curriculum, Orientation, CHEM IA, and Undergraduate and Postgraduate Liaisons.

In 2014/2015, the Department introduced a new laboratory core course for Chemistry Majors and BSc Chemistry students, core courses for Level III of the BSc Chemistry programme, new electives for Chemistry majors and BSc Chemistry students, and a new major in Industrial Chemistry and new minors in Industrial Chemistry, Materials Chemistry and Chemical Biology. The Help Desk initiative was reintroduced in Semester II of 2014/2015. At these sessions, students were free to approach lecturers in the room assigned for these to ask any questions with regard to their course material and programme of study.

The Math Remedial Session was introduced in Semester I of 2014/2015 designed to improve the mathematical skills required for chemistry students in Level I. The Department also introduced an online Chemistry Learning Centre with interactive material to read on acquiring study skills and time-management skills. This material was uploaded on all myElearning course shells for easy access. A departmental tutoring system was also created for Level I students. Due to prior implemented initiatives, attendance at lectures marginally improved. Attendance at the organic tutorials in particular proved to be more fruitful as students were required to submit tutorials, which were randomly marked.

#### Department of Life Sciences

The Department completed its quality assurance review during the period January 26-30, 2015. The review team included Professor Anthony L. Moore, School of Life Sciences, University of Sussex (Leader), Professor Paula Tennant, Head of the Department of Life Sciences, The UWI, Mona Campus and Dr Donna-May Sakura-Lemessy, Acting Director of the Institute of Marine Affairs, Trinidad and Tobago. In general, the review team was impressed with the efforts of the Department in delivering a wide variety of courses and imparting valuable skills to students. The reviewers also identified specific areas for improvement.

Two more specialisations in marine biology and microbiology were added to the BSc Biology degree programme. The MSc Biotechnology programme was also approved during the review period.

#### Department of Computing and Information Technology

The Department has been working diligently to revise the curricula for its BSc Computer Science and BSc Information Technology programmes (at both the introductory and advanced levels). A key strategy of the new curricula is a combined first year for both BSc Computer Science and BSc Information Technology students.

#### Department of Mathematics and Statistics

Accessibility to students was paramount to the Department during the period under review. Lecturers were encouraged to submit their office hours, which were posted on the notice boards for viewing by students, and offered students more ready access to lecturers for one-on-one consultation. The Department held two student/staff liaison meetings; the minutes of these meetings were forwarded to the Faculty Board. The Department ran several courses in the FST Summer School. The Statistical Consulting Unit began doing business and received its first very modest fees from clients. It also hosted a workshop in MAPEL and MatLab®, aimed at an off-campus audience which successfully attracted 17 students.

During the review period, two new degrees in Statistics were approved – the BSc Statistics and BSc Mathematics and Applied Statistics. The new three-credit Level II courses in Mathematics were also taught for the first time. During the transition period, allowances were made for some old four-credit core courses to be taught (but for the last time). The BSc Actuarial Science and Statistics and Economics degrees were updated to reflect the transition to three-credit courses.

## RESEARCH AND INNOVATION

#### Department of Chemistry

The Department's focus for 2012-2017 continues to be on environmental protection and related issues, as well as developing materials, products and processes to support national/regional development in the areas of the agriculture food sector, health and wellness and industry.

#### Major Research Completed

##### Arvind Kumar:

- *Development of Novel Schiff Base Chromophores for Dye Sensitized Solar Cells.* (MPhil awarded to Shanelle Suepaul).

##### Richard Fairman:

- *Investigations of Chiral Precursors for Synthesis of Novel Monosubstituted Squarate Complexes.* (MPhil awarded to Shireen Seenarine).

# SCIENCE & TECHNOLOGY

## **Denise Beckles:**

- *The Impact of Emissions from the Guanapo Landfill on the Surrounding Environment.* Landfill emissions can have a severe impact on the surrounding environment, particularly as these emissions can be readily transported long distances. This project produced a comprehensive description of the current state of the environment around and emissions from the Guanapo Landfill. Model studies of the landfill, air and water were conducted to allow for predictive studies that can be utilised to study other landfills in Trinidad and Tobago and the region. (Successfully completed in 2015.)

## **Ivan Chang Yen and Denise Beckles:**

- *Development of Non-Volatile Neutraceutical and Flavour Component Profiles of Cocoa.* (MPhil awarded to Sheldon Pilgrim)

## **Denise Beckles and Shirin Haque:**

- *A Chemical and Physical Profiling of Selected Mud Volcanoes in Trinidad for Purposes of Astrobiology.* The mud volcanoes of Trinidad are possible analogues for those on other planets such as Mars. It is believed that study of the Trinidad mud volcanoes (chemistry, geology and biology) will provide information that could be relevant to the search for life on distant planets. The PhD dissertation was submitted for examination, and is currently being revised before the oral examination. (PhD student: Riad Hosein)

## *Major Research in Progress*

### **Grace-Anne Bent:**

- *Monitoring and Quantification of Pesticide Residue Levels in Foods Consumed in Trinidad and Tobago.* (MPhil Student: Winnette Collimore)
- *Quantification of Acrylamide in Foods Consumed in Trinidad and Tobago.* (MPhil Student: Malika Simon)

### **Richard Fairman and Lebert Grierson:**

- *The Synthesis of Amphiphilic Molecules with a Variety of Functional Heads for use as Molecular Sensors, Transporters and Probes.*

## **Richard Fairman:**

- *Theoretical Studies of Reaction Mechanisms with Ab Initio Computational Chemistry Methods.*
- *Divergent Synthesis of Dendrimers With Paramagnetic Lanthanide Cores for use as MRI Contrast Enhancement Agents.*

## **Michael M. Forde:**

- Formation and Role of Alkyl Hydroperoxides in the Oxidation of Methane under Mild Aqueous Conditions.
- Catalysts For Thermo-Catalytic Lignin Upgrading (In Conjunction With Lokesh Kesavan of Aalto University, Finland).

## **Nigel K. Jalsa:**

- *Development of a Protocol to Selectively Remove the Anomeric O-Benzyl from a Diverse Array of Protected Carbohydrate Derivatives.*
- *Conformational Studies on Pyranoside Ring Shape.*
- *The Effect and Distortion Imparted by Various Cyclic Constraining Groups of Varying Sizes and Positions on the Classical Chair Conformation of Monosaccharides.*
- *Evaluation of Commonly Available and Relatively Inexpensive Reagents as Lewis-Acid Catalysts*
- *Design and Development of Novel Protecting and Activating Groups; thereby Facilitating the Synthesis of the Functional and Biologically Prevalent N-Linked Oligosaccharides (With Graduate Student Stacy Ali).*
- *Design of Alternative Approaches to obtain the Medicinally Important Protected Furanosides, which are typically difficult to access.*
- *Synthesis of Non-Natural Cyclodextrin Analogues; Evaluation of their Ability to Form Various Host-Guest Inclusion Complexes and hence Act as Drug Delivery Systems, Enzyme Mimics and Gene-Targeting Vehicles.*

## **Nicole John-Thomas:**

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

**Arvind Kumar:**

- *Metal-Directed Macrocyclic Self-Assembly used as Probes for Molecular Recognition/Sensing, Encapsulation, Optical Fibres, Catalysis and also of Biological Importance.*
- *Synthesis of Chromophores for Harvesting Solar Light (Dye Sensitized Solar Cells) DSSCs.*
- *Transition Metal Coordination Complexes for Chemical Sensing.*

**Anderson Maxwell:**

- *Study of the Chemistry of Trinidadian Rubiaceae, Solanaceae and Euphorbiaceae species.*
- *Synthesis of Chiral 2.2 [PC] Derivatives for use as Asymmetric Catalysts.*
- *Bioactive Natural Products from Plants and Microorganisms Isolated from Unusual Habitats e.g. Caroni Swamp and the Pitch Lake.*

**Terry Mohammed:**

- *The Evaluation of Oil Sand Deposits in Trinidad as a Viable Source of Petroleum.*
- *The Behaviour of Asphaltenes and Factors Leading to their Peptisation in Crude Oil and Crude Oil Mixtures.*

**Terry Mohammed and Azad Mohammed:**

- *Determination of Heavy Metal Content of Oceanic Top Predator (Shark).*
- *Evaluation of PAH Levels in Bottom and Filter Feeders in the South West Coast of Trinidad, One Year after a Major Oil Spill.*

**Ramish Pingal:**

- *Antibacterial metabolites active against MRSA produced by *Apergillus Sclerotiorum* from Trinidad. (MPhil Student: Sajidah Ali; expected to graduate in 2015-2016)*
- *Bioactive secondary metabolites active against MRSA from Bacteria found at Caroni Swamp in Trinidad. (MPhil Student: Famida Ali. Thesis submitted July 2015, awaiting report from examiners)*
- *Synthesis of new coumarin, chalcone, pyrazoline and indole derivatives with antimicrobial activities.*

**Anderson Maxwell, Co-supervisor: Ramish Pingal:**

- *Extraction, isolation, and characterisation of secondary metabolites from *Psychotria* species in Trinidad. (MPhil student: Collan Moore)*

**Russel Ramsewak:**

- *Isolation and structure elucidation of natural products from terrestrial plants and marine organisms including synthesis and bioactivity testing.*

**Mohindra Seepersaud:**

- *Anticancer Research: Isolation and vector technology application to Acetogenin Natural products: Extraction and Isolation of the Tetrahydrofuran containing Acetogenins and their use in prodrugs for Tumor Targeting.*
- *Antibacterial Research: Investigation of Peptide Deformylase Inhibitors, Antibacterial Agent for Intravenous and Oral Treatment of Hospitalized Patients with Multidrug Resistant Infections.*
- *Environmental and Green Chemistry: Investigation of *Sargassum* seaweed.*
- *A study of its Anticorrosive properties, Heavy metal concentrations and Phytochemicals Constituents.*
- *Investigation and discovery of Natural Products derived from in vitro produced *Solanum mammosum*.*
- *Chemical Prospecting: Isolation and identification of novel bioactive compounds from *Pseudomonas aeruginosa* UWI-1.*
- *Isolation, Identification and Antibacterial activity of Steroidal Secondary Metabolites from Solanaceae Species.*
- *SAR development of Naturally Occurring Carbohydrate-Based Pesticides.*
- *The Purification and Characterisation of New Carbohydrate-Binding Proteins from Tropical Species.*

**Gurdial 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.*

**David Stephenson:**

- *NMR Studies of the kinetics of dynamic equilibria.*
- *Low Frequency Nuclear Quadrupole Resonance (NQR) and its application for identification of counterfeit drugs.*

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## Richard Taylor:

Supervision of the Materials Research Group includes two PhD students, three MPhil students and several undergraduate research students. The primary objective of the group involves the rationale design and synthesis of novel materials and exploring their structure – property relationships for optoelectronic device applications. The following outlines project areas:

- Synthesis, Characterisation and Optoelectronic Properties of Lanthanide/Transition Metal Doped Ternary and Quaternary Chalcopyrite Semiconducting Nanocrystals (Quantum Dots) and Thin Films for Solar Cell Applications.
- Synthesis, Structural Elucidation and Thermotropic Phase Transition Studies of Metal-containing Liquid Crystal Compounds (Cu and Zn Schiff Bases complexes) for Liquid Crystal Display (LCD) device applications.
- Synthesis, Structural Elucidation and Thermotropic Phase Transition Studies of Luminescent Metal-containing Liquid Crystal Compounds (Rare-earth Schiff Bases complexes) for Liquid Crystal Display (LCD) device applications.
- Synthesis, Structural Elucidation and Thermotropic Phase Transition Studies of Binary Metal Carboxylates for Liquid Crystal Display (LCD) device applications.
- Synthesis, Structural Elucidation and Luminescent Properties of Lanthanide Metal-Organic Frameworks (Ln-MOFs) for molecular (gas) storage, catalytic, electronic and solid state light applications.

## Ann Wilson:

- *Electrochemical and physical analysis of waste products from the cocoa industry as corrosion inhibitor materials.*  
The outer shells of the cocoa pods are generally discarded in the field as a waste product of cocoa production. Cocoa is known to contain many phytochemicals, which could have relevance as corrosion inhibitors both in acidic and basic media. (MPhil Student: Tricia Badoo, MSc Student: Kerilene Pierre; Undergraduate Students: Kimberly Weston, Sabita Dourgah)
- *An Evaluation of the effect of surface and surface preparation on the adhesion of hydrogel films.*
- *Electrochemical investigation of the corrosion protection of mild steel by electroactive oligomers and polymers.*
- *Investigation of the anticorrosive properties of the seaweed *Sargassum natans* and *S. fluitans*.*

## Department of Life Sciences

Research activities are concentrated in the areas of Small Island Biodiversity and Environmental Management; and Biotechnology and Molecular Biology. These programmes are geared towards local and regional sustainability and development, specifically in areas related to the environment, agriculture and human well being. The major focal areas include:

- **Biodiversity and Ecosystem Services Management:**  
Quantification and valuation of biodiversity and ecosystem services provided to humans by forests, mangroves, savannahs coral reefs, rivers, freshwater wetlands. Mainstreaming ecosystem services valuation into government spatial planning, national accounting and eco-finance scheme.
- **Climate Change vulnerability, impact and adaptation:** Developing socio-economic climate change scenarios for important public health diseases, agricultural crops, biodiversity, ecosystem services, water availability and sea level rise.
- **Biotechnology for Plant Growth Improvement:**  
Work is proceeding on developing genetically improved anthurium, hot pepper and sugar cane. Developing/improving tissue culture techniques for commercially important crops like cassava and sweet potato as well as key ecological plant species for re-introduction into the wild.
- **Biotechnology for Sustainable Plant Health and management:** Development of sustainable disease management strategies to improve vegetable production towards self-sufficiency and food security in the Caribbean region. Novel methods of plant disease diagnosis are being developed and extracts of local seaweeds are being explored as bioelicitors for enhancing crop growth and yield.
- **Biotechnology for sustainable human health:**  
Research projects are in progress on important health issues affecting the Caribbean population including, metabolic diseases such as obesity and type 2 diabetes mellitus. Research is also being conducted to develop rapid and high-throughput methods for detecting and characterising antibiotic resistance in bacterial pathogens of humans in Trinidad and Tobago. Both traditional and metagenomic approaches are also being used for research aimed at novel drug discovery from indigenous microflora.

- **Biotechnology for environmental sustainability:** Plant and microbial-based methods for remediating oil spills and oil-contaminated soils are being investigated. Metagenomic based approaches are being applied to identify novel enzymes involved in bioremediation processes. Indigenous microbes are also being explored as biological control agents for managing plant diseases. Additionally, biotechnological tools are being applied to assess genetic biodiversity and help in the development of conservation systems for Caribbean flora.

#### Other Major Research in Progress

- Development of protocols for in vitro conservation of terrestrial Aripo Savannah orchids: Assessment of the status and ecology of plant species of conservation concern in the Aripo Savannas Environmentally Sensitive Area in north central Trinidad.
- Development of methodology for remote sensing of methane emissions from a tropical wetland and Biochemical, Molecular and Tissue Culture Studies on Root and Stem Tuberisation in cassava (*Manihot esculenta* Crantz).

#### Department of Computing and Information Technology

**Dr Margaret Bernard** leads The UWI RDI Fund project entitled "*Agricultural Knowledge ePortal: Research on Intelligent Decision Support for Enhancing Crop and Livestock Enterprise Management (AgriNeTT)*" which is a collaboration of Department of Computing and Information Technology researchers, with researchers from the Faculty of Food and Agriculture, the Ministry of Food Production, NAMDEVCO and the farming community under the category – Technology and Society Enhancing Efficiency Competitiveness and Social Well-being. The project completed two open data repositories, freely available online for institutions to upload their open data to the general as <http://data.tt> and <http://maps.tt>. Three apps are also freely available to the farming community and others through Google Play – AgriExpense, AgriMaps and AgriPrice. Two general meetings were held to evaluate users' feedback on the apps being developed, as well as continue one-to-one evaluation of user-friendliness of apps with farmers in farms and markets, and institutions responsible in agri-data management. One Agricultural Data Forum was held during the year (February 2014 - September 2015) to educate

stakeholders on the capabilities and uses of the three available apps. The project produced two MSc projects in Computing and Information Technology and served as the working training platform for eight undergraduate DCIT students from Years II and III Kiran Maharaj, an Associate Professional with the Ministry of Public Administration, Trinidad and Tobago was seconded to work on the AgriNeTT project.

#### Department of Mathematics and Statistics

Research continued in Applied Mathematics (Fluid Mechanics, Mathematical modelling of predator-prey interactions and others, finite element method), discrete mathematics and in Statistics. A Symposium on Mathematics and its applications, organised by **Professor Balswaroop Bhatt** was conducted by the Institute of Mathematical Sciences in collaboration with the Departments of Mathematics and Statistics, Computing and Information and Technology and the Faculty of Science and Technology on May 27, 2015. The objectives of the symposium were to promote and support understanding, teaching, research and applications of mathematics.

#### Department of Physics

The Department's research agenda includes Applied Physics and Interdisciplinary Fields:

- Renewable Energy and Environmental Physics
- Materials Science and Fuel Cell and Lithium Battery
- Medical Physics and Bioengineering, Electronics, Fiber-Optics, Optoelectronics
- Quantum Physics and Astronomy

## OUTREACH

#### Department of Chemistry

The induction of the Department of Chemistry's project '*Science Education as a Climate Change Resilience Strategy (SECCRS): Advancing Green Technologies Through Community Participation and Practical Science Education for our Children*' took place on October 31, 2014 at The UWI, St. Augustine Campus. Personnel from the NGO Guanapo Community Environmental Development Organisation (GCEDO) were in attendance. The 18-month project is funded by the UNDP Global Environment Facility Small Grants Programme at a cost of US\$47,553.00. The overall goal of the project is to empower communities to apply practical knowledge of green

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technologies to best meet the need of the local circumstances. A public meeting to present final results of the Guanapo Landfill project was held on June 25, 2015 at the Learning Resource Centre, The UWI, St. Augustine Campus. Members of the Heights of Guanapo community, the general public, UWI staff and students were invited. The lead researcher for this project was **Dr Denise Beckles**. Activities connected with the Guanapo Landfill project promoted strong interactions with two governmental agencies, the Solid Waste Management Company Limited and the Water Resources Authority. The Department of Chemistry participated in The UWI Open Day from June 16-18, 2015 where guidance on programmes and tours of the facilities were provided for students and members of the general public.

The Department (through **Dr Ramish Pingal**) facilitated laboratory interactive demonstration sessions for sixth form students covering the CAPE topic Analytical Methods and Separation Techniques on March 20 and 24, 2015 (two sessions) for 84 students from St. George's College, ASJA Girls' College (San Fernando), North Eastern College, Fyzabad Anglican Secondary School, St. Augustine Girls' High School, Bishop's Anstey/Trinity College East.

## *External Linkages with Industry Partners*

The Department partnered with outside agencies through visits to industries seeking funding, research collaboration and internships for the undergraduate students.

## *Cross-faculty Relationships*

Cross-faculty collaboration with The UWI School of Veterinary Medicine and the Department of Chemistry, through the Science Education as a Climate Change Resilience Strategy project (SECCRS). This project facilitated training of Guanapo residents to build and maintain a small-scale aquaponics system.

## *Links with Other Universities, Local and/or International Organisations*

Through a newly inducted project, the Department has linked to the United Nations Development Programme (*Science Education as a Climate Change Resilience Strategy*). The Department also participated in a Booth and Poster Presentation at The UNDP GEF/SPG Knowledge Fair, May 28-29, 2015, Arthur Lok Jack Graduate School of Business, Mount Hope for the SECCRS Project.

The Chemistry Department facilitated on a workshop for high school students on Nanoscience and Nanotechnology. **Dr Richard Taylor** was a member of the organising committee. Space and staff for the demonstration of experiments were facilitated by the Department during the period July 13-15, 2015.

## *Conferences and Seminars*

**Professor David Mootoo** from the Department of Chemistry at Hunter College, New York visited the Department on May 1, 2015. His seminar was entitled "Synthesis and Applications of Glycomimetics".

**Mohindra Seepersaud** presented a number of seminars at the Department, including:

- "Antibacterials, from Concept to Clinic" to the Microbiology Group, Department of Life Sciences in September 2014.
- "Novel Antibacterial Agent *Peptide Deformylase* Early Research and Development, A medicinal chemist perspective on this promising new class of antibiotics" October 2014.
- "Pathway to Commercialisation", plenary speaker, Workshop, Department of Life Sciences in November 2014.

## **Department of Life Sciences**

### *Links with Other Universities, Local and/or International Organisations*

**Dr Luke Rostant** is a member of and collaborates with the local organisation, Trinibats in the education and outreach with regards to the importance of bats in Trinidad and Tobago. Meanwhile, the Department's MSc team continues to maintain its partnership with the University of Belize, Anton de Kom Universiteit Van Suriname and University of Guyana with the launch of the Department's first online MSc.



### Conferences and Seminars

A number of conferences and seminars were hosted and organised by the Department. They include an advanced workshop on *Genomics, Metagenomics and Bioinformatics*, organised by **A. Ramsubhag, C. Carrington** (Faculty of Medical Sciences) and **K. Nelson** (JCVI) held from February 19-20, 2015; the 5<sup>th</sup> Annual Research symposium entitled: *“Environment for Sustainable Development”* organised by **D. Chadee** and **J. Gobin**; three stakeholders’ meetings with Regional Medical Authorities at Mount Hope, Sangre Grande and San Fernando General Hospitals organised by **J. Jayaraman** and a regional workshop on *“Integrated Disease Management”*, held from September 5-6, 2014 was organised by J. Jayaraman and A. Ramsubhag.

### School Visits

The **Department of Physics** remains committed to its outreach initiative and continues to extend invitations to selected schools to bring examination-level students to perform CAPE experiments in the Department’s advanced laboratories. The pilot period saw five schools participating: Couva East Secondary, Valencia Secondary, San Juan North Secondary, St. Anthony’s College and Iere High School. The diversity of the schools allowed for an in-depth understanding of how students can relate to the practical aspects of Physics.

Over the course of 2014/2015, schools such as Iere High School and St. Anthony’s College have returned on several occasions to keep students’ interest peaked about performing at their best at the national level. These visits are evidence of the Department’s willingness to support secondary schools to promote the Sciences to students. The Department also hosted an Open Day for students who were offered to do the BSc Physics or BSc Biomedical Physics degrees. The opportunity was used to showcase the Department’s course offerings and broaden the horizons of potential students. In addition, the Physics Department participated in FST Open Week held for prospective students. On display were various experiments and equipment used by both undergraduate and postgraduate candidates. It was indeed an eye-opening view of Physics to many students who were very interested in its practical applications.

## REVENUE GENERATION/COST CONTAINMENT

**The National Herbarium** successfully secured TT\$2.2 million from the Ministry of Planning and Sustainable Development in 2014/2015 to conduct research on the three-year study entitled: *Tropical Montane Forests: Water Capture and Conservation of Supplies in Trinidad and Tobago*.

Revenue generated for the **Department of Life Sciences** included the sum of TT\$6,403,934.00 from the UNEP/GEF; and the Green Fund provided funding in the sum of TT\$5,366,600.00 for research on the Aripo Savannah. Other generous donors were the ACP-EU (TT\$4,064,436.00 and TT\$4,061,715.00), The Acadian Sea Plants (TT\$139,260.00), the EMA (TT\$1,276,500.00), the IAEA (TT\$203,507.00), The UWI RDI Fund (TT\$954,854.00), The Ministry of Food Production, Land and Marine Affairs (TT\$50,000.00), Climate and Development Knowledge Network (TT\$957,159.00), the Research Development Initiative Fund (TT\$600,000.00) and Canada-Latin American and the Caribbean Research Exchange grants LACREG (TT\$83,000.00).

**The Department of Physics** generated income from the MSc Renewable Energy Technology, which commenced in September 2013 and the Electron Microscopic Unit, which began operations in August 2015.

## PROJECTED ACTIVITIES FOR 2015/2016

### Academic Programmes

The **Department of Chemistry** is developing an MSc Chemical Analysis and the **Department of Life Sciences** plans to develop new research degrees (MPhil/PhD) in Marine Biology, Biotechnology, Plant Pathology and Environmental Science. The **Department of Physics** is developing internships through the Ministry of Health for the BSc Biomedical Technology while the MSc Biomedical Physics is proposed to start in September 2016. The **Department of Mathematics and Statistics is working towards** new degrees in Computer Science and Mathematics and in Mathematics and Education. Plans are also on stream to construct a new Diploma in Mathematics for secondary school mathematics teachers wishing to be upgraded from Teacher II to Teacher III.

# SCIENCE & TECHNOLOGY

## General Activities

The **Department of Chemistry's** annual departmental Research Day is being planned for May/June 2016. This Research Day gives the postgraduate students an opportunity to exhibit their research work through seminars and poster presentations. Prizes for best posters will also be awarded to postgraduate students. The Department also plans to continue working with alumni, industry and other stakeholders regarding the types of courses, programmes and competencies that will meet the needs of the workplace.

## Research Activities

The **Department of Chemistry** has been preparing for major projects with two Green Fund proposals, which are at varying stages of completion. *Blue sky-Green Earth-C2 valorisation* is close to submission while preparation is in progress for the *Natural Products* Chemistry project.

Future research by staff members within the **Department of Life Sciences** includes research in the following areas:

- **W. Elibox** and his collaborators have been working towards improving the Anthurium industry through development of nematode resistant varieties. Other research on hot peppers has the objective of developing a hybrid production system for Caribbean hot peppers.
- **J. Gobin**: working on deep-sea data collected from the east coast of Trinidad.
- **A. Farrell**: New research on water and heat stress. The methods developed are now being applied in several systems, including: Resilience to climate change in Cocoa, tomato; Resilience to climate change in plants of Aripo Savannah and Response to abiotic stress in forest restoration species.
- **G. Briggs and J. Rouse-Miller**: Improving food security via the optimisation of antifungal treatments for cassava. The project is a cross campus and international collaboration using molecular markers to screen the in vitro collection of cassava varieties for resistance to Superelongation disease.

Other areas of future research include:

- Balancing the costs and benefits of using larvicidal fishes as agents of mosquito control in Trinidad and Tobago. Mosquito-borne illnesses such as dengue fever and malaria are a significant global problem that is showing signs of resurgence and redistribution. Guppies are larvicidal fishes used to control the transmission of mosquito-borne illness in a large number of countries where they have been introduced into formerly guppy-free aquatic habitats. The effect of guppy introduction on aquatic habitat is poorly characterised, though it is widely believed to be detrimental. This project aims to quantify the ecological costs and benefits of using fishes to control mosquito populations.
- Studying the pattern and intensity of occurrence of plant diseases of important vegetable crops (tomato, bodi and pumpkin) of the Caribbean and develop diagnostic tools; Evolving Integrated Disease Management (IDM) practices and sustainable plant health strategies for important vegetable crops; Developing and propagate and promote new technologies and adoption at the field scale; Training of growers and agricultural personal towards successful implementation; Characterisation of multiple virus infections of vegetable plants.

## DISTINGUISHED VISITORS

### Department of Chemistry

#### Professor Sang D. Choi

University of Wisconsin  
White-water, USA

#### Mr Stephen Fullwell

Magnolia House Consultancy  
Williston, Nantwich  
Cheshire, England

#### Professor E. Andrew Knapp

Department of Occupational and Environmental Safety and Health  
University of Wisconsin  
White-water, USA

#### Dr Judith Monsatt

Forensic Science Laboratory  
Jamaica

**Dr Alvaro Taveira**  
University of Wisconsin  
White-water, USA

**Department of Life Sciences**

**Professor Grant Brown**  
Concordia University  
Canada

**Professor Jean-Guy Godin**

Carleton University  
Canada

**Professor Jeffrey Jones**

University of Florida  
USA

**Professor Jens Krause**

Humboldt University  
Germany

**Professor Anne Magurran**

St Andrews University  
Scotland

**Professor Emmanuel Wicker**

CIRAD  
Rèunion

**Department of Mathematics and Statistics**

**Professor M. N. Mehta**

Department of Applied Mathematics and Humanities  
Sadar Vallabhbhai National Institute of Technology  
India

**Dr V. H. Pradhan**

Associate Professor  
Department of Applied Mathematics and Humanities  
Sadar Vallabhbhai National Institute of Technology  
India

**Professor P.G. Siddheshwar**

Department of Mathematics  
Bangalore University, Central campus, India

**Department of Physics**

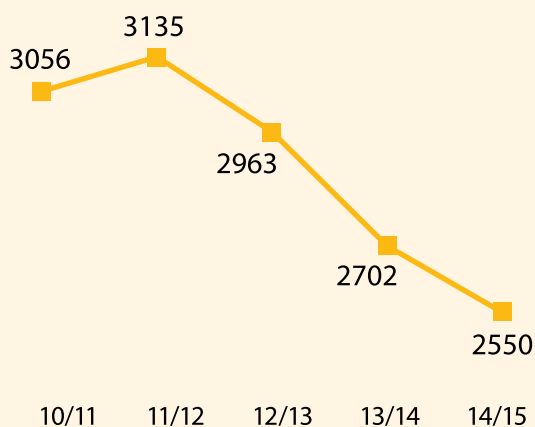
**Dr Professor Catherine Disselhorst-Klug**

Head of Department, Department of Rehabilitation and  
Prevention  
Engineering Institute of Applied Medical Engineering –  
Helmholtz Institute  
RWTH Aachen University – University Hospital Aachen  
Aachen, Germany

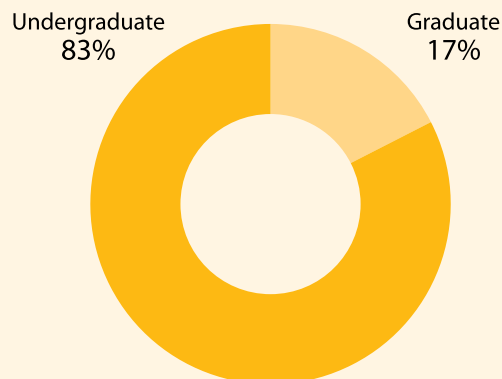
**Professor Harry Lehto**

Astronomer and Professor  
University of Turku  
Department of Physics and Astronomy Tuorla Observatory  
Finland

GROWTH IN ENROLMENT  
2010 – 2015



GRADUATES BY PROGRAMME  
2014 – 2015



Note: Prior to 2012/2013, the Faculties of Science & Technology and Food & Agriculture were schools in the Faculty of Science & Agriculture.

# SOCIAL SCIENCES



Professor Ann-Marie Bissessar  
Faculty Dean



## EXECUTIVE SUMMARY

The Faculty of Social Sciences (FSS) is a multidisciplinary faculty covering a number of disciplines such as political science, economics, management studies and behavioural sciences. The Faculty is therefore well placed in the time of economic downturn to provide research and services to the ministries and departments in a number of areas. It is indeed a time where the Faculty can explore new opportunities.



# SOCIAL SCIENCES

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

In its efforts to promote continuous curriculum renewal aligned to the attributes of The UWI graduate, the Faculty established a Curriculum Committee and Departmental Curriculum Committees with the responsibility for vetting programme and course proposals at the faculty level.

In order to improve on its offerings for the year 2014/2015, as well as to afford harmonisation with its sister campuses, each department within the Faculty is undertaking a comprehensive review of their programme and course offerings. The **Department of Management Studies** undertook a comprehensive review of its programmes at both the undergraduate and postgraduate levels. The first phase was completed in January 2015 and included a curriculum review workshop for all members of academic staff. It provided a context for an effective curriculum review grounded philosophy and focused on exploring the ways in which the process may take place. This workshop was facilitated by the Centre for Excellence in Teaching and Learning (CeTL). The second phase of the curriculum review entailed the conduct of a situational analysis and stakeholder consultation, which took place in July 2015. A number of departments also undertook quality assurance reviews during this period.

During the period under review, the Department of Political Science extended its programme in the South Campus and introduced the Bachelor of Science in Public Sector Management with a Minor in International Relations, in addition to the Certificate in Public Administration.

Two programmes were officially transferred out of the Faculty to departments where it was felt that the capacity for such offerings resided. The Master of Public Sector Management was moved to the Department of Political Science, and the Bachelor of Science in Leadership and Management to the Department of Management Studies.

## **New Programmes**

In the year under review, the Faculty of Social Sciences developed an MSc Children and Youth Studies in collaboration with UNICEF and the International Child Development Initiatives (ICDI) based in the Netherlands. The Bachelor of Science in Criminology and Criminal Justice was Government Assistance for Tuition Expenses (GATE) approved and the programme was offered in 2014/2015. A new co-curricular course entitled "Ethics and Integrity: Building Moral Competencies in the Workplace" was also introduced in 2014/2015.

## **Research and Innovation**

The Faculty provided financial support for several conferences and workshops hosted by the constituent departments, namely, the **Business, Banking and Finance Conference** which was held on May 18, 2015 at the Hilton Trinidad and Conference Centre in Port of Spain; the **Disability Studies Conference** entitled, "Towards Social Integration: Rights, Roles, Recognition of Persons with Disabilities" which was held on April 23-24, 2015 at the Learning Resource Centre, The UWI, St. Augustine Campus (attended by **His Excellency President Anthony Thomas Aquinas Carmona** and **Mrs Reema Carmona**, the Irish Consul, **Senator Kerry Ann Ifill** of Barbados); and the **2<sup>nd</sup> Annual Graduate Conference** entitled "The Caribbean Today: Facing Challenges and Assessing Opportunities through Postgraduate Research" which was held from April 09-10, 2015 at the Learning Resource Centre.

## **Employee Engagement and Development**

The Dean's Office held a retreat on May 19, 2015, for Administrative and Technical staff. Several issues and challenges relating to the administrative operations of the Faculty were discussed, such as records management, team building and service quality.

## ENROLMENT AND GRADUATION

The Faculty had an enrolment of over 3,700 students at the undergraduate level and over 2,300 students at the postgraduate level for the 2014/2015 academic year. At the graduation exercises in October 2015, more than 1,000 students from the Faculty were awarded certificates. Sixty-three percent earned undergraduate degrees while those earning higher degrees – taught and research – made up 25% of graduates.

## STUDENT ACHIEVEMENTS

**Dr Preeya Mohan** was awarded the PhD in Economic Development Policy (with high commendation). She also received an IDB Young Economists Award for her proposal *Energizing Sustainable Development: A Global Value Chain Analysis of the Caribbean Bioenergy Sector*. Dr Mohan joined the Sir Arthur Lewis Institute of Social and Economic Studies (SALISES) staff as a Post-Doctoral Fellow in 2015.

**Ms Chrissie Worme-Charles**, an MSc Social Work student, was selected under the Caribbean Internship Programme (CIP). She is currently pursuing her advance social work practicum in St. Vincent and Grenada.

**Mr Leo Mark**, a BSc Management Studies student, was awarded the prestigious Boeing internship opportunity in summer 2015.

## STRATEGY APPRAISAL

The Campus Principal signed an MOU with the McAL Group of Companies for the construction of a four-storey building to be located at the old Security building site to house the proposed **Department of Psychology**, as well as the **Anthony Sabga Centre for Entrepreneurship** as part of the Faculty of Social Sciences and the **School of Journalism of the Faculty of Humanities and Education**.

### Department of Management Studies

A staff retreat was held in January 2015 as part of its curriculum review process. This retreat was facilitated by the CeTL and the focus was on preparing staff for engaging in a curriculum review process.

The Department hosted a breakfast meeting for its industry stakeholders in July 2015 in order to get their feedback on programmes and graduates emanating from the Department and an MOU was signed with the Institute of Banking of Finance to offer internship places for students enrolled in related programmes offered by the Department.

### Department of Economics

The Economics Department hosted the annual Pre-Budget Forum for students and civil society in conjunction with the Trinidad and Tobago Group of Professional Associations, Fundraising and Alumni Affairs within The UWI Office of Institutional Advancement & Internationalisation and UWI Alumni Association, Trinidad and Tobago Chapter in April 2015.

### Department of Political Science

Together with the Tunapuna/Piarco Regional Corporation, the Governance Unit (chaired by **Professor Ann Marie Bissessar**) of the Department of Political Science, initiated seven public workshops during the first half of 2015 on areas such as voting behaviour, governance, the IMF and the World Bank, as well as questions on the economy.

### Disability Studies Unit

The Disability Studies Unit partnered with the Network for Disabilities Education and Sensitisation (NODES) to host a two-day conference on April 23-24, 2015.

## INTERNAL OPERATIONAL PROCESSES

The Faculty established an Information and Communication Technology (ICT) Advisory Committee whose members include: **Mr Simon Fraser** - Chair and Representative of the Department of Management Studies; **Mr Manohar Sookhoo** - IT Officer, Faculty of Social Sciences; **Dr Theodor Tudoriou** - Representative, Department of Political Science; **Dr Daren Conrad** - Representative, Department of Economics; **Mr Richard Escalante** - Representative, Department of Behavioural Sciences and **Mr Gerard Modeste** - Representative, Institute of International Relations.

# SOCIAL SCIENCES

The **Department of Management Studies** has been restructured to include the establishment of an ICT Steering Committee, an Industry Engagement Committee and seven disciplinary groups – Marketing and Entrepreneurship; IT and Operations Management; Tourism, Hospitality and Sport; Accounting; Finance; Law and Ethics; Human Resources Management. The purpose of the groups is to address issues of quality assurance and enhancement, course development and review, the sharing of good practice, and teaching and learning strategies in courses that pertain to the respective discipline.

## TEACHING AND LEARNING

During the period September 11, 2014-April 23, 2015, the Sociology Unit, under the mentorship of **Dr Ronald Marshall**, hosted 21 open forums, which included discussions on topics such as; *The Social Structure and the Cost of Poverty*; *The Media and Public Knowledge*; *Child and Elderly Abuse*; *Invisible Immigrants*; *The Culture of Gender Inequality*; *Sociology of the Brain*; *The Sociology of Relationships: Why do Women Expect Men to Not Cheat?*; *The Ugly Truth of Beauty and the Social and Psychological Perpetrators of Crime. What must be changed?*

April 2015 also saw the presentation of a speech by **Mr Watson Duke**, President of the Public Services Association to students on *Employment Relations: Integrating Industrial Relations and Human Resource Management*; as well as the hosting of a conference on Poverty and Opportunity by the Sociology Unit.

## GRADUATE STUDIES

The Faculty continued to support the undergraduate and graduate students by providing funding for student internships, student study tours and field trips. **The Department of Economics** in collaboration with the **Dean's Office**, assisted PhD candidate **Mrs Roxanne Brizan-St Martin** in pursuing training in Spatial Econometrics with Applications during the period May 25-June 19, 2015 at the Spatial Econometrics Advanced Institute, Faculty of Economics, Catholic University of the Sacred Heart, Rome, Italy.

## RESEARCH AND INNOVATION

The Governance Unit, Department of Political Science, under the coordination of **Professor Ann Marie Bissessar**, initiated a series of graduate research workshops with a view to assisting students to improve their research and writing skills. The topics covered included the process of arriving at a research topic (September 25, 2014); writing a research proposal (October 9 and November 27, 2014); grant writing (January 22, 2015); writing a review of the literature (February 26, 2015) and research methodology (March 26, 2015).

These were interactive sessions where students were asked to present their topics and discuss the justification/methodology and other aspects of the projects with their peers. Assisting with the presentations and supporting the students were, **Professor Ann Marie Bissessar** (Political Science), **Dr Kenwyn Taylor** (Political Science), **Dr Theodor Tudoroiu** (Political Science), and **Dr Benny Berkely** (Sociology).

## OUTREACH

The Social Work Unit conducted a two-day training workshop for professionals and clinicians on May 2-3, 2015 entitled, *"Moving Beyond the Basics: Management and Treatment Strategies for the Adolescent Suicidal Client."* The Unit also hosted 49 practice teachers at a workshop entitled, *"Practicum Placement towards Problem Solving Approach"* on March 18, 2015.

The **Sociology Unit** participated in a project entitled *"Community Building in Clarke Road"*, at Clarke Road in Penal on September 27, 2014. The Unit also hosted a social outreach event in the Edinburgh 500 community in partnership with the Ministry of Gender, Youth and Child Development. A team comprising 12 BSc students and two MSc students was assembled to facilitate a community-based programme for young boys and girls with modules on "Understanding Self", "Identifying and Dealing with Risky Situations" and "Knowing Child Rights."



Annually, the **Criminology Unit** has hosted a number of successful MSc seminars in December to offer peer review and critique of the research work of MSc students. Graduate students of the Unit also presented at local and international conferences (Department of Behavioural Sciences 2015 Postgraduate conference, the Trinidad and Tobago Police Service's 1<sup>st</sup> Law Enforcement conference, Academy of Criminal Justice Sciences (ACJS) 2015).

In July 2015, the **Mediation Unit** partnered with the **Cotton Tree Foundation** to host a domestic violence and conflict workshop for parents of the 120 children of the Foundation's vacation camp. This workshop was conducted by **Ann Diaz** and was well received by parents who confirmed that they benefited tremendously.

#### *Conferences, Workshops and Seminars*

The **Department of Economics**, with the assistance of CeTL, conducted a professional development workshop on Andragogy and Pedagogy for part-time lecturers, teaching assistants and tutors from January 12-15 and January 22, 2015. The Department also hosted a successful seminar, in collaboration with the **Trade and Economic Development Unit** on The Need for Economic Diversification: Falling Oil Prices and its Implications for the Trinidad and Tobago Budget, on January 30, 2015. This seminar was very well attended with over 400 persons participating. Presenters included **Mr Ewart Williams, Dr Roger Hosein, Dr Anthony Birchwood** and **Mr Gregory McGuire** of the Department of Economics, and **Professor Andrew Jupiter** of the Faculty of Engineering. The Department partnered with the **Trinidad and Tobago Group of Professional Associations, The UWI Alumni Association Trinidad and Tobago Chapter** and **The UWI Fundraising and Alumni Affairs** to host two Pre-Budget forums targeted to students, civil society and business professionals on April 22, and June 16, 2015.

The **Constitutional and Parliamentary Studies Unit (CAPSU)** delivered the Magna Carta series of lectures across the Caribbean region: Dominica on January 09; St. Vincent on January 11; Belize on January 29; Montego Bay, Jamaica on February 02; The UWI, Mona Campus, Jamaica on February 04; and St. Lucia on February 11. The series started in Trinidad and Tobago on October 18, 2014. **Dr Hamid Ghany** currently serves as the coordinator of CAPSU.

As part of its curriculum review exercise, the **Department of Management Studies** hosted a breakfast meeting on July 30, 2015 for industry stakeholders representing various sectors in order to get their evaluation of programmes offered by the department and an assessment of new graduates. On May 18, 2015 the **Department of Management Studies** successfully hosted its **6<sup>th</sup> Business, Banking and Finance Conference** at the Trinidad Hilton and Conference Centre. The **Sociology Unit** hosted a Conference on **Poverty and Opportunity** on April 15, 2015 in the Faculty of Social Sciences Lounge.

## REVENUE GENERATION/ COST CONTAINMENT

Given the funding constraints within which the Faculty of Social Sciences had to operate in 2014/2015, the Faculty made a tremendous effort to increase the student intake in its fee-paying programmes such as the MSc Strategic Leadership and Management, and the MSc Public Sector Management programmes. This resulted in approximately a gross revenue of TT\$2,238,000.00 during the fiscal year 2014/2015. The MSc Applied Psychology was also introduced as a fee-paying programme.

#### *Financial Ventures*

The **Mediation Unit** of the **Department of Behavioural Sciences** continued to deliver mediation training to nine member states of the OECS. Training was delivered in Dominica (June 2015), Barbados (April 2015) and the Virgin Islands (September 2014). The Faculty also continued to offer short courses and training programmes through its **Professional Development and Training Unit** and the **Computer Laboratory**. These generated a profit of TT\$267,629.42 while short courses offered as part of the **Summer Programme** resulted in a gross profit of TT\$518,600.00.

# SOCIAL SCIENCES

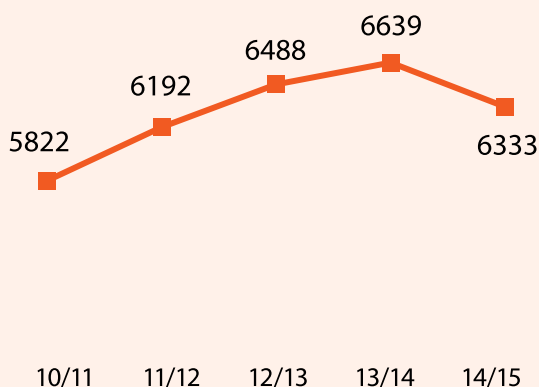
## PROJECTED ACTIVITIES FOR 2015/2016

Key activities proposed for the 2015/2016 academic year include the introduction of new academic programmes – a Certificate in Social Sciences, a Master's in Conflict Resolution, a Bachelor of Science in Marketing, and a Bachelor of Science in Human Resource Management.

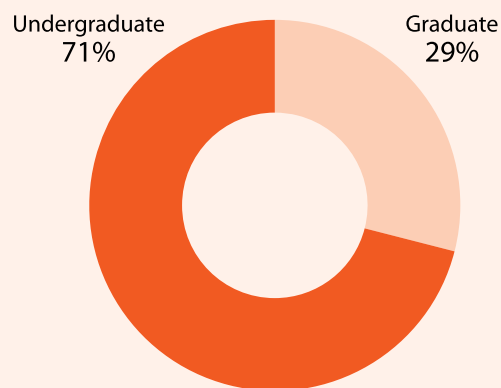
Proposed areas of research activity or existing areas that are expected to present significant outcomes include the hosting of a Graduate Open Day and the development and implementation of a research strategy for the **Department of Management Studies**.

Additional activities for the 2015/2016 academic period include the expansion of the **Business Unit** of the Faculty of Social Sciences to offer workshops/short-term programmes and courses. Also, the establishment of a **Social Working Training and Research Centre**, and a **Centre for Entrepreneurship and Innovation** are being planned for the future. The Faculty also intends to implement and monitor the revised programme offerings as well as a new system of academic advising for the Department of Management Studies.

GROWTH IN ENROLMENT  
2010 – 2015



GRADUATES BY PROGRAMME  
2014 – 2015



# CENTRES & UNITS



# CENTRES & UNITS

## ANSA MCAL PSYCHOLOGICAL RESEARCH CENTRE

### EXECUTIVE SUMMARY

In the 2014/2015 academic year the ANSA McAL Psychological Research Centre undertook data collection for The UWI-Trinidad and Tobago Research and Development Impact Fund (RDI) study, *Crime Victimization and Fear of Crime Survey (CVFCS) in Trinidad and Tobago*. The data collection period ran for six months and involved over 75 interviewers, administrators, and team members. Palgrave Macmillan published the book, *The Social Psychology of Nonverbal Communication*, while another, entitled *Caribbean Psychology: Indigenous Contributions to a Global Discipline*, is expected to be published by the prestigious **American Psychological Association (APA)** in the forthcoming academic year. Over the reported period the Centre continued to engage graduate and undergraduate students. It also published/anticipates publication of several journal articles and book chapters. Collaborations with researchers in the US, the UK, and Europe were also maintained in the period under review.

### TEACHING, LEARNING AND STUDENT DEVELOPMENT

#### **New programme**

The 2014/2015 academic year marked the initiation of the MSc Applied Psychology programme, a two-year degree programme which aims to provide students with an understanding of how psychological principles and research relate to real-life applications across various settings. Though it is a taught programme, there is an emphasis on practical aspects of psychology. The first intake in September 2014 comprised six students.

## GRADUATE STUDIES

### PhD Students

**Victor Grandison:** *'Crime Victims and the Responses they Evoke: An Examination of the Effect of Ambiguous Information, Identification and Just World Beliefs on Blame, Derogation and Empathy for Crime Victims: A Study Conducted at a University Campus in Trinidad and Tobago.'* The phenomenon of blaming the victim has often been explained by the Just World Theory. The core argument is that people have a need to believe that the world is a fair and just place, where people get what they deserve and deserve what they get. Innocent victimisation challenges this belief and thereby forces observers of such suffering to derogate the victim. This study raises the point that there might be additional variables that predict derogation (other than the belief in a just world). The hypotheses of the study are centred on the argument that ambiguous background information about the perpetrators of crime inhibits discounting of the role of the victim in criminal acts. Additionally, unambiguous information might facilitate the formation of defensive attributions (empathetic responses) in favour of the victim as certain characteristics and behaviours of perpetrators highlight the resourcefulness and sophistication of criminal operations. To date, two pilot studies and two major studies have been executed.

**Nikita Kimoy Ng Ying:** *'The (Non-) Pursuit of Perfection: Examining the Roles of Perfectionistic Self-Presentation and Cognitions in the Goal Pursuit of Trinidadian Adolescents.'* The ethos of exceeding personal and societal expectations has increasingly become a key motive and a major aspect of contemporary life (O'Brien & Page, 1994; DiPrima, Ashby, Gnilka, & Noble, 2011; Flett, Hewitt, Shapiro, & Rayman, 2001). The fallouts of perfectionistic strivings are many and varied, ranging from academic burnout (Zhang, Gan, & Cham, 2007) and procrastination (Saddler & Buley, 1999), to clinically significant depressive episodes and the development of eating disorders (Boone, Soenens, Braet, & Goossens, 2010; Hewitt & Flett, 1991). Increasing attention has also been directed to the consequences of perfectionistic tendencies within

educational settings (Damian, Stoeber, Negru, & Baban, 2014; Nounopoulos, Ashby, & Gilman, 2006; Verner-Filion & Gaudreau, 2010). This is especially relevant given the aggressive standards for admittance and commendation in both organisational and academic contexts. Indeed, the emphasis on achieving flawless results—and thus, the avoidance of failure—in a range of performance settings has never been more important.

While the findings of such research have propelled the literature on perfectionism in achievement settings, they still leave for contemplation how state and trait aspects of perfectionism are positioned within goal pursuit. The implications for goal orientation and psychological adjustment are significant, and therefore provide a framework for pursuing the captioned study. A working model of perfectionistic goal pursuit is currently being refined, with consideration being given to parental factors as antecedents to the development of perfectionistic self-beliefs.

### MPhil Students

**Dionne Brewster:** *'Adolescent Risky Decision-Making: Examining the Influence of Parental and Peer Attachment, Emotion Regulation and Sensation Seeking.'*

The objective of this study is to explore the influence of parent and peer attachment, emotion regulation and sensation seeking on risky decision-making among adolescent males. Limited research in the Caribbean has explored risk behaviours in adolescence. The dual systems model and developmental taxonomy of antisocial behaviour was used to develop a theoretical framework to further explore the factors that influence what risk behaviours adolescents choose to engage in. Adopting a risk decision-making perspective is critical as adolescence is a significant stage of development in which the individual undergoes physical, emotional, cognitive, psychological, and developmental changes that facilitate the transition to adulthood (Spear, 2000). Studies have consistently shown that adolescence is a developmental stage that is most associated with reckless and risk behaviours (Reyna & Farley, 2006; Spear, 2000).

# CENTRES & UNITS

**Nigel Horsford:** *'Psychological Factors which Influence Fear of Crime'*

This study focuses on distinguishing between functional and dysfunctional fear of crime. Furthermore, this study seeks to assess the extent to which issues of likelihood, control and consequence moderates or mediates perceived risk of victimisation. This study is also working on improving the definition of fear of crime to facilitate a greater understanding of the issue. The worry about crime model (Jackson, 2005) which examines the evaluation of an immediate situation (interpreting cues in the environment that signify a sense of a possible threat) and anticipatory states (a concern about potential danger of imminent and distal threat).

**Nylessia Nicome:** *'Factors Influencing Fear of Death and Fear of Crime within the Population of Trinidad and Tobago.'*

Internationally, the themes of "Fear of Crime" and "Fear of Death" have been extensively studied, fear of death being one of the earliest to draw the attention of psychology as an academic discipline. Additionally, studies originating in Europe and the USA, present fear of crime as being different from crime, a problem in its own right. Within the relatively small population of Trinidad and Tobago, crime has an ostensibly huge presence, possibly owing to the easy accessibility and wide dissemination of crime information. Treating fear of crime as a symptom of crime—a social disease—the question is asked, "How does perceived probability, of various occurrences affect the amount of fear one feels towards death and dying of self and others, and crime to person and property; and how is this mediated experience?" Consequently, the current study purposes to investigate whether local attitudes to crime mimic those observed internationally. It also aims to examine the relation between fear of crime, fear of death, probabilistic thinking and media influence, inter alia. This research has the potential to assist in the understanding and treatment of fear in the populace, particularly fear motivated by unfounded phenomena, which may be injurious to health and standard of living, thereby, potentiating management of negative effects on health and workforce productivity.

## RESEARCH AND INNOVATION

### **The UWIRDI Crime Victimisation and Fear of Crime Survey (CVFCS) in Trinidad and Tobago (On-going)**

In 2013, **Professor Derek Chadee** received a grant from The UWI-Trinidad and Tobago Research and Development Impact (UWIRDI) Fund to undertake a national survey on crime victimisation and fear of crime. The Trinidad and Tobago Police Service (TTPS) provided further support for this project. The primary objective of this project is to systematically examine crime victimisation and fear of crime. It also provides a local benchmark of crime victimisation and fear of crime, which facilitates comparisons over time and across countries. During the 2014/2015 period, the ANSA McAL Psychological Research Centre implemented and managed the data collection phase of the CVFCS, including development of the research instrument through a series of pilot tests and stakeholder consultations. The Centre was also responsible for the training and day-to-day supervision of 56 field interviewers as they collected data from persons in over 350 enumeration districts nationwide. The Centre will also undertake the data analysis and report writing for this project.

### **Time, Perspective and Personality and Perceptions of Victimisation (On-going)**

This on-going research assesses personality characteristics in the understanding of perceptions of risk and victimisation. Among the personality variables assessed are time perspective – Past (Positive and Negative), Present (Hedonistic and Fatalistic), and Future Time Perspective. This research also assesses the model of vulnerability to explain responses to criminal victimisation, and explores the "big five" personality characteristics—extraversion, agreeableness, conscientiousness, neuroticism, and openness—with global fear and rational calculations of risk.

### **The Impact of Emotion Modulation on Psychological Reactance (On-going)**

Emerging literature points to the importance of psychological states in the construction and maintenance of the fear of criminal victimisation (Chadee & Ng Ying, 2013). Given that general fear has been meaningfully linked to fear of crime (Chadee & Ng Ying, 2013), it is worth considering whether general sensitivity to the experience of emotions propels

the cognitive—affective nature of fear of crime. Emotional reactivity—or the intensity of individuals' response to a wide array of stimuli, and with high levels of intensity (Nock, Wedig, Homberg, & Hooley, 2008)—is explored as a predictive factor in a revisited model of fear of crime. The mediating role of personality is also considered as part of the on-going analysis on this data. A manuscript is currently being prepared for submission.

### Media Representation of Crime (On-going)

Research continues on the assessment of the social psychological consequences of the representation of crime in the media. The media, an important source of information, description of events, explanations and interpretations, often capture the imaginations of their readers rather than the facts. However, the public needs the media to know as well as to understand day-to-day events. The news that finally appears on the newspaper is just one version of a story, a version selected with newsworthy criteria determined by a filtration process involving the news gatekeepers (reporters, editors, producers). The media greatly influence the public's perceptions on issues related to crime. This study undertakes a content analysis of crime reports on the daily newspapers for the period January 1, 2003 to December 31, 2015. It also assesses data from crime reported to the police during the content analysis period. This study has been expanded from a three-year to a thirteen-year assessment period.

### Copycat Behaviour Expansion of Research (On-going)

This on-going research project assesses the cognitive processing of information, levels of empathy, and copycat behaviour among juveniles in high and low risk institutions. A manuscript on this research, undertaken in collaboration with Professor Ray Surrette, University of Central Florida, will be published in the APA journal, *Psychology of Popular Media Culture*. The collaboration continues with the University of Central Florida exploring copycat behaviour in an adult population, the first study of its kind using an adult sample.

### Trinidad and Tobago Guardian Opinion Poll

The Centre continued its relationship with the Trinidad and Tobago Guardian newspaper, undertaking another poll on current issues, which was published by the newspaper in February 2015.

## OUTREACH

### INTERNATIONAL COLLABORATION

The Centre continued to collaborate with several researchers in the US, UK, and Europe, in accordance with furthering the strategic objectives of The UWI. The Centre is currently working with **Professor Jason Young**, Hunter College, City University of New York (CUNY), on a media and crime project; **Professor Jonathan Jackson**, London School of Economics, on a fear of crime project; **Professor Ray Surrette**, University of Central Florida, on a juvenile delinquency and copycat study; **Professor Jaipaul Roopnarine**, Syracuse University, on a fathering and violence project. In the review period, the Centre also worked with colleagues from Middlesex University and University College London.

Collaboration with **Aleksandra Kostić**, Professor of Social Psychology at the University of Niš, Serbia resulted in the joint publication of the book, *The Social Psychology of Nonverbal Communication*, in November 2014. The book features contributions from over 20 scholars of nonverbal communication from around the world and offers insight into a range of issues within the discipline. It appeals to not only academics and researchers, but anyone who wants to improve their understanding of nonverbal behaviour. Reviews have been positive, with **Philip Zimbardo**, Emeritus Professor of Stanford University, stating that, "In this new volume of brilliant essays by internationally acclaimed researchers and theoreticians that is beautifully orchestrated by editors **Aleksandra Kostić** and **Derek Chadee**, the silent world of nonverbal communication is given the voice it well deserves."

Forthcoming in the 2015/2016 academic year is a Caribbean Psychology volume (joint effort of the ANSA McAL Psychological Research Centre and Syracuse University) entitled *Caribbean Psychology: Indigenous Contributions to a Global Discipline* to be published by the APA.

# CENTRES & UNITS

## PSI CHI: INTERNATIONAL HONOR SOCIETY IN PSYCHOLOGY

The Centre continued to support the PSI CHI UWI St. Augustine Chapter. The following are some of the activities undertaken by the group during the 2014/2015 academic year:

- **PSI CHI Research Writing Workshop** facilitated by Dr Erik Blair (Research Fellow, The UWI Centre for Excellence in Teaching and Learning) and geared toward preparing undergraduate students in Psychology to undertake research.
- **One Mic Night** annual social event, which encourages creative expression among the campus community.
- **Mind Games Psychology Fair** co-hosted by the Student Psychology Association on March 5, 2015.
- **Member Induction Ceremony** hosted in March 2015, where nine students were inducted into Psi Chi.
- **2<sup>nd</sup> Annual Psychology Student Conference** held on April 16, 2015 at the Teaching and Learning Complex, attracted over a hundred students and featured the research of several final-year Psychology undergraduates.
- **Chapter Elections** held in May 2015 saw the election of the following Chapter Officers for the 2015/2016 academic year: Kyle Davis, President; Nikita Ng Ying, Vice President; Krishna Mahadeo, Secretary; Dionne Brewster, Treasurer; and Marice Ochoa, Public Relations Officer.

## INTERNAL COLLABORATION

The Centre continues to maintain linkages with other researchers on The UWI, St. Augustine Campus, such as those in the Faculty of Medical Sciences on chronic non-communicable diseases, and the Department of Geomatics Engineering and Land Management in the field of spatial expression of data. Cross-cultural research on the fear of criminal victimisation also continues in collaboration with the Psychology Unit of The UWI, Cave Hill Campus.

## DISTINGUISHED VISITORS

### Dr Camille Alexis-Garsee

Senior Lecturer  
Department of Psychology  
School of Science and Technology  
Middlesex University  
London  
England, UK

### Professor Jaipaul Roopnarine

Director – Jack Reilly Institute of Early Childhood and Provider Education and  
Jack Reilly Professor of Child and Family Studies  
Department of Child and Family Studies  
Falk College of Sport and Human Dynamics  
University of Syracuse  
USA

### Professor Jason Young

Department of Psychology  
Hunter College  
City University of New York  
USA



# ARTHUR LOK JACK GRADUATE SCHOOL OF BUSINESS

## EXECUTIVE SUMMARY

In the academic year 2014/2015, the Arthur Lok Jack Graduate School of Business (UWI-ALJGSB) continued the implementation of its strategic focus of evolving from an emergent to an established globally recognised academic institution. The School commenced construction of its new wing at the north campus, formed new strategic alliances with international partners, introduced multimode delivery for five of its programmes, hired additional doctoral qualified faculty, and continued to align its systems with the standards of accreditation bodies of EQUIS and AACSB.

## ENROLMENT

During the 2014/2015 period, applications fell by 40% and student enrolment by 29%. A total of 274 students entered the programmes at the UWI-ALJGSB during 2014/2015. The International MBA programme grossed a total of 53 students between the September 2014 and January 2015 intakes. The second most popular programme, the Executive MBA, saw a combined intake of 45 students between the September 2014 and May 2015 recruitment periods. Overall, 111 students enrolled in September 2014, 103 in January 2014 and 60 in May 2014.

There was a continued decline in the number of students enrolled in Master programmes as a result of financial and work constraints experienced by applicants, as well as a saturated local market. Direct competition continues to come from the AIB 1 year MBA and flexible class delivery options from other tertiary providers such as SBCS and SAMS. However, as part of its strategic focus, the UWI-ALJGSB is seeking to expand its brand into other regions such as the Caribbean and Latin American territories. The aim for the new fiscal year is to re-enter the Guyana and Suriname markets with a distinct focus on new business development projects in Guatemala.

## GRADUATION

Overall, the School graduated a total of 307 students during the period in review. The number of graduates of each programme:

- Executive MBA (EMBA) – 29
- International MBA (IMBA) – 99
- Master of Human Resource Management (MHRM) – 37
- International Master in Business Development and Innovation (IMBDI) – 4
- MBA Sustainable Energy Management (MBA SEM) – 15
- Master of Marketing (MM) – 42
- Master of Science International Finance (MIF) – 28
- Master in Small and Medium Enterprise Management (MSMEM) – 47
- Master of Port and Maritime Management – 6

## STUDENT ACHIEVEMENTS

The most outstanding students from the October 2015 graduating class:

- **Hector Isadore:** Executive MBA (EMBA)
- **Solange Holder:** International MBA (IMBA)
- **Shyam Dyal:** MBA Sustainable Energy Management (MBA SEM)
- **Shelly Balkissoon:** MBA International Trade, Logistics and Procurement (MBA ITLP)
- **Bobbi Jeffrey:** Master of Marketing (MM)
- **Ashley Dyal:** International Master in Strategic Marketing (IMSM)
- **Kristy Reynald:** International Master in Business Development and Innovation (IMBDI)
- **Devon Romero:** Master of Science International Finance (MIF)
- **Wendy Roopnarine-Samm:** Master in Small and Medium Enterprise Management (MSMEM)
- **Dennisha Jackson:** Master of Human Resource Management (MHRM)

# CENTRES & UNITS

## CORE STRATEGIC FOCUS

In its strategic focus to become an established, globally recognised institution, the UWI-ALJGSB continued to facilitate staff development, improve effectiveness in teaching and learning as well as improvement in other key areas.

## EMPLOYEE ENGAGEMENT AND DEVELOPMENT

Foreign language development for staff remains a major pillar for the School, as it continues to aggressively pursue its internationalisation agenda. Eighty-two members of staff availed themselves of onsite Spanish and French language classes throughout the period. Seven staff members also visited Guatemala in August 2015 as part of the Spanish immersion programme. Twenty-eight UWI-ALJGSB employees attended Executive Education Training aligned to their individual development plans. Refresher sessions on the School's Performance Management system were conducted for all staff to reinforce correct usage of same and to further establish the link between performance and career planning and succession planning.

The UWI-ALJGSB had two additional members of faculty with doctoral degrees, increasing the total number of doctoral full-time faculty members from six to eight. The School continues to support four other staff members who are pursuing doctoral studies.

UWI-ALJGSB staff members also participated in employee events through the HR Department and the UWI-ALJGSB Sports & Cultural Club. Activities included the celebration of religious and ethnic holidays (Eid, Divali, Emancipation), Mother's Day and Father's Day, Spring Cleaning Day, April Cool Down, Carnival Cooler Lime, and End-of-Year Staff Party. In an attempt to further engage employees, as well as assist them in increasing their overall health and fitness, the School placed more emphasis on health and wellness. To this end, Zumba and meditation classes were hosted onsite for a limited period of time and the School also introduced a partial reimbursement benefit for gym membership and other wellness activities. The Spartan Fitness Club was also

contracted for a period of six months to conduct an extreme cross-training programme onsite for interested employees. Finally, through the UWI-ALJGSB Sports & Cultural Club, an average of 25 employees and students participated in each of two hikes during the year.

## TEACHING, LEARNING AND STUDENT DEVELOPMENT

The School accelerated the implementation of its Authentic Teaching and Learning Model and diversified the teaching strategies in each programme. Teaching and learning activities included simulations, project-based learning and problem-based learning as well as other authentic strategies. Programmes were customised for executives of ANSA McAL and other companies expressed interest in company customised programmes. Students across all programmes conducted 58 authentic practica in companies and stakeholder feedback continued to be extremely positive. Students also engaged in the Spanish immersion programme in Guatemala.

### Programme Accreditation Updates

The School continued to implement its improvement plans in alignment with the recommendations of its UWI Quality Assurance Review conducted in June 2014. Improvement plans were also guided by the AMBA report of 2013, the EFMD Programme Accreditation System (EPAS) and AACSB accreditation which the School intends to pursue.

### Faculty Development

With respect to faculty development, three faculty members were awarded the Postgraduate Certificate in Authentic Business Education (CABE).

## RESEARCH AND INNOVATION

The UWI-ALJGSB's research agenda is designed to support the core purpose of the School and to identify those areas that require new business-related knowledge and insights into practice in the medium and longer term. One of the key objectives of the research agenda is to create relevant and new knowledge and methods that will support the development of business and society.

Accordingly, major projects in the period reported are aligned to our core purpose. In 2015, the School continued the *Global Entrepreneurship Monitor (GEM) Report* completed by **Dr Henry Bailey, Professor Miguel Carrillo, and Mr Marvin Pacheco**, which measures the national entrepreneurial level in Trinidad and Tobago as well as Suriname and Belize. This report allows policy makers an insight into the reality of the entrepreneur, and to devise appropriate policies to aid the development of entrepreneurship in the respective territories. Similarly, the *World Economic Forum – Global Competitiveness Report (Trinidad) 2015*, conducted by **Dr Balraj Kistow, Mrs Stephanie Lezama-Rogers and Mr Marvin Pacheco** examines the macro and micro foundations of a country findings of which can then be used to examine the critical aspects of creating an enabling environment for long-term economic growth and innovation driven economy.

Further, through the UWI-ALJGSB Centre for Strategy and Competitiveness, a *Cluster Mapping of Trinidad and Tobago Tourism Sector and Value Chain Analysis of the Entertainment Sector* was completed to identify opportunities for new business development locally and internationally along with areas for institutional strengthening which has strategic and policy-related implications at both the private and public sector level.

### Honours and Awards

The UWI-ALJGSB was highly successful in the Accreditation Council of Trinidad and Tobago's (ACTT) Quality in Tertiary Education (QuITE) Awards 2014. The School received a number of awards. The individual awards included the **Leader in Tertiary Education (LiTE) award** – (Professor Miguel Carrillo); the **Excellence in Applied and Academic Research award** – (Dr Zaffar Khan) and the **Excellence in Teaching award – (Honorary mention)** – (Professor Gour Saha). Institutional awards included the **Excellence in Teaching and Learning award** – (First Place) and the **Excellence in Quality Management Systems award** – (Second Place). In addition to this, Dr Zaffar Khan, member of faculty and Programme Director for the MBA-Sustainable Energy Management programme, was selected for the 2014 **International Individual Achievement Award** by the Energy Institute of the UK.

## OUTREACH

### Access for Students

The School has operations in Trinidad, Tobago, Guyana, Suriname and Guatemala. Based on some of the challenges experienced in these markets such as geographic dispersion of students and the size of the market, which limits cohort sizes, it became difficult to meet the School's international accreditation requirement that students must learn in cohort sizes of at least 20. As such, students from these territories must be included in larger classes through multimodal delivery. Therefore, the School proposed and obtained approval from the Board for Graduate Studies and Research to offer four of its programmes via multimodal technology – Executive MBA; International MBA; MBA Sustainable Energy Management; and International Master of Strategic Marketing.

### Alumni Relations

The UWI-ALJGSB continued to build on the engagement of alumni with the *Business Networking Evenings* which took place on six occasions targeting students, alumni and members of the business community in 2014/2015. The School also launched the *Post MBA* programme with two cohorts in February 2015 and June 2015, with a total of 33 students. The *iAlum magazine* was published again with contributions from student, alumni and faculty; and the mentorship programme moved to an online platform, allowing all students access to mentors, and the ability to search the alumni mentor volunteers based on their career or area of interest. The annual alumni events – Distinguished Alumni Series and CEOs Back to School – also took place during the academic year. The School conducted its Employer Survey in January 2015 and shared the results with the Quality Assurance Unit for adjustments to be made to academic programmes.

### Conferences and Seminars

The School hosted its annual International **Distinguished Leadership and Innovation Conference (DLIC)** in April 2015 with **Peter Senge and Tom Peters** as key speakers, as well as the **Women in Leadership Conference** in July 2015. The School also hosted its **Brand Innovation Conference** with Sasha Strauss in November 2015.

# CENTRES & UNITS

## Strategic Alliances

The School aligned itself with a number of institutions during the 2014/2015 period. These included the **Ministry of Tertiary Education and Skills Training** and **The National Training Agency** (cluster mapping of Trinidad and Tobago Tourism sector and entertainment sector); **Florida International University** (graduate dual degree business agreement); **Trinidad and Tobago Manufacturers' Association (TTMA)** (joint educational partnership relatable to the manufacturing industry) and **INFORUM** (Online MSEM and business opportunities).

## PROJECTED ACTIVITIES FOR THE 2015/2016 ACADEMIC YEAR

The research focus for the School in the next academic year includes continued data collection for the 2016 Global Entrepreneurship Monitor, and the 2015-2016 World Economic Forum, Global Competitiveness Report. In addition, the School will continue work on the Sustainable and Renewable Energy Incubator in implementing projects both locally and regionally. The ALJGSB will also host its DLIC Conference in April 2016 with **Dr Donald Sull** as its key speaker.

## DISTINGUISHED VISITORS

### Professor John Board

Dean, Henley Business School  
UK

### Dr Sieglien Burleson

Executive Director, Competitiveness Unit  
Suriname

### Mr Dennis Evans

Caribbean Cluster Head  
Citibank

### Ms Adriana La Valley

Country Coordinator  
Inter-American Development Bank

### Mr Neil Parsan

Secretary for Integral Development  
Organisation of American States (OAS)

### Ms Catalina Herrera Roca

Country Manager and Officer  
Citibank

### Mr Jose Guillermo Castillo Villacorta

Ambassador, Guatemalan Embassy

## CENTRE FOR HEALTH ECONOMICS (HEU)

### EXECUTIVE SUMMARY

The HEU's continued contributions to national and regional development were evident by its key advisory roles and collaborations with various governments and agencies in Trinidad and Tobago and throughout the wider Caribbean. Importantly, the positive outcome of the Centre's first quality assurance review, which took place during the week of April 20-24, 2015, gave credence to the critical role of the HEU both locally and regionally.

The HEU organised and hosted the 9<sup>th</sup> Caribbean Conference on National Health Financing Initiatives, in November 2014. This is one of the premier regional conferences, which brings together stakeholders in health, social security and insurance to discuss health financing issues confronting the countries of the region. The feature speaker for the conference was **The Honourable Ralph Gonzales**, Prime Minister of St. Vincent and the Grenadines.

The Centre also engaged in a study for the Pan Caribbean Partnership against HIV & AIDS (PANCAP) Secretariat and the Joint United Nations Programme on HIV/AIDS (UNAIDS), which examined the region's approach towards the financing of the HIV response over the last decade. A final report on this study was submitted in December 2014. The Centre also collaborated with the Pan American Health Organisation (PAHO) in producing a study entitled, *Costs and Financing of Chronic Non-Communicable Diseases (NCDs) in the Caribbean*. This was one of the important components of the PAHO/WHO NCDs Costing-Financing Research project in December 2014. As part of its Health Systems Strengthening support, the Centre continued its work in the development of National Health Accounts for the Organisation of Eastern Caribbean States (OECS). This was part of its project activity with Abt Associates Inc. under the Financial Sustainability project, funded by the United States Agency for International Development (USAID).

The HEU also held fruitful discussions and meetings with representatives from PAHO and World Bank on its advisory support on National Health Accounts and Health Financing, as well as the Technical Cooperation with Caribbean Countries on Health Services and Access. These efforts were part of the thrust in assisting to foster a culture of efficiency in the health sectors in the region.

The International Development Research Centre (IDRC) project for the Evaluation of the 2007 Port of Spain Declaration on NCDs was also launched during the academic year, with the HEU responsible for executing Objective 4b, *Estimating the Potential for Revenue Generation for NCD Prevention and Control from Taxes on Tobacco and Alcohol*. This project is undertaken in collaboration with the Caribbean Community (CARICOM), PAHO, Caribbean Public Health Agency (CARPHA) and The UWI, Cave Hill Campus.

In June 2015, an agreement was completed with the Ministry of Health of Trinidad and Tobago for the HEU's support towards the development of an EQ-5D value set for Trinidad and Tobago entitled, *Towards a Health System that Reflects the Values and Preferences of the Population of Trinidad and Tobago*. The three-year *Local Capacity Initiative (LCI)* project with CARICOM promises to build much needed capacity in Civil Society Organisations (CSOs) as they implement various HIV-related programmes. Further, the HEU's continued research collaboration with PAHO in the area of Universal Health Coverage will be an important element in the region's push towards this goal.

The HEU also introduced two revenue generating short courses in March and April, 2015 to assist Regional Health Authorities (RHAs) and other health sector stakeholders to develop the skills of their managers and clinical professionals in working with, and understanding economic evaluation, resource allocation and costing in health care. On the teaching front, academic staff at the Centre continued their efforts to support the teaching programmes in The UWI Faculty of Social Sciences (Department of Economics) and the Faculty of Medical Sciences.

# CENTRES & UNITS

The organisation's core values of producing relevant work of the highest standard takes its lead from the HEU's mission of "making a difference" in the development of the Caribbean and its people. Inherently, this output hinges on fostering skilled professionals, continued engagement in capacity building through teaching and learning initiatives, and strategic and credible research.

## TEACHING, LEARNING AND STUDENT DEVELOPMENT

### Teaching Programmes

The Centre continued to offer training in Health Economics at the MPhil and PhD levels and delivered the Health Economics courses at the BSc and MSc levels for the Faculty of Social Sciences through the Department of Economics. The Centre also maintained teaching responsibility for the Health Economics modules in the Master's in Public Health programme offered by the Faculty of Medical Sciences.

## GRADUATE STUDIES

### Graduate Research/Thesis Supervision

Members of staff of the HEU continue to provide supervision of graduate research students across several faculties—Faculty of Social Sciences, Faculty of Medical Sciences, Faculty of Law—at The UWI St. Augustine and Mona campuses.

The topics undertaken by graduate students and supervised by members of staff during the academic year 2014/2015 include:

### MSc

- **Lance Mottley:** *HIV and Mobile Populations in the Caribbean* (Completed).
- **Krystin Rose:** *Social Determinants of Health, Its Application to HIV in the Caribbean* (Completed).
- **Darcelle Bowrin:** *HIV/AIDS and Mobility: Opportunities and Challenges* (Completed).

### MPhil

- **Michelle Salandy:** *Essays on Macroeconomic Stability: Capital Flight, Asset Price Bubbles and Capital Controls* (In progress).
- **Julian Peter Prescod:** *An Evaluation of the Performance of the Functions of the Health Delivery System and their Relationship with the Health Population Outcomes to Selected Caribbean Countries* (Completed).
- **Patricia Edwards-Wescott:** *The Contribution of Government Expenditure to Economic Development in the Caribbean Region: The Production Function Revisited* (In progress).

### PhD

- **Deneal Walters:** *Health Financing in Jamaica: The National Health Fund*. Sir Arthur Lewis Institute of Social and Economic Studies (SALISES), Jamaica (On hold).
- **Christine Laptiste:** *Towards Estimating the Intangible Costs of Illness: End-Stage Renal Disease in Trinidad and Tobago* (Completed).
- **Roger McLean:** *Integrated Approach to Addressing the HIV Challenge in Small Island States* (In progress).
- **Professor Hariharan Seetharaman:** *The Impact and Outcome of High-Technology Medicine: Is the Allocation of Resources Justified in Comparison to that Towards Primary Care* (Completed). Joint supervision with Professor Phyllis Pitt-Miller, Faculty of Medical Sciences.
- **Kimberly-Ann Gittens-Baynes:** *An Economic Investigation of the Causal Pathway between Socioeconomic Status and Health in Trinidad and Tobago* (In progress).
- **Roxanne Brizan:** *Spatial Access to Health Care in Multi-island States and its Impact on Health System Performance: A Case Study of Grenada, Carriacou and Petite Martinique* (In progress).

## RESEARCH AND INNOVATION

The HEU's research agenda has two components. One component supports requests from domestic and regional governments, as well as international agencies that seek to advance the policy agenda and aid country development. The other research component is of an academic nature and adds to the body of existing research in the field of health economics.

### *Major Research Projects Completed*

Health Finance and Governance (HFG) – in association with Abt Associates Inc. Contributors: **C. Laptiste, R. McLean, K. Theodore, A. La Foucade, S. Lalta, R. Brizan, H. Ali-Sisbane and D. Bethelmie.** Abt Associates Inc. worked with The UWI/HEU to support countries in their estimation of National Health Accounts (according to the System of Health Accounts 2011 framework) with an HIV focus, allowing for the generation of fundamental planning data that can improve the sustainability of HIV programmes in the Caribbean region. The objective of this work was to support the development of two National Health Accounts estimation exercises: one in Barbados and one in St. Vincent and the Grenadines, including surveys of People Living with HIV/AIDS (PLHIV) out-of-pocket expenditures and one household survey.

### *Major Technical Reports Completed*

During the period under review, a number of technical reports were completed. In November 2014, projects that were completed out of Barbados included an initial household survey work plan for Barbados to HFG project, including: sampling plan; overview of data collector recruitment and training approach; pre-testing and data collection procedures; field quality assurance procedures; data storage and management, data entry; data cleaning; and preliminary analysis plan. A brief plan for PLHIV interviews in Barbados to the HFG project, including overview of overall approach to conducting data collection with a vulnerable/stigmatised population; subject recruitment and informed consent process; pre-testing; data collection procedures, field quality assurance procedures; data storage and management, data entry; data cleaning; and preliminary analysis plan. Additionally, a complete NHA analysis, (including output of all required tables, exported metadata that compile methodological information such as the number of NGOs surveyed and response rate, additional methodological information not compiled in the tool and a list of assumptions applied in the estimation process) was also finished.

In St. Vincent and the Grenadines, a brief plan for PLHIV interviews in St. Vincent and the Grenadines to the HFG project was finished; a review report on HFG provided PLHIV household expenditure survey data collection instrument. A

NHA analysis, including output of all required tables, exported metadata that compile methodological information such as the number of NGOs surveyed and response rate, additional methodological information not compiled in the tool, and a list of assumptions applied in the estimation process was also completed. Contributors for this report included: **C. Laptiste, R. McLean, K. Theodore, A. La Foucade, S. Lalta, R. Brizan, H. Ali-Sisbane and D. Bethelmie.**

December 2014 saw the completion of the Final Report on the HIV/AIDS Dependency Study, submitted to UNAIDS Caribbean Regional Support Team. This study will examine the region's approach towards the financing of its HIV response over the last decade as a means of evaluating the degree of dependency on external financing. Contributors for this report included: **R. McLean, K. Theodore, A. Cumberbatch, S. Lalta, C. McKenzie and R. Bhajan.** Additionally, a report on Regional Conference on Results-based Financing and Management of Chronic Non-Communicable Diseases in the Caribbean was submitted to CARPHA. Contributors for this report included: **K. Theodore, S. Lalta, A. Cumberbatch and L. Ramrattan.**

In April 2015, a draft Final Report on The Cost of Hospital Services in St. Lucia: Turning Point Drug and Alcohol Rehabilitation Centre, Mental Wellness Centre, St. Jude Hospital, Victoria Hospital, New National Hospital was finished. This was an HEU initiated study done for the Ministry of Health, St. Lucia. Contributors for this report included: **C. Laptiste, K. Theodore, A. La Foucade, V. Beharry and P. Edwards-Wescott.**

### *Major Research Projects in Progress*

**The Evaluation of the Port of Spain Declaration: Seven Years on to Estimate the Potential for Revenue Generation for NCD Prevention and Control from Taxes on Tobacco and Alcohol:** A collaborative effort among The UWI, Cave Hill, UWI/HEU St. Augustine, University of Toronto, CARPHA and funded by the IDRC.

**LCI Project:** A collaborative effort among the CARICOM Secretariat and the UWI/HEU and funded by United States Agency for International Development (PEPFAR-USAID).

# CENTRES & UNITS

## **Situational and Response Assessment of Incarcerated**

**Sex Workers:** To obtain and produce concrete data on the sex work life cycle and experience and its relation to infectious disease spread and management in the sex worker and general populations. An effort funded by the Family Planning Association of Trinidad and Tobago.

## **Towards a Health System that Reflects the Preference of**

**the Trinidad and Tobago Population:** To develop an EQ-5D value set that reflects the preferences of the Trinidad and Tobago population. An effort funded by the Ministry of Health, Trinidad and Tobago.

## **The Prevalence and Economic Cost of Dementia in Trinidad and Tobago:**

A collaborative effort among the Dementia Awareness Group of Trinidad and Tobago (DARTT), The UWI Faculty of Medical Sciences and the UWI/HEU.

**The Costing of Hospital Services in St. Lucia:** A project for the Ministry of Health, St. Lucia.

## OUTREACH

### **STAKEHOLDERS AND PARTNERS**

The Centre has formed strategic alliances with governments in the Caribbean, as well as several national, regional and international stakeholders/partners, including the Ministry of Health, Trinidad and Tobago; CARICOM; CARPHA; PAHO; UN Group (UNAIDS, UNFPA, UNICEF) and multilateral agencies (World Bank, IDB). Such partnerships/collaborations have facilitated, in many ways (financial, technical, etc.), the coordination, promotion and integration of interventions that advance the countries of the Caribbean.

### **REGIONAL STRENGTHENING AND NATIONAL ENGAGEMENT**

The Centre embarked on a number of activities to strengthen regional and national engagement. They included participating at the CARICOM meeting of the Council on Human and Social Development (COHSOD) Ministers of Health entitled "An Assessment of the Dependency of the Financial Response to HIV" at the PAHO Head Office in Washington DC, September 2014; participation at Caribbean One Health Conference hosted by The UWI, UNESCO and PAHO entitled, "Social Determinants of Health – Its relevance for Small Island States" at the Tobago Beach Resort in November 2014.

The Centre participated in a number of conferences namely, the Caribbean Child Research Conference, the 9<sup>th</sup> Caribbean Conference on National Health Financing Initiatives; the EU-LAC Health Conference: Proceeding to the Next Step of Health Research Cooperation between the EU, Latin America and Caribbean countries; and the International AIDS Society 8<sup>th</sup> Conference on HIV Pathogenesis, Treatment and Prevention.

An additional way in which the Centre tried to strengthen regional and national engagement was to participate in meetings, workshops and consultations. These included participation at the St. Vincent and the Grenadines NHA Dissemination Meeting on "National Health Accounts: Policy Implications of Findings; in the Steering Group Virtual Meetings for the Evaluation of the Port of Spain Declaration on NCDs; in the CARPHA Consultation and Partners' Forum on Chikungunya in the Caribbean: Meeting Today's Challenge and Preparing for the Future and at the CARPHA Behavioural Sciences Workshop entitled, "The Relationship between Health Economics and Behaviour Change: The Case of the English Speaking Caribbean.

Other activities include participation at the Launch of the Family Planning Association of Trinidad and Tobago, Visual Inspection with Acetate Acid and Cryotherapy Programme entitled, "The Importance of VIA Screening & Cryotherapy Programme in Trinidad and Tobago"; participation at UNDP Development Dialogue Series – Ms. Amina Mohammed, UN Special Advisor on post-2015 Development Planning – Forum on the Future of the Caribbean; participation at Health Policy Project Expert Consultation on Scaling Up HIV Stigma Reduction in Health Facilities; HPP Health Offices; participation in Innovative Funding Strategies for NCDS and Risk Factor. PAHO Forum of Key Stakeholders on NCD Issues in the Caribbean and participation at 5<sup>th</sup> Meeting of the Technical Advisory Committee of the CARPHA.

### **Technical Support to Regional Governments**

The HEU provides technical expertise to assist countries in developing sustainable solutions for efficient and effective health care systems. This is a means by which The University contributes to regional development and fosters a culture of efficiency in the health sectors in the region.



***St. Vincent and the Grenadines***

Continued support on HFG project in Estimating NHA for St. Vincent and the Grenadines. Conduct of Health Expenditures Surveys and Special Survey among PLHIV to estimate the National Health Expenditure and National AIDS Spending for St. Vincent and the Grenadines.

The HEU participated in an NHA Dissemination Meeting, National Health Accounts, St. Vincent and the Grenadines on December 18, 2014 and HEU co-facilitated Validations Meetings on NHA in St. Vincent and the Grenadines on December 17, 2014.

***Barbados***

The HEU continued to provide support on the HFG project in Estimating NHA for Barbados, as well as the conduct of Health Expenditures Surveys and Survey among PLHIV to estimate the National Health Expenditure and National AIDS Spending for Barbados.

The HEU participation and presentation in the Barbados NHA Dissemination Meeting, National Health Accounts “National Health Accounts: Policy Implications of Findings” in December 2014. The Centre also co-facilitated Validations Meetings on NHA in Barbados on November 22, 2014 and December 22, 2014.

***Grenada***

The HEU held follow-up discussions with the Ministry of Health in Grenada and other stakeholders on the hosting of a series of sensitisation/fact finding workshops with key stakeholders (social partners, health staff, and senior government officials etc.) to assess Grenada’s readiness for the introduction of National Health Accounts.

***Guyana***

Preliminary work was done on the three-year Operational Plan Cost Projections for the Guyana National HIV Strategic Plan 2013-2020.

***Jamaica***

Activities include the contract finalisation with the UNAIDS, National HIV/STI Programme, Ministry of Health, Jamaica on the costing of Jamaica’s 2014-2019 Integrated Strategic Plan for Sexual Reproductive Health and HIV. Jamaica is one of the case countries under the IDRC-funded: Tobacco and Alcohol taxation study presently undertaken by the HEU.

***St. Lucia***

The Centre continued work on the costing of Health Services in St. Lucia.

***Trinidad and Tobago***

The HEU commenced a Situational and Response Assessment of Incarcerated Sex Workers in Trinidad and Tobago. The study, conducted on behalf of the Family Planning Association of Trinidad and Tobago, explores those factors that drive their health conditions; the propensity for the spreading of sexually transmitted infections and other infectious diseases, disease management and control among the sex worker and general population and human rights abuses.

**CARPHA**

The HEU continued to collaborate with the CARPHA, in a number of ways, including partnering with them to host a Regional Conference on Results-based Financing and Management of Chronic Non-Communicable Diseases in the Caribbean, which was submitted to CARPHA in November 2014. A Report of Regional Conference on Results-based Financing and Management of Chronic Non-Communicable Diseases in the Caribbean was submitted to CARPHA in December 2014.

The Centre also has undertaken research with CARPHA on NCD Issues in the Caribbean – Innovative Funding Strategies for NCDS and Risk Factor and has membership on CARPHA’s Technical Advisory Committee and Public Health Nutrition Advisory Committee.

**PAHO**

The HEU sent a proposal to PAHO on Technical Cooperation with Caribbean countries on Health Services and Access.

# CENTRES & UNITS

## CROSS FACULTY/CAMPUS RELATIONSHIPS

The Centre continued its collaboration with The UWI, Cave Hill Campus on the IRDC-funded project, Evaluation of the 2007 Port of Spain Declaration on NCDs, with Cave Hill Campus as lead agency and HEU responsible for executing Objective 4b, Estimating the Potential for Revenue Generation for NCD Prevention and Control from Taxes on Tobacco and Alcohol.

It also continued collaboration and research with DARTT, Faculty of Medical Sciences on the study entitled, "Prevalence of Economic Cost of Dementia in Trinidad and Tobago".

In addition, the HEU continued to participate in the work of UWIHARP and representation on the PANCAP with active involvement on a number of sub-committees. The UWIHARP programme covers all four UWI campuses (including Open Campus).

## Links with Other Universities, Local and International Organisations

The Centre created links with local and international organisations through the following ways:

- Continued collaboration with the Abt Associates, USA on NHA in the Caribbean with an aim to further strengthen the HEU's capacity to serve as an NHA technical resource for the region in the future.
- Continued collaboration with Futures Group/PEPFAR on the Local Capacity Initiative.
- Provision of academic support and curriculum guidance on Health Economics in the Masters of Health Administration degree programme at the University of Technology, Jamaica.
- Participation as a member of the UWIHARP-HEU-CARPHA-INSP team responsible for drafting the curriculum for Postgraduate Diploma in HIV Management.

## CONFERENCES, SEMINARS AND WORKSHOPS

The HEU hosted a major regional conference, the 9<sup>th</sup> Caribbean Conference on National Health Financing Initiatives, during the period under review.

## REVENUE GENERATION

The Centre's staff continues to be directly involved in endeavours aimed at generating revenue to finance its operations and research agenda. Financing efforts focus on writing proposals and networking to secure consultancies and research projects in selected areas that are in accordance with the organisation's strategic objectives and skills. Some of the major accomplishments for 2014/2015:

- The HEU obtained funding in the amount of **US\$200,167.00** from Abt Associates USA to conduct another round of *National Health Accounts Surveys*. Based on the HEU's past performance in the Health Systems 20/20 Project, USAID extended the project to cover two additional countries, namely Barbados and St. Vincent and the Grenadines.
- A Memorandum of Understanding between The UWI, Cave Hill and UWI/HEU St. Augustine was completed and signed by the Principals of each campus for Objective 4b of the IDRC-funded project, "*Evaluating CARICOM's Political Commitments for Non-Communicable Disease Prevention and Control*". HEU will execute Objective 4b of this project, *Estimating the Potential for Revenue Generation for NCD Prevention and Control from Taxes on Tobacco and Alcohol*, for the sum of **BDS\$127,000.00**.
- The CARICOM approved HEU's proposal to provide technical assistance for support to CSOs to implement policy and advocacy activities related to access and utilisation of quality HIV services for key populations in the Caribbean region under the LCI project. An MOU between UWI/HEU and CARICOM in the amount of **US\$550,736.00** is forthcoming.
- A proposal to the World Bank for the Knowledge Exchange Initiative in support of the costing of NCD Strategic Plans for Barbados, St. Lucia and Dominica in the amount of **US\$41,040.00** was approved in March 2015.
- HEU was able to secure a commitment of **TT\$80,000.00** from the Ministry of Health of Trinidad and Tobago to support the project, *Towards a Health System that Reflects the Values and Preferences of the Trinidad and Tobago Population*.
- In the academic year 2014/2015, the thrust to market the Centre's conference and training facilities produced returns in the amount of **TT\$140,487.90** from rental fees.

This is an increase of TT\$60,487.90 when compared to the academic year 2013/2014, and the trend is expected to continue as additional investment and marketing initiatives continue to bear fruit.

- During the academic year, the Centre introduced two revenue-generating courses: Introduction to Economic Evaluation in Health Care and Introduction to Costing in Health Care, which earned a total of **TT\$48,000**.

## PROJECTED ACTIVITIES FOR 2015/2016

Both the Centre and a number of staff members have proposed areas for future focus in research. As a centre, the HEU plans to focus on the following areas:

- Costing of the National Integrated Strategic Plan for Sexual Reproductive Health and HIV for Jamaica, 2014–2019 (National HIV/STI Programme of Jamaica).
- Economic Impact of Universal Health Care and Chronic Diseases.
- Costing of Health Services in St. Lucia.
- Chronic Diseases and Childhood Obesity.
- Estimating the Potential for Revenue Generation for NCD Prevention and Control from Taxes on Tobacco and Alcohol.
- Partnership with PAHO on National Health Accounts and Health Financing in the Caribbean.
- Review of the Health Financing Experiences in the OECS Member States and Trinidad and Tobago.
- Validation of PAHO's Monitoring and Evaluation Framework on Universal Access to Health and Universal Health Coverage in Trinidad and Tobago.

### *Proposed Areas of Research Activity*

#### *- Individual Staff Members*

##### **K. Theodore:**

- National Health Accounts and Health Financing in the Caribbean.

##### **A. LaFoucade:**

- Costing of Health Services and Programmes in Selected Caribbean Countries.
- Risky Behaviour, HIV/AIDS and Utility Maximisation.
- Equity and Health: The Situation of People Living with HIV/AIDS, and Evaluation of Social Programmes.

##### **R. Mc Lean:**

- Evaluation of Cost Effective Models for Prevention and Control of HIV and NCDs in the Caribbean: An Integrated Primary Health Care Based Approach, and Cervical Cancer Attitudes, Beliefs and Practices in Trinidad and Tobago: A Qualitative Assessment.

##### **C. Laptiste:**

- Estimating the Intangible Cost of Illness, and Health Financing and the Costing of Health Care Services.

##### **K. Gittens-Baynes:**

- Child Mapping and the Developing World: Implications for the Caribbean's Social Protection Framework: An Examination of the Health Resources Available for Tourist Activities in a Small Island Developing State with a Tourism Based Economy: The Island of Tobago.
- The Role of Household Decision-making in Health Outcomes: Caribbean Applications.
- Equality of Opportunity in Health: Implications for the Caribbean, and Retrospective Surveys and Social Science Research in Developing Countries: A Viable Research Tool?

##### **V. Beharry:**

- The Decision to Engage in High Risk Sexual Behaviour: A Case of Irrationality, and Cost Resistance, Risky Sexual Behaviour and HIV/AIDS.

##### **C. Metivier:**

- Child Abuse in Trinidad and Tobago: Implications for Social Policy, and Response Programmes for Addressing Chronic Non-communicable Diseases.

##### **S. Lalta:**

- Obesity and Chronic Diseases, and National Health Accounts and Health Financing in the OECS.

##### **P. Edwards-Wescott:**

- Fiscal Deficits in the OECS: A Behavioural Approach.

# CENTRES & UNITS

## DISTINGUISHED VISITORS

### **Ms Falicia Adams**

Senior Programme Officer  
Caribbean Regional Organisation of People Living with HIV (CRN+)  
United Nations House  
Port of Spain, Trinidad and Tobago

### **Mr Kip Beardsley**

Technical Officer  
HIV, Health Policy Project  
Futures Group, International  
Washington DC, USA

### **Dr Edwin Vicente C. Bolastig**

Advisor, Health Systems and Services  
Pan American Health Organisation  
Trinidad and Tobago

### **Mrs Deborah Charles-Smythe**

Senior Assistant Registrar - Graduate Studies & Research  
Office of the Deputy Campus Registrar  
The University of the West Indies  
St. Augustine, Trinidad and Tobago

### **Mr Ivanhoe Cruickshank**

Project Officer  
Caribbean Vulnerable Communities Coalition  
Kingston, Jamaica

### **Ms Dona DaCosta Martinez**

Executive Director  
Family Planning Association of Trinidad and Tobago  
Port of Spain, Trinidad and Tobago

### **Dr Marcus Day**

Director  
Caribbean Drug and Alcohol Research Institute  
Castries, Saint Lucia

### **Mr Lucien Desire Govaard**

Representative  
Caribbean Forum for Liberation and Acceptance of Gender and Sexuality  
Paramaribo, Suriname

### **Dr Michel de Groulard**

Regional Programme Coordinator  
CVC/COIN  
Port of Spain, Trinidad and Tobago

### **Ms Miriam Edwards**

Co-Chair  
Caribbean Sex Work Coalition  
East Canjie, Guyana

### **Professor Kit Fai Pun**

Professor - Industrial Engineering & Management  
Mechanical & Manufacturing Engineering  
The University of the West Indies  
St. Augustine, Trinidad and Tobago

### **Dr Sandra Gift**

Senior Programme Officer  
Quality Assessment Unit  
The University of the West Indies  
St. Augustine, Trinidad and Tobago

### **Ms. Marina Hilaire-Bartlett**

Executive Director  
Population Services International  
Woodbrook, Trinidad and Tobago

### **Dr James Hospedales**

Executive Director  
Caribbean Public Health Agency  
Port of Spain, Trinidad and Tobago

### **Ms Sandra Jones**

Sub-Regional Advisor  
Pan America Health Organisation  
Port of Spain, Trinidad and Tobago

### **Mr Collin Kirton**

Senior Accountant  
PANCAP Coordinating Unit  
CARICOM Secretariat  
Greater Georgetown, Guyana

### **Dr Claremont Kirton**

UWI Consulting Inc  
The University of the West Indies  
Mona Campus, Jamaica

**Ms Ann-Marie Libert-Defour**

HIV/AIDS Coordinator  
Prevention and Control  
Ministry of Health  
Port of Spain, Trinidad and Tobago

**Professor Flavia Mori Sarti**

University of Sao Paulo  
Brazil

**Mr Ken Morris**

Senior Technical Advisor  
HIV, Health Policy Project  
The Futures Group, International  
Washington DC, USA

**Mr Kenneth Morrison**

Senior Technical Advisor  
International Organisations Futures Group (HPP)  
Cuernavaca, Morelos  
Mexico

**Ms Yolanda Paul**

Project Manager  
UWI HIV and AIDS Response Programme (UWI HARP)  
Kingston, Jamaica

**Ms Chierry Poyotte**

Ministry of Health  
Castries, St. Lucia

**Dr Sandra Richards**

Senior Programme Officer  
Graduate Studies and Research  
Quality Assurance Unit  
The University of the West Indies  
Barbados

**Mr Vivian Rookhum**

Consultant  
Local Capacity Initiative Project  
Greater Georgetown, Guyana

**Professor Clement Sankat**

Principal  
Office of the Campus Principal  
The University of the West Indies  
St. Augustine, Trinidad and Tobago

**Mr Richard Saunders**

Campus Registrar  
Office of the Campus Registrar  
The University of the West Indies  
St. Augustine, Trinidad and Tobago

**Mr Kishore Shallow**

CARICOM Youth Ambassador  
Ministry of National Mobilisation, Youth & Sports  
Youth Affairs Division  
Kingstown, St. Vincent and the Grenadines

**Dr Donald Simeon**

Director  
Caribbean Public Health Agency  
Port of Spain, Trinidad and Tobago

**Mr Dereck Springer**

Director  
PANCAP Coordinating Unit  
CARICOM Secretariat  
Greater Georgetown, Guyana

**Dr Bernadette Theodore-Gandi**

Caribbean Programme Director  
The Pan American Health Organisation  
Port of Spain, Trinidad and Tobago

**Ms Cointha Thomas**

Permanent Secretary  
Ministry of Health  
Castries, St. Lucia

**Ms Lisa B. Thompson**

Program Management Specialist  
The United States President's Emergency Plan for AIDS Relief  
(PEPFAR)  
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Senior Health Policy Analyst  
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# CENTRES & UNITS

## INSTITUTE FOR GENDER AND DEVELOPMENT (IGDS)

### EXECUTIVE SUMMARY

Now into its third decade, the Institute for Gender and Development Studies deliberately set out this year to engage in an aggressive growth strategy for the next five years in each of its mandated areas of work. The primary achievements of this year were the curriculum review and proposed expansion of teaching options at undergraduate and graduate level; the successful tendering for research grants, in particular (The UWI-Trinidad and Tobago Research and Development Impact (RDI) Fund for research on Work-Life Balance and Impact on Ageing; substantial range of outreach activities including the hosting of a conference in March 2015 in honour of women's activist Hazel Brown; the establishment and inaugural meeting of the Gender Advisory Board; and the roll out of The UWI Gender Policy consultation process for St. Augustine.

Staff achievements in research, publication and outreach show evidence of dedication to advancing knowledge in their fields of expertise. Fulbright Fellow, Dr Angelique Nixon supported the teaching and programming efforts of the Institute this year. The Institute made a concerted effort to engage graduate students as part-time tutors, research assistants and for administrative support in various events and activities, which generated a high level of collegiality and cooperation between staff and students, and a pleasing and productive atmosphere.

IGDS successfully engaged in fundraising and resource mobilisation to support research. This is dealt with extensively under the Outreach section of this report. It is important to underscore that in addition to attracting funds for existing and new research projects, a 5% administrative fee has been imposed on any research or outreach projects and consultancies, in which staff of the Institute are involved.

The Institute introduced new courses, hosted a series of short summer courses, and co-hosted workshops in gender with other specialty disciplines such as Gender Mainstreaming in International Relations through the UWI IIR's Diplomatic Academy, Gender and Global Governance, and Gender and the International and Regional Negotiating Machinery.

### ENROLMENT

A number of BSc degrees were awarded with a Minor in Gender Studies during the reporting period. These included two Humanities students, 18 Social Sciences students and one student from the Faculty of Science and Technology. The IGDS currently has three Postgraduate Diploma/MSc students and one PhD student.

### STUDENT ACHIEVEMENT

**Lisa McDonald** graduated with the MSc Gender and Development Studies with distinction. **Celise Patrick** (MSc Gender and Development Studies) received the Louraine Emanuel Prize while **Charen Glasgow** (MSc Gender and Development Studies) received the award for the graduate student showing most commitment, dedication and advancement.

### Student Service and Outreach

The Popular Action was a course assignment in GEND1103 that tests students' ability to communicate their understanding of feminist theory in relation to contemporary women's issues. The aim of the Popular Action is to raise awareness on an issue, discussing the gendered nature of the problem and propose possible solutions and linkages to global social movements to the student body. The Popular Actions exhibit was held at the JFK Quadrangle on November 21, 2014.

## TEACHING, LEARNING AND STUDENT DEVELOPMENT

A curriculum review exercise was conducted from January 22-23, 2015. **Dr Sue-Ann Barratt** and **Dr Angelique Nixon** were charged with the planning and organisation of delivery for this review and preparation of the report. The Institute attracted a number of partners from other faculties including members from; the Film Programme, the Faculty of Science and Technology, the Faculty of Humanities and Education, Department of Social Work, visiting scholar **Dr Rhonda Cobham-Sander**, Amherst College, USA and colleagues from The UWI, Cave Hill Campus' **Drs Charmaine Crawford** and **Halimah DeShong**.

## RESEARCH AND INNOVATION

### Research Completed

**Subjective Well-Being Regional Report:** The IGDS and UNDP collaborated on this project from July to August 2015. Interviews and focus group discussions were held in Trinidad and Tobago on Subjective Well-Being. The IGDS submitted a report by **Ms Sommer Hunte** on September 23, 2015. The final report will form part of the UNDP Regional Human Development Report 2016.

### Research in Progress

**UWI RDI Fund project, "Work-Life Balance: Its Impact on the Productivity of Working Men and Women and on the Well-being of Ageing Populations":** This project examines the contemporary challenges of employed women and men aged 40-55 in the East-West Corridor of Trinidad, in balancing their work and family life commitments. In connecting work-life balance with gender and ageing, we accept that women constitute the majority of the ageing population, accounting for 53% of the aged compared to 47% males. The life expectation of both women and men has increased over the last two decades. Retired men and women undertake unpaid work as a continued commitment to family, thus relieving the working population of men and women of some of their domestic and care burdens.

### "A Matter of Survival: A life-course approach to understanding the decision-making and economic livelihoods of school dropouts in Trinidad and Tobago":

While the principal investigator of this UWI RDI project is Dr Priya Kissoon (Department of Geography), Deborah McFee and Professor Patricia Mohammed facilitate IGDS participation as co-investigators. The IGDS has contracted a data analyst to prepare a report on gender data points based on the questionnaire administered by the Department of Geography. The IGDS will in turn prepare a comprehensive analysis of the data as it relates to specific gender issues on school dropouts, both in the society and in prisons.

**Women's Conversation Project:** In 2008, the Women's Institute for Alternative Development (WINAD) introduced a community-based project, which is intended to mobilise women in selected communities to analyse the impact of gun violence on both their lives and communities and make recommendations for violence prevention and alleviation. In 2015, WINAD sought to expand the conversation beyond violence, and increase the number of communities. Towards this end, WINAD partnered with the IGDS for project support through the use of graduate students in the areas of research, rapporteurship and report writing.

- April 21: WINAD/IGDS conducted a sensitisation session with five rapporteurs and research assistants (MPhil and undergraduate students) who gathered data during the cycle of the project "Women's Conversation Caravan: Making our Voices Count."
- May 16: Patricia Hackett along with four rapporteurs, IGDS MPhil graduate students and one undergraduate student participated in the WINAD/IGDS Women's Conversation Caravan: Making our voices Count" at Biche Community Centre.
- May 17: Deborah McFee along with three rapporteurs, participated in the WINAD/IGDS Women's Conversation Caravan: Making our voices Count" at George Street Community Centre, Port of Spain.

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**Measuring the Immeasurable: "Changing Gender Relations in the Caribbean"** is supported by a Campus Research and Publication Fund Grant; Lead Researcher is Deborah McFee.

Issue 8 of the *Caribbean Review of Gender Studies* (CRGS) titled: "Fragility and Persistence of Dominant Masculinities" was made live online in May 2015. Guest Editors are Wesley Crichlow, Halimah DeShong and Linden Lewis.

## EMPLOYEE ENGAGEMENT AND DEVELOPMENT

Research assistant, **Sommer Hunte** participated in, and completed a three-day workshop (from March 30-April 1, 2015) on Mixed Methods Research and Academic Publishing facilitated by **Professor Anthony Onwuegbuzie** and **Dr Cindy Benge** of Sam Houston University, Texas and presented at the UWI School of Education, St. Augustine.

Four staff members and two graduate students attended and presented papers at the Caribbean Studies Association held in New Orleans, Louisiana, USA from May 25-30, 2015.

Five members of staff attended the Regional Management meeting of the IGDS held at The UWI, Cave Hill from June 8-9, 2015.

## ADMINISTRATIVE PROCESSES

### UWI Gender Policy

The IGDS, St. Augustine continued its collaboration with the Human Resources Department on the development and implementation of The UWI Gender Policy and Sexual Harassment Policy to create a supportive environment for both men and women in all aspects of university life and to ensure that The UWI gender-related policies are standardised regionally. From March 12-April 17, 2015, the IGDS conducted nine consultations/focus groups with students and staff at The UWI St. Augustine related to the development of The UWI Gender Policy.

### Gender Advisory Board

The Gender Advisory Board is constituted primarily of external stakeholders representing industry, commerce, finance and global communications. The role of this Board is to advise on future directions, guide on the relevance of the Institute's programming to serve the widest group of stakeholders, and to support its funding ventures. The inaugural meeting of the IGDS Gender Advisory Board was held on May 13, 2015.

## OUTREACH

### STAKEHOLDERS AND PARTNERS

The IGDS and UNDP hosted a workshop designed by IGDS for facilitators, rapporteurs and research assistants attached to UNDP Subjective Well-being project in June 2015. IGDS (St. Augustine), IGDS (Cave Hill), UWI Office of Research Development and Knowledge Transfer and the UWI Social Work Unit at St. Augustine submitted a project proposal to the European Union – *Towards a Future Free of Domestic Violence*. The Institute also partnered with The UWI School of Education to host the *Break the Silence* Exhibit at the School of Education's Library during the period under review.

### STRENGTHENING REGIONALITY

The Institute engaged in a number of activities to help strengthen regionality. These included the *Making of Caribbean Feminisms Conversation Series* interview and discussion with Tara Ramoutar, feminist social activist on October 19, 2014; the "Evolving Gender and Feminist Conversations: Cyber Activism, Social Networking and LGBT Organising" panel held on December 10, 2014. Panellists included Angelique Nixon, Krystal Ghisyawan, Colin Robinson and Cedriann Martin.

The popular Break the Silence (BTS) campaign collaborated with students in the Communications Studies programme resulting in an art competition and fund-raising for the BTS Campaign and production of a research report and display booth.

### SEA LOTS HOME WORK CENTRE

Emerging from the work of the Women's Conversation Caravan, the Sea Lots Community Home Work Centre indicated a need for their reading room to be expanded. Towards this end, the IGDS undertook a book drive and was able to contribute over 90 volumes to the reading room in July 2015.



### **IGDS IN COLLABORATION WITH WORKING WOMEN FOR SOCIAL PROGRESS**

IGDS and Working Women for Social Progress partnered in November 2014 to host a one-day workshop on family violence called, *Alternative Methods of Disciplining Children*.

### **CROSS FACULTY RELATIONSHIPS**

#### **Conference on Disabilities**

The IGDS sponsored visiting scholar Ana Maria Sanchez Rodriguez, from University of Massachusetts, Boston, USA to present on "Civil society practices to end violence and abuse of woman and girls with disabilities in Mexico" at The UWI, St. Augustine conference entitled "Towards Social Integration: Rights, Roles, Recognition of Persons with Disabilities." This conference was organised by The UWI Network and Outreach for Disability Education and Sensitisation (NODES) and The Disability Studies Unit.

#### **Joint Book Launch**

The IGDS hosted a book launch on January 29, 2015. The book, *Ageing in the Caribbean* by **Joan Rawlins** and **Nicole Alea** (Life Gate Publishing) and *Guidelines for Use of Non-Sexist Language at The University of West Indies* was updated by **Valerie Youssef** and **Sue Ann Barratt**.

### **EXTERNAL LINKAGES WITH INDUSTRY PARTNERS**

#### **Fire circle! Day 17+ to End Gender Violence in T&T**

The Institute hosted a multimedia public education, work and strategy session to challenge issues of violence against women, gender inequality and governance in Trinidad and Tobago on December 11, 2014. IGDS also collaborated with WINAD and Women Working for Social Progress for convocation in recognition of Universal Children's Day on November 8, 2014.

### **LINKS WITH OTHER UNIVERSITIES AND LOCAL AND/OR INTERNATIONAL ORGANISATIONS**

**Professor Patricia Mohammed** was invited by Groupe Genre de Societe [Gender and Society Group] of the Centre de Recherches pour les Pouvoirs Locaux dans la Caraibe at the Universite des Antilles et Guyane, in Martinique to present work, be discussant at a special seminar and establish areas of collaboration between universities and departments.

She also attended the first special meeting of Directors/ Co-ordinators of Women's/Gender Affairs Bureaux hosted by UN Women, CARICOM and Caribbean Development Bank, Marriott, Barbados from February 23-24, 2015 and the World Bank Caribbean consultations on Environmental and Social Safeguards Policies at the Marriott, Barbados from January 22, 2015.

### **CONFERENCES AND SEMINARS**

#### **Fearless Politics: The Life and Times of Hazel Brown:**

This two-day conference from March 27-28, 2015 was held in honour of Hazel Brown at Hyatt Regency Trinidad, and The UWI, St. Augustine, featuring keynote speaker Dr Rosina Wiltshire and an address by then Prime Minister of Trinidad and Tobago Mrs Kamla Persad-Bissessar. The Chair of Conference Committee was IGDS' Dr Gabrielle Hosein, who was supported by graduate students, Sommer Hunte and Tivia Collins.

#### **Panel Discussion/ Hosting of UN Study Tour:**

As part of the Caribbean Study Tour of Professor Rashida Mangroo, United Nations Special Rapporteur on Violence against Women, its Causes and Consequences and Professor Tracy Robinson, Rapporteur on the Rights of Women of the Inter-American Commission on Human Rights, a panel discussion entitled "Promoting the Rights of Women in Trinidad and Tobago: Issues and Challenges" was held on April 27, 2015 at the Noor Hassanali Law Auditorium, The UWI, St. Augustine. Professor Patricia Mohammed made a presentation on "The Role of the IGDS in Promoting Gender Rights". Ms Gaietry Pargass, Human Rights Attorney was the chair of session.

A number of graduate seminars were held; these included the MSc seminars of **Lisa McDonald**, **Lisa Allen-Agostini** and **Melvin Julien**, the MPhil seminar of **Amilcar Sanatan**, and the PhD seminars of **Sommer Hunte** and **Raquel Sukhu**.

The Lunchtime Seminar series continued during the period in review featuring **Joshua Schapiro's** (visiting Fulbright) seminar on "The Caribbean and the World: Imaginative Geographies in the Independence Age"; **Professor Jane Parpart's**, (University of Massachusetts, Boston) seminar on "Imagined Peace, Gender Relations and Post-Conflict Transformation: Anti-colonial and Post-Cold War Conflicts"; **Teriyuki "Terry" Tsuji's** seminar on "Dressing the Statue Spirituality, Sexuality and Sociality of Virgin Mary/Indian Lady". **Angelique V. Nixon**,

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(IGDS Fulbright Scholar) also presented a seminar on “The Problem of ‘Rights’ – Movements for Gender and Sexual Justice in the Caribbean”; **Professor Brinsley Samaroo** presented on “An Exceptional Imperialist: Florence Nankivell in Trinbago during perilous times, 1932-1938” and **Dr Usha Iyer** presented on “Transitioning from Bai (courtesan) to Devi (respectable woman): Narrativizing Dance as a Female Profession in Hindi Cinema of the 1950s and 1960s”.

Guest seminar, “Making Meaning of the Violence in their Communities: The Case of Jamaican Youth” with **Professors Carl James** and **Andrea Davis** of York University was held on November 28, 2014.

## NON-ACADEMIC CONFERENCE PRESENTATIONS AND LECTURES BY ACADEMIC STAFF

The Institute held a number of non-academic conference presentations during the period under review. These included: a workshop on Political Anthropology: Power, Subjectivity and Citizenship in the Contemporary Caribbean by **G. Hosein**; Child Protection Mapping and Assessment of Trinidad and Tobago presented at National Consultation hosted by the Ministry of Gender Youth and Child Development and UNICEF by **S. Hunte**; and a paper presentation by **P. Mohammed** entitled, “Legislating Gender and Human Rights” at the breakfast seminar on Human Rights and Gender, organised by The Equal Opportunity Commission.

**Professor Rhoda Reddock** also delivered keynote presentations at UNICEF/Ministry of Gender, Youth and Child Development one-day workshop on Child Sexual Abuse and the Break the Silence project, for the Media; she was a speaker at the global launch for Latin America and the Caribbean UNWOMEN Report, “Progress of the World’s Women”, 2015: Transforming Economies, Realizing Rights, The Autonomous University of Mexico (UNAM); she also made a presentation to UNDP Development Dialogue on Citizen Security, “Violence against Women and Children: A Continuing Challenge to Citizen Security”.

**A. Sanatan** engaged in a discussion on the Constitutional Amendment Bill on CNMG’s, “Political Capital”; a discussion on Republic Day and Youth Perspectives on TV6 News; a discussion on Gender, Youth and Social Media on 94.1 FM.

**Professor P. Mohammed** screened her film *Coolie Pink and Green* at Cite Trinite, Les Amis de San Fernando (Martinique) and at the Indian Diaspora Conference. She also presented a paper titled, ‘Legislating Gender and Human Rights at the Breakfast seminar on Human Rights and Gender organised by The Equal Opportunity Commission.

## REVENUE GENERATION/COST CONTAINMENT

The Institute imposed a 5% administrative fee on research or outreach projects and consultancies involving staff of the Institute. Income generated by the Institute from such activity was in the region of TT\$22,000.00.

The undergraduate course Gender and Development with Reference to Caribbean Society (GEND/SOCI 3039) was offered through the Faculty of Social Sciences Summer School. Other short courses were offered to the university community and general public: Women, Gender and the Law, Advanced Research Writing, and Men’s Rights and Justice. Income from these was approximately TT\$10,000.00 (after expenses).

The Institute also received several grants and donations to support various initiatives during the period under review:

- Dr Gabrielle Hosein: TT\$25,000.00 to be used for Indo Caribbean Feminism Symposium.
- Indo Caribbean Workshop: TT\$45,000.00.
- Scholarship fund donation from Roona Simpson: TT\$300,000.00
- Professor Patricia Mohammed: TT\$300,000.00 to be used for Work-Life Balance Project.
- Caribbean Review of Gender Studies (CRGS) (4 Issues): TT\$64,000.00.

## PROJECTED ACTIVITIES FOR 2015/2016

### **Online Master's in Gender**

The IGDS intends partner with The UWI Open Campus to expand enrolment and opportunities for international, professional, non-degree and disadvantaged populations through the blended learning educational initiative (online courses). These initiatives include an MSc professional degree toward building a career path for graduates, an online degree offer to regional governmental partners and civil society and online courses/distance learning for students.

Future plans also include the stabilisation of the graduate programme, and expansion of the undergraduate course offering with revised and new courses that are attractive and allow for more diverse inclusivity of students. The Institute will also engage in various forms of marketing, both on and off campus, to increase awareness and enrolment of the courses offered.

### **Short Courses/ Workshops**

The IGDS plans to develop workshops and courses for external partners, based on past requests and successful delivery, as well as new areas that stimulate growth possibilities for partnerships with more male students, industry and society.

### **Research**

Among the projects expected to be completed in 2015/2016 are the WINAD initiative as well as and the UNDP findings from the Subjective Well-being Regional Report.

### **General Activities and Outreach**

Future plans at the Institute include a book launch; an Indo Caribbean Feminism Conference and the realisation of the IGDS website redesign.

## DISTINGUISHED VISITORS

### **Ms Karen Thornton**

Masters of Social Work student  
McMaster University in Hamilton  
Ontario, Canada

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## INSTITUTE OF INTERNATIONAL RELATIONS (IIR)

### EXECUTIVE SUMMARY

The Institute of International Relations (IIR) is an institution of The University of the West Indies. Established by Swiss funding in 1966, the IIR has become a well established and highly regarded interdisciplinary Caribbean regional centre for the analysis and advancement of international relations. It has trained many of the Caribbean's political, business and diplomatic leaders over the years. Located on the St. Augustine Campus, the Institute offers a programme of courses and supervises research leading to the Postgraduate Diploma in International Relations; MSc Global Studies; MPhil and PhD International Relations.

The programme of courses comprehensively covers the geographical, historical, political, economic, social, cultural, legal and institutional aspects of international relations and emphasises an inter-disciplinary approach in the study of relations between nations and other entities. In addition to conducting teaching, research and study of international relations, the Institute engages in many activities, including the organisation of special programmes, courses and seminars, and the provision of consultative assistance and research, for the governments and private sectors of the region, and regional organisations and agencies, which are intended to strengthen Caribbean responses to the challenges of international relations and the understanding thereof in the community at large. The Institute of International Relations is committed to training the next generation of diplomats from the region. To this end, a new diplomatic training centre – **The Diplomatic Academy of the Caribbean** – was launched on May 6, 2014.

The governance of the Institute, chaired by The UWI Vice-Chancellor, is vested in the Board of the Institute. The management of the Institute rests with the Director, who is responsible to the Board for the proper discharge of his

functions. **Professor W. Andy Knight** is currently the Director of the IIR. He is the 10<sup>th</sup> Director of the Institute and assumed duties in January 2013. His goal is to build upon the excellent work done in the Institute over the years, and to use his experience, connections and networks to expand the IIR's reach and make it better known throughout the world. In the period under review, he has re-established connections with bodies such as the ACS, CARICOM, CELAC, and the OAS in the region, with diplomatic and consular corps present throughout the Caribbean and with multilateral institutions such as the United Nations System, the Commonwealth.

### IIR Library

During the review period, the IIR Library undertook some renovation work. Installation of three Dell smartcard reader keyboards was finalised when the Library reopened for service in September 2014, after the renovation period. The IIR Library Staff, working in close collaboration with the Acquisitions librarian at The UWI Alma Jordan Library (AJL), were able to set up online access to 13 IIR journal subscriptions to the wider campus community. In spite of its restricted budget, the IIR Library has gone the route of e-resources and acquired its first e-book in September 2014. Student papers from the Diploma programme for the years 2003 to 2013, and MSc student research papers for 2008 to 2013, were submitted to the Alma Jordan Library in July 2014 for entry into UWISpace. A call for a review of the collection of student papers is planned to take place during the academic year 2015/2016.

At the request of the Permanent Secretary in the Ministry of Foreign Affairs, the IIR Library hosted **Gloria Deoraj-Deen** for one week of intensive training during the period January 19-23, 2015. During the period March 9-25, 2015, the Library hosted an intern from the College of Science, Technology and Applied Arts of Trinidad and Tobago (COSTAATT), **Ayanna Lopez**, who was trained in all aspects of the Library's operations. A Library Assistant from The UWI-Roytec, **Mr Justin Piper** was also hosted for one-day training on April 29, 2015.

Displays during this year featured an array of international themes. In September 2014, the Library showcased its signature "What to do with a degree in International Relations".

The Library was transformed into an “oceanic experience” for World Oceans Day while, with the International Day of Forests on March 31; a “Tree of Information” was mounted from floor to ceiling inviting comments from patrons, which were pinned to the tree. Displays were also mounted paying tribute to **Professor Yves Collart**, the third Director of the Institute who passed away on October 29, 2014, and to commemorate the life of **Dr Hans Geiser**, former Lecturer at the Institute who died on May 11, 2015. A request was made by **Dr Georgina Chami**, seeking the Library’s input in the setting up of a CCron display for a Youth Development conference held on March 23-27, 2015.

In 2015, the decision to rename the IIR Library “**The Norman Girvan Library**” in honour of the late Professor Emeritus Norman Girvan was put before the University’s Naming Committee.

## ENROLMENT

The total number of registered students for the 2014/2015 academic year was 129 (down from 141 for the academic year 2013/2014). Thirty-six students enrolled in the MPhil/ PhD programmes, 58 in the MSc programme, and 35 in the Postgraduate Diploma programme. Twelve students graduated with a Postgraduate Diploma in International Relations, 33 with an MSc Global Studies and two with a PhD in International Relations in 2014/2015, a significant improvement over the last academic year.

## STUDENT ACHIEVEMENT

The top students graduating with distinctions in the Postgraduate Diploma in International Relations were **Samantha Allahar; Vishal Ganessingh, Richard Lynch** and **Raeisa Perreira**. In the Master of Science Global Studies cohort, seven students graduated with distinction – **Vladimir Budhu; Martina Mendoza, Shezraé Nesbitt, Chadwick Noel, Nelsonia Persaud-Budhram, Shilohna Phillanders** and **Anthony Phillips-Spencer. Winston O’Young** and **Khellon Q. Roach** both graduated with the PhD International Relations.

The 33<sup>rd</sup> Model OAS General Assembly for Universities of the Hemisphere was held in St. Kitts and Nevis from March 24-26, 2015. Co-organised by the Office of the Assistant Secretary General of the Organisation of American States (OAS) and the Ministry of Youth Empowerment, Sports, Information Technology, Telecommunications and Posts of St. Kitts and Nevis, it was the first MOAS Assembly to be held in the English-speaking Caribbean. The purpose of the MOAS is to promote democratic values among the youth of the Caribbean and of the Hemisphere, and to disseminate the mission and role of the OAS. A six-member team of **Shilohna Phillanders, Kurba-Marie Questelles, Anthony Phillips-Spencer, Vladimir Budhu, Simone Phagoo** and **Rondelle Keller**, along with their faculty advisor **Dr Debbie Mohammed** represented the Institute and by extension the Faculty of Social Sciences and The UWI with distinction. They gave an outstanding performance and the level of professionalism and insight, which they applied to the issues of their respective committees, is testimony to the preparatory work they did as a team with just three weeks’ notice. The OAS Secretariat, fellow faculty advisors and fellow delegates from the other participating member countries all expressed delight at their intellectual prowess, debating skills and seemingly effortless ability to win the support of delegations, regardless of cultural or linguistic differences for the resolutions they proposed. They were excellent ambassadors of what The UWI embodies and formidable representatives for their assigned country – Colombia.

Three team members secured convincing victories for positions on the next MOAS leadership team: Shilohna Phillanders – Secretary General Designate of the 34<sup>th</sup> MOAS; **Kurba-Marie Questelles** – Vice Chair Designate General Committee; and **Rondelle Keller** – Chair Designate, Second Committee.

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## TEACHING, LEARNING AND STUDENT DEVELOPMENT

### Staff/Student Liaison Committee

In an effort to enhance the quality of the learning experience at the Institute, the first Staff/Student Liaison Committee (SSLC) of the Institute was established on February 4, 2015. The Committee serves as a mechanism to draw to the attention of the Director, matters which adversely affect the students' learning environment and to find appropriate solutions to these issues in the shortest possible time. Issues, which can be addressed at the IIR, are handled by the Secretariat working closely with the IIR Library, lecturers and the director. Matters that need to be addressed at the faculty/campus level are brought to attention of the relevant authorities.

## OUTREACH

In the weeks leading up to February 28, 2015, the IIR community pledged its commitment and resources to giving back to the national community. Students at all levels (Diploma, Masters and MPhil/PhD and alumni), along with staff (academic and non-academic) were enthused by the idea of mobilising the humanitarian arm of the Institute. Donations were made to the Amica Home for Girls in Curepe, and Comfort Care Geriatric Home in Mount Hope. The Institute was able to accumulate a wide range and quantity of items from staff and students as well as donations from the National Flour Mills Ltd. The support was overwhelming and the momentum that the project gained was firm evidence of the potential of the IIR to cooperate across all levels in order to bring initiatives to fruition.

Requests have been made by members of staff and students, alike, to make this an on-going year-round project so that the IIR and its students could keep in touch with the humanitarian aspect of the field. Although much effort had to be made towards its realisation, the excitement, commitment and determination to give back to society would be the engines that propel the longevity of this project. It is hoped that this outreach could be the catalyst for inculcating a culture of humanitarianism in the IIR.

### World Down Syndrome Day

As part of the fun "**Lots of Socks**" event held on March 20, 2015 to raise awareness of World Down Syndrome Day (WDS), students and staff wore brightly coloured socks to show support for the Down Syndrome Family Network.

### Caribbean Child Rights Observatory Network

The Institute of International Relations won the bid to become the Hub of the Caribbean Child Rights Observatory Network (CCRON) in March 2014. In February 2015, CCRON launched a regional logo competition within secondary schools to not only to promote and showcase CCRON but more importantly deepen students' knowledge on their rights and responsibilities under the Convention on the Rights of the Child (CRC). The theme of the logo – *Children's Rights Awareness* – and the winning design will be used on the CCRON website and in its official correspondence material. The competition officially closed on April 30, 2015. The judging panel comprised representation from regional bodies: **Professor W. Andy Knight** (IIR, Trinidad and Tobago), **Ms Ceceile Minott** (The UWI Open Campus, Jamaica) **Ms Beverly Reynolds** (CARICOM Secretariat, Guyana) and **Mr Patrick Knight** (UNICEF, Barbados). The three winners selected from an initial pool of over 60 entries from five regional countries: Trinidad and Tobago, St. Vincent and the Grenadines, Belize, Guyana and Jamaica, produced logos that were original, creative and representative of the aims of CCRON and theme of the competition. Students were especially commended for their great efforts and deep thought which was evident in their pieces and descriptions – **Neeshana Bhola**, ASJA Girls' College (Trinidad and Tobago), **Isake Perez**, Saint Catherine Academy (Belize), and **Shenalice Richards**, St. James Secondary School (Trinidad and Tobago). The official award ceremony for the first and second place winners **Jonathan Gift** and **Josiah Dubarry** took place at Institute of International Relations (IIR) on June 25, 2015. The UNICEF Representative for the Eastern Caribbean **Khin-Sandi Lwin**, Director and IIR Director, **Professor W. Andy Knight** and other CCRON members were in attendance at this award ceremony. The third place winner was awarded her prize at an official ceremony held in Belize in September 2015 by UNICEF representative.

### IIR Library Outreach

Under the umbrella of The UWI Strategic Plan 2012-2017, the IIR Librarian served on the User Perspective Committee, which has devised a training programme for the St. Augustine Campus Libraries to be rolled out at the beginning of the academic year 2015/2016. In light of cost containment, The St. Augustine Campus Librarians also discussed proposals aimed at realigning staff and workflows in keeping with the Campus Libraries' Operational Plan.

In collaboration with the Alma Jordan Library, the IIR Library facilitated a request from the Federative Republic of Brazil in Port of Spain to make the Embassy's collection available through the Campus Libraries Integrated Library System (ILS) and the setting up of an inter-library loan facility. On November 13, 2014 the Library hosted its second session in the discussion series "*Bibliochats*". This instalment featured an hour-long discussion by **Dr Debbie Mohammed** on her publication *The CARIFORUM-EU Economic Partnership Agreement: Impediment or Development Opportunity for CARICOM SIDS?*

With the launch of the Diplomatic Academy of the Caribbean and the Caribbean Child Rights Observatory Network (CCRON), the IIR Library has now extended its services to these centres of teaching and research.

### Memoranda of Understanding

The IIR engaged in a number of memoranda of understanding with various interest groups. These include:

- **The United Nations Institute for Training and Research (UNITAR) and the Diplomatic Academy of the Caribbean:** to provide a cooperative framework within which the parties can develop and implement thematic areas for collaboration. They include, inter alia, conference diplomacy and multilateral negotiations, drafting resolutions, chairing international conferences, rules of procedure and introduction to the UN System; skills development in negotiation, cosmopolitan communication, facilitation and mediation, leadership, public speaking and media relations and, content based workshops on the United Nations System, conference diplomacy, climate change diplomacy, trade and economic diplomacy, human rights diplomacy.
- **The Ministry of the Peoples Power of Foreign Affairs of the Bolivarian Republic of Venezuela and The University of the West Indies for the creation of a Bolivarian Chair at The UWI:** The modalities of cooperation include the development of thematic courses/modules that will be conducted via classroom teaching and the arrangement of feature presentations, conferences and roundtable discussions with specially invited academics from the Bolivarian Republic of Venezuela, the Republic of Trinidad and Tobago as well as other designated countries.
- **The Higher Institute of International Relations (Cuba) and The UWI through the Institute of International Relations:** which include academic visits incorporating short and long-term visits of scholars, joint research and development activities including assistance with the development of relevant centres within each institution; participating and co-sponsoring of international conferences, seminars, workshops, academic meetings and joint issues of academic journals; participation of students in summer/winter educational programmes of a short-term nature; programme collaboration and teaching at the undergraduate and postgraduate level and in the Diplomatic Academy of the Caribbean; and development of joint PhD and MSc programmes in International Relations and Global Politics.
- **The UWI, Cave Hill Campus, Barbados and the Institute of International Relations, The UWI, St. Augustine Campus:** This seeks to clarify the relationship and expectations between the parties as collaborators on the International Development Research Centre (IDRC) funded project 'The Evaluation of the Port of Spain Declaration'.
- **The Foreign Service Institute, Ministry of External Affairs, Republic of India and The Institute of International Relations, The UWI, St. Augustine:** The cooperation inter alia includes exchange of information of structure and content of training programmes for diplomats; and identification of experts in mutually agreed areas.

# CENTRES & UNITS

- **The Ministry of Foreign Affairs of the United Mexican States through the Matías Romero Institute (IMR) and The University of the West Indies through the Diplomatic Academy of the Caribbean:** This agreement seeks to carry out activities of collaboration in the field of diplomatic training under the principles of reciprocity and mutual benefits.
- **The Institute of International Relations and the Institut Barcelona d'Estudis Internacionals:** Submission of a proposal for a collaborative project 'The cultural, scientific and social dimension of EU-LAC relations' under the 'Horizon 2020 Framework'.

## The Diplomatic Academy of the Caribbean

The Academy successfully completed a number of modules during the period August 2014 to December 2015, including:

- **Understanding the United Nations:** Led by Ambassador **Walter Lichem** and **Professor W. Andy Knight**, this module provided participants with knowledge and understanding of the basic principles governing the United Nations system architecture, the United Nations founding values, the functioning of its main bodies such as the General Assembly, the Security Council and the Economic and Social Council, the articulation with countries' missions and the main issues and points of negotiation on several hot topics.
- **Intelligence, Statecraft and Multi-dimensional Security in the Caribbean:** This module was led by **Professor Angela Gendron**, Senior Fellow at the Canadian Centre of Intelligence and Security Studies and **Professor Martin Rudner** of the Norman Paterson School of International Affairs, Carleton University, Ottawa and examined the role of intelligence in international affairs, and in support of diplomatic activities.
- **Summit Diplomacy: G7/8, G20, CARICOM, Summit of the Americas, CHOGM:** The lead facilitator of this course was **John J. Kirton**, a professor of political science, founder and director of the G8 Research Group and the founder and co-director of the G20 Research Group, the BRICS Research Group and the Global Health Diplomacy Programme, all based at the Munk School of Global Affairs at Trinity College in the University of Toronto. This course was designed to enhance the ability of participants to shape the summit diplomacy in which their countries and communities participate and those which affect them, by exploring how and why such summits operate to produce results, the ways in which they can be influenced from inside and out, and how the summit systems can be institutionally strengthened to this end.
- **The Rise of China and Its Impact on the Caribbean:** This module was facilitated by **Gordon Houlden**, Director of the China Institute Professor of Political Science at the Alberta School of Business University of Alberta. Partnering with him was **Ambassador Richard Bernal**, Alternate Executive Director Inter-American Development Bank. The course aimed to equip participants with an understanding of China's rapid economic growth and the opportunities and challenges that this remarkable fluorescence presents for the Caribbean.
- **The Kingdom of Saudi Arabia: Business, Politic, Culture:** This module was a collaboration with the Trinidad Saudi Chamber of Commerce (TSCC). It was led by **His Excellency Dr Fahad Aldawood**, expert on the Saudi Judicial Apparatus & Law Enforcement System, Presenting Saudi Member at International Judicial Conferences and **Professor Brinsley Samaroo** who is a Senior Research Fellow at the Academy of the University of Trinidad and Tobago. The course, which attracted former Minister in the Ministry of Gender, Youth and Child Development – **Mrs Raziah Ahmed**, represented the first ever educational programme in the region designed to provide in-depth knowledge about the Kingdom of Saudi Arabia and ways in which interested persons and organisations may effectively engage the Kingdom and pursue available opportunities.
- **Protocol and Diplomatic Law: Rules and Procedures:** The very popular module, was held in Barbados (in partnership with the Training Administration Unit) and Jamaica respectively. As done previously, the Diplomatic Academy partnered with *Protocol Partners, Washington Centre for Protocol*. The module was facilitated by **Gary Biggs**, Founding Partner and veteran protocol officer with over 27 years' experience and **Lawrence Dunham**,



Senior Associate and former US Assistant Chief of Protocol (1989-2005). The course aimed to raise awareness of the principles of international protocol and global business etiquette and develop the skills required to serve as a courteous and diplomatic representative of one's organisation.

- **Global Hemispheric and Regional Security and Defence:** This module was the collaborative effort of the Diplomatic Academy and the Office of the Vice-Chief of Defence Staff (VCDS). Facilitated by **Dr Ann Fitz-Gerald**, Associate Professor in the United Kingdom's Cranfield University's Defence Academy, **Dr Ivelaw Lloyd Griffith**, 9<sup>th</sup> President of Fort Valley State University and **Brigadier-General Anthony Phillips-Spencer**, the course was intended to equip participants with the requisite knowledge to ensure greater capacity for strategic security decision-making, policy formulation and implementation, or programme design and delivery. It attracted several foreign-based Military Attachés and key persons from the National Security Council Secretariat (NSCS).
- **Looking Towards Latin America: Growing Together:** This module was held in partnership with the Argentine Embassy and the country's National Foreign Service Institute (ISEN). It attracted participants from 13 Caribbean countries and aimed to familiarise attendees with various aspects of Latin American culture, inclusive of politics, regional integration and economic structure and highlighted the many ways in which interested persons and organisations could effectively engage the region and pursue available opportunities.

## REVENUE GENERATION/ COST CONTAINMENT

The Library's budgetary allocation for the year stood at TT\$1,011,113.00. To date, funds have been allocated to acquire approximately 731 monographs and renew subscriptions to 51 periodical titles, comprising both print and electronic journal subscriptions. The income-generating account which was set up for the Library for the receipt of fines/lost books/ replacement charges and the receipt of monetary gifts, stood at TT\$41,121.11 as of July 31, 2015.

## PROJECTED ACTIVITIES FOR 2015/2016

The Institute of International Relations will be celebrating its 50<sup>th</sup> Anniversary in 2015/2016 with the launch of the book – *History of the IIR* – written by **Drs Mark Kirton** and **Khellon Q. Roach**, a black tie dinner and reception and an alumni reunion. A number of areas will be renamed in the coming academic year, these include the renaming of the IIR Library to the "**Norman Girvan Library**" in honour of the late Professor Norman Girvan; the renaming of the IIR Boardroom to "**Yves Collart Boardroom**" in honour of the late Professor Yves Collart and the renaming of the DAOC Boardroom to the "**Hans Geiser Boardroom**" in honour of the late Dr Hans Geiser. Planned events/special initiatives include the continued hosting of "Bibliochats" and film screenings in the Library. A number of modules will be delivered by the Diplomatic Academy of the Caribbean. These include the following:

- Aligning International Law with Domestic Law
- Digital Diplomacy
- Disaster Risk Reduction and Management in the Caribbean – Building Resilience
- Global Health Diplomacy
- Labour Diplomacy
- Mainstreaming Gender
- Mediation – Alternative Dispute Resolution
- Military Protocol
- Protocol and Diplomatic Law
- Security Intelligence – Regional Security
- Shifts in Hegemony
- Small States and Trade Diplomacy – The Caribbean Perspective
- The Art of Diplomatic Communication
- The EU, Latin America and the Caribbean
- Intelligence, Statecraft and Multidimensional Security in the Caribbean

# CENTRES & UNITS

## DISTINGUISHED VISITORS

### **Ms Diane Abbott**

Member of Parliament for Hackney North and Stoke Newington  
House of Commons  
London, UK

### **Senator The Honourable Raziah Ahmed**

President of Senate  
Trinidad and Tobago

### **Senator the Hon. Brig. Gen. Carl A. Alfonso**

Minister of National Security  
Ministry of National Security  
Trinidad and Tobago

### **Colonel Robert F. Alvaro**

Chief of Strategic Outreach  
William J. Perry Center for Hemispheric Defense Studies

### **H.E. Mordehai Amihai-Bivas**

Ambassador  
Embassy of Israel,  
New York, USA

### **The Right Honourable Owen Arthur**

Member of Parliament  
Barbados

### **Mr Paul Baverstock**

Executive Partner  
Fortitude Partners  
UK

### **Professor Fernando Ramón Bossi**

President of the Emancipation Foundation and Portal ALBA  
The Bolivarian Republic of Venezuela

### **Dr Genevieve Boucaud**

Associate Dean of Distance Education  
University of the Southern Caribbean  
Trinidad and Tobago

### **Mr Alastair Brown**

Technical Director  
International Nuclear Services  
UK

### **Lieutenant Colonel Patrick Brown**

Defence Attaché Caribbean  
UK

### **Colonel Claudia J. Carrizales**

Military Liaison Office  
Embassy of the United States of America

### **Mr Gavin Carter**

International Nuclear Services  
USA

### **Dr Vijay Kumar Chattu**

UWI Faculty of Medical Sciences &  
Researcher UPEACE

### **Ms Jacqueline Clarke**

J. Clarke Associates  
INS Consultant

### **Mr Hervé Dreand**

AREVA France

### **H.E. José María Fernández López De Turiso**

Ambassador  
Embassy of the Kingdom of Spain

### **Professor Ann Fitz-Gerald**

Cranfield University  
UK

### **H.E. Coromoto Godoy**

Ambassador  
Embassy of the Bolivarian Republic of Venezuela

### **H.E. Dr Lutz Hermann Görgens**

Ambassador  
Embassy of the Federal Republic of Germany

**Dr Ivelaw Griffith**

President  
Fort Valley State University  
Georgia, USA

**Professor Abdelwahab Hechiche**

Professor  
University of South Florida  
USA

**H.E. Jan Henderson**

High Commissioner  
New Zealand High Commission to the Caribbean

**Professor Svend F. Hougaard Jensen**

Copenhagen Business School  
Denmark

**Mr Gordon Houlden**

Director  
China Institute at University of Alberta  
Canada

**Dr M. Raymond Izarali**

Associate Professor  
Department of Criminology  
Wilfrid Laurier University  
Canada

**Rosalind Howells**

The Baroness Howells of St. Davids OBE  
House of Lords  
London, UK

**H.E. Daven Joseph**

Ambassador  
Antigua and Barbuda

**Ms Candyce Kelshall**

Doctoral Research Fellow  
The University of Buckingham, Centre for Security and  
Intelligence Studies  
UK

**Mr Renny Khan**

Director of International Programmes  
Faculty of Medicine & Dentistry  
University of Alberta  
USA

**Professor John J. Kirton**

Co-Founder and Director, G7 and G8 Research Group and  
Founder and Co-Director, G20 Research Group  
Munk School of Global Affairs at Trinity College  
University of Toronto  
Canada

**Ms Madeline Koch**

Managing Director G7 and G8 Research, the G20 Research  
Group, the BRICS Research Group and the Global Health  
Diplomacy Program  
Munk School of Global Affairs at Trinity College  
University of Toronto  
Canada

**Mr Takashi Komatsu**

Overseas Reprocessing Committee  
Japan

**Dr Sylvan Lashley**

Dean  
University of the Southern Caribbean  
Trinidad and Tobago

**Justice Anthony Lucky**

Judge  
International Tribunal for the Law of the Sea  
Hamburg, Germany

**Professor Mojtaba Mahdavi**

ECMC Chair of Islamic Studies and  
Associate Professor of Political Science  
Department of Political Science  
University of Alberta  
Canada

**Mr Bernard Monot**

AREVA France

# CENTRES & UNITS

**Mr Charles Moore**

Chargé d’Affaires a.i.  
High Commission for the United Kingdom of Great Britain and Northern Ireland

**Mr Thomas Mudau**

Counsellor  
High Commission for the Republic of South Africa

**Mr Robert Nuttall**

Managing Partner  
Fortitude Partners

**Dr Yuan Peng**

Vice President  
China Institutes of Contemporary International Relations

**Eduardo Porretti**

Ministry of Foreign Affairs and Culture, Argentine Republic  
Director of Caribbean Affairs

**Mr Ian Ramdhanie**

Principal  
Caribbean Institute for Security and Public Safety

**Dr Louise Richardson**

Principal  
University of St. Andrews  
Scotland, UK

**Belen Yuste Rojas**

Deputy Head of Mission  
Embassy of the Kingdom of Spain

**Mr Andrew Rosindell**

Member of Parliament for Romford  
House of Commons  
London, UK

**Professor Jorge Mario Sánchez Egozcue**

University of Havana  
Cuba

**Mr Masatoshi Sato**

Minister Counsellor & Deputy Head of Mission  
Embassy of Japan

**Rosalind Carol Scott**

The Baroness Scott of Needham Market  
House of Lords  
London, UK

**Rt. Hon. Mark Simmonds**

Member of Parliament for Boston and Skegness  
House of Commons  
London, UK

**Dr Naresh Singh**

Director General for Strategic Planning and Operations  
Canadian International Development Agency (CIDA)  
Ottawa, Canada

**Vivien Stern**

The Baroness Stern CBE  
House of Lords  
London, UK

**Professor Monica Suiz**

Portal ALBA  
The Bolivarian Republic of Venezuela

**H.E. Huang Xingyuan**

Ambassador  
Embassy of the People’s Republic of China

# SIR ARTHUR LEWIS INSTITUTE OF SOCIAL AND ECONOMIC STUDIES (SALISES)

## EXECUTIVE SUMMARY

The Sir Arthur Lewis Institute of Social and Economic Studies (SALISES) was born of a merger, in 2001, between the Institute of Social and Economic Research, which has roots that date back to the birth of the University itself, and the Consortium Graduate School of the Social Sciences. Its mission 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 plank of its vision is to become “an internationally renowned institution for development policy analysis.” The activities of the SALISES at St. Augustine for the academic year 2014/2015 are in keeping with the mission and vision of the SALISES and with the core objectives of the University’s Strategic Plan 2012-2017.

The SALISES at St. Augustine enjoyed a very successful academic year 2014/2015. Once again, staff participated in the teaching programmes of the Institute and of the wider Faculty and continued supervision of Master’s, MPhil and PhD students. There were three graduates in the PhD programme, two in MPhil and nine in the MSc Development Statistics programme. All programmes are targeted principally at the entire Caribbean region and are attracting more and more candidates from The UWI-13 countries.

The Institute continued its scholarly, professional and outreach activity, which resulted in the publication of journal articles and technical reports, the publication of Caribbean Dialogue, the conduct of consulting and executive training programmes and the public discussion series, the SALISES Forum. The Institute successfully concluded two major research projects: one funded by the IDRC entitled *Managing Adaptation to Coastal Environmental Change: Canada and the Caribbean* and the other, awarded under the 10<sup>th</sup> European Development Fund by the ACP Secretariat entitled *Climate Change Adaptation*

*Strategies for Water Resources and Human Livelihoods in the Coastal Zones of Small Island Developing States (CASCADE)*. Work continued on a third major project, funded by the IDRC and done in collaboration with CERMES, entitled *Sustainable Water Management under Climate Change in Small Island Developing States (Water aCCIS)*. As part of the SALISES efforts to transform itself into a regional centre of excellence for scholarly work on competitiveness and innovation, it also successfully bid for four smaller IDB-funded projects.

## ENROLMENT

SALISES at St. Augustine continued its drive to recruit more students at the MSc and MPhil/PhD. In the 2014/2015 academic year, there was an intake of 12 students in the MSc Development Statistics programme and six in the various MPhil/PhD programmes. These figures point to the attractiveness of the programmes.

## GRADUATION

In the review period, three students graduated from the PhD programme:

- **John Cozier:** PhD, Economic Development Policy
- **Chiedozie Osuala:** PhD, Economic Development Policy
- **Mala Jokhan:** PhD, Social Policy

Two students graduated from the MPhil programme:

- **Carlos Hazel:** MPhil, Economic Development Policy
- **Nyron Seaton:** MPhil, Economic Development Policy

## STUDENT ACHIEVEMENTS

The following PhD candidates made conference presentations in the period under review:

- **Alvinelle Matthew:** *Human Resource Development, Social Capital and Youth Behaviour: The influence of family, school and community social capital on adolescence problem behaviour in Trinidad*. International Conference on Human Resource Development Research and Practice, School of Management and Marketing, University College Cork, Ireland, June 3-5, 2015.

# CENTRES & UNITS

- **Raynata Wiggins:** *An Empirical Analysis of Poverty and its Determinants in Trinidad and Tobago*. Forum on the Future of the Caribbean. May 2015.
- **Paray Bephyer:** *Defining Disability: An Equal Opportunities Approach For Children With Disabilities*. Caribbean Child Research Conference: November 5-6, 2014, Jamaica. *Aesthetics and Development: The Role of Persons with Impairments in Development*. The 16<sup>th</sup> Annual SALISES Conference, January 14-16, 2015, St Lucia.
- CASCADE (Climate Change Adaptation Strategies for Water Resources and Human Livelihoods in the Coastal Zones of Small Island Developing States): funded by the European Union, in partnership with the Euro-Mediterranean Centre for Climate Change (CMCC) and the Caribbean Community Climate Change Centre (CCCCC).
- Water aCCSIS (Sustainable Water Management under Climate Change in Small Island Developing States): in collaboration with CERMES and funded by the IDRC.

## GRADUATE STUDIES

Teaching at SALISES is strictly at the graduate level so all teaching and learning outcomes are related to graduate studies. MPhil and PhD students continued to make strides through making seminar presentations, attending conferences and presenting papers.

Graduates from the MSc Development Statistics programme have been securing jobs in critical domains where their acquired skills are appreciated. The programme is gaining popularity insofar as it is filling a void in spheres where skills akin to development policy and applied quantitative skills are needed.

There were five graduates in the MPhil/PhD programme and a further nine from the MSc Development Statistics programme in 2014/2015.

## RESEARCH AND INNOVATION

The SALISES research programme continued apace resulting in the publication of articles in regional and international journals, book chapters and technical papers. These covered areas, all related to the Caribbean, such as poverty, natural disasters, the digital divide, crime and violence, human resource development, social cohesion and innovation.

The Institute continued to pursue these major projects:

- C-CHANGE: funded by the IDRC under the heading, *Managing Adaptation to Coastal Environmental Change: Canada and the Caribbean*.

The Institute, in collaboration with Ryerson University, successfully bid for a Social Sciences and Humanities Research Council of Canada (SSHRC) Grant to pursue research in the area of Child Rights in Latin America and the Caribbean (including the Caribbean Diaspora in Canada). The Executive Director of the CCFC completed the editing of a book *Competitiveness Through Global Value Chains: Selected Industry Case Studies for Caribbean Countries*, which is to be published in the coming months by The UWI Press.

The Institute successfully bid for four small projects, all funded by the IDB. They are:

- FDI and Firm Innovative Activity and Productivity in the Caribbean (US\$7,000.00).
- Barriers to Innovation and Firm Productivity in the Caribbean (US\$7,000.00).
- Knowledge Intensive Business Services in the Oil and Gas Sector in Trinidad and Tobago (US\$17,000.00).
- Innovation, Productivity and Training: The Case of Caribbean Small Island Developing States (US\$30,000.00).

These four projects form part of the Institute's thrust to become a centre of excellence for scholarly activity in competitiveness and innovation.

The Institute continued work on a number of research areas including, Climate change and its impact on water security and coastal regions in the Caribbean; Poverty; Ageing; Sports and development and Vulnerability. Additional areas of research include, the financial sector in the Caribbean; Caribbean growth and development; Injury Prevention and Safety Promotion; Population Dynamics in the Caribbean; and Competitiveness and innovation in the Caribbean.

## OUTREACH

The Institute continued its very popular and informative SALISES Forum, a public education exercise which deals with topics of national, regional and international interest. Topics treated during the 2014/2015 academic year included, *Carnival 2015 and Ebola* and *Caribbean Integration: Rhetoric or Reality?*

The Institute devoted a lot of its time in co-hosting the mega event *Forum on the Future of the Caribbean*, in collaboration with the UNDP, the Government of Trinidad and Tobago and other organisations. It was held over the period May 5-7, 2015, and was attended by participants from all over the world.

The Institute also co-hosted, together with the Corporación Andina de Fomento (CAF), a workshop on Citizen Security, which was also very successful.

The Institute, through the Caribbean Centre for Competitiveness (CCfC) organised the workshops, "*Business Competitiveness Case Writing*" by Professor Maria Luisa Blasaquez on June 10, 2015 at the Hyatt and "*Cutting Edge Strategies for Business Competitiveness*" by Professor Maria Luisa Blasaquez on June 11, 2015 at the Hyatt. The seminar, "Innovations in Financing: Concept to Commercialisation" by Andrew Farquharson and Lyn Baranowski was also held at the Courtyard Marriott on June 25, 2015. The CCfC also produced a cluster study of the local cocoa industry and facilitated two stakeholder meetings. It also supervised the completion of 10 of consultancies commissioned on value chain studies in the Caribbean.

### 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-13 countries. The three major funded projects (C-CHANGE, CASCADE and Water-aCCSIS) are anchored in these territories (Belize, St. Lucia, St. Vincent and the Grenadines, and Grenada). Scholarships have been granted to students in these countries, stakeholder panels have been established in these countries, and they are also the subjects of PhD theses. One PhD thesis, in particular, is devoted partly to disaster management in Grenada and

fieldwork has already been conducted there. Three of the four IDB-funded projects are Caribbean-wide in focus and cover some of The UWI-13 countries. Students in the MSc Development Statistics programme have been encouraged to, and have actually pursued research, catering to the needs of The UWI-13 countries.

## PROJECTED ACTIVITIES FOR 2015/2016

### Teaching and Scholarship

Staff members will continue teaching and graduate supervision of students enrolled in the SALISES programmes. It is expected that a further five to ten students will be admitted to the MPhil/PhD programme and about 15 to the MSc Development Statistics programme, and three or four more students are scheduled to graduate with the PhD degree during the coming academic year along with two or three more at the MPhil level. Some 10 students are on course to graduate from the MSc Development Statistics programme. Staff members will also be teaching and supervising students enrolled in the SALISES MSc programmes on The UWI, Mona Campus as well as in the programmes of the wider Faculty of Social Sciences.

Staff members will continue advancing in research around the following themes of Social Accounting Matrices (and extensions) for the Caribbean, with applications to poverty, human capital formation and income distribution; Computable General Equilibrium modelling of the Caribbean Economy, with applications to trade, poverty, income distribution and the environment; Poverty, poverty reduction and inequality with special reference to the Caribbean and Sport and development in the Caribbean. Research will also centre around the themes of Measurement of Social Phenomena in Caribbean Society; Homicidal Patterns in Trinidad and Tobago; Return Migration and Transnationalism; Population Dynamics in the Caribbean; Growth, Competitiveness and Development Issues in the Caribbean; Coastal zone adaptation to Climate Change; Climate Change Impacts on Water Resources in the Coastal Zones of Small Island Developing States; The Role of Education in Competitiveness: A Framework for Benchmarking the Education System in the Caribbean are also areas of consideration.

# CENTRES & UNITS

The Institute will be submitting material for publication and completing the publication of some material already in the pipeline. Publication of *Caribbean Dialogue* will continue but the way in which the publication is structured and disseminated will be re-organised.

The SALISES will continue its aggressive pursuit of funding through research grants, especially from international donor agencies.

## **SALISES Forum Series**

The SALISES Forum series will continue in the academic year 2015/2016. A target of hosting two each semester has been established.

## **Other Future Activities**

SALISES St. Augustine intends to strengthen itself in 2015-2016 and in the coming years. Its focus will be in conducting specialist training in specific subject-matter areas based on selected course offerings from the MSc Development Statistics, done using a short-course format during June-August annually; publish papers resulting from the CASCADE and ICURA Climate Change projects; wrap-up, in collaboration with CERMES, an IDRC-funded Water-ACCIS project.

The SALISES also seeks to pursue existing research, organise a series of conferences, continue the implementation of the recommendations of the quality assurance review exercise conducted in 2010.

Other activities will centre on improving the profile of the Caribbean Dialogue and gradually transforming it into an online journal, fostering greater interdisciplinary research involving scholars from outside SALISES and The UWI.

## **Revenue Generating Activity**

The Institute at St. Augustine will continue its Executive and Professional Training programmes and will be aggressively seeking institutional consultancies, locally and internationally, in partnership with other UWI departments and divisions, such as the Business Development Office and The UWI Consulting Company. The CCfC, in particular, shall seek out consultancies in the Centre's niche focus: clustering, value chain analysis and innovation.



## SPORT AND PHYSICAL EDUCATION CENTRE (SPEC)

### EXECUTIVE SUMMARY

The 12<sup>th</sup> edition of The UWI SPEC International Half-Marathon attracted 1,200 participants comprising of local, regional and international athletes. This year, for the first time, there was participation from Cuban athletes and a Male athlete, Richer Perez, won the race. First Citizens' Bank maintained its commitment as the presenting sponsor, although this year represented the final year of the three-year contract. The UWI SPEC and SM Jaleel signed a three-year contract valued at over TT\$300,000.00 and came on as the water sponsor of the event.

This year saw many improvements to the race; these included, post-race drugs testing; the introduction of music along the route for the runners at strategic points and the upgrade of the timing system, as well as the provision of a chip timing system.

The "SPECtator" race day magazine, now in its sixth year of publication, was upgraded to a standard, larger-sized format and displayed several note-worthy articles on running and the Half-Marathon event.

SPEC played a pivotal role in the organisation and implementation of the conference, *Science, Higher Education and Business: An Interdisciplinary approach to Sport Studies, Research and Development*, from January 15-17, 2014. This conference attracted over twenty presenters and close to 300 participants. The next instalment of the conference will be staged in 2016.

The UWI SPEC's competitive Women's and Men's teams (basketball, cricket, football, hockey, netball, swimming, table tennis, tennis, track and field and volleyball) continued participating in their respective sporting disciplines for the 2014/2015 domestic season.

St. Augustine hosted The UWI Games 2015. This event saw the coming together of the four campuses to compete across 10 sporting disciplines from May 21-29, 2015.

The UWI SPEC's Operational Plan 2015-2017 was drafted and submitted for further discourse with the Campus Office of Planning and Development.

### TEACHING, LEARNING AND STUDENT DEVELOPMENT

#### Academic Programmes

The UWI SPEC continued to offer the following academic programmes:

- Certificate in The Art and Science of Coaching (under the aegis of the School of Education).
- Co-curricular Courses: Minding Spec, Exploring Sport, Physical Education, Health and Wellness.

The re-introduction of the BEd Physical Education is being aggressively pursued with the School of Education to restart the programme.

### CONTRIBUTION TO THE OVERALL EFFICIENCY OF THE UNIVERSITY

The UWI SPEC assisted with the drive to encourage the holistic development of students and faculty/staff by providing an aspect of the work-life balance. The Centre also continues to promote the administrative processes of The UWI. Specifically, as established by The UWI Strategic Plan 2012-2017, the Centre focused on the strategic themes and goals of employee engagement, student engagement and experience and alumni engagement.

# CENTRES & UNITS

In this regard, SPEC introduced the Carnival Boot-Camp, which was intended to end after Carnival 2015. Due to its popularity, it has however continued, with staff and students actively enjoying it at no cost to them. The stretch and relaxation classes, as well as massages for staff and students have also been re-introduced. The number of available aqua fit classes has been increased due and gym facilities continue to be oversubscribed. Most notably, UWI SPEC has been involved in the very successful UWI T20 cricket competition for the past three years. The success of this event can be ascribed to the contribution of UWI SPEC staff to the initiative.

## **Staff and Student Services**

The Centre continues to pioneer the growth and development of sport and physical education on the Campus while actively collaborating with internal stakeholders to maximise the scope and scale of its offerings.

Notable collaborations are Orientation Village, the Guild of Students' Interfaculty and Halls Sports Week, the Get Up and Do it Yourself (GUADIY) Football League and the Campus' Wellness programme facilitated by Human Resources. UWI SPEC played a pivotal role in the Wellness programme initiative and looks forward to a greater involvement and expansion of the scope of this excellent employee engagement tool. The popular "Boot Camp" training offered twice per week was extended for the year with an average participation of 100 persons per session. Also, the 'Losers can be Winners' competition, in collaboration with the HR Department, involved UWI SPEC personnel as trainers and therapists and UWI SPEC management also consulted on the competition and implementation of the programme.

The Centre's indoor court operations continued seven days a week catering for competitive teams and campus usage. The gym also continued extended operations on Saturdays (7:00a.m. to 2:00p.m.) and Sundays (7:00a.m. to noon). Outdoor grounds usage continued as per usual (seven days per week) with daily team practices/games and open recreation periods. Pool operations were maintained to facilitate team practices (with specific emphasis on The UWI St. Augustine Swim Team) and other aqua fitness classes for the staff and students.

Coaching programmes, led by the Centre's part-time coaches, continued in disciplines including core training, aerobics, aqua aerobics, badminton, basketball, cricket, football, hockey, karate, netball, rugby, stretch and relaxation classes, table tennis, taekwondo, track and field, volleyball, aqua training and aqua power training.

## **UWI Activities**

UWI SPEC remained the host venue for several UWI activities including, End-of-Semester examinations, University Graduations (UWI St. Augustine and Open Campuses, UWI-Roytec and Sir Hugh Wooding Law School), Research Days, Open Days and Career Fairs. The facility has also been utilised for various Campus functions, residence halls valedictory functions, seminars and workshops, retirement functions, and the use of grounds for interdepartmental competitions.

## **OUTREACH**

The Centre continued to work with the community across a range of initiatives. It maintained its role as hosts to the Trinidad and Tobago Defence Force Physical Training Instructors programme. The programme trains 75 trainers annually to assist in the national pool of sport resources for the country.

UWI SPEC worked with several National Governing Bodies (NGBs) for Sport on varying initiatives. It provided technical support and a training facility for several national elite athletes and worked with the Trinidad and Tobago Cricket Board (TTCB) to facilitate its use of the Sir Frank Worrell Field.

UWI SPEC also allowed Lucia's Private Primary School to use its facilities for tennis, cricket and football. It provided sporting facilities for several UWI-affiliated July/August camps, as well as facilitated practice sessions for the National Women's Football teams. It partnered with the University School to offer programmes in tennis to its students, under the supervision of Ms Rhonda Mohammed, coach of the University Junior School tennis team.

The Centre also sponsored MILAT/Civilian Conservation Corps (CCC) runners in The UWI SPEC International Half-Marathon.

## REVENUE GENERATION

UWI SPEC's major undertakings continue to yield financial results particularly with regard to the rental of facilities. The rental of SPEC's indoor facility generated TT\$348,267.00, while the rental of the Sir Frank Worrell football Field (south) earned TT\$100,021.00. During the period under review, the swimming pool, which usually does not generate any income for the UWI SPEC, managed to bring in TT\$8,000. Overall, the rental of facilities earned net revenue of TT\$504,215.

### Commercial Activities

While, commercial activity for the indoor court and classroom areas continued in the review period, the ability to maximise commercial avenues is affected by the increased Campus demand for usage of these areas. The UWI SPEC's ability to host simultaneous activities also continues to be adversely affected by the closure of the outdoor court for resurfacing.

Usage requests for the outdoor fields increased with minimal commercial value as these facilities are predominately used by the Campus. The concession area continued to attract students and staff and contributed to a diversification in interactions at UWI SPEC.

## PROJECTED ACTIVITIES FOR 2015/2016

Activities projected for the 2015/2016 period include Inter-Staff league competitions in all fours, chess, dominoes, basketball, football, cricket, badminton and table tennis.

# PUBLICATIONS AND CONFERENCES

## FACULTY OF ENGINEERING

### JOURNAL PUBLICATIONS

#### Department of Chemical Engineering

Ali, N.A., **Baccus-Taylor, G.S.H.**, Sukha, D.A. and Umaharan, P. (2014) The Effect of Cacao (*Theobroma cacao* L.) Pulp on Final Flavour. *ISHS Acta Horticulturae* 1047; 245-254.

**Baccus-Taylor, G. S. H.**, Falloon, O. and Henry, N. (2015) Pressure Resistance of Cold-Shocked *Escherichia coli* 0157:H7 in Ground Beef, Beef Gravy and Peptone Water. *Journal of Applied Microbiology*, 118: 1521- 1529.

**Hosein, R.** and Lewis-Hosein, R. (2014). An Experimental Investigation of Steam Distillation of Trinidad Crude Oils. *The West Indian Journal of Engineering* (WIJE), Vol. 37, No. 1. pp10-15.

**Hosein, R.**, Mayrhuo R. and McCain W. Jr. (2014). Determination and Validation of Saturation Pressure of Hydrocarbon Systems Using Extended Y-Function. *Journal of Petroleum Science and Engineering*, 124, pp105-113.

**Hosein, R.** and Mayrhuo R. (2015). A Model for Extending the Heptanes Plus Fraction for Trinidad Gas Condensates. *The West Indian Journal of Engineering* (WIJE), Vol. 37, No. 2. Jan. 2015 pp23-30

**Maharaj, S.**, D.R. McGaw, A. Parasram, and W. Grayson. (2014) The extraction of heavy oil from Trinidad tar sands using supercritical carbon dioxide". *The West Indian Journal of Engineering* WIJE, Vol 37, No 1.

**Marquez, A.** Corrosion in construction materials", Proceedings of the 225th ECS Conference (2014), *ECS Trans.* volume 61, issue 20, pp61-71.

Aiyejina, A., **A. Marquez**, and M. Sastry, (2014) "Developing a two-dimensional model of a proton exchange membrane fuel cell in Freefem++", Proceedings of the ASME 2014 12th ESFuelCell2014, Paper No. FuelCell2014-6529, pp. V001T06A013; 8 pages.

**Mujaffar, S.** and C.K. Sankat, (2014). Modelling the drying behaviour of unsalted and salted catfish (*Arius* sp.) slabs. *Journal of Food Processing and Preservation*, 10/2014; DOI: 10.1111/jfpp.12357

**Riverol, C.** and Pilipovik, M.V., (2014) Assessing the Failure Frequency of Potential Hazardous Incidents using Radial Basis Function Networks (RBFN). A Milk Pasteurization Unit as Study Case, *Food Control*, Volume 1, pp18-21.

**Riverol, C.** and Pilipovik, M.V., (2014) TECHNICAL NOTE: Advantages of the Self-Organizing Controller for High-Pressure Sterilization Equipment, *ISA Transaction*, Volume 53, (1), pp186-188.

**Riverol, C.** and Alvarez, T., Assessing the Effect of Nearshore Currents over the SO<sub>2</sub> Absorption in Caribbean Seawater, *Environmental and Agricultural Research Summaries*. Volume 1 pp45-46, 2014.

**Wilson, B.**, and Hayek, L.-A. C., (2015) Distinguishing relative specialist and generalist species in the fossil record, *Marine Micropaleontology*, v. 119, pp. 7-16.

**Wilson, B.**, Coimbra, J.C., Hayek, L.-A.C., (2014) Ostracoda (Arthropoda, Crustacea) in a Miocene oxygen minimum zone, Trinidad, West Indies: A test of the Platycopid Signal Hypothesis. *Journal of South American Earth Sciences* 54, 210-216.

**Wilson, B.** and Hayek, L. C., (2014) Ontology confounds reproducibility in ecology and climate science. *Life: The Excitement of Biology* 2, 12–29.

#### Department of Electrical and Computer Engineering

**Adams, R.** (2014) Infinitesimal Perturbation Analysis of a Single-Stage Fluid Queue with Loss Feedback and Non-Responsive Competing Traffic, *Discrete Event Dynamic Systems*, 1-16, 18 November.

Ramsawak, S., S. Bahadoorsingh, (2014) A. Singh and **C. Sharma**, "A reengineered transmission line parameter calculator," *West Indian Journal of Engineering*, vol. 38, pp. 52-60.

C., L. Bhairosingh, and **C. Sharma**, (2014) "A methodology for dynamically adjusting a transmission line rating on an island grid in the Caribbean," *The West Indian Journal of Engineering*, vol. 36, pp. 76-83.

**Bahadoorsingh, S.**, R. Dyer and **C. Sharma**, (2015) "Integrating Serious Games into the Engineering Curriculum – A Game-Based Learning Approach to Power Systems Analysis," *International Journal of Computational Vision and Robotics*, 2015.

**Bahadoorsingh, Ally, C., S. Bahadoorsingh, A. Singh and C. Sharma**, (2015) "A technical assessment integrating wind energy into an island power system," *Elsevier Renewable & Sustainable Energy Journal*, vol. 51, pp. 863-874.

**Pooransingh, A.**, and **C. Radix**. (2014) "Broadcast Cricket Highlight Treatment using a Quadrant Based Method for Global Motion." *Journal of Multimedia* 9, no. 6, pp. 747-756.

## Dean's Office

**Gift, S. J. G.**, and **B. Maundy**, (2015) Versatile Composite Amplifier Configuration, *International Journal of Electronics*, Vol. 102, No.6, pp993-1006.

**Gift, S. J. G.**, (2014) Time Transfer and the Sagnac Correction in the GPS, *Applied Physics Research*, Vol. 6, No. 6, pp1-9.

**Gift, S. J. G.**, (2015) Burst of Trouble for Relativity: New Test of Light Speed Constancy Using Electromagnetic Signal Pulses from a Geo-stationary Satellite, *Physics Essays*, Vol. 28, No.1, pp20-23.

**Gift, S. J. G.**, (2015) On the Selleri Transformations: Analysis of Recent Attempts by Kassner to Resolve Selleri's Paradox, *Applied Physics Research*, Vol. 7, No.2, pp112-120.

## Department of Mechanical and Manufacturing Engineering

Benjamin, C.T. and **Pun, K.F.**, (2014) "An exploratory study to determine archetypes in the Trinidad and Tobago fashion industry environment", *West Indian Journal of Engineering*, Vol.37, No.1, pp70-76 (ISSN 0511-5728).

Yiu, M.Y.R. and **Pun, K.F.**, (2014) "Measuring knowledge management performance in industrial enterprises: an exploratory study based on an integrated model", *The Learning Organisation*, Vol.21. Nos.5/6, pp.310-332 (ISSN 0969-6474).

**Pun, K.F.** and Yiu, M.Y.R., (2015) "Assessing organisational KM performance based on the criteria of total quality management", *International Journal of Knowledge and Systems Science*, Vol.6, No.1, pp.1-20 (ISSN (print): 1947-8208/ ISSN (online): 1947-8216).

Patterson, S. and **Pun, K.F.**, (2015) "A value management approach for managing social project risks of international funding discontinuity in Guyana", *West Indian Journal of Engineering*, Vol.38, No.1, pp.79-85 (ISSN 0511-5728).

**Chowdary, B. V.**, (2014) Fuzzy QFD Integrated CAD/CAE and DFE framework: Enabler of Sustainable Product Design Practices, *Int. J. of Collaborative Enterprise*, Vol. 4, No. 4, pp. 278-298.

**Chowdary, B. V.** and C. M. Phillips, (2014) Integration of Computer Aided Design and DFE Principles for Development of a Tennis Ball Retriever Concept: A Case Study, *Asian J. Management Science and Applications*, Vol. 1, No. 4, pp.333-354.

**Chowdary, B. V.** and D. R. Sahatoo, (2014) CAD Modelling Issues in Rapid Prototyping, *West Indian Journal of Engineering*, Vol. 37, No. 1, pp. 65-69.

Thomas, S. and **B. V. Chowdary**, (2014) The Effects of Digitising Parameters on Noise in Point Cloud Data: An Investigative Study on a Free Form Model, *West Indian Journal of Engineering*, Vol. 37, No. 1, pp.16-22.

**Ekwue, E.I.**, R. Birch, N.R. Chadee, (2014) A comparison of four Instruments for measuring the effects of organic matter on the strength of compacted agricultural soils. *Biosystems Engineering*, UK, 127: pp176 –188.

**Ekwue, E.I.**, Constantine, R C and Birch, R., (2015) Simulation of irrigation water requirements of some crops in Trinidad using the CROPWAT irrigation software, *West Indian Journal of Engineering*, 37 (2): 31 – 36.

**Ekwue, E.I.**, R. Birch, J. Chewitt, (2015) Effect of dynamic and static methods of compaction on soil strength, *West Indian Journal of Engineering*, 37 (2): 74 – 78.

**Ekwue, E.I.** and Seepersad, D., (2015) Effect of Soil type, peat, compaction effort and their interactions on soil strength and splash detachment rates during simulated rainfall. *Biosystems Engineering*, UK, 136: 140 – 148.

**Ekwue, E.I.**, Stone, R.J., Peters, E. and Rampersad, S.A., (2015) Thermal conductivities of some agricultural soils in Trinidad as affected by density, water and peat content. *West Indian Journal of Engineering*, 38 (1): pp61– 69.

Deoraj, S., **Ekwue, E.I.** and Birch, R., (2015) An evaporative cooler for the storage of fresh fruits and vegetables. *West Indian Journal of Engineering*, 38 (1): 86 – 95.

# PUBLICATIONS AND CONFERENCES

**Maharaj, C.** and Maharaj, R., (2015) Physical properties of LDPE, PVC and Used Engine Oil modified Asphalt. *Progress in Rubber, Plastics & Recycling Technology*, 31 (3): p 145-159.

**Maharaj, C.**, Maharaj, R., and Maynard, J., (2015) The effect of Polyethylene Terephthalate particle size and concentration on the properties of asphalt and bitumen as an additive. *Progress in Rubber, Plastics & Recycling Technology*, 31 (1): p 1-24.

Ramesar, K., **Maharaj, C.**, and Persad, U., (2015) A mechanism for cutting coconut husks, *West Indian Journal of Engineering*, 37 (2): p 54-62.

Maharaj, R., Grierson, L.H., and **Maharaj, C.**, Ramjattan-Harry, V., (2015) Rheological study of cement modified with a lignin based admixture. *West Indian Journal of Engineering*, 37 (2): p 68-73.

Blair, E., **Maharaj, C.**, and Primus, S., (2015) Performance and perception in the flipped classroom. *Education and Information Technologies*. [http://link.springer.com/article/10.1007/s10639-015-9393-5?sa\\_campaign=email/event/articleAuthor/onlineFirst](http://link.springer.com/article/10.1007/s10639-015-9393-5?sa_campaign=email/event/articleAuthor/onlineFirst)

## Department of Geomatics

### Engineering and Land Management

**Griffith-Charles, C.**, Spence, B., Bynoe, P., Roberts, D., & Wilson, L. (2015) Land tenure and natural disaster management in the Caribbean, *Land Tenure Journal*, No.1, pp137-161, 2014.

**Miller K.**, (2015) Needs for Professional Hydrography in the Caribbean Towards Risk Reduction in Maritime Navigation, *The West Indian Journal of Engineering*, Vol. 38, No. 1, pp 70-78.

**Ramlal, B.** and P.K. Watson (2014) The Digital Divide in Trinidad and Tobago, *Journal of Social and Economic Studies*, Vol. 63: 1, pp.1-23.

**Mycoo, M.**, (2014) Sustainable Tourism, Climate Change and Sea Level Rise Adaptation Policies: Barbados. *Natural Resources Forum*. Vol.38, Issue 1, 47-51.

**Mycoo, M.**, (2014) Autonomous household responses and urban governance capacity building for climate change adaptation: Georgetown, Guyana. *Urban Climate*. Vol. 9, 134-154.

## Department of Civil and

### Environmental Engineering

**Banerjee, K.S.** and Ryan S. Melville, R.S. (2015), "Preliminary Investigation of Geotechnical Properties of the Rock Aggregates Commonly Used for Civil Engineering Construction in Trinidad and Tobago", *West Indian Journal of Engineering*, Vol.38, No.1, July, pp.15-21.

**Banerjee K.S.**, and Sengupta D. (2015), "Importance of radon studies in rural areas and correlation of indoor radon level with radon inventory", *Int. J. Low Radiation*, Vol. 10, No. 1, pp. 48-60.

Leon, L., and **Charles, R.** (2014), Aggregate Angularity on the Permanent Deformation Zones of Hot Mix Asphalt, *Global Journal of Researches in Engineering (E)*, Volume XV, Issue III, Version 1, pp 25-30.

**Charles, R.**, and Leon, L. (2014), Impact of Coarse Aggregate Type and Angularity on Permanent Deformation of Asphalt Concrete, Computational Methods and Experimental Measurements, *WIT Transactions on Modelling and Simulation*, Vol 59, pages 303-313.

Jaramillo, F., Baccard, M., **Narinesingh, P.**, Gaskin, G., Cooper, V. (2014). 'Assessing the role of a limestone quarry as sediment source in a developing tropical catchment'. *Land Degradation & Development*. Doi:10.1002/ldr.2347.

## BOOKS & BOOK CHAPTERS

**Chowdary B. V.** and J. Bansee, (2014) Flexibility via Virtual Cellular System for Variability, **In: The Flexible Enterprise, The Flexible Systems Management**, Chapter 17, pp. 295-308, Edward A. Stohr and Sushil (eds), Springer New Delhi, 2014, ISBN 978-81-322-1559-2

**Al-Tahir, R.**, I. Saeed, and R. Mahabir. (2014). Applications of Remote Sensing and GIS Technologies in Flood Risk Management. **In: Flooding and Climate Change: Sectorial Impacts and Adaptation Strategies for the Caribbean Region**, D. Chadee, J. Agard and J. Sutherland (eds). Nova Science Publishers. pp. 137-150.

Lane, D.E., Mercer-Clarke, M., Clarke, J.D., **Mycoo, M.** and Gobin, J.F. (2015). "Managing Adaptation to Climate Change in the Coastal Zone" **In: Coastal Zones: Solutions for the 21st Century**. Baztan, J., Chouinard, O., Jorgensen, B., Tett, P., Vasseur, L. and Vanderlinden, J.-P. (Eds.).

**Ramlal, B.** Roopnarine, J. Logie, C. Narine, L. and J. Krishnakumar (2015) "A National Assessment Survey in Trinidad and Tobago: Methodological Assessment" **In:** *Child-rearing Practices in Caribbean: Lessons and Implications from National Assessment in Trinidad and Tobago*, edited by Carol Logie and Jaipaul Roopnarine. UWI Press, pg. 28-37.

**Ramlal, B.** and Davis, D. (2014), Using GIS in Developing an Integrated Approach to Flood Management in Trinidad and Tobago. **In:** *Flooding and Climate Change: Sectorial Impacts and Adaptation Strategies for the Caribbean Region* Edited by D. Chadee, J.M Sutherland and J. Agard. Nova Science Publishers, pg. 152-161.

**Ellis, L. A.**, Lewis, T. M., and A. K. Petersen. (2015). "Leadership studies in changing times." **In:** *Leadership and Sustainability in the Built Environment*. Alex Opoku and Vian Ahmen. (eds.), Informa UK Ltd: Taylor and Francis. Pg. 123-138. ISBN: 978-1-13-877842-9.

## CONFERENCE PRESENTATIONS

### Department of Chemical Engineering

**S. Mujaffar** and **C.K. Sankat**, (2015)  
*Modelling the Sun and Solar Cabinet Drying Behaviour of Salted Catfish (Arius Sp.) Slabs*.  
First Nordic Baltic Drying Conference NBDC 2015: Gdansk, Poland, June 17-20.

N.A. Ali, **G.S.H. Baccus-Taylor**, D.A. Sukha and P. Umaharan, (2015)  
*Exploiting the flavour potential of cocoa genetic groups*  
International Fine Cocoa Innovation Centre Conference and Symposium. Seeding Innovation along the Cocoa Value Chain. 23<sup>rd</sup> -24<sup>th</sup> March. Ortinola Estate, Acono, Maracas Valley, St. Joseph Trinidad.

O. Falloon, **G.S.H. Baccus-Taylor**, **S. Mujaffar**, and D.A. Minott., (2014)  
*A preliminary investigation into the quantification and isolation of starch & proteins from seeds of ackee (Blighia sapida) fruit. Harnessing Science and Technology to Create Knowledge-Based Economies and Preserve Caribbean Ecosystems*.  
Caribbean Academy of Sciences. Magdalena Grand Hotel, Scarborough, Tobago, November 21-23.

O. Falloon, **G.S.H. Baccus-Taylor**, **S. Mujaffar**, and D.A. Minott., (2015)  
*An Investigation into Quantification and isolation of starch from seeds of Ackee (Blighia sapida) fruit." Where Science Feeds Innovation*.  
Institute of Food Technologists. July 11-14. McCormick Place Chicago, IL: (Poster)

O. Falloon, **G.S.H. Baccus-Taylor**, **S. Mujaffar**, and D.A. Minott., (2015)  
*A Preliminary Investigation into Quantification and Isolation of Starch from the Seeds of Ackee (Blighia sapida) Fruit*.  
Institute of Food Technologists (IFT) 15th Annual Conference, Chicago, IL. USA, July 11-14.

D. Gilchrist, **S. Mujaffar**, W. Isaac and M. Mohammed. (2015)  
*Vacuum Freeze Dried Pumpkin (Cucurbita maxima Duch) Powder*.  
51st CFCS Annual Meeting in Suriname "Food Safety, Innovation and Quality in Green Agriculture; The Way Forward to Food Security for the Caribbean".  
Hotel Torarica, Paramaribo, Suriname, South America. July 19-24.

A. Ramroop, **S. Mujaffar** and D. Sukha. (2015)  
*Does Drying Method really matter? An Investigation into Drying Methodologies and Drying Behaviour of Cocoa Beans (Theobroma Cacao L.)*  
International Fine Cocoa Innovation Center (IFCIC) Conference and Symposium, Ortinola Estate, St. Joseph, Trinidad. 23-24 March.

**S. Mujaffar**, (2014)  
*The Application of Drying Technologies to Selected Local Agricultural Commodities*.  
Inter-American Institute for Cooperation on Agriculture (IICA) "Innovations in the Agri-food Sector" 6th Workshop, NAMDEVO Wholesale Market, Nov 18th.

O. Falloon, **G.S.H. Baccus-Taylor**, **S. Mujaffar**, and D.A. Minott., (2014)  
*A Preliminary Investigation into the Quantification and Isolation of Starch & Proteins from Seeds of Ackee (Blighia sapida) Fruit*.  
CAS Biennial Conference, Magdalena Grand Beach Resort, Scarborough, Tobago. November 21-23.

A. Ramroop and **S. Mujaffar**. (2014)  
*The Effect Temperature & Treatment on the Drying Behavior of Cocoa Beans*.  
Inter-American Institute for Cooperation on Agriculture (IICA) "Innovations in the Agri-food Sector" 6th Workshop, NAMDEVO Wholesale Market, Nov18th.

# PUBLICATIONS AND CONFERENCES

S. John and **S. Mujaffar**, (2014)

*Dehydration of Lemongrass (Fevergrass).*

Inter-American Institute for Cooperation on Agriculture (IICA)  
"Innovations in the Agri-food Sector" 6th Workshop, NAMDEVO  
Wholesale Market, Nov18th.

V. Pilipovik and **C. Riverol**, (2014)

*Fuzzy ventilation control for wood-based houses in tropical climates.*

World Timbering Conference (WCTE 2014), in Quebec, Canada,  
August 11-14.

S.C. Jones, and L.E. **Sobers**, (2014)

*Comparison of the Impact of Dip and Vertical Transmissibility on Oil Recovery and Carbon Storage Using Water Over Gas Injection in the Forest Reserve Field, Trinidad. SPE 169961.*

Trinidad and Tobago Energy Resources SPETT Conference, POS,  
Trinidad June. (Poster)

M.M. Smith and L.E. **Sobers**, (2014)

*Identification of Natural Gas Hydrates in Blocks 25a, 25b, 26 and 27 offshore Trinidad using available Well Log Data. SPE 169975-MS*

Trinidad and Tobago Energy Resources SPE Int. Conference  
held in Port of Spain, Trinidad and Tobago, 9–11 June.

**L. Sobers** and S. Lashley, (2015)

*Sustainable Development of Heavy Oil Deposits in Trinidad using CO<sub>2</sub> for Enhanced Oil Recovery,*

Association of Professional Engineers (APETT) Conference 2015,  
NESC, Pt. Lisas, Trinidad, June 25-26th.

**L. Sobers**, (2014)

*Improved and Enhanced Oil Recovery in Offshore Environments,*  
SPE Workshop California, August.

S. Samsoundar, Valadere, J., **Wilson, B.**, Moonan, K. and  
Moonan, X., (2015)

*High resolution benthic foraminiferal ecostratigraphy of the Cipero Formation, Trinidad.*

20th Caribbean Geological Conference, Port of Spain, Trinidad.

L.S. Sum, **Wilson, B.** and Moonan, X., (2015)

*Micropalaeontological Reconnaissance of the Rocky Bay Formation, Tobago.*

20th Caribbean Geological Conference, Port of Spain, Trinidad

**B. Wilson**, (2015)

*Determining percentage carrying capacity and delayed percentage-dependency lags in palaeontological time series, illustrated using benthonic foraminifera in the Cipero Formation (Catapsydrax stainforthi Zone, Lower Miocene) of Trinidad, western tropical Atlantic Ocean.*

20th Caribbean Geological Conference, Port of Spain, Trinidad.

**B. Wilson**, Vincent, H. and McLean, A. Q., (2015)

*A Microtektite Horizon in the Miocene Cruse Formation of Southern Trinidad.*

20th Caribbean Geological Conference, Port of Spain, Trinidad.

R. Rampersad, **A. Singh, S. Bahadoorsingh and C. Sharma**, (2015)

*Platform for studying online frequency response analysis of power transformers,*

IEEE Electrical Insulation Conference, Seattle, USA.

**S. Bahadoorsingh, A. Singh**, G. E. Mahadeo and **C. Sharma**, (2014)

*A Feasibility Template Assessing Renewable Energy Projects in the Caribbean,*

Renewable Energy Conference & World Exposition North  
America Orlando, USA.

Aziz, N. H., V.M. Catterson, S. M. Rowland and

**S. Bahadoorsingh**, (2014)

*Effect of Harmonics on Pulse Sequence Analysis Plots from Electrical Trees*

IEEE Conference on Electrical Insulation and Dielectric  
Phenomena, Iowa, USA.

Aziz, N. H., V.M. Catterson, S. M. Rowland and

**S. Bahadoorsingh**, (2014)

*Prognostic Modeling for Electrical Treeing in Solid Insulation using Pulse Sequence Analysis,*

IEEE Conference on Electrical Insulation and Dielectric  
Phenomena, Iowa, USA.

S. Ibrir and **C. Ramlal**, (2014)

*Iterative Learning Control schemes for a class of nonlinear systems a theoretical and real time implementation.*

12th International Conference Proceedings, Industrial  
Informatics (INDIN). Porto Alegre: IEEE.

## Department of Electrical and Computer Engineering

**Abdool, A., C. Radix and S. Rocke**, (2014)

*Exploration and Assessment of Memory Architectures or Densely-Deployed Sensor Networks.*

IEEE RSP Symposium, October.

**Abdool, A. and Akash Pooransingh**, (2014)

*An Industry-Mentored Undergraduate Software Engineering Project - work-in-progress (WIP)*

IEEE Frontiers in Education Conference (FIE) Oct.



**K.I. Mallalieu, K.I.** and Sankarsingh, C.V. (2014)  
*ICT in Small Scale Fisheries: Linking Governance, Livelihoods and Organizations.*  
Proceedings of the Sixty-Seventh Annual Gulf and Caribbean Fisheries Institute (Volume 67). Bridgetown. Barbados. November 3 – 7.

**K.I. Mallalieu,** (2015)  
*Open Data and the Caribbean Marine Environment.*  
3rd International Open Data Conference: Enabling the Data Revolution. Ottawa, Canada. May 25 - 27.

Lavariaga, J.C., Casas, E., Gomez, L. and **K.I. Mallalieu,** (2015)  
*Deployment Strategy for Secure Software Systems in Populations of Low Digital Literacy.*  
XIII LACCEI Conference. Santo Domingo, Dominican Republic, July 29-31.

**K.I. Mallalieu,** (2015)  
*Caribbean Open Data Scoping.*  
CTU 25th Anniversary ICT week, Port of Spain, Trinidad and Tobago. February 2 – 6.

**Rocke, S.,** A. Abdool and D. Ringis. (2015)  
*Energy-Reduced Non-Contiguous Spectrum Sensing for Compliance Enforcement in Dynamic Spectrum Access Environments.*  
IEEE PACRIM 2015, August.

**Rocke, S.** and A. Wyglinski. (2015)  
*Rethinking Compliance Enforcement: Investigating Random Spectrum Sampling Techniques for Temporal Occupancy Characterization.*  
IEEE WoWMoM 2015, June.

**Rocke, S., C. Radix, J.Persad** and D. Ringis. (2014)  
*Use of Argument Maps to Promote Critical Thinking in Engineering Education.*  
IEEE FIE Conference, October.

## Department of Geomatics Engineering and Land Management

**D. Davis** and Desai, I. (2014)  
*Evaluation of Low Cost Aerial Platforms*  
URISA 7th Caribbean GIS Conference, Curacao, October 26-30.

**Edwards, E.P.,** (2014)  
*An Enterprise GIS for the University of the West Indies, St. Augustine.*  
URISA's 7<sup>th</sup> Caribbean GIS Conference, Curacao, October 26-30.

**M. Sutherland, K. Miller, D. Davis,** A. Seeram and D. Singh, (2014)  
*Modelling Projections of Potential Sea Level Rise Impacts on Some Caribbean Communities: Is it Worth the Effort?*  
International Federation of Surveyors Congress, Kuala Lumpur, Malaysia.

**C. Griffith-Charles and E. Edwards,** (2014)  
*Taking the Current Cadastre to 3D, LADM Based Cadastre in Trinidad and Tobago.*  
4th International FIG 3D Cadastre Workshop. 9-11 November Dubai, United Arab Emirates.

**C. Griffith-Charles and M. Sutherland,** (2014)  
*Governance in 3D, LADM Compliant Marine Cadastres.*  
4th International FIG 3D Cadastre Workshop. 9-11 November, Dubai, United Arab Emirates.

Hutchinson, S., **M. Mycoo,** S. Sookram, **M. Sutherland** and P. Watson, (2015)  
*Water Governance in Saint Lucia and Saint Vincent and the Grenadines,*  
Annual Sir Arthur Lewis Institute of Social and Economic Studies Conference, Rodney Bay, Saint Lucia, January 14-16.

Hutchinson, S., **M. Mycoo,** S. Sookram, **M. Sutherland** and P. Watson, (2015)  
*Managing Adaptation to Climate Change Impacts on Water Resources and Human Livelihoods in Saint Lucia and Saint Vincent and the Grenadines,*  
Annual Sir Arthur Lewis Institute of Social and Economic Studies Conference, Rodney Bay, Saint Lucia, January 14-16.

Hutchinson, S., **M. Mycoo,** S. Sookram, **M. Sutherland** and P. Watson, (2015)  
*Assessing Vulnerability to Climate Change Impacts on Water Resources and Building Adaptive Capacity in Saint Lucia and Saint Vincent and the Grenadines.*  
Annual Sir Arthur Lewis Institute of Social and Economic Studies Conference, Rodney Bay, Saint Lucia, January 14-16

**A. Mohammed,** and Calvin Weekes, (2014)  
*Addressing the issues of Non-conforming development in Trinidad,*  
The Caribbean Land Conference 2014, Radisson Hotel, Trinidad Sept 29-Oct 1.

**C. Griffith-Charles, A. Mohammed** and Sunil Laloo, (2014)  
*The Potential for Use of the Social Tenure Domain Model (STDM) for Squatting in TT.*  
The Caribbean Land Conference 2014, Radisson Hotel, Trinidad, Sept 29-Oct 1.

# PUBLICATIONS AND CONFERENCES

**C. Griffith–Charles, A. Mohammed,** Sunil Laloo, and Cyprian Selebalo, (2015)

*Challenges and Outcomes of Piloting the Social Tenure Domain Model (STDM) in the eastern Caribbean,*

The World Bank Land Conference on Land and Poverty, Washington DC, March 23-27.

**A. Mohammed** and P. Polar, (2015)

*Small and Medium Enterprises as indicators of resilience to climate change in the Caribbean,*

Forum on the future of the Caribbean, UWI May 2-5.

Nanlal, C., **Miller, K., Ramlal, B.** and Wiseman R. (2014)

*A New Datum for the National Spatial Data Infrastructure of Trinidad and Tobago,*

The Caribbean Land Conference 2014, Land Settlement Agency and the Institute of Surveyors of Trinidad and Tobago. Port of Spain, Trinidad, Sept 29-Oct 1.

Nanan, D., **Miller, K.** and **Ramlal, B.** (2014)

*Building a New Hydrographic Capacity for Trinidad and Tobago,*

The Caribbean Land Conference, Land Settlement Agency and the Institute of Surveyors of Trinidad and Tobago. Port of Spain, Trinidad Sept 29 - Oct 1.

De Graff, A. and **Ramlal, B.** (2015)

*Participatory Mapping: Caribbean Small Island Developing States*

Caribbean Forum on New pathways to strengthen resilience and underpin sustainable development in the Caribbean hosted by the United Nations Development Program in collaboration with SALISES, UWI St. Augustine, Trinidad, West Indies, May.

Gay, E. and **Ramlal, B.**, (2014)

*Selecting an appropriate model for solar potential in Trinidad and Tobago using Geoinformatics,*

Caribbean Academy of Science Conference, Magdalena Grand, Tobago, November.

## Department of Mechanical and Manufacturing Engineering

**C.T. Benjamin,** (2015)

*Healthcare Facilities - Inefficient by Design?*

Ministry of Design - From Cottage Industry to State Enterprise Colloquium Proceedings. St. Augustine: Department of Creative and Festival Arts,. 45-61.

R. Young and **C. T. Benjamin.** (2015)

*The Cooperative as a solution to Manufacturing, Production and Isolation for Fashion Designers in Trinidad and Tobago and the Caribbean.*

Ministry of Design - From Cottage Industry to State Enterprise Colloquium Proceedings. St. Augustine: Department of Creative and Festival Arts. UWI,. 111-125.

**R. Birch,** (2014)

*Design and Fabrication of Banana Fibre Machine,*

Caribbean Academy of Sciences, November, Tobago.

**R. Birch,** (2015)

*Design and Field Testing of a Low-priced Cassava Harvester for Trinidad Soils,*

APETT Technical Conference, June.

**E.I. Ekwue,** (2014)

*Simulation of Irrigation – Watering Fields using CROPWAT.*

Caribbean Academy of Sciences Workshop, June 2, at UWI.

F. Ali and **B. V. Chowdary,** (2014)

*Influence of Some Process Parameters on Build Time, Material Consumption and Surface Roughness of FDM Processed Part: Inferences Based on Taguchi Design of Experiments,*

4th IAJC/ISAM Joint International Conference, Orlando, Florida, September 25-27.

F. Ali and **B. V. Chowdary,** (2014)

*Influence of Some Process Parameters on Build Time, Material Consumption and Surface Roughness of FDM Processed Part: Inferences Based on Taguchi Design of Experiments,*

4th IAJC/ISAM Joint International Conference, Orlando, Florida, September 25-27.

Benjamin, C.T. and **Pun, K.F.**, (2014)

*Positioning the T&T fashion industry within global value chains: A case study,*

The Caribbean Academy of Sciences' 2014 Biennial Conference, Tobago, November 21-23.

**Pun, K.F.**, (2014)

*Closing the gap between graduate intakes and throughputs at UWI – A throughput enhancement project,* Proceedings of the IEM3-2014 Conference, Faculty of Engineering, The University of the West Indies, Trinidad and Tobago, December.

Motilal, C.B., Sankat, C.K. and **Pun, K.F.**, (2014)

*Open innovation paradigm model in the food and beverage industry in Trinidad and Tobago,*

IEM3-2014 Conference, Faculty of Engineering, The University of the West Indies, Trinidad and Tobago, December.

**Pun, K.F.**, Charles-Smythe, D. and Ellis, R., (2014)  
*Mapping process improvement of The Office of Graduate Studies and Research at UWI: An agenda and some findings*, IEM3-2014 Conference, Faculty of Engineering, The University of the West Indies, Trinidad and Tobago, December.

Patterson, S. and **Pun, K.F.**, (2014)  
*A value management approach to sustain social development projects following discontinuity of international funding in Guyana*, IEM3-2014 Conference, Faculty of Engineering, The University of the West Indies, Trinidad and Tobago, December.

Barkoye, P. and **Pun, K.F.** (2014)  
*Development of a maintenance strategy for a distributor of water: A case study in Guyana*, IEM3-2014 Conference, Faculty of Engineering, The University of the West Indies, Trinidad and Tobago, December.

Hyatali, N. and **Pun, K.F.**, (2014)  
*A review of challenges and strategies of project management practices in project-based organisations*, IEM3-2014 Conference, Faculty of Engineering, The University of the West Indies, Trinidad and Tobago, December.

Koonj Beharry, A. and **Pun, K.F.**, (2014)  
*Boosting the competitiveness of the Caribbean manufacturing sector: A cluster initiative*, IEM3-2014 Conference, Faculty of Engineering, The University of the West Indies, Trinidad and Tobago, December.

Motilal, C.B., Sankat, C.K. and **Pun, K.F.**, (2014)  
*Innovation management in small and medium-sized enterprises: A review of recent developments and models*, IEM3-2014 Conference, Faculty of Engineering, The University of the West Indies, Trinidad and Tobago, December.

R. J. Rodriguez and **W. G. Lewis**, (2014)  
*Exploring the potential High Energy Locations and Intensities in Confined Work Spaces of Waveguide Dimensions*, 27<sup>th</sup> Annual Conference of CAD/CAM, Robotics and Factories of the Future, London, UK, 22-24 July.

A. Bahall and **W. G. Lewis**, (2014)  
*An Ergonomic Evaluation of Heat Stress in the Work Environment*, Third Industrial Engineering and Management Conference (IEM3-2014), The University of the West Indies, Trinidad and Tobago, December 5<sup>th</sup> & 6<sup>th</sup>

K. Seebaran, **W. G. Lewis** and G. King, (2014)  
*Ergonomic Design and Layout of a Distribution Control Centre*, Third Industrial Engineering and Management Conference (IEM3-2014), The University of the West Indies, Trinidad and Tobago, December 5<sup>th</sup> & 6<sup>th</sup>

Ricardo J. Rodriguez and **W. G. Lewis**, (2014)  
*A Comparison of the varying Effects on RF Propagation Characteristics in Natural and Man-made Environments*, Third Industrial Engineering and Management Conference (IEM3-2014), The University of the West Indies, Trinidad and Tobago, December 5<sup>th</sup> & 6<sup>th</sup>

**Narinesingh, P.** (2014)  
*Fluvial Geomorphology in River Maintenance. Engineering for Disaster Preparedness and Management*. APETT Technical Conference, Cara Suites, Claxton Bay, Trinidad and Tobago, 23-24<sup>th</sup> January.

## FACULTY OF FOOD & AGRICULTURE

### JOURNAL PUBLICATIONS

**Gideon Ramtahal**, Ivan Chang Yen, Isaac Bekele, Frances Bekele, Lawrence Wilson, Kamaldeo Maharaj, Lisa Harryninan (2016). Relationships between Cadmium in Tissues of Cacao Trees and Soils in Plantations of Trinidad and Tobago. *Food and Nutrition Sciences* 7(1), 37-43.

**Gideon Ramtahal**, Ivan Chang Yen, Nazeer Ahmad, **Isaac Bekele**, Frances Bekele, Kamaldeo Maharaj, Lawrence Wilson, Lisa Harryninan (2015). Prediction of Soil Cadmium Bioavailability to Cacao (*Theobroma cacao* L.) using Single-Step Extraction Procedures. *Communications in Soil Science and Plant Analysis* 46 (20), 2585-2594.

**G Ramtahal**, I Chang Yen, **I Bekele**, F Bekele, L Wilson, K Maharaj, B Sukha (2015). Implications of distribution of cadmium between the nibs and testae of cocoa beans on its marketability and food safety assessment. *Quality Assurance and Safety of Crops & Foods*, 1-6.

V De Gannes, **G Eudoxie**, **I Bekele**, WJ Hickey (2015). Relations of microbiome characteristics to edaphic properties of tropical soils from Trinidad. *Frontiers in microbiology* 6, 1-13.

J Roberts, I Chang-Yen, F Bekele, **I Bekele**, L Harryninan (2014). Determination of Ochratoxin A in Cocoa Beans Using Immunoaffinity Column Cleanup with High-Performance Liquid Chromatography. *Journal of AOAC International* 97 (3), 884-88.

Chaney CG St. Martin, **Isaac Bekele**, **Gaius D Eudoxie**, Dexter Bristol, Richard Al Brathwaite, Kenia-Rosa Campo (2014). Modelling response patterns of physico-chemical indicators during high-rate composting of green waste for suppression of *Pythium ultimum*. *Environmental Technology* 35 (5), 590-601

# PUBLICATIONS AND CONFERENCES

**G Ramtahal**, IC Yen, **I Bekele**, F Bekele, L Wilson, B Sukha, K Maharaj (2014). Cost-effective Method of Analysis for the Determination of Cadmium, Copper, Nickel and Zinc in Cocoa Beans and Chocolates. *Journal of Food Research* 4 (1), 193 , 2014-199

GG Renaldo Belfon, **Isaac Bekele**, **Gaius Eudoxie**, Paul Voroney (2014). Sequestering carbon and improving soil fertility; Validation of an improved method for estimating CO<sub>2</sub> flux. *Geoderma*, 323–328

Anderson, T and Badrie, N. (2015). *Sensory acceptability of novel sorrel/roselle (Hibiscus sabdariffa) wines*. World Academy of Science, Engineering and Technology/International Journal of Biological, Biomolecular, Agricultural, Food and Biotechnological Engineering Vol:9, No:7: 754- 759

Hosein, R., **Badrie, N.** and Sanchez, R. (2015). Physicochemical effects and sensory characteristics of pomerac (Malay Apple; Syzygium malaccense) wine. Effects of varying pectolase concentrations. *International Journal of Natural Sciences Research*. 3(3): 48-54.

Franklyn, S., **Badrie, N.** and Singh, M. (2015). Vendor hygienic practices and consumer perception of food safety during the Carnival festival on the island of Tobago. *International Journal of Consumer Studies*, 39 (Issue 2), 145-154.

**Badrie, N.**, Bekele, F., Sikora, E. and Sikora, M.(2014). Cocoa agronomy, quality, nutritional and health aspects. *Critical Reviews in Food Science and Nutrition*. 55:5, 620-659. To link to this article: <http://dx.doi.org/10.1080/10408398.2012.669428>.

Turnbull-Fortune, S. and **Badrie, N.** (2014). Practice, behaviour, knowledge and awareness of food safety among secondary and tertiary level students in Trinidad, West Indies. *Food and Nutrition Sciences*. 5 (15): 1463-1481.

**Ganpat, W.**, **Badrie, N.**, Walter, S., Roberts, L. Nandalal, J., and Smith, N. (2014). Compliance with Good Agricultural Practices (GAPs) by state-registered and non-registered vegetable farmers in Trinidad, West Indies. *Food Security-The Science, Sociology and Economics of Food Production and Access to Food*. Springer. 5 (6): 3-11.

Lakhan, C., **Badrie, N.**, Ramsubhag, A., Sundarneedi, K., Indar, L. (2014). *Burden and impact of acute gastroenteritis and foodborne pathogens in Trinidad and Tobago*. *Journal of Health and Population Nutrition*. 31 (4): Suppl 1: S30-S42. <http://www.ncbi.nlm.nih.gov/pubmed/24992810>

Balfour, S., **Badrie, N.**, Chang Yen, I. and Chatergoon, L. (2014). Microbiological, physical and sensory quality of marine shrimp (*Peneaus spp.*) Sold by Vendors in Trinidad, West Indies. *International Food Research Journal*. 21 (4): 1279-1288

Ezra S. Bartholomew, Reshma Baah, **Richard A. I. Brathwaite** and **Wendy-Ann P. Isaac** (2014). Botanical control of *meloidogyne incognita* using sesame and neem extracts *Tropical Agriculture* (Trinidad) 91 (3): 196-201.

Allison Boney, Christine Robley-Job, **Wendy-Ann P. Isaac** and **Wayne Ganpat** (2014). Local crop protection practices in Trinidad and Tobago *Tropical Agriculture* (Trinidad) 90 (1)

**Mohammed, M.** Wilson L.A. and P.I. Gomes P.I. (2014). Occurrence, manifestation and alleviation of chilling injury of hot peppers (*Capsicum chinense* L.). *Acta Horticulturae* 1016: 89-94.

**Mohammed, M.** (2014). Quality indices of ripe Spanish tamarind (*Vangueria edulis* Vahl) fruits. *Acta Horticulturae* 1016: 131-134.

John, A., Sukha, D., Wickham, L.D. and **Mohammed, M.** 2014. Quality changes of cocoa liqueur made from infused beans with or without spices and pulp. *Acta Horticulturae* 1047: 331-335.

**Ramnarine, R.**, Harris, W. G. and Grunwald, S. 2015. Predicting the distribution of naturally-occurring phosphatic soils across a county-wide landscape, Florida, USA. *Communications in Soil Science and Plant Analysis*. 46: 1391-1410.

**Ramnarine, R.**, Voroney, R. P, Wagner-Riddle, C. and Dunfield, K. E. 2015. Conventional and no-tillage effects on the distribution of crop residues and light fraction organic matter. *Soil Science Society of America Journal*. 79:74–80.

**Roberts-Nkrumah, Laura B.** 2014. A review of the potential of breadfruit cultivar 'Ma'afala' for commercial production in Trinidad and Tobago. *Tropical Agriculture* (Trinidad) 91 (4), 284

**Stone, R.J.** 2014. Homogeneity assessment of Trinidad and Tobago's surface air temperature in Trinidad and Tobago. *West Indian Journal of Engineering*, Vol. 36, No. 2, pp. 29-33.

De Caires, S.A., **Wuddivira, M.N.**, and **I. Bekele**. 2014. Assessing the temporal stability of spatial patterns of soil apparent electrical conductivity using Geophysics. *International Agrophysics*, 28 (4).

Atwell, M.A., **Wuddivira, M.N.**, and De Caires, S.A. 2014. Seasonal effects on the correlation between electromagnetic-induction signals and the properties of two Trinidad soils. *Tropical Agriculture*, 91 (3):187-196.

De Caires, S.A., **Wuddivira, M.N.**, and **I. Bekele**. 2014. Spatial analysis for management zone delineation in humid tropic cocoa plantation. *Precision Agriculture*, 15 (4):1-19. doi 10.1007/s11119-014-9366-5 (Impact Factor 1.728).

Hughes, M.P., **Wuddivira, M.N.**, Mlambo, V., Jennings, P.G.A., and Lallo, C.H.O. 2014. Non-destructive foliar chlorophyll measurement has the potential to predict crude protein concentration and in vitro ruminal organic matter digestibility in *Bracharia decumbens* herbage. *Animal Feed Science and Technology*, 195:14–27. doi: 10.1016/j.anifeeds.2014.06.011 (Impact Factor 2.156).

**Bawa Sa'eed**, Baldeo Siann (2015): Magnitude of macro- and micronutrient deficiency in pediatric oncology patients aged 2-18 years. *Hygeia Public health* 50(2): 357-361.

Ezebilo, E., **E. Boman**, M., Mattsson, L., Lindhagen, A. & Mbongo, W. (2015). Preferences and willingness to pay for close to home nature for outdoor recreation in Sweden. *Journal of Environmental Planning and Management* 58(2), pp. 283-296. (<http://www.tandfonline.com/doi/abs/10.1080/09640568.2013.854196>)

Filyushkina, A., Strange, N., Löf, M., Ezebilo, E., **Boman, E.** (2015). Non-market forest ecosystem services and decision support in Nordic countries. *Scandinavian Journal of Forest Research*. Published online. (<http://www.tandfonline.com/doi/full/10.1080/02827581.2015.1079643#abstract>)

Mc Donald, Andrea, **Francis-Granderson**, I and Charmaine Spencer-Stewart.(2015) Channel to Death: High School Students Perception about Diabetes in Trinidad. *International Journal of Health Sciences* June 2015, Vol. 3, No. 2, pp. 1-6.

Baksh, K., **W. Ganpat**, & L.K. Narine. 2015. Farmers Knowledge of Occupational health and Safety Hazards in Trinidad, West Indies and Implications for the Agriculture sector. *Journal of Agricultural Extension and Rural development*. Vol. 7 (6). Pp 221-228. DOI:10.5897/JAERD14.0672 9

Baksh, K., **W. Ganpat**, & L.K. Narine. 2015. Occupational Health & Safety Issues among Vegetable Farmers in Trinidad and the Implications for Extension. *Journal of Agricultural Safety & Health*. Vol. 21 (3) Pp 159-171. DOI: 10.13031/jash.21.10149

Kristen Lowitt; Gordon M Hickey; **Wayne Ganpat**; Leroy Phillip. 2015. Linking communities of practice with value chain development in smallholder farming systems. *World Development*. Vol. 74. Pp. 363-373. DOI: 10.1016/j.worlddev.2015.05.014

Narine, L.K., A. Iton, **W. Ganpat**, & S. Moonsammy. (2015) Consumers In Trinidad and Tobago: Value Seekers Or Quality Seekers? The Case of Fresh Tomato. *Journal of Agriculture and Sustainability*. 7(2), 207-226.

Narine L, **W Ganpat** and G Seepersad. 2015. Demand for Organic Produce: Trinidadian Consumers'Willingness to Pay for Organic Tomatoes. *Journal of Agribusiness in Developing and Emerging Economies*. Vol. 5 (1). DOI:10.1108/JADEE-04-2013-0015

Roberts, T. G., **Ganpat, W. G.**, Narine, L., Heinert, S. B., & Rodriguez, M. T. (2015). Agricultural producers' knowledge of food security issues in Trinidad: Implications for extension programming. *Journal of International Agricultural and Extension Education*. Vol 22 (1). Pp. 7-20. DOI:10.5191/jiaee.2015.22101

Marcus N. A. Ramdwar, Valerie A. Stoute and **Wayne G. Ganpat** (2015). Extension Officers' Perceptions of Farmers' Groups in Trinidad, West Indies and Implications for Extension. *Journal of International Agricultural and Extension Education*. Vol 22 (1). Pp. 35-48. DOI:10.5191/jiaee.2015.22103

Scott M. R. Mahadeo, Sharon D. Hutchinson and **Hazel J. Patterson-Andrews** (2015) De- agriculturalisation in an Energy-Intensive Economy: Contemporary Evidence from Output and Employment Dynamics in a multi-sector model of Trinidad and Tobago. *Tropical Agriculture* 2015 Volume 92 No.4

**Patterson-Andrews, H.** and **C. Pemberton** (2014) "Factors Affecting Profitability of Small Scale Farming in Southern Trinidad and Tobago". *International Journal of Food and Agricultural Economics* Vol. 2 Issue 3 July 2014. 10

**Webb, M. C.** & Aguilar, J. (2015). Nutritional knowledge, attitude, and practice of diabetic clients attending an out-patient clinic in Trinidad. *West Indian Medical Journal*. First online DOI: 10.7727/wimj.2014.287.

Leung Chee, C. S., Singh, A., Persad, R., and **Darsan, J.** The influence of tidal state on coastal erosion in a tropical micro-tidal environment - A case study of Columbus Bay, Trinidad. *Global Journal of Science Frontier Research*. 14: 5 Version 1.0

**Webb, M. C.** & Morancie, A. (2014). An assessment of food safety knowledge of foodservice employees at a university campus by education level, experience, and food safety training. *Food Control*, 50 (2015) 259-264. DOI: 10.1016/j.foodcont.2014.09.002

**Wilson, M.D.**, Durand, M., Jung, H.C. and Alsdorf, D.A., 2014. Swath altimetry measurements of the mainstem Amazon River: measurement errors and hydraulic implications, *Hydrology and Earth Systems Science Discussions*, 11, 9399-9434, doi:10.5194/hessd-11-9399-2014

# PUBLICATIONS AND CONFERENCES

**Darsan, J.** and Alexis, C. (2014). The impact of makeshift sandbag groyne on coastal geomorphology: A Case Study at Columbus Bay, Trinidad. *Environment and Natural Resources Research* 4 (1): 94-116. (DOI: 10.5539/enrr.v4n1p94).

Leung Chee, C. S., Singh, A., Persad, R., and **Darsan, J.** (2014). The influence of tidal state on coastal erosion in a tropical micro-tidal environment - A case study of Columbus Bay, Trinidad. *Global Journal of Science Frontier Research*. 14 (5): 15-31. [https://globaljournals.org/GJSFR\\_Volume14/2-The-Influence-of-Tidal-Currents.pdf](https://globaljournals.org/GJSFR_Volume14/2-The-Influence-of-Tidal-Currents.pdf)

**Darsan, J.** (2014) Digital Mapping of the Coastline Evolution of Cocos Bay (Manzanilla), Trinidad. *Caribbean Journal of Science* 48 (2-3): 103-116.

## Department of Agricultural Economics and Extension

Myszkowska-Rygiak J, Gajewska D, Harton A, **Bawa S** (2014): The intake of lycopene, lutein and zeaxanthin by a group of young Polish women. *Polish Journal of Bromatology and Toxicological Chemistry* 47: 631-636

**Bawa S** (2014): Health benefits of consuming citrus fruit: Role in the prevention and management of chronic non-communicable diseases. *Polish Journal of Food Safety and Hygiene* No. 2/2014, pp. 48-51.

**Bawa S** (2014): Components of citrus fruits and their potential for prevention and management of chronic non-communicable diseases. *Newsletter of the Faculty of Food and Agriculture, UWI* Volume 2, Issue 3, pp. 12-13

**Bawa S** (2014): The significance of fluid ingestion in improving performance in physically active people. *Polish Journal of Food Safety and Hygiene* No. 2/2014, pp. 23-31.

**Bawa S, Baldeo S** (2014): The Magnitude of macro- and micronutrient deficiencies in paediatric oncology patients aged 2-18 years. *West Indian Medical Journal* 63 (Suppl 2): 57

Mattsson L, **Boman M, Ezebilo EE** (2014): More or less moose: how is the hunting value affected? *Scandinavian Journal of Forest Research* 29(2). (<http://www.tandfonline.com/doi/abs/10.1080/02827581.2014.881545>)

**Ganpat W, Badrie N, Walter S, Roberts L, Nandlal J, Smith N** (2014): Compliance with Good Agricultural Practices (GAPs) by state-registered and non-registered vegetable farmers in Trinidad, West Indies. *Food Security: The Science, Sociology and Economics of Food Production and Access to Food*. Volume 5. No 6 DOI: 10.1007/s12571-013-0322-4.

Strong R, **Ganpat W, Harder A, Linder L** (2014): Technology Preferences of Caribbean Extension Officers. *Journal of Agricultural Education and Extension*. Volume 20. No. 5. Pp. 485-495. DOI:10.1080/1389224X.2014.927373

Narine L, **Ganpat W, Seepersad G** (2014): Consumers' Willingness to Pay and the Market Potential for Greenhouse-Hydroponic Tomatoes in Trinidad, W.I. *Tropical Agriculture*. Vol. 91 (4).

Ramdwar MNA, Stoute VA, **Ganpat WA** (2014): A Focus Group approach to exploration of the dynamics of farmers' groups in Trinidad, West Indies. *Journal of Agricultural Extension and Rural Development*. Vol. 6 (9) Pp 369-377. DOI 10.5897/JAERD 2014.0602

Narine L, **Ganpat W, Seepersad G** (2014): "Demand for Organic Produce: Trinidadian Consumers' Willingness to Pay for Organic Tomatoes". In *Journal of Agribusiness in Developing and Emerging Economies*. Vol. 4 (3).

Ragbir S, **Ganpat W, Narine LK** (2014): Innovativeness and success among vegetable farmers in Trinidad, West Indies. *Tropical Agriculture*. Vol. 91. No. 1 January 2014.

Webster N, **Ganpat W** (2014): St. Vincent Youth and Careers in Agriculture. *Journal of Agricultural Education and Extension*. 20;1 pp 49-64. DOI: 10.1080/1389224x.2013.775952

**Ganpat W.** (2014): A Model for Post harvest Extension in the Caribbean. *Acta Horticulturae*. No. 1047. Pp 181-188.

**Patterson-Andrews H, Pemberton C** (2014), Factors Affecting Profitability Of Small Scale Farming In Southern Trinidad and Tobago. *International Journal of Food and Agricultural Economics (IJFAEC)* Vol. 2 Issue 3 July 2014.

**Nichols SD, Francis MP, Dalrymple N** (2014): Sustainability of a Curriculum-based Intervention on Dietary Behaviours and Physical Activity among Primary School Children in Trinidad and Tobago. *West Indian Med J*. 2014 Apr 8;63(1):73-82. doi: 10.7727/wimj.2014.011.

Ramcharitar-Bourne A, **Nichols S, Badrie N** (2014): Correlates of adiposity in a Caribbean pre-school population. *Public Health Nutr*. 2014 Aug;17(8):1796-804. doi: 10.1017/S1368980013001900. Epub 2013 Jul 18.

**Webb MC, Morancie, A** (2014): An assessment of food safety knowledge of foodservice employees at a university campus by education level, experience, and food safety training. *Food Control*, 50 (2015) 259-264. DOI: 10.1016/j.foodcont.2014.09.002.

**Webb, MC,** Beckford SE (2014): Nutritional knowledge and attitudes of adolescent swimmers in Trinidad and Tobago. *Journal of Nutrition and Metabolism*. Online 11 February 2014. dx.doi.org/10.1155/2014/506434. 7 pages.

## Department of Food Production

**Stone, R.J.** (2014). Homogeneity assessment of Trinidad and Tobago's surface air temperature in Trinidad and Tobago. *West Indian Journal of Engineering*, Vol. 36, No. 2, pp. 29-33.

Ekwue, E.I., **Stone, R.J.**, Peters, E.J., and Rampersad, S. (2015). Thermal conductivities of some agricultural soils in Trinidad as affected by density, water and peat content. *West Indian Journal of Engineering* 38 (2): 61-69.

Franklyn, S. and **Badrie, N.** and Marsha Singh, M. (2015). Vendor hygienic practices and consumer perception of food safety during the Carnival festival on the island of Tobago. *International Journal of Consumer Studies*, 39 (Issue 2), 145-154.

Hosein, R., **Badrie, N.** and Sanchez, R. (2015). Physicochemical effects and sensory characteristics of pomereac (Malay Apple; *Syzygium malaccense*) wine. Effects of varying pectolase concentrations. *International Journal of Natural Sciences Research*. 3(3): 48-54.

**Badrie, N.**, Bekele, F., Sikora, E. and Sikora, M. (2014). Cocoa agronomy, quality, nutritional and health aspects. *Critical Reviews in Food Science and Nutrition*. 55:5, 620-659. <http://dx.doi.org/10.1080/10408398.2012.669428>.

De Gannes, V., **Eudoxie, G.**, and Hickey, W. J. (2014). Impacts of edaphic factors on communities of ammonia-oxidizing archaea, ammonia-oxidizing bacteria and nitrification in tropical soils. *Plus One*, 9(2), e89568.

De Gannes, V., **Eudoxie, G.**, Bekele, I., and Hickey, W. J. (2015). Relations of microbiome characteristics to edaphic properties of tropical soils from Trinidad. *Frontiers in Microbiology*, 6: 1045.

Springer, R., **Eudoxie, G.** and Gouveia, G. (2014). Comparative evaluation of common savannahgrass on a range of soils subjected to different stresses. II: rootzone physical condition. *Agronomy*, 4(1), 124-143.

Springer, R., **Eudoxie, G.** and Gouveia, G. (2014). Comparative evaluation of common savannahgrass on a range of soils subjected to different stresses. I Productivity and Quality. *Agronomy*, 4(2), 202-216.

Roopnarine, R., **Eudoxie, G.** and Gay, D. (2014). Prediction of soil strength using the adsorption water characteristic curve. *Caribbean Journal of Earth Sciences*, 47, 1-8.

Belfon, R. Bekele, I. **Eudoxie, G.** Vorony, P. and Gouveia, G. (2014). Sequestering carbon and improving soil fertility; Validation of an improved method for estimating CO2 flux. *Geoderma*, 235, 323-328.

Springer, R., **G. Eudoxie** and G. Gouveia (2014) Comparative Evaluation of Common Savannah Grass on a Range of Soils Subjected to Different Stresses I: Productivity and Quality. *Agron. 4*, 202-216.

Springer, R., **G. Eudoxie** and G. Gouveia (2014) Comparative Evaluation of Common Savannah Grass on a Range of Soils Subjected to Different Stresses II: Root Zone Physical Condition. *Agron. 4*, 124-143.

Belfon, R., **I. Bekele, G. Eudoxie,** P. Voroney and G. Gouveia (2014) Sequestering carbon and improving soil fertility using organic amendments - II. Validation of an improved method for estimating CO2 flux. *Geoderma* 235-236:323-328.

De Caires, S.A., **Wuddivira, M.N.**, and **I. Bekele.** (2014). Assessing the temporal stability of spatial patterns of soil apparent electrical conductivity using geophysics. *International Agrophysics*, 28 (4): 423-433. (Impact factor 1.167).

Atwell, M.A., **Wuddivira, M.N.**, and De Caires, S.A. (2014). Seasonal effects on the correlation between electromagnetic-induction signals and the properties of two Trinidad soils. *Tropical Agriculture*, 91 (3):187-196.

De Caires, S.A., **Wuddivira, M.N.**, and I. Bekele. (2014). Spatial analysis for management zone delineation in humid tropic cocoa plantation. *Precision Agriculture*, 15 (4):1-19. Doi 10.1007/s11119-014-9366-5. (Impact Factor 1.728).

Hughes, M.P., **Wuddivira, M.N.**, Mlambo, V., Jennings, P.G.A., and Lallo, C.H.O. (2014). Non-destructive foliar chlorophyll measurement has the potential to predict crude protein concentration and in vitro ruminal organic matter digestibility in *Bracharia decumbens* herbage. *Animal Feed Science and Technology*, 195:14-27. doi:10.1016/j.anifeedsci.2014.06.011. (Impact Factor 2.156).

Belfon, R., **Wuddivira, M.N.** and Renwick, S. (2014). Navigating through the pressures of publishing in an era of predatory journals. *FFA News*, 3 (1): 8-9.

# PUBLICATIONS AND CONFERENCES

**Ramnarine, R.**, Harris, W. G. and Grunwald, S. (2015). Predicting the distribution of naturally-occurring phosphatic soils across a county-wide landscape, Florida, USA. *Communications in Soil Science and Plant Analysis*. 46: 1391-1410.

**Ramnarine, R.**, Voroney, R. P, Wagner-Riddle, C. and Dunfield, K. E. (2015). Conventional and no-tillage effects on the distribution of crop residues and light fraction organic matter. *Soil Science Society of America Journal*. 79:74–80.

John, A. Sukha, D. Wickham, L.D. and **Mohammed, M.** 2014. Quality changes of cocoa liqueur made from infused beans with or without spices and pulp. *Acta Horticulturae* 1047: 331-335.

**Mohammed, M.** and Craig, K. 2015. Postharvest loss management and storage need along the cassava value chain. FAO Regional Conference on Cassava in the Caribbean and Latin America. ISBN 978-92-5-108750-3, 36-43.

**Roberts-Nkrumah, Laura B.** 2014. A review of the potential of breadfruit cultivar 'Ma'afala' for commercial production in Trinidad and Tobago. *Tropical Agriculture (Trinidad)* 91 (4), 284.

Ezra S. Bartholomew, Reshma Baah, Richard A. I. Brathwaite and **Wendy-Ann P. Isaac** (2014). Botanical control of *meloidogyne incognita* using sesame and neem extracts *Tropical Agriculture (Trinidad)* 91 (3): 196-201.

Allison Boney, Christine Robley-Job, **Wendy-Ann P. Isaac** and Wayne Ganpat (2014). Local crop protection practices in Trinidad and Tobago *Tropical Agriculture (Trinidad)* 90 (1)

## Department of Geography

**Wilson, M.D.**, Durand, M., Jung, H.C. and Alsdorf, D.A., (2014) Swath altimetry measurements of the mainstem Amazon River: measurement errors and hydraulic implications, *Hydrology and Earth Systems Science Discussions*, 11, 9399-9434, doi:10.5194/hessd-11-9399-2014

**Darsan, J.** and Alexis, C. (2014). The impact of makeshift sandbag groyne on coastal geomorphology: A Case Study at Columbus Bay, Trinidad. *Environment and Natural Resources Research* 4 (1): 94-116. (DOI: 10.5539/enrr.v4n1p94).

Leung Chee, C. S., Singh, A., Persad, R., and **Darsan, J.** (2014). The influence of tidal state on coastal erosion in a tropical micro-tidal environment - A case study of Columbus Bay, Trinidad. *Global Journal of Science Frontier Research*. 14 (5): 15-31. [https://globaljournals.org/GJSFR\\_Volume14/2-The-Influence-of-Tidal-Currents.pdf](https://globaljournals.org/GJSFR_Volume14/2-The-Influence-of-Tidal-Currents.pdf)

**Darsan, J.** (2014) Digital Mapping of the Coastline Evolution of Cocos Bay (Manzanilla), Trinidad. *Caribbean Journal of Science*.48 (2-3): 103-116.

## JOURNAL ABSTRACTS

### Department of Food Production

De Caires, S.A., **M.N. Wuddivira** and **I. Bekele** (2014). Assessing the temporal stability of spatial patterns of soil apparent electrical conductivity using Geophysics. *International Agrophysics*, 28 (4).

Atwell, M.A., **M.N. Wuddivira** and S. A. De Caires, (2014). Seasonal effects on the correlation between electromagnetic-induction signals and the properties of two Trinidad soils. *Tropical Agriculture*, 91 (3):187-196.

De Caires, S.A., **Wuddivira, M.N.**, and **I. Bekele** (2014). Spatial analysis for management zone delineation in humid tropic cocoa plantation. *Precision Agriculture*, 15 (4):1-19. doi 10.1007/s11119-014-9366-5 (Impact Factor 1.728).

Hughes, M.P., **Wuddivira, M.N.**, V. Mlambo, P.G.A. Jennings, and C.H.O. Lallo, (2014). Non-destructive foliar chlorophyll measurement has the potential to predict crude protein concentration and in vitro ruminal organic matter digestibility in *Bracharia decumbens* herbage. *Animal Feed Science and Technology*, 195:14–27. doi: 10.1016/j.anifeedsci.2014.06.011 (Impact Factor 2.156).

## BOOKS & BOOK CHAPTERS

Ganpat, W. G and W I Isaac. (Editors) (2015). *Sustainable Food Production Practices in the Caribbean*. Volume 2. (12 chapter). Randle. Jamaica and New York. March 2015.

Ganpat, W. G and W I Isaac. (Editors) (2015). *Impact of Climate Change on Food Security on Small Island Developing States*. (12 chapters). IGI Global Publishers, Pennsylvania, USA.

Kissoon, P (2015). *Intersections of Displacement: Refugees' Experiences of Home and Homelessness*, Newcastle-upon-Tyne: Cambridge Scholars Publishing.



## Department of Food Production

**Eudoxie, G.** and M. Wuddivira. (2014). Soil, water and Agricultural Adaptations. **In:** Ganpat, W. and Isaac, W.A.P. (Eds.), *Impacts of Climate Change on Food Security in Small Island Developing States*. IGI Global, Hershey, PA. USA. pp. 255-279.

Wuddivira, M. N., Atwell, M. A. and **Eudoxie, G. D.** 2015. Sustainable Water Management Practices for Food Production in the Caribbean. **In:** *W.A.P. Sustainable Food Production in the Caribbean II*. Ganpat, W. and Isaac, eds. Kingston, Jamaica: Ian Randle Publishers Ltd. pp. 169-209.

**Ramnarine, R.** and Dipchansingh, D. 2015. Agroforestry Systems and Practices in the Caribbean. **In:** *Sustainable Food Production Practices in the Caribbean*. W. Ganpat and W. Isaac, eds. Volume 2. Ian Randle Publishers, Kingston, Jamaica. Pp. 353-379 ISBN 978-976-637-889-9.

Wuddivira, M.N., Atwell, M., and Eudoxie, G.D. 2014. Sustainable water management practices for the Caribbean. **In:** *Sustainable Food Production Practices in the Caribbean*, edited by Wayne G. Ganpat and Wendy-Ann P. Isaac. Jamaica: Ian Randle Publishers.

Eudoxie, G.D., and Wuddivira, M.N. 2014. Soil, water and agricultural adaptation. **In:** *Impacts of Climate Change on Food Security in Small Island Developing States*, edited by Wayne G. Ganpat and Wendy-Ann P. Isaac. IGI Global. 469 pages.

**Mohammed, M.** (2015) Postharvest logistics management: Case study on Mango. **In:** *Sustainable Food Production Practices* (Eds. W. Ganpat and W. Isaac), Chapter 8, Vol. 2: 243-262

## Department of Agricultural Economics and Extension

**Granderson I, Pemberton C** (2014). Factors Influencing Housing Status Among Low Income Elderly in Trinidad. **In:** *Ageing in the Caribbean*. Joan Rawlins and Nicole Alea. Lifegate Publishing, USA.

**Granderson I**, Edwards A, Pierre M (2012). Sustainable Nutrition Practices for the Caribbean. **In:** *Sustainable Food Production Practices in the Caribbean*. Edited by Wayne Ganpat and Wendy-Ann P. Isaac. Ian Randle Publishers. Jamaica/Miami.

## CONFERENCE PRESENTATIONS

### Department of Agricultural Economics and Extension

Narine LK, **Boman M**, Ali AD, Moonsammy S (2014) *An evaluation of Hicksian sustainability in a rapidly developing economy: Is Trinidad and Tobago's economic growth sustainable?* Fifth World Congress of Environmental and Resource Economists 28 June - 2 July, Istanbul, Turkey. (<http://www.webmeets.com/wcere/2014/prog/viewpaper.asp?pid=1366>)

Bakhtiari F, Bredahl Jacobsen J, Jellesmark Thorsen B, Hedemark Lundhede T, Strange N, **Boman M**, Gibbons J (2014) *Valuation of biodiversity protection across borders: Limits to the public good?* Fifth World Congress of Environmental and Resource Economists 28 June - 2 July, Istanbul, Turkey. (<http://www.webmeets.com/wcere/2014/prog/viewpaper.asp?pid=1266>)

**Ganpat W** (2014) *Farmers' satisfaction with the Extension Services in Trinidad*. AIAEE conference. April 28<sup>th</sup> –may 1<sup>st</sup>. 2014 Miami, Florida, USA. doi: 10.5191/jiaee.2014.21207.

Phillip L, **Granderson I**, Isaac W, Thompson-Colon T, Saintville A, Hickey S, Gordon H, Borucki S, Hosein A, Lazlo S, Gray-Donald K, Madramootoo C (2014). *Improving Food and Nutrition Security in the Caribbean: Linkages among Agriculture, Health and Social Sciences*. Global Food and Nutrition Security Conference, Linking Agriculture, Nutrition and Health. At the University of Saskatchewan, Canada. February 6 - 8, 2014

**Granderson I** (2014) *Does Gender Play a Role: Determinant of Food Security Among Low Income Household Families in North East Trinidad* 2014 Dialogue on International Food Security, University of Alberta, Canada. February, 2014.

**Francis-Granderson I**, Isaac W (2014) *Building Sustainable linkages between Agriculture and Health*. NCD Child Conference 2014, Hyatt Regency, Port of Spain, Trinidad and Tobago. 20 - 21 March.

**Seepersad G**, Felix N, Evans E, Iton A (2014) *Consumers' Preference of Local versus Imported Juice Beverages*. AAEA Committee on the Status of Blacks in Agricultural Economics (COSBAE) Symposium

# PUBLICATIONS AND CONFERENCES

## Department of Food Production

Ancel Balfour, **Wendy Ann Isaac**, Gaius Eudoxie, Leevun Solomon, Nakisha Mark and Majeed Mohammed (2014). *Evaluation of Cultivation Guidelines on Productivity of 3 Pumpkin Cultivars*.

Proceedings of the 50<sup>th</sup> Annual Meeting, Caribbean Food Crop Society on Enhancing Family Farms through Sustainable Energy, Research and Technology Sugar Bay Resort & Spa, St. Thomas, U.S. Virgin Islands July 6<sup>th</sup> – 11<sup>th</sup>

**Mohammed, M.** and Craig, K. (2014).

*FAO study on postharvest losses of cassava, tomato and mango in Trinidad and Tobago, Guyana and St. Lucia*. FAO Regional Forum to raise Awareness on the Reduction of Food Losses along the Food Chain in the CARICOM Sub-Region, in House, September 25-26<sup>th</sup> 2014, Barbados 20 pp.

Craig, K and **Mohammed, M.** (2014).

*Economic analysis of postharvest losses of cassava, tomato and mango in Trinidad and Tobago, Guyana and St. Lucia*. FAO Regional Forum to raise Awareness on the Reduction of Food Losses along the Food Chain in the CARICOM Sub-Region, September 25-26<sup>th</sup> 2014, 18 pp.

**Mohammed, M.** and Craig, K. (2014).

*Postharvest losses and food waste in the Caribbean*. Regional Expert Consultation on Food losses and Waste in the Caribbean and Latin America, October 8-10, 2014, Santiago, Chile, 12 pp.

**Roberts-Nkrumah, L.** and Colin Leakey (2015)

*The Introduction of the Breadfruit (Artocarpus altilis) to the Caribbean – the Role of Sir Joseph Banks* International Breadfruit Conference, Port of Spain, Trinidad and Tobago, July 5-10.

**Roberts-Nkrumah, L.**, Judy Rouse-Miller, Rita Pemberton and Julian Duncan (2015)

*A historical perspective on the role of plant propagation in the distribution, development and commercialisation of breadfruit*. International Breadfruit Conference, Port of Spain, Trinidad and Tobago, July 5-10

**Roberts-Nkrumah, L.** and Oral O. Daley, Laura B. Roberts-Nkrumah, and Angela T. Alleyne. (2015)

*Colour and texture variation among breadfruit cultivars (Artocarpus altilis)*. International Breadfruit Conference, Port of Spain, Trinidad and Tobago, July 5-10.

**Roberts-Nkrumah, L.** and Travis Paul (2015)

*Utilizing analytics and breadfruit germplasm data to create and enhance business opportunities in the Caribbean*. International Breadfruit Conference, Port of Spain, Trinidad and Tobago, July 5-10.

**Roberts-Nkrumah, L.**, Frankie K. Solomon Jr., and Judy A. Rouse-Miller (2015)

*Ex vitro grafting of breadfruit microcuttings on chataigne rootstock* International Breadfruit Conference, Port of Spain, Trinidad and Tobago, July 5-10.

**Roberts-Nkrumah, L.** (2015)

*Evaluation of regrowth responses of breadfruit cultivars 'Yellow' and 'Ma'afala' to different levels of pruning*. International Breadfruit Conference, Port of Spain, Trinidad and Tobago, July 5-10.

**Roberts-Nkrumah, L.** and Michael C. Gloster (2015)

*Effects of planting material on early growth and development responses of breadfruit (Artocarpus altilis) cultivar 'Yellow' in studies at two locations on Trinidad* International Breadfruit Conference, Port of Spain, Trinidad and Tobago, July 5-10.

**Roberts-Nkrumah, L.**, Gem Thomas and Mark Wuddivira (2015)

*A preliminary evaluation of growth and physiological responses of breadfruit cultivars to waterlogging*. International Breadfruit Conference, Port of Spain, Trinidad and Tobago, July 5-10.

**Roberts-Nkrumah, L.**, Jacklyn Broomes and Neela Badrie (2015)

*Characterisation of starch from selected breadfruit (Artocarpus altilis) cultivars at two stages of maturity*. International Breadfruit Conference, Port of Spain, Trinidad and Tobago, July 5-10

**Badrie, N.** and Singh, M. (2015)

*Strengthening capacity for food science and technology, teaching, learning and research, FSTINAC. To add value to indigenous foods for food security in Africa and the Caribbean*, International Breadfruit Conference Exhibition, The University of the West Indies, St. Augustine, Trinidad and Tobago, 10<sup>th</sup> July.

**Badrie, N.**, Aquilal, J., Alphonso, G., Singh, R. and Charles, P. (2014)

*Consumption and purchasing patterns of dark chocolates versus brown (milk) and white chocolates among consumers living in Eastern Trinidad, West Indies: Socio-economic effects.*

'Women Scientists in a Quest for Sustainability and Development' is the title of the OWSD Fifth General Assembly and International Conference to be held in Cuernavaca, Mexico from 17-20 September 2014.

Singh, M. and **Badrie, N.** (2014)

Project: EDULINK II – *Strengthening capacity for food science and technology teaching, Learning and research to add value to indigenous foods for food security in Africa and the Caribbean (FSTinAC).*

19<sup>th</sup> General Meeting and Biennial Conference of the Caribbean Academy of Sciences, Magdalena Grand Beach Resort, Tobago, 21-23 November, 2014. Presentation 22<sup>nd</sup> November, 2014.

Johnson, M.L. Singh, M. and **Badrie, N.** (2014).

*Pesticide residues in vegetables from retail markets Trinidad.*

19<sup>th</sup> General Meeting and Biennial Conference of the Caribbean Academy of Sciences, Magdalena Grand Beach Resort, Tobago, 22<sup>nd</sup> November.

Rajkumar, R. and **Badrie, N.** (2014)

*Knowledge, perception and acceptance of coconut water as a functional food among consumers in Trinidad.*

19<sup>th</sup> General Meeting and Biennial Conference of the Caribbean Academy of Sciences, Magdalena Grand Beach Resort, Tobago, 22<sup>nd</sup> November

**Badrie, N.**, Alli, I. and Balfour, S (2014).

*Monitoring Codex Food Hygienic Principles at school feeding Caterers in Trinidad, W.I.*

17<sup>th</sup> (International Union of Food Science and Technology, IUFOST 2014), Montreal, August 17<sup>th</sup>-21<sup>st</sup>

**Badrie, N.** Ngadi, M. and Balfour, B. (2014)

*Comparing postharvest losses of tomatoes and sweet peppers grown under Protected Agriculture and Open Field in Trinidad, West Indies.*

17<sup>th</sup> (International Union of Food Science and Technology, IUFOST 2014), Montreal, August 17<sup>th</sup>-21<sup>st</sup>

**Badrie, N.** I Alli, I. and **Balfour, S** (2014)

*Monitoring Codex Food Hygienic Principles at School Feeding Caterers in Trinidad, W. I.*

17<sup>th</sup> World Congress of Food Science & Technology (International Union of Food Science and Technology, 17<sup>th</sup>-21<sup>st</sup> August, 2014 (IUFOST 2014), Montreal, Canada.

Lakhan, C; **Badrie, N.** Ramsubhag, A., Indar, L. (2014)

*Association of demographic determinants on food safety practices as risk factors to acute gastroenteritis among residents in Trinidad and Tobago.* (ID 2788423).

17<sup>th</sup> International Union of Food Science and Technology, IUFOST 2014), Montreal, August 17<sup>th</sup>-21<sup>st</sup>

**Balfour, S.** and **Badrie, N.** (2014)

*Physical characteristics of pumpkin, tomato and sweet pepper harvested in Trinidad, West Indies: Linkages to consumption uses.*

Caribbean Fruit Crops Society Meeting, St. Thomas. 6-12 July.

**Badrie, N.** (2014).

*Nutrition through the life Cycle of Pregnant and Lactating mothers for students in midwifery programme* Department of Nursing,

Faculty of Applied Sciences, National University of Samoa (NUS)

**Badrie, N.**, Ngadi, M. and **Balfour, S.** (2014)

*Comparing postharvest losses of tomatoes and sweet peppers grown under protected agriculture and open field in Trinidad, West Indies.*

International Union of Food Science and Technology (IUFOST). Montreal, Canada. 17-21 August

**Badrie, N.** (2014).

*Overview of Some Food Safety Issues in the Globalised World.*

Caribbean Academy of Science in collaboration with the Department of Food Production, Faculty of Food and Agriculture, Trinidad and Tobago, Rm B, Sir Frank Stockdale Building.

**Badrie, N.** and **Balfour, S.** (2014)

*CIFSRSR CARICOM UWI-McGill Food Security Project-Progress Report Postharvest& Food-safety Subtheme'.*

16<sup>th</sup> December, 2013, Rm 16, Dept of Agricultural Economics and Extension, Trinidad and Tobago.

## Department of Geography

**Wilson, M.D.**, Vega, M.C. and Forsberg, B.R. (2014)

*Measurement and Modelling of Central Amazon Varzea Floodplain Hydrodynamics.*

International Conference on the Status and Future of the World's Large Rivers, Manaus, Brazil. 21-25 July

**Darsan, J.** (2015)

*The influence of fluvial dynamics and North Atlantic swells on the beach habitat of the leatherback turtle - the case of Grande Riviere, Trinidad.*

2015 Annual Meeting, Association of American Geographers, Chicago, Illinois, USA: 21<sup>st</sup>-25<sup>th</sup> April

# PUBLICATIONS AND CONFERENCES

**Kissoon, P.** and Jeniffer Mohammed (2015)

*A Matter of Survival: An investigation of the livelihoods of working-age adults since leaving school early in Trinidad and Tobago*  
16th Annual SALISES Conference, W Arthur Lewis Centennial, Jan 14-16, St. Lucia.

**Darsan, J.**, Jehu, A. and Asmath, H. (2015)

*The influence of fluvial dynamics and North Atlantic swells on the beach habitat of the leatherback turtle - the case of Grande Riviere, Trinidad.*

Book of Abstracts from the 2015 Annual Meeting, Association of American Geographers, Chicago, Illinois, USA: 21<sup>st</sup>-25<sup>th</sup> April, 2015.

Mandall, A., **Wilson, M.D.** and Taylor, M.A. (2014)

*Flood Risk Assessment in Jamaica: Case Studies on combined terrestrial and coastal flood risk driven by projections of future climate using the PRECIS regional climate model.*

Annual Meeting of the Unión Geofísica Mexicana, session S02: Regional climate models and CORDEX, 2-7 November 2014, Puerto Vallarta, Valisco, México.

**Kissoon, P.** (2014)

*Before the pavements: Situating street-dwelling and vagrancy in the residential histories of the homeless*, Caribbean Urban Forum, May 14-16, Barbados Town and Country Planning, Barbados.

Mandall, A., **Wilson, M.D.** and Taylor, M.A. (2014)

*Flood Risk Assessment in Jamaica: Case Studies on combined terrestrial and coastal flood risk driven by projections of future climate using the PRECIS regional climate model.*

Annual Meeting of the Unión Geofísica Mexicana, session S02: Regional climate models and CORDEX, 2-7 November 2014, Puerto Vallarta, Valisco, México.

**Wilson, M.D.**, Vega, M.C. and Forsberg, B.R. (2014)

*Measurement and Modelling of Central Amazon Varzea Floodplain Hydrodynamics.*

International Conference on the Status and Future of the World's Large Rivers, 21-25 July 2014, Manaus, Brazil.

Seenath, A., **Wilson, M.D.** and Miller, K., (2014).

*Evaluating the Vulnerability of the Inhabitants along the south-western Coast of Tobago and the island's economy to projected storm surges at Pigeon Point Beach.*

Coastal Zone Canada 2014, Halifax, Nova Scotia, Canada. 15-19 June

Seenath, A., **Wilson, M.D.** and Miller, K., (2014)

*Projecting the Current and Future Impact of Storm Surges on Coastal Flood Extent at Pigeon Point, South-West Tobago, through Hydrodynamic Modelling Analyses.*

Geophysical Research Abstracts, Vol. 16, EGU2014-154, EGU General Assembly, 27 April-2 May

**Wilson, M.D.**, Cooper, V., Kissoon, P., Taylor, M. and MARAJ, V., (2014)

*Flood Risk and Climate Change in the Caroni river basin, Trinidad- Adaptation Measures for Vulnerable Communities: Project Inception and Early Results.*

WCRP VAMOS/CORDEX Workshop on Latin-America and Caribbean CORDEX LAC: Phase II - The Caribbean. 7-9 April 2014, Santo Domingo, Dominican Republic.

**Wilson, M.D.**, Mandal, A., Taylor, M., Burgess, C., Campbell, J. and Stepphenson, T., (2014)

*Flood Risk and Climate Change in Negril, Jamaica: an assessment of combined terrestrial and coastal flood risk driven by projections of future climate.*

WCRP Conference for Latin America and the Caribbean: Developing, linking and applying climate knowledge. 17-21 March 2014, Montevideo, Uruguay.

Mandal, A., **Wilson, M.D.**, Maharaj, A., Barrett, L. and Smith, D., (2014)

*Simulation of hydrological extremes in Jamaica – case studies of flooding in Yallahs, Hope and Outram river watersheds.*

WCRP Conference for Latin America and the Caribbean: Developing, linking and applying climate knowledge., Montevideo, Uruguay. 17-21 March

## CONFERENCE PAPERS/PROCEEDINGS

### Department of Food Production

**R. Stone** (2014)

Chairman Session 2B (Education)  
Caribbean Academy of Sciences 19th General Meeting and Conference held in Tobago, November 21-23

M.N. Wuddivira, **R.J. Stone** and E.I. Ekwue (2015)

*Assessing the degradation potentials of tropical soils under intense rainfall.*

Conference on desertification and land degradation, 16-17 June, 2015, Ghent, Belgium.

M.A. Atwell, **M.N Wuddivira, J. Gobin**, and D.A. Robinson (2015)

*Geophysical Assessment of Hydrological and Anthropogenic Effects on the Water Quality of Riverine Ecosystems.*

Conference on Desertification and Land Degradation, 16 & 17 June, 2015, Ghent, Belgium.

**M.N. Wuddivira**, R.J. Stone and E.I. Ekwue (2015)

*Assessing the Degradation Potentials of Tropical Soils Under Intense Rainfall.*

Conference on Desertification and Land Degradation, 16 & 17 June, 2015, Ghent, Belgium.

**M.N. Wuddivira** and S.A. Ali (2014)

*Response of Tropical Forest Soil to Water Repellency as Influenced by Conversion to Plantation Forest and Solution pH Treatment.* "Harnessing Science and Technology to Create Knowledge-based Economies and Preserve Caribbean Ecosystems". 19th General Meeting and Biennial Conference of the Caribbean Academy of Sciences. 21st-23th November 2014. Magdalena Grand Beach Resort, Tobago.

R. Belfon, **M.N. Wuddivira** and Renwick, S. (2014)

*Open Access Publishing and the Quality of Scientific Publications in Caribbean Higher Education.*

"Harnessing Science and Technology to Create Knowledge-based Economies and Preserve Caribbean Ecosystems". 19th General Meeting and Biennial Conference of the Caribbean Academy of Sciences. 21st-23th November 2014. Magdalena Grand Beach Resort, Tobago.

M.A. Atwell, **M.N. Wuddivira** and **J. Gobin** (2014)

*Hydrological and Anthropogenic influences on the Water Quality of Two River Channels Assessed with Electromagnetic Induction Technique.*

"Harnessing Science and Technology to Create Knowledge-based Economies and Preserve Caribbean Ecosystems". 19th General Meeting and Biennial Conference of the Caribbean Academy of Sciences. 21st-23th November 2014. Magdalena Grand Beach Resort, Tobago.

R. Belfon, **M.N. Wuddivira** and S. Renwick. (2014)

*Publication Preferences and Policy in Caribbean Higher Education.* Association of Caribbean Higher Education Administrators (ACHEA) Conference, Barbados, West Indies. July 10- 2, 2014.

**A. Thomas** and D. Saravanakumar (2015)

*Antagonistic activity of rhizobacteria against bacterial wilt of tomato plants in the Caribbean.*

8<sup>th</sup> International IPM Symposium: Solutions for a Changing World, March 23-26, 2015, Salt Lake City, Utah. P.124.

**I. Manzanero, L.** and D. Saravanakumar (2015)

*Use of antagonistic rhizobacteria against Fusarium wilt of hot pepper and tomato in Trinidad.*

APS annual meeting, August 1-5, 2015. California, USA.

**R.J. Stone** (2014)

*A simple statistical procedure for monitoring and assessing changes in Trinidad and Tobago's Murder Rate.* Caribbean Academy of Sciences 19th General Meeting and Conference, Magdalena Grand Beach Resort, Tobago, November 21-23.

**R.J. Stone** (2014)

*Correlation analysis of rainfall and surface air temperature to assess the possible long-term implications of global warming for agriculture in Trinidad and Tobago.*

Caribbean Academy of Sciences 19th General Meeting and Conference, Magdalena Grand Beach Resort, Tobago, November 21-23, 2014.

**R.J. Stone** (2015)

*UWI Supervision Regulations and Procedures-Thesis Submission and Examination.*

Workshop 2: The Centre of Excellence in Teaching and Learning Research Supervisor Development Course, March 5, 2015, Teaching and Learning Complex, The University of the West Indies, St. Augustine, Trinidad and Tobago, W.I.

**R.J. Stone** (2015)

*Interrater reliability and agreement of interviewers' scores in the selection of administrative, technical and service staff.*

Association of Caribbean Higher Education Administrators 14th Annual International Conference, Teaching and Learning Complex, The University of the West Indies, St. Augustine, Trinidad and Tobago, July 9-11, 2015

**R. Ramnarine**, S. Persad and I. Rampersad (2014)

*Sustainable management of former Caroni (1975) Limited sugarcane lands in Trinidad.*

Caribbean workshop on Soil Physical Management – Soil management issues related to food production and environmental quality as a consequence of climate change and variability. June 30 - July 04, 2014. UWI, St. Augustine, Trinidad.

M. Bain-Kent, **G. Eudoxie** and V. Mllambo (2014)

*Effects of agouti (Dasyprocta leporina) manure on pat choi (Brassica chinensis) yield and quality.*

XCIMFAUNA, August 17-22, 2014, St. Augustine, Trinidad and Tobago.

## Department of Geography

**P. Kissoon** (2014)

*Before the pavements: Situating street-dwelling and vagrancy in the residential histories of the homeless,*

Caribbean Urban Forum, Barbados Town and Country Planning, Barbados 14-16.

A. Mandall, **M. D. Wilson** and M. A. Taylor (2014)

*Flood Risk Assessment in Jamaica: Case Studies on combined terrestrial and coastal flood risk driven by projections of future climate using the PRECIS regional climate model.*

Annual Meeting of the Unión Geofísica Mexicana, session S02:

Regional climate models and CORDEX

Puerto Vallarta, Valisco, México, 2-7 November.

# PUBLICATIONS AND CONFERENCES

**M. D. Wilson**, M. C. Vega and B. R. Forsberg (2014) *Measurement and Modelling of Central Amazon Varzea Floodplain Hydrodynamics*. International Conference on the Status and Future of the World's Large Rivers Manaus, Brazil 21-25 July.

## OTHER PUBLICATIONS

### Video Production

Research and Teaching Videos: **Budding Citrus** – 5 mins. **Govind Seepersad** & Terry Sampson. 2014

Research and Teaching Videos: **Belize Citrus Industry – Facing the Challenges**: 20 mins. **Govind Seepersad**, Malcolm Wallace & Terry Sampson. 2014

Research and Teaching Videos: **Re-Engineering the Caribbean Citrus Industry**: 20 mins. **Govind Seepersad**, Nkosi Felix, Edward Evans & Terry Sampson. 2014

Department of Agricultural Economics and Extension Research and Teaching Videos: **Budding Citrus** – 5 mins. **Govind Seepersad** & Terry Sampson. 2014

Research and Teaching Videos: **Belize Citrus Industry – Facing the Challenges**: 20 mins. **Govind Seepersad**, Malcolm Wallace & Terry Sampson. 2014

Research and Teaching Videos: **Re-Engineering the Caribbean Citrus Industry**: 20 mins. **Govind Seepersad**, Nkosi Felix, Edward Evans & Terry Sampson. 2014

### Book Review

## Department of Food Production

Allison Boney, Christine Robley-Job, **Wendy-Ann Isaac** and Wayne Ganpat (2014). Are our farmers dying with their knowledge? Local crop protection practices in Trinidad and Tobago. *Tropical Agriculture* (Trinidad) 91 (1)

## Department of Geography

### Policy documents and technical reports

**Wilson, M.D.** and Mandal, A., 2015. *Hydrological characterisation of Carriacou Island, Grenada*. CERMES, University of the West Indies, Cave Hill, Barbados.

### Other articles published

**Darsan, J., Wilson, M.D.**, Asmath, H. Nature's balancing act: Manzanilla's delicate ecosystem, Trinidad Express Newspaper, Published on Nov 22, 2014, 10:47 pm AST; <http://www.trinidadexpress.com/news/Natures-balancing-act-283610171.html>

## FACULTY OF HUMANITIES & EDUCATION

### JOURNAL PUBLICATIONS

**Ali, T.** (2014) Masculinity Studies Yesteryear; Masculinity Studies Today: Tyrone Ali in Conversation with Rhoda Reddock. Fragility and Persistence of Dominant Masculinities. *Caribbean Review of Gender Studies*. Issue 8, 1-13

**Antoine-Dunne, J.** (2015) Sex, Spirit and the Artist in the Films of Felix de Rooy. *Visions and Re Visions. Film In the Caribbean*. CQ 62

**Antoine-Dunne, J.** (2015) General Introduction. *Visions and Re Visions. Film In the Caribbean*. CQ 62

**Bazan, O.** (2015) Las dos Celamas de Luis Mateo Díez: recuerdo y olvido. *Castilla. Estudios de Literatura* 6, 72-93

**Boufof-Bastick, B.** (2015) Rescuing language education from the neoliberal disaster: Culturometric predictions and analyses of future policy. *Policy Futures in Education*, 13(4), 439-467

**Boufof-Bastick, B.** (2014) Linguistic dilemma in diglossic post-colonial states: Designing language-sensitive primary curricula *RES HUMANITARIAE XVI*, 8-21

**Boufof-Bastick, B.** (2014) Empreinte ou emprise néolibérale sur le politiques éducatives européennes: regard et éclairage culturométrique sur le Cadre Européen Commun de Référence pour les Langues (CECRL), *Verbum* 5, 205-215

**Braithwaite, B.** (2015) Deaf Perspectives on Deaf Education: An Ethnographic Study from Trinidad and Tobago. *Caribbean Educational Research Journal* 3.1, 18-26

**Carrington-Blaides, E.**, and John, Y. (2015) The effects of one-one instruction on grade equivalence scores of emergent readers. *International Journal of Language Teaching*, 2 (2) 59

**Crawford, S.** (2015) Visible Beats: Competition in English Tap Practice *Dance and Competition*

**Cwik, C.** (2014) Sklaverei, Sklavenhandel und Abolition auf Curaçao [Slavery, Slave trade and Abolition in Curacao]. *Zeitschrift für Weltgeschichte. Interdisziplinäre Perspektiven [Journal of World History. Interdisciplinary Perspectives]* 43:1, 117-140

- Dallier, M.** (2014) Le théâtre : outil d'apprentissage du français langue étrangère à l'Université des Indes Occidentales (Trinité-et-Tobago)? *Le français à l'université*, online
- Dedovets, Z.** and Rodionov, M. (2014) The forming of students' intellectual tolerance: theoretical study and implementation. *International Journal for Cross-Disciplinary Subjects in Education (IJCDSE)*, Special Issue 1863-1869
- Dedovets, Z.** (2015) Improving student reasoning in geometry. *Modern Education: Scientific Approaches, Experience, Problems, Prospects*, 17-22
- Dedovets, Z.** (2015) Learning to develop mathematics lesson with GeoGebra. *Problems of Theory and Practice of Teaching Mathematics*, 194-199
- De Lisle, J.** (2015) Installing a system of performance standards for national assessments in the Republic of Trinidad and Tobago: Issues and challenges. *Applied Measurement in Education*, 28(4), 308-329
- Ferdinand, D.** (2015) Workforce education and development (WED) graduate students' perceptions of cultural insensitivity in classroom teaching: A mixed methods study. *Caribbean Educational Research Journal*, 3(1), 27-43
- Ferdinand, D.,** Onuoha, C., and Onuoha, P. (2015). Evaluation of a government ICT programme for secondary schools: A case study of teachers' perceptions of a Caribbean boys' school. *Journal of Education Research and Behavioural Sciences*, 4(1), 005-019
- Fergus, C.** (2015) From Slavery to Black Power: The Enigma of Africa in the Trinidad Calyspo. *Transactions of the Historical Society of Ghana New Series*, No. 16, 1-25
- Forde M.** (2015) Review of David Scott: Omens of Adversity: Tragedy, Time, Memory, Justice. *PoLAR: Political and Legal Anthropology Review* 38(2)
- Harry, S.,** and Smith T.L. (2015) Criss-Crossing "Straight-up" Subjects: Using Literary Excerpts from West Indian Novels to teach Educational Philosophy. *International Journal of Digital Society (IJS)*, 6(2), 1047-1054
- Harry, S. and Mitchell, B.** (2015) An Investigation into Teachers' Perspectives of the Factors that Facilitate the Implementation of eCAL Curriculum Change Initiative in Trinidad and Tobago. *International Journal of Digital Society (IJS)*, 6(3), 1071-1078
- Hezekiah, G.** (2015) Stillness in Motion: Todos los Caminos Conducen al Mar. *Caribbean Quarterly* 61 (2). Special issue on Caribbean Cinema.
- Jaggernaut, S. and Jameson-Charles, M.** (2015) Exploring Teacher Efficacy of Untrained Secondary Teachers in Trinidad and Tobago. *Caribbean Curriculum*, 23, 23 – 48
- James, F. and Figaro-Henry, S.** (2015) Mobile learning in the 21st century higher education classroom: Readiness experiences challenges. *Caribbean Curriculum*, 23, 99-121
- Jameson-Charles, M. and Jaggernaut, S.** (2015) An Investigation of the Influence of Teacher Variables on Pre-Training Efficacy Beliefs. *The Caribbean Teaching Scholar*, 5 (1), 5 - 24
- Lilford, G.** (2014) Madness or Mysticism? The Unconscious Ascetics of Power and Hunger. *Current Writing: Text and Reception in Southern Africa. Volume 26, Issue 2*, Special Issue: Celebrating the 40th Anniversary of the Publication of Bessie Head's A Question of Power (1973)
- Matthews, G.** (2015) Book Review of Revolutionary Emancipation: Slavery and Abolitionism in the British West Indies by Claudius Fergus. *The Historian* Volume 77, No. 2, 382-384
- Primus, S.,** Blair, E. and Maharaj, C. (2015) Performance and perception in the flipped classroom. *Education and Information Technologies*
- Reid, B.,** Pagán-Jiménez, J., Reniel Rodriguez, R., Martijn van den Bel and Hofman, L. (2015) Early Maize Dispersal into the Southern Caribbean and Northeastern South America. *Quaternary Science Reviews* 123, 231-246
- Singh, S.** (2015) Indo-Caribbean Historiography. *Journal of Caribbean History*. Vol. 49:1, 53-77
- Singh, S.** (2015) Review of Coolie Woman: The Odyssey of Indenture by Gaiutra Bahadur. *Through the Historian's Lens?*
- Steele, G.** (2015) Back(ground)ing to the future in Caribbean Human Communication Studies. *The Journal of Human Communication Studies in the Caribbean*, 1, 1, 3-6
- Steele, G.** (2015) The human communication discipline in the Anglophone Caribbean: Pathways. *The Journal of Human Communication Studies in the Caribbean*, 1, 1, 18-39

# PUBLICATIONS AND CONFERENCES

**Steele, G.** (2015) New postgraduate student experience and engagement in human communication studies. *Journal of Further and Higher Education*, 39, 4, 498-533

**Steele, G.** (2015) Supervisor-subordinate communication competence and job and communication satisfaction. *International Journal of Business Communication*. 52, 3

**Stell, G.** (2014) Ethnicity in discourse: The Interactional Negotiation of Ethnic Boundaries in Post-apartheid Namibia. *Journal of Ethnic and Racial Studies* 38.6, 976-992

**Teelucksingh, J.** (2014) The Black Power Movement in Trinidad and Tobago. *Black Diaspora Review*. 157-186

**Walcott-Hackshaw, E.** (2014) Cher Ami. *The Missing Slate: Art and Literary Journal, The Caribbean Issue*, Issue 12, 58-63

**Watson, D.** (2014) Defining Power Margins: A Classification of Power within the Discourses of Police and Civilian in a Crime 'Hotspot Community' in Northern Trinidad. *Journal of Multicultural Discourses*, 9.3, 227-250

## BOOKS & BOOK CHAPTERS

**Meir, C.** (2014) *Scottish Cinema: Texts and Contexts*. England: Manchester University Press.

**Mohammed, J.** (2014) *Sociology for CAPE Examinations*. London: Macmillan

**Mohammed, J.** (2015) *Caribbean Studies for CAPE Examinations*. London, Macmillan

**Stell, G.** and Yakpo, K. (2015) Eds. *Code-Switching between Structural and Sociolinguistic Perspectives*, United Kingdom: Linguae & Litterae.

**Teelucksingh, J.** (2015) *Labour and the Decolonization Struggle in Trinidad and Tobago*. London: Palgrave Macmillan.

**Teelucksingh, J.** (2015) *The Good, the Bad and the Ugly: Eric Williams and the Labor Movement in Trinidad and Tobago, 1955 – Moment*. Mississippi: University Press of Mississippi.

**Teelucksingh, J.** (2014) *Caribbean Empire: The Impact of Culture, Literature and History*. California: Academia Press.

**Boufof-Bastick, B.** and **Chinien, S.** (2015) Eds. *Caribbean Dynamics: Re-configuring Caribbean Culture*, Kingston, Jamaica: Ian Randle Publishers Ltd.

**Antoine-Dunne, J.** (2015) Mutual Obsessions. Beckett, Walcott and Brathwaite. **In:** *Caribbean–Irish Connections. Interdisciplinary Perspectives*. E. O'Callaghan, A. Donnell and M. McGarrity (Eds). Mona: The University of the West Indies Press

**Boufof-Bastick, B.** (2014) Constructions of teacher identities: Professional development versus global neoliberal performativity. **In:** *Teacher Educators and Teachers as Learners - International Perspectives*. P. Boyd, A. Szplit & Z. Zbróg (Eds). Kraków: Libron-Filip Lohner

**Chinien, S.** (2015) We are Still in the Colonial Woods: Interview with Yao Ramesar. **In:** *Caribbean Dynamics: Reconfiguring Caribbean Culture*. B. Boufof-Bastick, and S. Chinien, (Eds). Kingston: Ian Randle

**Cwik, C.** (2014) Die amerikanische Dimension des Wiener Kongresses [The American dimension of the Congress of Vienna]. **In:** *Der Wiener Kongress. Die Erfindung Europas [The Congress of Vienna. The Invention of Europe]*. T. Just, W. Maderthaler and H. Maimann (Eds). Wien: Carl Gerold's Sohn

**Cwik, C.** (2014) Revolution und Reaktion: Der Wiener Kongress, Österreich und die Amerikafrage [Revolution and Reaction: The Congress of Vienna, Austria, and the American Issue]. **In:** *Mächtigkeitspolitik und Friedenssicherung. Zur politischen Kultur Europas im Zeichen des Wiener Kongresses [Policy of Power and Peace Security. Europe's Political Culture in the Age of the Congress of Vienna]*, R. Stauber, F. Kerschbaumer and M. Koschier (Eds). Austria: Forschung und Wissenschaft – Geschichte

**Cwik, C.** (2014) Africanization of Amerindian Tribes in the Greater Caribbean: Case Studies of the Wayuu and Miskito during the 17th and 18th Centuries. **In:** *Dimensions of African and Other Diasporas*, F.W. Knight and R. Iyob (Eds). Kingston: University of the West Indies Press

**Cwik, C.** (2014) The End of the British Atlantic Slave Trade or the Beginning of the Big Slave Robbery, 1808-1850. **In:** *The Second Slavery. Mass Slavery and Modernity in the Americas and in the Atlantic Basin*. J. Laviña and M. Zeuske (Eds). Berlin/Münster/Wien: Slavery and Postemancipation

**Fergus, C.** (2015) Revisiting Marcus Garvey: Extrapolating lessons for 21<sup>st</sup> Century Pan-Africanism and the AU's 6<sup>th</sup> Region. **In:** *Unite or Perish Africa Fifty Years after the Founding of the OAU*. M. Muchie, V. Gumede, P. Lukhele-Olorunju (Eds). African Institute of South Africa Press

**Ferreira, J.** (2015) Trinidad's French Creole Linguistic and Cultural Heritage. **In:** *Caribbean Dynamics: Reconfiguring Caribbean Culture*. B. Boufof-Bastick, and S. Chinien, (Eds). Kingston: Ian Randle



- Jackson, E.** (2015) Gender ideologies and diasporic identity in Monica Ali's *Brick Lane* and Jhumpa Lahiri's *The Namesake*. **In:** *Exploring Gender in the Literature of the Indian Diaspora*. S. Mehta Rao (Ed). Cambridge Scholars Publishing
- Jackson, E.** (2015) Envisioning Social Change in Indo-Caribbean Women's Writing. **In:** *Contemporary Caribbean Dynamics: Re-configuring Caribbean Culture*. B. Boufoy-Bastick and S. Chinien (Eds). Kingston, Jamaica: Ian Randle
- Jackson, E.** (2015) We need to talk about ambivalence toward the child in contemporary literary fiction: A case study of Lionel Shriver's *We Need to Talk about Kevin* and Doris Lessing's *The Fifth Child*. **In:** *Conflicts in Childhood*. M. Damrow and H. Hearn (Eds). Oxford: Inter-disciplinary Press
- Jackson, E.** (2014) Transcending the Limitations of Diaspora as a Category of Cultural Identity in Chimamanda Ngozi Adichie's *The Thing Around Your Neck*. **In:** *Writing Diaspora: Identity, Memory and Culture in a Transnational Context*. A. Sayed (Ed). Oxford: Inter-Disciplinary Press
- Logie, C.** (2015) Childrearing Practices, Reflections and Observations. **In:** *Childrearing Practices in the Caribbean: Lessons and Implications from a National Assessment in Trinidad and Tobago*. C. Logie and J.L., Roopnarine (Eds). Chaguanas, Trinidad: Plain Vision Publishing.
- Logie, C.** and Roopnarine, J.L. (2015) Childrearing Practices, Ideas about Childhood Development, Sources of Values and Ethnic and Religious Socialisation. **In:** *Childrearing Practices in the Caribbean: Lessons and Implications from a National Assessment in Trinidad and Tobago*. C. Logie and J.L., Roopnarine (Eds). Chaguanas, Trinidad: Plain Vision Publishing.
- Logie, C.** and Phillip, J. (2015). Childbearing: The Caribbean Context. **In:** *Childrearing Practices in the Caribbean: Lessons and Implications from a National Assessment in Trinidad and Tobago*. C. Logie and J.L., Roopnarine (Eds). Chaguanas, Trinidad: Plain Vision Publishing.
- Logie, C.**, Ramlal, B., Roopnarine, J.L., Krishnakumar, A., & Lutchmie, N (2015). A National Assessment Survey in Trinidad and Tobago: Methodological Determinants. **In:** *Childrearing Practices in the Caribbean: Lessons and Implications from a National Assessment in Trinidad and Tobago*. C. Logie and J.L., Roopnarine (Eds). Chaguanas, Trinidad: Plain Vision Publishing.
- Meir, C.** (2015) Transnational Production, International Policy and South African Cinema. **In:** *Mzansi at the Movies: Film Culture in Contemporary South Africa*. H. Ebrahim and J. Ellapen (Eds), Johannesburg: UNISA Press
- Meir, C.** (2015) "A Throw of the Dice", "Bombay Talkie", "Mother India", "Sholay", "Dilwale Dulhania Le Jayenge", "Yash Chopra" and "Lagaan". **In:** *Directory of World Cinema: India*. A. Bingham (Ed). Bristol: Intellect
- Meir, C.** (2015) "Bill Forsyth", "Ken Loach", "Trainspotting", "Mrs. Brown", "Local Hero" and "The Last King of Scotland". **In:** *Directory of World Cinema: Scotland*. R. Nowlan and Z. Finch (Eds). Bristol: Intellect
- Rampaul, G.** (2014) "How blest am I": Colonial Desire in Selected Poetry by John Donne. **In:** *Postscripts: Caribbean Perspectives on the British Canon from Shakespeare to Dickens*. ? Kingston, Jamaica: UWI Press
- Rampaul, G.** (2014) Strange Creatures and Fantastic Worlds: The Other in Selected Nineteenth-Century Children's Texts. **In:** *Postscripts: Caribbean Perspectives on the British Canon from Shakespeare to Dickens*. ? Kingston, Jamaica: UWI Press
- Roberts, N.** (2015) Echoes of Ancestral Voices: Analysing Tropes of Identity in Selected Poetry by Jennifer Rahim, Mayra Santos Febres and Sherazada Chiqui Vicioso. **In:** *Caribbean Dynamics: Reconfiguring Caribbean Culture*. B. Boufoy-Bastick, and S. Chinien, (Eds). Kingston: Ian Randle
- Singh, S.** (2015) Vehicle of History: The Yagna in Trinidad Hinduism. In *India in the Caribbean – Socio-Cultural Moorings of Diaspora*. A. Murali (Ed). Port-of-Spain: High Commission of India to Trinidad and Tobago
- Singh, S.** (2014) The Association of Caribbean Historians. In *Encyclopedia of Caribbean Archaeology*. B. A. Reid and R. Grant Gilmore (Eds). Gainesville: University Press of Florida
- Skeete, G.** (2015) New Literatures. **In:** *The Year's Work in English Studies*. Skeete, G., G. Rampaul and P. Sharrad. Oxford University Press.
- Stell, G** (2015) Towards an Integrated Approach to Structural and Conversational Code-Switching through Macrosociolinguistic Factors. **In:** *Code-Switching between Structural and Sociolinguistic Perspectives*. G. Stell, and K. Yakpo (Eds). United Kingdom: Linguae & Litterae.
- Walcott-Hackshaw, E.** (2015) Gros Islet. **In:** *The Haunted Tropics, Caribbean Ghost Stories*, M. Munro (Ed). Jamaica: The University of the West Indies Press

# PUBLICATIONS AND CONFERENCES

## REVIEWS

**Antoine-Dunne, J.** (2015) Director and Producer. *Disabled/Mis Labled*. A documentary filmed in the Caribbean and Ireland. 24 minutes. Screened at the conference, *Towards Social Integration. Rights, Roles, Recognition of Persons with Disabilities* in April 2015, and at the Caribbean Studies Association Conference in New Orleans in May 2015

**Antoine-Dunne, J.** (2015) Director, scriptwriter and producer. *The Walcott Documentary: Walcott as Poet and Seer*. 65 mins. Screened at Bocas Literary Festival in April 2015

**Ramesar, R.Y.** (2014) *Haiti Bride*. Screened at FESPACO Film Festival in Burkina Faso in March 2015, Trinidad and Tobago Film Festival in September 2014, and at the Ghetto Biennale in Haiti in December 2015

**Ramesar, R.Y.** (2014) *Sistagod* screened at ArtoDocs International Film Festival in St Petersburg, Russia. *Winner of Grand Prix for Best Feature Film*.

## INTERVIEWS

**Rampaul, G.** (2014) Open digital archive of interviews with writers for "The Spaces Between Words: Conversations with Writers" podcast series of the LCCS Department.

## TECHNICAL REPORTS

**Reid, B.** (2015) Red House Restoration Archaeology Report, Office of the Parliament of the Republic of Trinidad and Tobago. Final Report - Phase 1 for the period July 1, 2013 to January 31, 2015

**Tull, J.** (2014) *Strategic Plan for Regional Carnivals of Trinidad and Tobago*.

## CONFERENCE PRESENTATIONS

**S. Abdul-Majied** and Huggins, J. (2015) *Feeling their way: Negotiation and accommodation for students who are visually impaired or legally blind at UWI- St. Augustine* The Network for Disabilities Education and Sensitization (NODES) and The Disability Studies Unit of The University of the West Indies Conference, UWI, St. Augustine

**S. Abdul-Majied** and Carl, W. (2015) *Numeracy and the preschooler: "Identifying the contributing factors to poor numeracy skills and mathematics performance* The UWI Schools of Education Biennial Conference, Cave Hill, Barbados

**S. Ali** and Bahadoorsingh (2015) *Poster presentation: Teachers' experiences of Implementing Curriculum Change in a Primary School, Trinidad and Tobago* The UWI Schools of Education Biennial Conference, Cave Hill, Barbados

**T. Ali** (2014) *Talking Male Sexuality; Males Talking Sexuality* 2nd MenEngage Global Symposium on Gender Equality, New Delhi, India, November

**S. Burke** (2015) *Culture, Business and the Nation State: The Evolution of Cultural Management Practices on the Creative Ecology* International Conference on Arts and Cultural Management (AIMAC), Aix-en-Provence, Marseille, France, 26 June-4 July

**M. Cain** (2015) *Charting the Online Milieu: Instructors' Perspectives* CICE Conference in Canada, 22-25 June

**M. Cain** (2015) *Negotiating the Digital Divide: "Up a Creek Without a Paddle" Teachers' Response to the Laptop Initiatives in Trinidad and Tobago and Saint Lucia* CSA Conference in New Orleans, 25-29 May

**B. Carter** (2014) *Evaluating a Caribbean Centre of Excellence for Languages* The 22<sup>nd</sup> Annual Conference of the French Association of University Language Centres hosted by the Université du Littoral Côte Opale (UCLC), Boulogne-sur-Mer, France, 27-29 November

**B. Carter** (2014) *Embrace the new decade of Confucius Institute* 9<sup>th</sup> Global Confucius Institute Conference, Xiamen, China, 4 -10 December

**B. Carter** (2015) *The National Chinese Language Conference (NCLC)* Conference, Atlanta, Georgia, 16-18 April

**B. Carter** (2015) *The Language and Competitiveness Project: Thinking outside the (English only) Box* 40<sup>th</sup> annual conference of the Caribbean Studies Association (CSA), New Orleans, Louisiana, 25-29 May

**E. Carrington-Blaides** (2015) *Behaviour problems in schools in Trinidad and Tobago* The Global Center for School Counseling Outcome Research Evaluation and Development Conference, Hyatt Hotel, June

**E. Carrington-Blaides** (2015)

*Teachers' assessment of behavior problems in schools in Trinidad and Tobago*

MOE Colloquium on teaching and teacher development, The Public Library POS, June

**E. Carrington-Blaides** and N. Laptiste - Francis (2015)

*Teacher Experiences with the Implementation of the Continuous Assessment Component (CAC) at schools facing exceptional challenges*

The UWI Schools of Education Biennial Conference, Cave Hill, Barbados

**E. Carrington-Blaides** and J. Lawrence (2015)

*Inclusive Education: An investigation into the inclusion of students with severe to profound hearing impairments at three general education secondary schools*

The UWI Schools of Education Biennial Conference, Cave Hill, Barbados

**E. Carrington-Blaides** and A. Marcelle (2015)

*Experience speaks: A general education teacher's experience of teaching a child with Autism*

The UWI Schools of Education Biennial Conference, Cave Hill, Barbados

**S. Chinien** (2014)

*L'intégration des communautés orientales dans le oeuvres de Chamoiseau*

Culture/Identity/Politics conference at the Florida State University, USA, October

**S. Crawford** (2015)

*Playing Mas on Campus: Dance and Protest at the University of the West Indies, Trinidad*

Joint International Congress on Research in Dance/Society for Dance History Scholars Conference, Athens, Greece, June

**Z. Dedovets** (2015)

*The Formation of Motivational Sphere for Learning Activity under conditions of change of one of its leading components*

The International Conference on Education and Pedagogy, Venice, Italy, April

**Z. Dedovets** (2015)

*Virtual presentation "Learning to Develop Mathematics Lesson with GeoGebra*

The XI Russian Scientific-Practical Conference, Penza State University Russia (PSU) Russia, 14-15 May

**J. De Lisle** (2015)

*Using canonical correlation analysis to study the complexity of continuous assessment practice in Trinidad and Tobago: Policy implications*

American Educational Research Association, Chicago, USA, 14-18 April

**J. De Lisle** (2015)

*On researching and theorizing about ourselves-The case of gendered achievement in the Caribbean*

American Educational Research Association, Chicago, USA, 14-18 April

**J. De Lisle** and D. Rodriguez (2015)

*A novel data-centered intervention for closing the gender achievement gap in the Caribbean island of Tobago*

28th Annual Conference of the International Congress for School Effectiveness and Improvement (ICESI), Cincinnati, Ohio, USA, 3-6 January

**J. De Lisle**, C. Bowrin-Williams, J. Neaves, S. Annisette and L. Mohammed(2015)

*Explaining Trinidad and Tobago's improving scores on PIRLS: A role for the 2005 school performance feedback system*

28th Annual Conference of the International Congress for School Effectiveness and Improvement (ICESI), Cincinnati, Ohio, USA, 3-6 January

**J. De Lisle** and R. Mohammed (2015)

*Exploring the relationships between data use practice and student achievement in Trinidad and Tobago*

28th Annual Conference of the International Congress for School Effectiveness and Improvement (ICESI), Cincinnati, Ohio, USA, 3-6 January

**A. Diaz Fernandez** (2014)

*"The Look from a Corner": The Lost Voice in Miguel Barnet's Biography of a Maroon*

33rd Annual West Indian Literature Conference, Barbados, October

**D. Ferdinand** and F. Watson (2015)

*Debating: A dynamic teaching strategy for motivating teachers and students*

Annual Midwest Conference on the Scholarship of Teaching and Learning, Indiana University South Bend, Indiana, U.S.A., April

**D. Ferdinand** (2015)

*Combining mixed methods designs: Follow-Up Sequential and Within-Stage Models*

Mixed Methods Research Caribbean Conference, The University of the West-Indies, Mona, Jamaica, March

# PUBLICATIONS AND CONFERENCES

**M. Forde** (2015)

*Space, Boundaries, and Civic Engagement: Locating the Public Sphere in Urban Trinidad*  
Political Anthropology in the Caribbean, UWI St. Augustine, 11-12 June

**M. Forde** (2015)

*The "Undeserving Poor" and Moralities of Belonging in Urban Trinidad*  
Annual Society for Caribbean Studies conference, Birmingham, UK, 1-3 July

S. Geofroy (2014)

*Degree of Separation: The State and Religion in Trinidad and Tobago Today*  
The Cave Hill Philosophy Symposium III (CHIPS), Philosophy of Religions' Cave Hill, UWI, Barbados, 12-14 November

**S. Geofroy** and A. Ali (2015)

*Perspectives of administrators of Islamic secondary schools (within predominantly Indian-Trinidadian School settings) on masculine construction*  
Conference on Indian Diaspora – commemorating the 170<sup>th</sup> Anniversary of Indian Arrival in Trinidad and Tobago, The UWI, St Augustine, May

**R. Guédez** (2014)

*Examining Rating Scales: Assessment of Peer-to-Peer Interactive Speaking Performance*  
Linguistic Research Day, The University of the West Indies, St Augustine, Trinidad and Tobago, November

**R. Guédez** (2015)

*Construction of Rating Scales for the Assessment of Peer-to-Peer Interactive Speaking Performance*  
The 37th Language Testing Research Colloquium, LTRC2015, Toronto, Canada, March

**R. Guédez** (2015)

*Assessing Foreign Language Interactive Speaking Performance: The Case of Undergraduate Students of Spanish*  
Institutionalising Best Practice in Higher Education, The University of the West Indies, St Augustine, Trinidad and Tobago, June

**S. Harry** and T. Smith (2015)

*Blurring "straight" subject lines: Using the West Indian novel as a pedagogical tool for the teaching of educational philosophy*  
Canadian International Conference on Education (CICE), University of Toronto, 22 - 25 June

**S. Herbert** (2015)

*Transforming Education: New Frameworks and Alliances*  
The UWI Schools of Education Biennial Conference, Cave Hill Campus, Barbados, 1-4 June

**S. Herbert** (2014)

*Visionary Evaluation for a sustainable equitable future*  
AEA Conference, Denver, Colorado, 15-18 October

**A. Ibrahim-Ali** (2015)

*Defying established practice in the EFL classroom: the development of a theoretical framework for teaching and testing SE periphrastic verbs*  
Institutionalising Best Practice in Higher Education Conference, UWI, St. Augustine, June

**E. Jackson** (2014)

*Rewriting Heart of Darkness in Guyana: Landscape as an active character in David Dabydeen's Our Lady of Demerara*  
West Indian Literature conference, UWI, Cave Hill, Barbados, October

**E. Jackson** (2014)

*Gendered diasporic identities in Monica Ali's Brick Lane and Jhumpa Lahiri's The Namesake*  
Diasporas conference, Oxford University, July

**F. James** and P. Rigaud (2014)

*Investigating school performance in the primary sector of Trinidad and Tobago: An Embedded Case Study*  
British Educational Research Association Conference, Institute of Education, London, 23-25 September

**M. Jameson-Charles** and H. Charles (2015)

*Challenges and opportunities of youth employment in Saint Lucia: Towards an empowerment framework for sustainable youth employment*  
6th Annual SALISES Conference, Rodney Bay, Saint Lucia, 14-16 January

**M. Jameson-Charles** and H. Charles (2015)

*Contextual realities of the youth policy environment in Grenada: The youth perspective*  
6th Annual SALISES Conference, Rodney Bay, Saint Lucia, 14 - 16 January

**M. Jameson-Charles** and H. Charles (2015)

*Kwéyòl our native language but not our official language: Using semiotics to explore our Saint Lucian Kwéyòl identity from a Creolité standpoint*  
Caribbean Studies Association 40<sup>th</sup> Annual Conference, New Orleans, May

**M. Jameson-Charles** and A. Phillip-Thompson (2015)  
*Older women as amateur choristers: A phenomenographic approach to informal Adult Education*  
Caribbean Studies Association 40<sup>th</sup> Annual Conference, New Orleans, May

**S. Jaggernaut** and V. Ramjattan (2015)  
*Primary teachers' concerns about garden-based learning as a teaching and learning strategy*  
The UWI Schools of Education Biennial Conference, Cave Hill Campus, Barbados, 1-4 June

**S. Jaggernaut** and D. Ramnanan (2015)  
*Primary teachers' concerns about the continuous assessment component of the secondary entrance assessment (SEA)*  
The UWI Schools of Education Biennial Conference, Cave Hill Campus, Barbados, 1-4 June

**S. Jaggernaut** and S. Teelucksingh-Birju (2015)  
*An investigation into social networking and blogging as a homework resource in CAPE Communication Studies*  
The UWI Schools of Education Biennial Conference, Cave Hill Campus, Barbados, 1-4 June

**S. Jaggernaut** (2015)  
*Exploring Teacher Efficacy of In-Service Secondary School Teachers in Trinidad and Tobago*  
Hawaii International Conferences, Honolulu, Hawaii, 3-6 January

**S. Jaggernaut** (2015)  
*Primary school teachers' mathematics anxiety, mathematics teacher efficacy, and mathematics avoidance: The case of Trinidad and Tobago*  
Hawaii International Conferences, Honolulu, Hawaii, 3-6 January

**S. Jaggernaut** (2015)  
*Measuring dimensions of teacher efficacy: The case of in-service Secondary Teachers in Trinidad and Tobago*  
Hawaii International Conferences, Honolulu, Hawaii, 3-6 January

**S. Jaggernaut** (2015)  
*Mathematics Anxiety, mathematics Teacher Efficacy, and mathematics avoidance: A study of primary teachers in Trinidad and Tobago*  
Clute Institute International Education Conference, Maui, Hawaii, 4 – 8 January

**S. Jaggernaut** (2014)  
*Primary teachers' mathematics anxiety and teacher efficacy*  
Caribbean Regional Conference of Psychologists, Unmasking the Past, Claim our Future, Paramaribo, Suriname, 10 – 14 November

**V. Kamalodeen** (2015)  
*Teacher and student laptop use in a selected South Government Secondary School in Trinidad*  
International Conference on Social Science, Languages and Education, Humber College, Toronto, Canada, May

**V. Kamalodeen** (2015)  
*A Mixed Methods Approach to Analyzing Participation in an online social networking site for teachers*  
Mixed Methods Regional Conference, Mona, UWI, Jamaica, March

**C. Meir** (2015)  
*Towards a European Major: StudioCanal and Contemporary Anglophone European Cinema*  
New Directions in Film and Television Production Studies conference, Bristol, England, UK, 14 April

**D. Mideros** (2014)  
*Past learning experiences and agency in L2 learning: phenomenological exploration in Trinidad and Tobago*  
World Congress of Applied Linguistics in Brisbane, Australia, August

**D. Mideros** (2015)  
*The Social Dimension of Listening: From Theory to HE Practice*  
Institutionalising Best Practice in Higher Education Conference, The University of the West Indies, St. Augustine, Trinidad, June

**J. Mohammed** and P. Kissoon (2015)  
*A Matter of Survival: An investigation of the livelihoods of working-age adults since leaving school early in Trinidad and Tobago*  
16<sup>th</sup> Annual SALISES Conference, The W. Arthur Lewis Centennial, St. Lucia, 14-16 January

**J. Mohammed** and D. Conrad (2015)  
*Transformative Leadership through the lens of biography and self study*  
The UWI Schools of Education Biennial Conference, which was hosted by the Cave Hill Campus, Barbados, 1-4 June

**L. Noel** (2014)  
*Developing a design curriculum for rural entrepreneurs of the arts and crafts sector in the Eastern Caribbean*  
19th DMI: Academic Design Management Conference – Design Management in an era of Disruption, London School of Fashion, London, September

# PUBLICATIONS AND CONFERENCES

**L. Noel** (2015)

*Envisioning a Future Design Education in vulnerable emerging economies*  
Insight 2015 Design Research Symposium, National Institute of Design, Bangalore, India, January

**L. Noel** (2015)

*Using Design Strategies Against “Wicked Problems and to promote Sustainable Development, with a focus on St. Vincent and the Grenadines*  
St. Vincent Country Conference 2015, Open Campus, St. Vincent, March

**L. Noel** (2015)

*Creating Caribbean Stories Through Design*  
Learning Design – 3rd International Conference for Design Education Researchers, School of the Art Institute of Chicago, June

**L. Noel** with M. Lee Poy (2015)

*Putting Design on the National Agenda by Campaigning for a Ministry of Design*  
Ministry of Design – From Cottage Industry to State Enterprise, Open Campus Auditorium, Gordon Street, May

**S. Otway-Charles** (2015)

*Transforming Education: New Frameworks and Alliances*  
The UWI Schools of Education Biennial Conference, which was hosted by the Cave Hill Campus, Barbados, 1-4 June

**S. Phillip** (2015)

*Charting the Online Milieu: Instructors’ Perspectives*  
Canada International Conference on Education (CICE), June 22

**S. Phillip** (2015)

*Negotiating the Digital Divide: “Up a Creek without a Paddle” Teachers’ Response to the Laptop Initiatives in Trinidad and Tobago and Saint Lucia*  
Caribbean Studies Association (CSA) 40<sup>th</sup> Annual Conference, May

**G. Rampaul** (2015)

*Shakespeare in the Caribbean: Adapting A Midsummer Night’s Dream for the Caribbean Stage*  
8<sup>th</sup> Annual International Conference on Literature, Athens Institute for Education and Research, Greece, June

**G. Rampaul** (2015)

*Shakespeare in Paradise: Caribbean Adaptations of Shakespeare in the Bahamas*  
International Journal of Arts and Sciences Conference, Florence, Italy, June

**N. Ramsawak-Jodha**, Y. Joong and P. Wintz (2015)

*Improving Learning Strategies in STEM: in five countries in Africa and the Caribbean and Education for All: Special Education and TVET programmes in Africa and the Caribbean* The UWI Schools of Education Biennial Conference, Cave Hill Campus, Barbados, 1-4 June

**N. Ramsawak-Jodha** and Y. Joong (2015)

*Secondary Reform in Trinidad as part of a symposium on Education for All: Comparing the voices of teachers and students in Africa and the Caribbean*  
International Congress for School Effectiveness and Improvement (ICSEI), Cincinnati, Ohio

**N. Ramsawak-Jodha** and Y. Joong (2014)

*Comparing the voices of teachers and students in the teaching of Mathematics and English in Trinidad, Jamaica and Guyana*  
International Conference on Urban Education (ICUE), Montego Bay, Jamaica, November

**L. Regis** (2015)

*Where Soca going*  
40<sup>th</sup> Caribbean Studies Association, New Orleans, USA, May

**L. Regis** (2015)

*Calypso and the Genesis of Obeah Politics in Trinidad and Tobago*  
Carnaval et Politique: Colloque International 13-14 Fevrier, Universite Paris Diderot, Paris, France, February

**L. Regis** (2015)

*The calypso as a source of understanding World Wars 1 and 2*  
History Conference for CAPE History teachers and students, Bishop Anstey and Trinity College East, Trincity, February

**N. Roberts** (2014)

*Personhood and psychological trauma: Reading survival in the novel *Cualquier miércoles soy tuya* by Mayra Santos Febres*  
33<sup>rd</sup> Annual West Indian Literature Conference, Barbados, October

**N. Roberts** (2015)

*Multi-lingual publishing in the Anglophone Caribbean: Problems and Possibilities*  
24<sup>th</sup> International Book Fair, Centro de Estudios Martianos, 18 February

**N. Roberts** (2015)

*Identificatory Possibilities: Re-thinking Identity in Mayra Santos Febres’ *Pez de vidrio**  
40<sup>th</sup> Annual Caribbean Studies Association conference, New Orleans, USA, May

**N. Roberts** (2015)

*Assessing Value and Effectiveness of Study Abroad and Exchange Programmes in Foreign Language Degree Programmes at the University of the West Indies, St. Augustine Campus*  
Institutionalising Best Practice in Higher Education Conference, The UWI, St. Augustine, Trinidad, June

**K. Sanderson-Cole** (2014)

*Metaphor and Leadership in the Autobiography - Beyond the Islands - James Mitchell and the Making of the Comrade - Ralph Gonsalves*  
The Caribbean Studies Association Conference, New Orleans, May

**G. Skeete** (2014)

*Caribbean Literary Festivals as Seminal Moments: A Case Study*  
14th International Conference on Caribbean Literature (ICCL), Willemstad, Curaçao, 5th – 7th November

**G. Skeete** (2014)

*A Literary Account of Hurricane-Devastated Grenada – Charting Paul Keens-Douglas's Oral/Scribal Performance in 'Story of a Storm: Ivan was an Education'*  
33rd Annual Conference on West Indian Literature, The University of the West Indies, Cave Hill Campus, 2nd – 4th October

**G. Steele** (2014)

*What the @\*^#! do they mean by @\*^#! in Caribbean language discourse? Taboo language use, awareness and the development of written forms*  
Society for Caribbean Linguistics, Oranjestad, Aruba, August 5-8

**J. Yamin-Ali** (2014)

*Are schools ready to use data to drive decision-making?*  
Inaugural Research in Education Symposium, Ministry of Education, Trinidad and Tobago, Hyatt Hotel, 3 & 4 December

**S. Abdul- Majied**, J. De Lisle and R. Mohammed (2015)

*The challenges of using data effectively within early childhood care & education centers in Trinidad and Tobago: A multi-site case study*  
American Educational Research Association (AERA). Chicago, USA

**S. Abdul- Majied** and **S. Figaro-Henry** (2015)

*Getting STEM right from the start: Using the project approach to transform teacher education in early childhood*  
The UWI Schools of Education Biennial Conference, Cave Hill Campus, Barbados, 1- 4 June

**S. Ali, D. Barras, B. Bitu, S. Geofroy, S. Lochan** and L. Mc

Leod (2015)  
*Social Sciences teachers' perceptions of transformatory learnings from an initial in-service Professional Development programme at The University of the West Indies, Trinidad and Tobago, 2013-14*  
The UWI Schools of Education Biennial Conference, Cave Hill Campus, Barbados, 1- 4 June

**S. Ali, D. Barras, B. Bitu, S. Geofroy, S. Lochan** and L. Mc Leod (2015)

*What experiences proved significant to the professional development of a group of Social Sciences teachers on The UWI Diploma in Education programme, 2013-2014*  
14<sup>th</sup> Annual Hawaii International Conference on Education, Honolulu, Hawaii, 03-06 January

**C. Arrieta, S. Corredor, P. Palma, N. Roberts** (2015)

*Exploring Foreign Language (Spanish) teaching best practice in online delivery of the reading comprehension and writing module at the UWI, St. Augustine*  
Institutionalising Best Practice in Higher Education Conference, The UWI, St. Augustine, Trinidad, June

**D. Augustin, S. Ali, S. Herbert, F. James, S. Philip, J. Rampersad and J. Yamin-Ali** (2015)

*Quality assurance in teacher education through insider evaluation and stakeholder involvement – a case for programme renewal*  
Institutionalising Best Practice in Higher Education, UWI, St Augustine

**M. Cain and S. Phillip** (2015)

*Teachers Concerns and Level of Use of the Laptops in Secondary Schools in Trinidad and Tobago*  
SALISES Conference, St Lucia, 14 – 16 January

**Z. Dedovets, S. Figaro-Henry, V. Kamalodeen, N. Ramsewak-Jodha** (2014)

*The Development of Teacher ICT competencies through a STEM Teacher Training Project GORTT, Ministry of Education, Symposium, 3 - 4 December*

**S. Harry and B. Mitchell** (2015)

*Confronting/Conquering the technology integration challenge: Experiences in curriculum implementation from the field*  
Canadian International Conference on Education (CICE-2015), University of Toronto, 22 - 25th June

**S. Herbert and P. Pierre** (2015)

*The idea vs. the experience: Culturally relevant curricula at the tertiary level (along with co-researcher*  
The UWI Schools of Education Biennial Conference, which was hosted by the Cave Hill Campus, Barbados, 1 – 4 June

# PUBLICATIONS AND CONFERENCES

**S. Herbert, F. James and J. Yamin-Ali** (2015)

*Transforming the postgraduate Diploma in Education programme: First steps*

The UWI Schools of Education Biennial Conference, which was hosted by the Cave Hill Campus, Barbados, 1 – 4 June

**F. James, S. Ali, D. Augustin, S. Herbert, S. Phillip, J. Rampersad and J. Yamin-Ali** (2015)

*Quality assurance in teacher education through insider evaluation and stakeholder involvement: A case of programme renewal*

The UWI Schools of Education Biennial Conference, which was hosted by the Cave Hill Campus, Barbados, 1 – 4 June

**M. Jameson-Charles, S. Jaggernauth** (2014)

*In-Service Secondary School Post-graduate Diploma in Education Student Teacher Efficacy*

Caribbean Regional Conference of Psychology, Paramaribo, Suriname 11 – 14 November

**M. Jameson-Charles and S. Jaggernauth** (2014)

*Changes in teacher efficacy beliefs of secondary teachers enrolled in an in-service teacher-training programme*

Caribbean Regional Conference of Psychologists, Paramaribo, Suriname, 10 – 14 November

**G. Steele and M. Jameson-Charles** (2015)

*Student Evaluation of Courses and Lecturers (SECL), Extra-class Communication and Student Engagement*

Schools of Education Biennial Conference, UWI, Barbados, 1-5 June

**G. Steele, M. Jameson-Charles** (2015)

*Extra-class Communication, Student Engagement and Predicted Outcome Value Theory* International Communication

Association, University of Puerto Rico, Rio Piedras, Puerto Rico, 20-26 May

## FACULTY OF LAW

### BOOKS

**Antoine, R-M. B.** (2014) *Confidentiality in Offshore Financial Law*. 2<sup>nd</sup> ed. Oxford University Press: UK, NY. 417 pgs.

**Bulkan, A.** (2014) *The Survival of Indigenous Rights in Guyana*. Institute of Development Studies, University of Guyana: Guyana. 357 pgs.

**Bulkan, A., T. Robinson and A. Saunders** (2015) *Fundamentals of Caribbean Constitutional Law*. Sweet & Maxwell: Andover, UK 500pgs.

**Knechtle, J.** and C. J. Roederer (2015) *Mastering Constitutional Law*, 2<sup>nd</sup> ed., Carolina Academic Press: USA.

**Le Gall, S.** (2015) *Intellectual Property, Traditional Knowledge and Cultural Property Protection: Cultural Signifiers in the Caribbean and the Americas*. Routledge: London and New York.

### BOOK CHAPTER

**Antoine, R-M. B.** (2014) Embracing Collective Rights: Unions and the New Struggle for Relevance and Autonomy – A View from the Commonwealth Caribbean, **In:** Dominic Roux (ed) *Autonomie collective et droit du travail – Melanges en l'honneur du professeur Pierre Vierge*, Les Presses de l'Universite Laval, Canada.

### CONFERENCE PRESENTATIONS



**C. Amaefule** (2015)

*Banking Law*

Inaugural Banking Law Workshop, UWI, St. Augustine, February 21.

**R-M.B Antoine** (2014)

*Re-engineering the Criminal Justice System*

Inaugural Dana Seetahal Symposium on Criminal Justice, Trinidad and Tobago

**R-M.B Antoine** (2014)

*Sexual and Reproductive Rights in Trinidad and Tobago and the Caribbean*

The High Level Panel of the Family Planning Annual Conference, Trinidad and Tobago, September 30

**R-M. B. Antoine** (2014)

*Disability Rights in the Latin America and the Caribbean – the International Framework*

UN Committee on Disability Expert Meeting, Geneva, September 26.



**R-M. B. Antoine** (2014)

*Equality and Non-Discrimination in the Labour Context*  
High Level Meeting of Ministers of Labour and Labour Officials of Latin America and the Caribbean, September

**R-M. B. Antoine** (2014)

*Rights for Persons of African Descent in Canada – An International Perspective*  
Second Special Forum on Race and Human Rights in Canada, Osgoode Hall University, African Caribbean Legal Clinic & IACHR, Toronto, September 6.

**R-M. B. Antoine** (2014)

*Living Your Dream – Success*  
Address for the Six-Figure Successful Women's Forum, Cave Hill School of Business, MBA, Barbados, November 22

**R-M. B. Antoine** (2015)

*Understanding the Legal Framework of the Equal Opportunity Act* - Feature Presentation for International Human Rights Day, Equal Opportunity Commission Conference, Trinidad, December 10

**R-M. B. Antoine** (2014),

*Juvenile Justice – Symposium on Promoting and Protecting Human Rights in celebration of International Human Rights Day*, The Catholic Commission For Social Justice (CCSJ) and The Greater Caribbean For Life (GCL), December 10, Santa Rosa Parish Hall, Arima.

**R-M. B. Antoine** (2015)

*Assessing 10 Years of the CCJ's Jurisprudence – Encouraging Signs*  
The CCJ Symposium: Advancing the Case for Regionalism and Indigenous Jurisprudence  
Canadian Embassy, UWI/ILO/IDB, St Augustine, January 21

**R-M. B. Antoine** (2015)

*Offshore Banking – Regulatory Issues and Money Laundering*  
The Inaugural Banking Law Workshop, Faculty of Law, St. Augustine, February 21.

**R-M. B. Antoine** (2015)

*Promoting Human Rights – The Challenge for Christians*  
The Annual Regional Catholic Conference for Religious, Guyana, April 9.

**R-M. B. Antoine** (2015)

*The Caribbean Offshore Financial Services Revolution - A Bold, Futuristic Initiative Requiring Brave Leadership*  
The UWI/IDB Caribbean Forum on the Future of the Caribbean UWI, St. Augustine, May 5.

**R-M. B. Antoine** (2015)

*The Place of Race – An International Human Rights Perspective*  
The Exploratory Seminar: Afro-Latin American Studies, Radcliffe Institute for Advanced Studies, Harvard University, Boston, May 8.

**R-M. B. Antoine** (2015)

*Who's Afraid of Human Rights?*  
The Distinguished Jurist Lecture Panel Discussion at Trinidad and Tobago Supreme Court of Justice, May 13.

**A. Bulkan** (2014)

*Overview of Rights - Symposium on Promoting and Protecting Human Rights in celebration of International Human Rights Day*, The Catholic Commission For Social Justice (CCSJ) and The Greater Caribbean For Life (GCL), December 10, Santa Rosa Parish Hall, Arima.

**A. Bulkan** (2014)

*Why Human Rights Matter*  
Panel Discussion on Protecting and Promoting Human Rights in Commemoration of World Human Rights Day, Catholic Commission on Social Justice, Arima, Trinidad, December 10.

**A. Bulkan** (2015)

*GUYANA: A Review of the 2015 Elections and Perspectives on the Way Forward*  
Panel Discussion hosted by the Institute of International Relations, UWI, St Augustine Campus, June 3.

**J. Jeremie SC** (2014)

*Financial Crime*  
Cambridge Symposium, Cambridge, UK, September

**J. Knechtle** (2015)

*Liability for Environmental and Economic Harm Due to Offshore Oil Spills*  
UWI Inaugural Oil and Gas Law Conference: Key Legal Issues in Oil and Gas Law: A Caribbean Perspective, Hyatt Regency, Port of Spain, May 1.

**S. Le Gall** (2014)

*Intellectual Property in the Caribbean Community – Identification, Protection and Valuation*  
Training Workshop on Techno-entrepreneurship for the Caribbean, hosted by the International Science, Technology and Innovation Centre (ISTIC) for South-South Cooperation under the Auspices of UNESCO and CARISCIENCE (The Network of R&D and Postgraduate Programmes in the Basic Sciences in the Caribbean) in collaboration with the CARICOM Science, Technology and Innovation Committee, and managed by Usains Holding Sdn. Bhd. (a wholly-owned by Universiti Sains Malaysia), held at the Grafton Beach Resort, Tobago

# PUBLICATIONS AND CONFERENCES



## NON-REFEREED PUBLICATIONS AND RELATED WORKS

**Bulkan, A.** (2014) 'The Death Penalty in the Commonwealth Caribbean: Justice out of Reach?' in Ivan Simonovic (ed), *Moving Away from the Death Penalty: Arguments, Trends and Perspectives* (UN-OHCHR) 114-133.

**Bulkan, A.** (2015) 'The PPP/C has been giving Guyanese the Ramsaran treatment for years', *Stabroek News*, April 27, 2015

**Bulkan, A., A. Trotz & U. Burnham** (2015) 'The multiple dimensions of a truly democratic election', *Stabroek News*, April 20, 2015

**Bulkan, A.** (2014) 'Anil Nandall: A Visceral Embodiment of the Post-Jagan PPP', *Stabroek News*, December 8, 2014

**Bulkan, A.** (2014) 'President Donald Ramotar: Re-convene Parliament Immediately and Return to the Path of Democracy', *Stabroek News*, November 17, 2014

**Bulkan, A., A. Trotz & U. Burnham** (2014) 'An Issue of Public Misconduct, Not a Private Matter', *Stabroek News*, November 3, 2014

**Bulkan, A.** (2014) 'Transparency and Accountability in the Regulation of Guyana's Forestry Sector' *Stabroek News*, August 26 & September 2, 2014

## FACULTY OF MEDICAL SCIENCES

### JOURNAL PUBLICATIONS

#### Department of Pre-Clinical Sciences

Bhat V., **S. Nayak**. (2015) Renoprotective effects, protein thiols and liver glycogen content of Alloxan-induced diabetic rats treated with different fractions of heartwood of *Pterocarpus marsupium*. *Natural Product Communications* 10: 1-5.

Sundaram V., **S. Rao**, A. Adogwa, **S. Nayak**. (2015) Morphological studies of the forelimb skeleton of the orange rumped agouti (*Dasyprocta leporine*). *Linnaeus*, 1758 *APRB* 8(4): 1-9.

Bhaktha G., **S. Nayak**, S. Manjula. (2015) Assessment of biomarkers in type 2 diabetic subjects without any complications. Diabetes and metabolic syndrome. *Clinical Research and Review*. Aug 21. pii: S1871-4021(15)00081-8. doi: 10.1016/j.dsx.2015.08.014. [Epub ahead of print]

**Nayak S.**, A. Jagessar, Z. Mohammed, J. Rampersad, S. Ramkissoon, S. Biswah, A. Mohammed, A. Maraj, C. Rampersad. (2015) Evaluation of N-terminal pro BNP and hs-CRP relationship with features of metabolic syndrome in high risk sub groups for cardiovascular disease. *International Journal of Applied Basic Medical Research* 5 (3): 190-194.

**Nayak S.**, G. Bhaktha, S. Mohammad. (2015) Adiponectin in diabetic subjects without any micro- or macrovascular complications: A review. *Journal of Diabetes Science and Technology* 9(5):1160-1161.

Bhat V., **S. Nayak**. (2015) Evaluation of antidiabetic and hypolipidemic efficacy of various fractions of heartwood of *Pterocarpus marsupium* (fabaceae) on alloxan induced diabetic rats. *European Journal of Medicinal Plants* 6(4): 242-248.

**Nayak B.S.**, A. Abraham, F. Mohammed, A. Mohammed, T. Mohammed, A. Roopchand, L. Battersby, C. Law, S. Mohammed. (2015) Investigating the impact of the local health care system in controlling blood glucose levels and preventing complications in patients with type 2 diabetes. *World Journal of Pharmaceutical Research* 4 (2): 1084-1092.

**Nayak B.S.**, C. Gosine, S. Ramkissoon, A. Baig, A. Kamalodeen, D. Mohammed, S. Poolchan, A. Harripersad, S. Singh. (2015) The association between indices of obesity and common clinical measures in adults with and without type 2 diabetes. *Int J Res Med Sci*. 3(1):256-259.

- Bhaktha G., S. Nayak, S. Mayya, M. Shantaram.** (2015) Effect of caffeine on adiponectin levels and risk of diabetes. *Journal of Clinical and Diagnostic Research* 9(1): BC01-BC03.
- Sahadeo, N., H. Mohammed, O. M. Allicock, A. J. Auguste, S. G. Widen, K. Badal, K. Pulchan, **J. E. Foster**, S. C. Weaver and **C. V. F. Carrington.** (2015). Molecular characterisation of chikungunya virus infections in Trinidad and comparison of clinical and laboratory features with dengue and other acute febrile cases. *PLOS Neglected Tropical Diseases*. DOI: 10.1371/journal.pntd.0004199
- Cuthbert C.E., D. Ramdath and J. E. Foster. (2014). Frequency of Fat Mass and Obesity-Associated Gene rs9939609 and Peroxisome Proliferator-Activated Receptor Gamma 2 Gene rs1801282 Polymorphisms among Trinidadian Neonates of Different Ethnicities and Their Relationship to Anthropometry at Birth. *Journal of Nutrigenetics and Nutrigenomics*.7:39-47. DOI: 10.1159/000363138.
- Rampersad S.N., F. N. Hosein and **C. V. F. Carrington.** (2014). Sequence exploration reveals information bias among molecular markers used in phylogenetic reconstruction for *Colletotrichum* species. *Springerplus* 2014 17;3:614. doi: 10.1186/2193-1801-3-614. eCollection 2014.
- Auguste A.J., J. T. Kaelber, E. B. Fokam, H. Guzman, **C. V. F. Carrington**, J. H. Erasmus, B. Kamgang, V. L. Popov, J. Jakana, X. Liu, T. G. Wood, S. G. Widen, N. Vasilakis, R. B. Tesh, W. Chiu, S. C. Weaver. (2014) A newly-isolated reovirus has the simplest genomic and structural organization of any reovirus. *J Virol*. pii: JVI.02264-14.
- Suepaul S. M., **C. V. F. Carrington**, M. Campbell, G. Borde, A. Adesiyun. (2014) Seroepidemiology of leptospirosis in dogs and rats in Trinidad. *Tropical Biomedicine* Dec: 31(4):853-61.
- Waggoner J.J., N. S. D.Sahadeo, A. Brown, A. Mohamed-Hadley, D. Hadley, L. Carrington, **C. V. F. Carrington**, B. A. Pinsky. (2014) Improved Serotype-Specific Dengue Virus Detection in Trinidad and Tobago using a Multiplex, Real-Time RT-PCR. *Diagnostic Microbiology and Infectious Disease* 81(2):105-6. doi: 10.1016/j.diagmicrobio.2014.10.001. Epub 2014 Oct 7.
- Sahadeo N., Mohammed H., Allicock O.M., Auguste A.J., Widen S.G., Badal K., Pulchan K., Foster J.E., Weaver S.C., **Carrington C.V.** (2015). Molecular Characterisation of Chikungunya Virus Infections in Trinidad and Comparison of Clinical and Laboratory Features with Dengue and Other Acute Febrile Cases. *PLoS Negl Trop Dis* 18:9(11):e0004199. doi: 10.1371/journal.pntd.0004199. eCollection 2015 Nov.
- Rao S., S. Konduru and T. Rao.** (2015) Left inferior vena cava - a congenital anomaly. *International Journal of Advances in Case Reports* 2(18): 1153-1154.
- Rao S., H. Daisley, S. Gajula, R. Bissessar, S. Bholra, T. Rao.** (2015) Quadricuspid Aortic Valve – A Rare Congenital Anomaly. *International Journal of Advances in Case Reports* 2(10):654-656.
- Rao S., G. Swamy, T. K. Vasudha, T. Rao.** (2015) Unusual Foramen on the Posterior Arch of Atlas. *Journal of Science* 5 (12): 1165-1167.
- Rao S., G. Swamy, T. K. Vasudha, T. Rao.** (2015) A failure of resegmentation of the thoracic vertebra - A congenital anomaly. *Journal of Science* 5 (12): 1162-1164.
- Konduru S., K. Satheesha, **T. Rao** and **S. Rao.** (2015) Lunate-Triquetral Fusion: A Congenital Anaomaly. *International Journal of Advances in Case Reports*. 2 (14):904-906.
- Rao T.** and S. Rao. (2015) Variations in the formation of the cords of brachial plexus – a case report. *International Journal of Advances in Case Reports*. 2(9):553-556.
- Rao T. and S. Rao.** (2015) Anomalous origin of palmaris longus muscle – case report. *International Journal of Advances in Case Reports*. 2(9):536-538.
- Rao T. and S. Rao.** (2015): Incidence of Cranio (Meningo)-orbital foramen in the dry human skull and its clinical relevance – a case report. *International Journal of Advances in Case Reports*. 2 (11) 729-731.
- Rao T., S. Konduru, S. Rao.** (2015) Pseudoaneurysm of the left Superficial Temporal Artery secondary to trauma. *Journal of Science* 5 (11): 1029-1031.
- Rao S., V. Rodrigues, K.G. Mohandas Rao, N. Ovchinnikov.** (2015) Multiple Vascular Anomalies Involving Renal, Testicular and Suprarenal Arteries. *Arch Clin Exp Surg*. 4(3): 168-171.

## Department of Para-Clinical Medical Sciences

Nwankwo C.U., **C. E. Ezenwaka**, P. C. Onuoha, N. R. Agbakoba. (2015) Implementing diabetes self-management education (DSME) in a Nigerian population: perceptions of practice nurses and dieticians. *Archives of Physiology & Biochemistry* DOI: 10.3109/13813455.2015.1031140, Early Online: 1–5.

# PUBLICATIONS AND CONFERENCES

Onuoha P.C., M. Ramcharan, N. London, I. Ramlal, L. A. Sheen-Daniel, C. E. **Ezenwaka**. (2015) Motivational factors and techniques at the workplace: perspectives of nurses in two major hospitals in Trinidad. *Asian Journal of Science & Technology* 6(5): 1388-1392.

Joseph-Browne R., P. C. Onuoha, **C. E. Ezenwaka**. (2015) Preschoolers' level of activity and their parents' nutrition practices regarding their nutrition at a Caribbean government owned preschool. *International Journal of Current Research* 7(3): 14033-14037.

Onuoha P. C., J. Gittens, J. McKenzie, M. Toussaint, **C. E. Ezenwaka**. (2014) Substance use among staff nurses at selected hospitals in Trinidad and Tobago: An exploration. *Asian Academic Research Associates Journal* 1(27): 2319-2801.

Onuoha P. C. and **C. E. Ezenwaka**. (2014) Diabetes patients need support to practise self-monitoring of blood glucose levels. *Asian Journal of Science and Technology* 5(12): 789-792.

Onuoha P. C., D. Israel-Richardson, L. A. Caesar, **C. E. Ezenwaka**, M. Moriyama. (2014) Do Practice Nurses in the Caribbean have the knowledge of the principles and concepts of diabetes self-management education? *Journal of Nursing Care* 3: 192. DOI: 10.4172/2167-1168.1000192.

**Ezenwaka C.E.**, C. U. Nwankwo, P. C. Onuoha, N. R. Agbakoba. (2014) The opinion of practice nurses and dietitians on implementing diabetes self-management education (DSME) in Africa and the Caribbean. *International Journal of Diabetes Research* (DOI: 10.5923/j.diabetes.20140305.01) 3(5), 71-77.

Onuoha P. C., A. Drayton-Bailey, R. Dais, C. James-Fough, D. Sherma-Hinne, K. Alphonso-Lootawan, **C. E. Ezenwaka**. (2014) Registered Nurses' workplace bullying experiences at a Caribbean teaching hospital. *Asian Academic Research Journal of Multidisciplinary* 1(20), (ISSN: 2319-2801).

**Ezenwaka C. E.**, O. Okoye, C. Esonwune, P. C. Onuoha, C. Dioka, C. Osuji, C. Oguejiofor, C. Meludu. (2014) High prevalence of abdominal obesity increases the risk of the metabolic syndrome in Nigerian type 2 diabetes patients: using the IDF world-wide definition. *Metabolic Syndrome & Related Disorders*, early online pp. 1-6, DOI: 10.1089/met.2013.0139.

**Ezenwaka C.E.**, O. Okoye, C. Esonwune, C. Dioka, P. C. Onuoha, C. Osuji, C. Oguejiofor, C. Meludu. (2014) Is diabetes patients' knowledge of laboratory tests for monitoring blood glucose levels associated with better glycaemic control? *Archives of Physiology & Biochemistry*, early online 1-5, DOI: 10.3109/13813455.2014.884140.

**Ezenwaka C. E.**, P. C. Onuoha, D. Sandy, D. Israel-Richardson. (2014) Diabetes self-management education in a high-income developing country: survey of the opinion of nurses and dietitians. *Int J Diabetes Dev Ctries* (DOI: 10.1007/s13410-013-0174-7), 34 (3), 163-168.

Del Pino, D., D. Basdeo, K. Fyzool, B. Fermin, J. Baksh, R. Sookdeo, N. Ramdass, R. Nandlal, **Y. Clement**. (2015) Adherence to chronic disease management among diabetic and hypertensive patients in Trinidad. *West Indian Medical Journal* 64 (Suppl 2): 71.

**Chattu, V. K.**, K. Soosanna. (2015) Global Health Governance and the END TB Strategy: An optimistic post 2015 development agenda. *Global J of Med and Public Health* 4 (1), 1-3.

**Chattu, V. K.**, K. Soosanna. (2015) TB-HIV co-infection and MDR-TB: major concerns for post 2015 global agenda. *International Journal of Current Microbiology and Applied Sciences* 4 (3), 1-4.

**Chattu, V. K.** (2015) Corporate Social Responsibility in Public Health: A case-study on HIV/AIDS epidemic by Johnson & Johnson company in Africa. *Journal of Natural Science, Biology and Medicine* 6 (1) 219-223.

**Chattu, V. K.** (2014) Role of biomedical and behavioural interventions and their evidence in prevention of HIV infection: A literature review. *International Journal of Medicine and Public Health* 4 (4), 324-330. DOI: 10.4103/2230-8598.144057.

Nayak, S., S. Ramlogan, **A. V. C. Rao**, S. Maharaj. (2014) NeuroLaena lobata L. promotes wound healing in Sprague Dawley rats. *International Journal of Applied and Basic Medical Research* Vol 4, Issue 2.

**Srikanth U.**, R. Pai, M. Bukelo and **A. V. C. Rao**. (2014) Primary Pleural Liposarcoma: A Case Report and Review of Literature. *International Journal of Medical and Applied Sciences* Volume 3, Issue 3.

Bukelo M., **U. Srikanth**, R. Sharada, **A. V. C. Rao**. (2015) Adenomatoid tumor of the fallopian tube: A rare case report and review of literature. *International Journal of Medical and Applied Sciences* 4(1):4-7.

**Vuma, S.**, B. Sa, S. Ramsewak. (2015) Descriptive Analysis of Pre-testing outcome in haematology as an indicator of performance in final examinations among third year medical students. *Caribbean Teaching Scholar* 5(1) p25-35.

**Vuma, S.**, B. Sa, S. Ramsewak. (2015) A retrospective co-relational analysis of students' performance in different modalities of assessment in Haematology and the final integrated multi-specialty examinations among third year MBBS students. *Caribbean Teaching Scholar* 5(1) p37-46.

## Department of Clinical Surgical Sciences

**Cawich, S.,** F. Mohammed, R. Spence, M. Albert, **V.**

**Naraynsingh.** (2015) Colonic foreign body retrieval using a modified TAMIS technique with standard instruments and trocars. *Case Rep Emerg Med.* 815616. doi: 10.1155/2015/815616. PMID: 25945267

**Cawich, S.,** E. Mohammed, **M. Mencia, V. Naraynsingh.**

Upper limb ischemic gangrene as a complication of hemodialysis access. *Case Rep Vasc Med.* 830219. doi: 10.1155/2015/830219. Epub 2015 Feb 25. PMID: 25810944

**Ramdass, M., S. Cawich,** S. Pooran S, D. Milne, E. Ali, **V.**

**Naraynsingh.** (2015) Declaration of a state of emergency in Trinidad and Tobago: effect on the trauma admissions at the National Referral Trauma Centre. *Prehosp Disaster Med.* Jun; 30(3):229-32. doi:10.1017/S1049023X15000242. Epub 2015 Mar 18. PMID: 25783806.

**Cawich S.,** D. Thomas, C. Ramjit, R. Bhagan, **V. Naraynsingh.**

(2015) Complex liver resections for colorectal metastases: are they safe in the low-volume, resource-poor Caribbean setting? *Case Rep Surg.* 570968. doi: 10.1155/2015/570968. Epub 2015 Feb 2. PMID: 25713743.

**Singh, Y., S. Cawich,** I. Aziz, **V. Naraynsingh.** (2015) Delayed splenic abscess after laparoscopic sleeve gastrectomy. *BMJ Case Rep.* pii: bcr2014208057. doi: 10.1136/bcr-2014-208057. PMID: 25691579.

**Cawich, S., R. Maharaj, V. Naraynsingh.** (2014) Penile Fracture: Peno-scrotal approach with degloving penis after Magnetic Resonance Imaging. *Archivio italiano di urologia, andrologia; organo ufficiale [di] Società italiana di ecografia urologica e nefrologica/ Associazione ricerche in urologia.* 86(4):304. DOI: 10.4081/aiua.2014.4.304.

**Cawich, S., P. Harnarayan,** S. Islam, S. Budhooram, S. Ramsewak, **V. Naraynsingh.** (2014) Adverse events in diabetic foot infections: a case control study comparing early versus delayed medical treatment after home remedies. *Risk Manag Healthc Policy.* 27;7: 239-243.

**Cawich, S.,** S. Islam, S. Budhooram, **V. Naraynsingh.** (2014) A case of neglected giant phylloides. *Caribbean Medical Journal* 76 (1): 57 – 69.

**Dan D.,** P.V. Ramraj, M. Solomon, T. Ramnarine, N. Kawal, **N. Bascombe, V. Naraynsingh.** (2014) Laparoscopic repair of a rare acquired abdominal intercostal hernia. *Int J Surg Case Rep.* Oct 24;5(12):1041-1043. doi: 10.1016/j.ijscr.2014.10.077. [Epub ahead of print]

Islam, S., **V. Naraynsingh.** (2014) Spontaneous Rupture of Liver Haemangioma - A Case Report & Review of Literature. *Journal of Surgery [Jurnalul de chirurgie]* 10(2): 1-3 DOI: 10.7438/1584-9341-10-2-20.

**Dan D., N. Bascombe, D. Harnanan,** S. Islam, **V. Naraynsingh.** (2014) Minimally Invasive Surgery in the Management of Adhesive Small Bowel Obstruction: A rare case. *J Gastroint Dig Syst* 4: 211. Doi: 10.4172/2161-069X.1000211.

**Cawich, S.,** D. Thomas, D. Hassranah, **V. Naraynsingh.** (2014) Evolution of SILS Cholecystectomy in the Caribbean: The Direct Transfascial Puncture Technique Using Conventional Instruments without Working Ports. *Case Rep Surg.* 164342. doi: 10.1155/2014/164342. Epub 2014 Oct 2. PMID: 25349766.

**Cawich, S.,** M. Arthurs, T. Murphy, K. Bonadie, H. Roberts, V. Naraynsingh. (2014) Complications of ERCP for choledocholithiasis in a sickle cell cohort. *Trop Doct.* 14. pii: 0049475514552550. PMID: 25315239.

**Harnarayan, P., S. Cawich,** S. Islam, S. Ramsewak, **V. Naraynsingh.** (2014) Self-directed treatment for lower limb wounds in persons with diabetes: a short report. *Patient Prefer Adherence.* Sep 2; 8:1173-7. doi: 10.2147/PPA.S68680. eCollection 2014. PMID: 25214770 [PubMed]

BahadurSingh, S., R. Maharaj, **P. Harnarayan, S. Cawich, M. Yearwood, V. Naraynsingh.** (2014) Mammographic screening: Is it relevant to developing countries? *Current Medicine Research and Practice* Volume 4, Issue 4, July–August, Pages 168–170.

**Cawich, S.,** S. Kulkarni, **M. Ramdass,** D. Hassranah, I. Bambury, L. Christie, **V. Naraynsingh.** (2014) An audit of clinician compliance with best practice recommendations to repair severe obstetric anal sphincter injuries. *Perm J.* Summer;18(3):27-31. doi: 10.7812/TPP/13-167.

**Ramdass, M., V. Naraynsingh.** (2014) Multiple Urethral Stones Causing Penile Gangrene. *Case Reports in Urology.* Volume 2014 (2014), Article ID 182094, 3 pages. <http://dx.doi.org/10.1155/2014/182094>.

**Cawich, S., P. Harnarayan,** S. Budhooram, N. Bobb, S. Islam, **V. Naraynsingh.** (2014) Wonder of Life (kalanchoe pinnata) leaves to treat diabetic foot infections in Trinidad and Tobago: a case control study. *Trop Doct.* Jul 31. pii: 0049475514543656. [Epub ahead of print].

# PUBLICATIONS AND CONFERENCES

**Cawich, S., S. Mohanty, L. Simpson, M. Ramdass, V. Naraynsingh.** (2014) Is Laparoscopic Appendectomy Safe When Performed in a Low Volume Setting? *International J Biomed Sci.* 2014;10(1):31-35.

**Cawich, S., S. Islam, S. Hariharan, P. Harnarayan, S. Budhooram, S. Ramsewak, V. Naraynsingh.** (2014) The economic impact of hospitalization for diabetic foot infections in a Caribbean nation. *Perm J.* Winter;18 (1):e101-4. doi: 10.7812/TPP/13-096.PMID:24626079.

**Ramdass, M., P. Harnarayan, N. Mooteeram, A. Nath, V. Naraynsingh, S. Budhooram, T. Dookie, R. Henry R.** (2014) Patterns of atherosclerotic lesions of the lower extremity in a West Indian population based on angiographic findings and ethnicity. *Annals of the Royal College of Surgeons of England* 96:121-126. Impact factor: 1.27; Citations: 0. PMID:24780669.

**Ramdass, M., V. Naraynsingh.** (2014) Multiple urethral stones causing penile gangrene. *Case Reports in Urology* PMID:24963438.

**Cawich, S., S. Kulkarni, M. Ramdass, D. Hassranah, I. Bambury, L. Christie, V. Naraynsingh.** (2014) An audit of clinician compliance with best practice recommendations to repair severe obstetric anal sphincter injuries. *The Permanente Journal.* Summer;18(3):27-31. doi: 10.7812/TPP/13-167 PMID: 25102516.

**Ramdass, M., Q. Young-Sing, D. Milne, J. Mooteeram, S. Barrow.** (2014) Association between the appendix and the fecalith in adults. *Canadian Journal of Surgery* Nov; 57(6): 002014-2014. doi: 10:1503/cjs.002014. PMID: 25427333.

**Ramdass, M.** (2015) TEVAR for Symptomatic Stanford B Dissection: A Systematic Review 30-day Mortality and Morbidity. *The Thoracic and Cardiovascular Surgeon* Mar: 63(2):97-112. doi: 10.1055/s-0034-1370760. PMID: 24752872

**Ramdass, M., K. Maharaj, J. Mooteeram, W. Dwarika, C. Tilluckdharry, S. Barrow.** (2015) Parotid tumours in a West Indian population: Comparisons to world trends. *Molecular and Clinical Oncology.* Jan; 3(1): 167-170. Epub 2014 Oct 8. PMID: 25469289

**Ramdass, M., A. Harracksingh, K. Maharaj, Q. Young Sing, J. Mooteeram, S. Barrow.** (2015) Incidence of Tongue Carcinoma in Trinidad and Tobago. *Oncology Letters* 9: 1417-1419, DOI: 10.3892/ol.2015.2862 Early online. PMID:25663924

**Ramdass, M., V. Naraynsingh, Q. Young-Sing, J. Mooteeram, S. Barrow.** (2015) Penile Carcinoma in Trinidad and Tobago. *West Indian Medical Journal* Feb 26:63(6): 571. doi: 10.7727/wimj2013.303 PMID: 25803395

**Ramdass, M., S. Cawich, S. Pooran, D. Milne, E. Ali, V. Naraynsingh.** (2015) Declaration of a State of Emergency in Trinidad and Tobago: Effect on the Trauma Admissions at the National Referral Trauma Centre. *Prehospital and Disaster Medicine* Mar 18:1-4. PMID:25783806

**Ramdass, M.** (2015) How to Jimmy the chest in Emergency Median Sternotomy. *Annals of the Royal College of Surgeons of England* 97: 396-403. PMID:26264096

## Department of Clinical Medical Sciences

**Baboolal, N. G. Davis, A. McRae.** (2014) Trinidad and Tobago: A decade of dementia research. *Dement Neuropsychol.* December;8(4):330-338.

Coombs D., **C. Bodkyn, J. Ramcharan.** (2014). Neurodevelopmental outcome of childhood cancer survivors. *WIMJ* 63(6): 583

Adler, E., C. Alexis, Z. Ali, U. Allen, U. Bartels, C. Bick, J. Bird-Compton, **C. Bodkyn,** R. Boyle, S. De Young, B. Fleming-Carroll, S. Gupta, P. Ingram-Martin, M. Irwin, M. Kirby-Allen, S. McLean-Salmon, P. Mihelcic, M. Richards-Dawson, M. Reece-Mills, F. Shaikh, C. Sinquee-Brown, M. Thame, S. Weitzman, G. Wharfe, V. Blanchette. (2014). Bridging the distance in the Caribbean: Telemedicine as a means to build capacity for care in paediatric cancer and blood disorders. *Studies in Health Technology and Informatics* 209, 1-8.

Ciufolini, S., C. Morgan, K. Morgan, P. Fearon, J. Boydell, **G. Hutchinson,** A. Demjaha, P. Girardi, G. Doody, P. Jones, R. Murray, P. Dazzan. (2015) Self-esteem and self-agency in the first episode psychosis: Ethnic variation and relationship with clinical presentation. *Psychiatry Res.* Jun 30;227.

Morgan, C., M. Hibben, O. Esan, S. John, V. Patel, H. Weiss, R. Murray, **G. Hutchinson,** O. Gureje, R. Thara, A. Cohen. (2015) Searching for Psychosis INTREPID (1): Systems for detecting untreated and first-episode cases of psychosis in diverse settings. *Soc Psychiatry Psychiatr Epidemiol.* Jun: 50.

Sandy, S., S. Pittock, **T. Seemungal,** A. Ali. (2014) Aquaporin-4 Immunoglobulin G testing in 36 consecutive Jamaican patients with inflammatory central nervous system demyelinating disease. *Neurology International.* Aug 5;6(3).

Mohammed, H., G. Donaldson, J. Wedzicha, T. Seemungal, S. Mohammed. (2014) Exacerbations are related to depression and sgrq in West Indian subjects with COPD. *Am J Respir Crit Care Med.*;189:A2942

Montane-Jaime, L., **S. Shafe**, T. Liang, D. Wills, G. Berg, C. Ehlers. (2014) Subjective response to alcohol and ADH Polymorphisms in a select sample of young adult male East Indians and Africans in Trinidad and Tobago. *Journal of Studies on Alcohol and Drugs*. Sep;75 (5):827-38.

Batson, Y., **S. Teelucksingh**, R. Maharaj, B. Cockburn. (2014) A cross-sectional study to determine the prevalence of obesity and other risk factors for type 2 diabetes among school children aged between 7-18 years in Trinidad. *Paediatric and International Child Health* Vol 34. No.3, 178-183.

Ramkelawan, S., J. Stone, V. **Singh**, A. Ramtahal. (2014) Clinical options for the treatment of urinary tract infections in children. *Clinical Medicine Insights: Paediatrics* 8: 1-7.

## School of Dentistry

**Balkaran, R.**, T. Osoba, R. Rafeek. (2014) A cross-sectional study of patients' satisfaction with dental care facilities: a survey of adult treatment at the University of the West Indies School of Dentistry. *West Indian Medical Journal* 63:5.

Nash, D. A., J. W. Friedman, K. R. Mathu-Muju, P. G. Robinson, J. Satur, S. Moffat, R. Kardos, E. C. M. Lo, A. H. H. Wong, N. Jaafar, J. Van den Heuvel, P. Phantumvanit, E. Chu, **R. Naidu**, L. Naidoo, I. McKenzie, E. Fernando. (2014) A Review of the Global Literature on Dental Therapists. *Community Dentistry and Oral Epidemiology* 42:1.

Nazario G., **R. Naidu**, A. Elias-Boneta. (2014) Engaging the Caribbean Region for Oral Health. *Puerto Rico Health Science Journal* 33:205.

Marchan, S. M., M. E. Ostromecki, **Q. M. Marchan**, D. Hinds. (2014) The Influence of Finishing and Multi-step Polishing on Nanocomposites: A Qualitative Surface Assessment. *International Journal of Clinical Dentistry* 7:174.

Marchan, S., D. White, J. Pruszynski, T. Manwah, V. Bassaw, **W. Smith**. (2014) The Shear Bond Strengths of Composite Bonded to Dentine Following Treatment with Two Dentine Occluding Toothpastes. *Open Journal of Stomatology* 4:121.

**Marchan S. M., W. Smith, Q. M. Marchan**, M. E. Ostromecki. (2014) A Nano-hybrid Investigated: The Correlation between Surface Characteristics and Color after Instrumentation. *International Journal of Clinical Dentistry* 7:4.

**Paryag, A., R. N. Rafeek**. (2014) Dental Erosion and Medical Conditions: An Overview of Aetiology, Diagnosis, and Management. *West Indian Medical Journal* 63:499.

**Bissoon, A., K Moze**. (2014) Clinical and Radiological Evaluation of Cleidocranial Dysplasia in Two Trinidadian Siblings. *West Indian Medical Journal* 63:5.

Apostolakis, D. **A. Bissoon**. (2014) Radiographic Evaluation of the Superior Alveolar Canal: Measurements of its Diameter and of its Position in Relation to the Maxillary Sinus Floor: A Cone Beam Computerized Tomography Study. *Clinical Oral Implantology Research* 25:553.

**Bissoon, A.** (2015) Incidental Finding of Ethmoidal Osteoma on Cone Beam Computed Tomography. *Journal of Dental Applications* 2:240.

## School of Pharmacy

**Ignacio, D., P. Sealy**, Y. Clement. (2014) Confidence in Prescription Writing among Junior Physicians in Trinidad and Tobago. *West Indian Med J* DOI: 10.7727.wimj.2014.087.

Alleyne, T., **D. Ignacio**, V. Sampson, D. Ashe. (2015) A Bio-Computing Analysis of the Resting- to-pulsed conformational Changes in cytochrome c Oxidase. *WIMJ Open* 2 (3):109

Ahmad, A., M. U. Khan, L. J. Gogoi, M. Kalita, A. P. Sikdar, **S. Pandey, S. Dhingra**. (2015) Japanese Encephalitis in Assam, India: Need to Increase Healthcare Workers' Understanding to Improve Health Care. *PLoS ONE* 10(8): e0135767. doi:10.1371/journal.pone.0135767.

Ahmad, A., M. U. Khan, I. Patel, **S. Maharaj, S. Pandey, S. Dhingra**. (2015) Knowledge, attitude and practice of B.Sc. Pharmacy students about antibiotics in Trinidad and Tobago. *Journal of Research in Pharmacy Practice* 4:37-41.

**Dhingra, S., S. Boodoo**, K. DeGannes, **S. Maharaj, S. Pandey**, A. Ahmad. (2015) Angiotensin-Converting Enzyme (ACE) Induced Angioedema: A Case Report. *International Journal of Toxicological and Pharmacological Research* 7(2); 105-107.

Hosein, D., A. Ahmad, M. U. Khan, **S. Dhingra**. (2015) Canagliflozin: A First-in-Class Medication for the Treatment of Type 2 Diabetes Mellitus. *International Journal of Toxicological and Pharmacological Research* 7(2); 105-107.

Ramrekha, C., A. Ramkelawan, R. Singh, A. Solomon, C. Tilluckdharry, A. Ahmad, **S. Dhingra, S. Pandey, S. Maharaj**. (2015) Pharmacy Education in Trinidad and Tobago. *Indian Journal of Pharmaceutical Education and Research* 49(3):168-173. DOI: 10.5530/ijper.49.3.1.

# PUBLICATIONS AND CONFERENCES

Sachdeva, M., **S. Dhingra**. (2015) Obinutuzumab: A FDA approved monoclonal antibody in the treatment of untreated chronic lymphocytic leukemia. *Int J App Basic Med Res* 5:54-7.

**Maharaj, S., S. Pandey**, K. Maharaj, **S. Dhingra**. (2014) A case report on the significance of pharmaceutical excipients in paediatric medicines. *Clinical Case Reports (Wiley Journal)* (6), 258-259. DOI: 10.1002/ccr3.106.

Dhingra, M. S., **S. Dhingra**, R. Kumria, T. Singh, R. Chadha, A. Kumar, M. Karan M. (2014) Effect of trimethylgallic acid esters against chronic stress-induced anxiety-like behavior and oxidative stress in mice. *Pharmacological Reports* 66(4):606-12. Doi: 10.1016/j.pharep.2014.01.004.

Dhingra, M.S., **S. Dhingra**, T. Singh, R. Chadha, A. Kumar, M. Karan. (2014) Design, synthesis, physicochemical and pharmacological evaluation of gallic acid esters as non-ulcerogenic and gastroprotective anti-inflammatory agents. *Medicinal Chemistry Research (Springer journal)* 23(11), 4771-4788 DOI: 10.1007/s00044-014-1041-x.

Ayub, S., **S. Maharaj, S. Pandey**, A. Ahmad, M. Umair, S. D. Khan. (2015) Suvorexant: A New Drug in the Treatment of Insomnia. *International Journal of Toxicological and Pharmacological Research* 7(4); 237-242.

Ramrekha, C., A. Ramkhelawan, R. Singh, A. Solomon, C. Tilluckdharry, A. Ahmad, **S. Dhingra, S. Pandey, S. Maharaj**. (2015) Pharmacy Education in Trinidad and Tobago. *Indian Journal of Pharmaceutical Education and Research* Jul; 49(3): 168-173.

Akram, A., M. U. Khan, I. Patel, S. **Maharaj**, S. Pandey, S. Dhingra S. (2015) Knowledge, attitude and practice of B. Sc. Pharmacy students about antibiotics in Trinidad and Tobago. *Journal of Research in Pharmacy Practice* Jan; 4 (1):37.

Boodoo, S., K. De Gannes, S. Maharaj, S. Pandey, A. Ahmad, S. Dhingra. (2014) Angiotensin-Converting Enzyme (ACE) Induced Angioedema: A Case Report. *International Journal of Toxicological and Pharmacological Research* 6(4): 121-122.

Maharaj, S., S. Pandey, K. Maharaj, M. S. Sheik, S. Dhingra. (2014) Significance of pharmaceutical excipients in prescribed medicines: A case report. *Clinical Case Reports* Dec 1; 2(6):258-9.

Sachdev, M., **S. Dhingra**, M. Parle, **S. Maharaj**. (2014) Findings of a retrospective study on factors responsible for depression in India. *Value in Health* 17(3): A209.

**Maharaj, S., S. Pandey**, Y. Pathak, M. Janodia. (2014) Development of a sustainable access to medicine model in the Caribbean: A case study of the chronic disease assistance program. *Journal of Pharmaceutical Policy and Practice* Dec. 17; 7 (Suppl.1):8.

**Dhingra, S.**, M. Parle, M. Sachdev, **S. Maharaj, S. Pandey**. (2014) Knowledge, Attitudes and Practice Pertaining to Depression among General Practitioners in an Indian City. *Value in Health* 17(3): A152-A152.

Nayak, S., S. Ramlogan, A. V. C. Chalapathi, **S. Maharaj**. (2014) *Neurolaena lobata* L. promotes wound healing in Sprague Dawley rats. *Int J App Basic Med Res*. 4:106-10.

Shrinivas, D., M. U. A. More, D. Parkale, T. M. Aminabhavi, **A. K. Gadad**, M. N. Nadagouda, R. Jawarkar. (2015) Design, synthesis of quinolinyl Schiff bases and azetidinones as enoyl ACP-reductase inhibitors. *Medicinal Chemistry Research* 24:3892-3911.

Patel, H. M., B. Singh, V. Bhardwaj, M. Palkar, H. Shaikh, R. Rane, W. S. Alwan, **A. K. Gadad**, M. N. Noolvi, R. Karpoomath. (2015) Design, synthesis and evaluation of small molecule imidazo[2,1-b][1,3,4]-thiadiazoles as inhibitors of transforming growth factor-type-I receptor kinase (ALK5). *European Journal of Medicinal Chemistry* 93:26 March: 599-613.

Joshi, S. D., S. R. Dixit, U. A. More, T. M. Aminabhavi, V. H. Kulkarni, **A. K. Gadad**. (2014) Enoyl ACP Reductase as Effective Target for the Synthesized Novel Anti tubercular Drugs. *Mini-Reviews in Medicinal Chemistry* 14: 678-693.

**Sealy, P.** (2015) Team Based Learning Strategy Applied to Pharmacy Based Courses. *Journal of Pharmaceutical Care & Health Systems* S2: S2-002. doi:10.4172/jpchs.1000-S2-002.

Villarrol, S. A., Y. Clement, **P. Sealy**, R. Löbenberg, L. Montane-Jaime, R. G. Maharaj, A. Maxwell. (2015) Comparing the dissolution profiles of seven metformin formulations in Simulated Intestinal Fluid. *Dissolution Technologies Journal* 22 (1):17-21. dx.doi.org/10.14227/DT220115P17.

**Sealy, P.** (2015) Cyclosporine Enhances Fluconazole Efficacy. *European International Journal of Science and Technology* 4 (2): 55-59.

**Sealy, P.** (2015) Fungal Osteomyelitis. *European International Journal of Science and Technology* 4 (2): 17-22.

**Sealy, P.** (2015) Drug Delivery Systems. *European International Journal of Science and Technology* 4 (2): 60-68.



## School of Veterinary Medicine

Syne, S., A. Ramsubhag, **A. Adesiyun**. (2015) Microbial quality of popular locally processed meats sold in retail outlets in Trinidad, West Indies. *Journal of Food Protection* 78: 333-339.

**Offiah, N., A. Adesiyun**. (2015) Detection of antimicrobial residues in chicken muscle and liver sold at retail outlets in Trinidad. *International Journal of Poultry Science* 14: 456-462.

Hassan, H., B. Min, T. Amit, G. Reddy, **A. Adesiyun**, A. Hinton, W. Abdela. (2015) Antimicrobial activity of pomagranate, orange and lemon peel extracts against food-borne pathogens and spoilage bacteria in vitro and on poultry skin. *International Journal of Poultry Science* 14: 229-239.

Nguyen, G., M. I. Abo-Samaha, G. Reddy, M. Abdulrahman, T. Samuel, **A. Adesiyun**, W. Abdela. (2015) Improved detection of *campylobacter jejuni*, *listeria monocytogenes* and *salmonella typhimurium* assays. *International Journal of Poultry Science* 14: 364-375.

Gordon, A., J. Marshall, K. Ramdass, A. Stewart-Johnson, **A. Adesiyun**. (2014) Frequency of resistance to methicillin and other antimicrobial agents amongst *Staphylococcus aureus* strains isolated from pigs and their human handlers in Trinidad. *Infection* <http://dx.doi.org/10.3402/iee.v4.22736>.

Thompson, N. N., A. J. Auguste, A. P. Travassos da Rosa, V. V. F. Carrington, B. J. Blitvich, D. D. Chadee, R. B. Tesh, S. C. Weaver, **A. Adesiyun**. (2014) Seroepidemiology of selected alphaviruses and flaviviruses in bats in Trinidad. *Zoonoses and Public Health*. DOI: 10.1111/zph.12118.

**Adesiyun, A.**, L.A. Webb, L. Musai, B. Louison, J. George, A. Johnson-Stewart, M. Samlal, S. Rodrigo. (2014) Survey of *Salmonella* contamination in chicken layer farms in three Caribbean countries. *Journal of Food Protection* 77: 1471-1480.

Suepaul, S., C. Carrington, M. Campbell, G. Borde, **A. Adesiyun**. (2014) Seroepidemiology of leptospirosis in dogs and rodents in Trinidad. *Tropical Biomedicine* 31:1-9.

**Adesiyun, A.**, L. A. Webb, L. Musai, B. Louison, J. George, A. Johnson-Stewart, M. Samlal, S. Rodrigo. (2014) Resistance to antimicrobial agents amongst *Salmonella* spp. recovered from layer farms and eggs in the Caribbean region. *Journal of Food Protection* 77: 2153-2160.

Adam, J. N., **Z. Asgarali**, S. M. Singh, C. D. Ezeokoli. (2014) A Serological Study of Canine Parvovirus (CPV-2) and Distemper Virus (CDV) in Stray Dogs in North. *West Indian Veterinary Journal* 2011, 111-2.

Singh, S. M., **Z. Asgarali**, **K. Georges**, **M. Diptee**, K. King, S. Hosein. (2014) Serological Investigation of Bovine Leukaemia Virus at a model farm at the University Field Station, Trinidad. *West Indian Veterinary Journal* 2011. 11.

**Oura, C. A.**, G. Sebbar, C. Loutfi, O. Fassi-Fehri, N. Touil, M. El Harrak. (2014) No evidence for replication of a field strain of bluetongue virus serotype 1 in the blood of domestic dogs. *Research in Veterinary Science* 96 217-219

Daouam, S., F. Z. Fakri, A. El Arkam, M. M. Ennaji, K. O. Tadlaoui, **C. A. Oura**, M. Elharrak. (2014) Heat stability of the Rift Valley Fever Clone 13 live vaccines. *Trials in Vaccinology* 3:61-64.

Tuppurainen E., **C. A. Oura**. (2014) Lumpy skin disease: An African cattle disease getting closer to the EU. *Veterinary Record*, Sep 27; 175(12) 300-301.

**Basu A. K.**, R. A. Charles. (2014) A review of the cat liver fluke *Platynosomum fastosum* Kossack, 1910 (Trematoda: Dicrocoeliidae). *Veterinary Parasitology* 200: 1- 7.

Manyazewal, A.Z., **A. Basu**, **A. Yilka**. (2014) Socioeconomic Assessment of a Tsetse and Trypanosomosis Control Programme in Southwest Ethiopia. *J. Adv. Vet. Research*, 4(3): 126-134.

## JOURNAL ABSTRACTS

### School of Dentistry

Al-Bayaty, H. F., R. L. Balkaran, P. R. Murti, B. Sa, **R. Naidu** (2014) Knowledge, Attitudes, and Beliefs of Dental Students towards Patients with HIV/AIDS. *West Indian Medical Journal* 63:1.

## BOOKS & BOOK CHAPTERS

### Department of Pre-Clinical Sciences

**Nayak S.** (2015). *Manipal Textbook of Biochemistry for Dental Students*, 2<sup>nd</sup> edition. CBS Publishers, New Delhi, India.

### Department of Clinical Surgical Sciences

Dilip, D., K. Deonarine, C. Beharry, S. Cawich, V. Naraynsingh. (2014) Thyroidectomy: Indications, Technique and Perioperative Care in Thyroidectomy: Surgical Procedures, Potential Complications and Post-Operative Outcomes. Ed. Kimberly Rodolfo. p61-90; ISBN: 978-1-63321-440-8.

Cawich, S., M. Gardner, D. Dan, V. Naraynsingh, R. Shetty. (2014) Surgical Anatomy of the Thyroid and Parathyroid Glands: A Pictorial Review with Clinical Correlates in Thyroidectomy: Surgical Procedures, Potential Complications and Post-Operative Outcomes. Ed by Kimberly Rodolfo. p91-116; ISBN: 978-1-63321-440-8.

# PUBLICATIONS AND CONFERENCES

## CONFERENCE PRESENTATIONS

### Department of Pre-Clinical Sciences

**A. Odekunle** (2015)

*Unilateral sternalis muscle on the anterior chest wall of a West Indian male.*

Annual General Conference of the International Stress and Behavior Society  
St Lucia, January

N.S.D. Sahadeo, H. Mohammed, O.M. Allicock, A.J. Auguste, S.G. Widen, K. Badal, K. Pulchan, J. Foster, S.C. Weaver, **C.V.F. Carrington** (2015)

*Evolutionary and epidemiological characterization of a Chikungunya virus outbreak in Trinidad*

Gordon Research Conference on Tropical Diseases  
Galveston, Texas, March

P.K. Sahu, J.I. Addae and B. Sa (2015)

*An evaluation of PBL delivery process in the Faculty of Medical Sciences, St. Augustine, and ways forward.* Conference on 'Institutionalising Best Practice in Higher Education'  
UWI, St. Augustine, June.

### Department of Para-Clinical Medical Sciences

D. Del Pino, D. Basdeo, K. Fyzool, B. Fermin, J. Baksh, R. Sookdeo, N. Ramdass, R. Nandlal, **Y. Clement**. (2015)

*Adherence to chronic disease management among diabetic and hypertensive patients in Trinidad*

Caribbean Public Health Agency Research Conference  
Grenada, June.

**Y. Clement**, Y. Baksh-Comeau, C. Seaforth (2014)

*A TRAMIL ethnobotanical survey of medicinal plants in Trinidad (2007-2008)*

8<sup>th</sup> International Meeting of Aromatic and Medicinal Plants (CIPAM 8)  
Guadeloupe, October.

**S. Vuma** (2015)

*Predictors of thalassaemia carriers in Trinidad and Tobago (poster presentation)*

Caribbean Public Health Agency Conference  
Grenada, June.

**S. Vuma** (2015)

*Predictors of thalassaemia carriers in Trinidad and Tobago (poster presentation)*

Laboratory Medical Professionals Congress  
South Africa, May

### Department of Clinical Medical Sciences

**S. Teelucksingh** (2014)

*Lessons for and from the Developing World!*

Commonwealth Science Conference  
Bengaluru, India, November.

**S. Teelucksingh** (2015)

*Information & Communication Technologies in Health and Wellness*

Seminar hosted by CARIRI

Trinidad, January.

### School of Dentistry

**M. McAulay-Rieger** (2015)

*Research and Its Role in 21<sup>st</sup> Century Dental Education and Practice*

1<sup>st</sup> and 2<sup>nd</sup> Annual Scientific Lectures, International Association for Dental Research – Caribbean Section

Champs Fleurs, Trinidad and Tobago and Mona Jamaica.

**A. Paryag**, D. Lewis, **R. N. Rafeek** (2015)

*Quality of Oral Care by Caregivers in Government Assisted Long Term Care Institutions for Elderly People in Trinidad (poster presentation)*

International Association for Dental Research  
Boston, Massachusetts.

### School of Nursing

**O. Ocho** (2015)

*Positioning Nursing Education for effective delivery of care and the advancement of Nursing and Midwifery in the 21<sup>st</sup> Century*

Trinidad and Tobago Registered Nurses Association and 7<sup>th</sup> Quadrennial Health Conference Hilton Hotel

Trinidad and Tobago, June.

**E. Daniel** (2015)

*Effectiveness of structured educational models for primary school teachers on knowledge and skills in identification of common mental health problems among children*

Sigma Theta Tau International's 26<sup>th</sup> International Nursing Research Congress

San Juan, Puerto Rico July.

**O. Ocho** (2015)

*Perceptions among men in Trinidad and Tobago between the ages of 18 and 65 years about 'male sensitive' health services*

Dr Mary J Sievwright International Research Conference  
Mona, Jamaica, May.

**G. Mootoo** (2015)

*Attention Deficit Hyperactivity Disorder and Mothers Psychological Distress: Mothers' Responses to a Child Diagnosed with Attention Deficit Hyperactivity Disorder*

Dr Mary J Sievwright International Research Conference  
Mona, Jamaica, May

## School of Veterinary Medicine

**K. Georges**, Z. Asgarali, B. Sa (2014)

*Veterinary Students' Perception of a Common Curriculum for Medical Professionals*

Caribbean Veterinary Association Biennial Conference  
Grand Cayman, Cayman Islands, November.

**C. Sant, Z. Asgarali, I. Pargass, R. D'Abadie, A. Basu, K. Georges** (2014)

*Investigating Transplacental Transmission of Babesia caballi infection in Thoroughbred Foals in Trinidad (poster presentation)*  
Joint 8<sup>th</sup> International Ticks and Tick-borne pathogens (TTP8) and 12<sup>th</sup> Biennial Society for Tropical Veterinary Medicine (STVM12) Conference

Cape Town, South Africa, August.

**C. Sant** (2014)

*Haematological values, plasma protein concentrations and erythroid cell types of a semi intensively reared colony of the brown rump agouti Dasyprocta leporina*  
XICIMFAUNA (The 11th International Conference on Management of Amazonian and Latin American Wildlife) St Augustine, Trinidad, August.

**R. Suepaul** (2014)

*Bacteria, fungi and parasites found on nasal cavity and intestinal mucosa of freshly shot wild agouti (Dasyprocta leporina) in Trinidad*  
XICIMFAUNA (The 11th International Conference on Management of Amazonian and Latin American Wildlife) St Augustine, Trinidad, August.

K. Aldahami, S. Afroj, **A. Adesiyun**, G. Reddy, T. Samuel, W. Abdela (2015)

*Novel genomic targets for specific and sensitive identification of Salmonella serovars from retail meat samples*  
92nd Annual Meeting of the Alabama Academy of Science  
Livingston, Alabama, March.

S. Afroj, K. Aldahami, **A. Adesiyun**, T. Samuel, W. Abdela (2015)

*Development of real time PCR using novel genomic target for Multiple Salmonella serovars detection from milk*  
American Society of Microbiology (ASM) Conference  
New Orleans, Louisiana, May/June.

## OTHER PUBLICATIONS

### Department of Para-Clinical Medical Sciences

#### Commentary

**Clement, Y.** (2015) Clearing heat and detoxifying injection is as efficacious as oseltamivir in the treatment of influenza. *Focus on Alternative and Complementary Therapies* 20(2): 108-109.

## FACULTY OF SCIENCE & TECHNOLOGY

### JOURNAL PUBLICATIONS

#### Department of Chemistry

Basumatary, D.; Lal, R. A.; **Kumar, A.** (2015) Synthesis, and characterization of low- and high-spin manganese (II) complexes of polyfunctional adipoyldihydrazone: Effect of coordination of N-donor ligands on stereo-redox chemistry. *Journal of Molecular Structure*, 1092, 122-129. (Elsevier). DOI:10.1016/j.molstruc.2015.02.070

**Bent G-A;** Maragh P; Dasgupta T. In vitro Studies on the Reaction Rates of Acrylamide with the key Body-Fluid Thiols: L-Cysteine, Glutathione and Captopril. *Toxicol. Res.* 2014, 3(6) 445 – 446.

**Bent G-A;** Maragh P; Dasgupta T; **Fairman R.** (2015) Grierson L. Kinetic and Density Functional Theory (DFT) Studies of in vitro Reactions of Acrylamide with the Thiols: Captopril, L-Cysteine and Glutathione. *Toxicol. Res.*, 4(1), 121-131

Borthakur, R.; Asthana, M.; **Kumar, A.;** Lal R. A. (2014) Cooperative catalysis by polymetallic copper-zinc complexes in the efficient oxidation of alcohols under solvent free condition. *Inorganic Chemistry Communications* 46, 198-201. (Elsevier) (Impact factor: 2.02). DOI:10.1016/j.inoche.2014.05.018

Borthakur, R.; **Kumar, A.;** Lal, R. A. (2014) Synthesis and characterization of heterotrinnuclear bis( $\mu_2$ -chlorido) dicopper(II) mono zinc(II) complexes derived from succinoyldihydrazones. *Spectrochimica Acta, A* 118, 94-101. (Elsevier) (Impact factor: 1.98). DOI:10.1016/j.saa.2013.08.063

Borthakur, R.; **Kumar, A.;** Lal, R. A. (2014), Synthesis and characterisation of heterotrinnuclear bis(nitrato) dicopper(II) monozinc(II) complexes derived from some succinoyldihydrazones. *Journal of the Indian Chemical Society* 91(3), 407-423. (Impact factor: 0.25).

Borthakur, R.; **Kumar, A.;** Lal, R. A. (2015) Synthesis, characterization and electrochemical studies of some Ni(II) heterobimetallic complexes derived from succinoyldihydrazones. *Spectrochimica Acta, A* 149, 621-629 (Elsevier). (Impact factor: 1.98). DOI:10.1016/j.saa.2015.04.031

Borthakur, R.; **Kumar, A.;** Shangpung, Sankey; Lal, Ram A. (2015) Synthesis and characterization of perchlorato bridged Cu<sup>II</sup><sub>2</sub>Zn<sup>II</sup> heterotrinnuclear complexes derived from succinoyldihydrazones. *Spectrochimica Acta, A* 138, 481-488. (Elsevier). (Impact factor: 1.98). DOI:10.1016/j.saa.2014.11.014

# PUBLICATIONS AND CONFERENCES

Borthakura, R.; **Kumar, A.**; Lal, R. A (2015) Synthesis and characterization of some heterobimetallic complexes of Cu, Zn and Mn derived from succinoyldihydrazones. *Journal of the Indian Chemical Society* 92(7), 1071-108. (Impact factor: 1.98).

Hosein, R., S. Haque and **D.M. Beckles**. (2014). Mud volcanoes of Trinidad as astrobiological analogs for Martian environments. *Life*. 4:566-585.

Jeffrey, R., G. Singh, P. G. J. Plaza-Alexander, **N. Singh**, J. M. Goodman, A. Bacchi, F. Punzo, (2014) Synthesis of 2,3-O-benzyl-ribose and xylose and equilibration. *Tetrahedron: Asymmetry* 25: 1424-1429

Kanhai, L.D.K., J. Gobin, **D.M. Beckles**, B. Lauckner and A. Mohammed (2014) Polycyclic aromatic hydrocarbons (PAHs) in *Crassostrea rhizophorae* and *Cathorops spixii* from the Caroni Swamp, Trinidad. *Environmental Science and Pollution Research*. DOI 10.1007/s11356-014-3450-2.

Koch, A.; **Kumar, A.**; Borthakur, R.; Ozukum, O. S.; Lal, R. A. (2015), Synthesis and characterization of a copper-zinc heterobinuclear complex of 2,2'-bipyridine. *Journal of Coordination Chemistry*, 68(2), 229-240. (Taylor & Francis) DOI:10.1080/00958972.2014.987135

Koch, A.; **Kumar, A.**; De, A.K.; Phukan, A.; Lal, R. A. (2014), Synthesis, characterization and reactivity of trinuclear Cu(II) complexes derived from disalicylaldehyde malonoyldihydrazone. *Spectrochimica Acta*, A 129, 103-113. (Elsevier) (Impact factor: 1.98). DOI:10.1016/j.saa.2014.02.202

Koch, Angira; Phukan, Arnab; Chanu, Oinam B.; Lal, R. A. (2014), Synthesis, characterization and electrochemical studies of heterometallic manganese(IV)-zinc(II) and manganese(IV)-copper(II) complexes derived from bis(2-hydroxy-1-naphthaldehyde)oxaloyldihydrazone. *Journal of Molecular Structure* 1060, 119-130. (Impact factor: 1.40) DOI:10.1016/j.molstruc.2013.12.027

**Kumar, A.**; Koch, A.; Borthakur, R.; Chakraborty, M.; De, A. K.; Phukan, A.; Bez, G.; Lal, R. A. (2014) Synthesis and spectroscopic characterization of monometallic molybdenum (VI) complexes derived from bis(2-hydroxy-1-naphthaldehyde) succinoyldihydrazone. *Journal of Molecular Structure*, 1063, 92-101. (Elsevier) (Impact factor: 1.40). DOI:10.1016/j.molstruc.2014.01.048

Peter N. Nelson and **Richard A. Taylor**; (2015) Mesomorphic and Crystal-Crystal Phase Transition Behaviours of the Homologous Series of some Zinc(II) and Sodium(I) n-Alkanoates; *Spectrochimica Acta Part A: Molecular and Biomolecular Spectroscopy* 138 800-806.

Rean Maharaj, **Lebert H. Grierson**, Chris Maharaj and Vitra Ramjattan-Harry, (2015). Rheological Study of Cement Modified with a Lignin Based Admixture. *The West Indian Journal of Engineering*, Vol. 37, No.2 January 2015, pp. 68-73.

Shangpung, S.; **Kumar, A.**; Asthana, M.; Dey, A. K.; Kurbah, S. D.; Basumatary, D.; Lal, R. A (2015) Crystal structure and catalytic studies of heterodinuclear complex [CuZn( $\mu$ -OAc)( $\mu$ -OH)( $\mu$ -OH<sub>2</sub>)(bpy)<sub>2</sub>](ClO<sub>4</sub>)<sub>2</sub>. *Inorganic Chemistry Communications*, 58, 48-52. (Elsevier) (Impact factor: 2.02). DOI:10.1016/j.inoche.2015.05.023

**Stephenson, D., N. Singh**. (2015), <sup>14</sup>N NQR Spectrum of Sildenafil Citrate. *Hyperfine Interactions* 231, 1.

## Department of Life Sciences

**Ali, N., Farrell, A., Ramsubhag, A., Jayaraj, J.** (2015). The effect of *Ascophyllum nodosum* extract on the growth, yield and fruit quality of tomato grown under tropical conditions. *Journal of Applied Phycology*. DOI: 10.1007/s10811-015-0608-3.

Alleyn, A.T., Gilkes, J.M and **Briggs, G.** (2015). Early detection of Super-elongation disease in *Manihot esculenta* Crantz (cassava) using molecular markers for gibberellic acid biosynthesis. *European Journal of Plant Pathology*, 141 (1): 27-34

Clement, Y., **Baksh-Comeau, Y.S.**, Seaforth C. (2015) An ethnobotanical survey of medicinal plants in Trinidad, *Journal of Ethnobiology and Ethnomedicine*: DOI: 10.1186/s13002-015-0052-0

Blake, L.W., Akpaka, P.E., **Ramsubhag, A.**, Hitlal-Blake, R.K.S. (2015). Molecular and Susceptibility Analysis of Toxigenic *Clostridium difficile* Obtained from Adult Patients Suspected of CDI in Trinidad., *Open Journal of Medical Microbiology*, Vol.05 No.01, Article ID:55073, 14 pages

Böhnke-Henrichs, A., Baulcomb, C., Alam, M., **Rawlins, M.**, Koss, R., Jobstvogt, N. (2014) YESS—The network for Young Ecosystem Services Specialists. *Ecosystem Services*, 9: 216-217.

**Briggs, G.C.** and Blair E. (2014). Everyday personal laptop usage in secondary schools in Trinidad and Tobago. *Education and Information Technologies*, DOI: 10.1007/s10639-014-9338-4

Brown, G.E. C.K Elvidge, **I. Ramnarine**, D.P. Chivers, M.C.O. Ferrari (2014). Personality and the response to predation risk: effects of information quantity and quality. *Animal cognition*, 1-7.

Camacho-Cervantes, M., A.F Ojanguren, A.E. Deacon, **I.W. Ramnarine** (2014). Association tendency and preference for heterospecifics in an invasive species, *Behaviour* 151 (6), 769-780

- Elvidge, C.K., **Ramnarine, I.W., Brown, G.E.** (2014) Compensatory foraging in Trinidadian guppies: Effects of acute and chronic predation threats, *Curr. Zool.* 60: 323-332
- Elibox, W.**, Umaharan, P. 2014. Genetic basis for productivity in *Anthurium andraeanum* Hort. *HortScience*, 49(7): 859-863
- Elibox, W.**, Umaharan, P. 2014. Morphophysiological parameters associated with vase-life of cut-flowers of *Anthurium andraeanum* Hort. *Acta Horticulturae*, 1047: 99-108.
- Brown, G.E., Elvidge, C.K., **Ramnarine, I.W.**, Ferrari, M.C.O., Chivers, D.P. (2015) Background risk and recent experience influences retention of neophobic responses to predators, *Behavioral Ecology and Sociobiology*, 69 (5), 737-745
- K.K. Borner, S. Krause, T. Mehner, S. Uusi-Heikkilä, **I.W. Ramnarine**, J. Krause (2015) Turbidity affects social dynamics in Trinidadian guppies, *Behavioral Ecology and Sociobiology* 69 (4), 645-651
- Kanhai, L.K., Gobin, J.**, Beckles, D., Lauckner, B., **Mohammed A.**, (2015). Polycyclic aromatic hydrocarbons (PAHs) in *Crassostrea rhizophorae* and *Cathorops spixii* from the Caroni Swamp, Trinidad, West Indies. *Environmental Science Pollution Research International*, 22(2):1366-79
- Kondhare K.R., Hedden P., Kettlewell P. S., **Farrell A. D.** and Monaghan J. M. (2014). Use of the hormone-biosynthesis inhibitors fluridone and paclobutrazol to determine the effects of altered abscisic acid and gibberellin levels on pre-maturity  $\alpha$ -amylase formation in wheat grains. *Journal of Cereal Science* 60: 210-216.
- Kondhare KR, **Farrell AD**, Kettlewell PS, Hedden P, and Monaghan JM. (2015). Pre-maturity  $\alpha$ -amylase in wheat: the role of abscisic acid and gibberellins. *Journal of Cereal Science* 63: 95-108
- Ramdial, H.**, and **Rampersad, S.N.** (2015). Characterization of *Colletotrichum* spp. causing anthracnose of bell pepper (*Capsicum annuum* L.) in Trinidad. *Phytoparasitica*, Volume 43(1): 37-49
- Ramkissoon, A., Ramsubhag, A.**, Maxwell, A., **Jayaraj, J.** (2015). In vitro antimicrobial activity of common species of seaweeds native to Trinidadian coasts, *Algological studies*, 147: 45-66.
- Rampersad, S.N.**, Hosein, F.N., and Carrington, C.V.F. (2014). Sequence exploration reveals information bias among molecular markers used in phylogenetic reconstruction for *Colletotrichum* species. *SpringerPlus* 3:614, 15 pp.
- Sewlal, J.N.** and Hailey, A. (2014). Sampling tropical spiders: Estimating the biodiversity of the orb-weaving families Araneidae, Nephilidae and Tetragnathidae in natural and disturbed habitats in Trinidad, West Indies. *Tropical Ecology*. 55(1): 109-117.
- Sharma, K.**, Mahabir, R.S., Curtin, K, Sutherland, J.M., Agard, J.B. and **Chadee, D.D.** (2014). Exploratory Space-Time Analysis of Dengue Incidence in Trinidad: A Retrospective Study using travel hubs as dispersal points, 1998-2004. *Parasites and Vectors*, 7: e341
- Syne, S., Ramsubhag, A.**, & Adesiyun, A. A. (2015). Microbial quality of popular locally processed meats sold in retail outlets in Trinidad, West Indies. *Journal of Food Protection*, 78(2), 333-339.
- Yamada, H.**, Vreysen, M.J.B, Bourtzis, K., Tschirk, W., **Chadee, D.D.**, Gilles, J.R.L. (2015). Corrigendum to "The *Anopheles arabiensis* genetic sexing strain ANO IPCL1 and its application potential for the sterile insect technique in integrated vector management programmes" *Acta Tropica*, 147: 64-65.
- Yamada, H.**, Vreysen M.J.B., Bourtzis, K., Tschirk, W., **Chadee, D.D.** and Gilles, J. R.L. (2015). The *Anopheles arabiensis* genetic sexing strain ANO IPCL1 and its application potential for the sterile insect technique in integrated vector management programmes: current status and future challenges. *Acta Tropica* 142: 138-144
- Briggs, G.C.**, Nakhid, Z., Alleyne, A.T., Ayats, J., Despradel, J.O., **Elibox, W.** (2014). First report of orange rust disease of sugarcane in the Dominican Republic, *Plant Disease* 98 (7):1010
- Chinnaraja, C., Ramkissoon, A., Rajendran, R., St. Hill, A., Ramsubhag, A., Jayaraj, J.** (2015). First report of Zucchini yellow mosaic virus and Squash mosaic virus infecting cucurbits in Trinidad, *Plant Disease*, <http://dx.doi.org/10.1094/PDIS-09-15-0988-PDN>
- Sewlal, J.N.** and A.W. Hook. (2014). Guarding by males in the opilionid family Cranidae. *Living World*, J. Trinidad and Tobago Field Naturalists' Club. 2014:48-50.
- Sewlal, J.N.** (2014). Observations of colonies and responses to disturbance by the Uloborid spider *Philoponella republicana* at Simla Research Station, Trinidad and Tobago. *Living World*, J. Trinidad and Tobago Field Naturalists' Club. 2014:57-58.

# PUBLICATIONS AND CONFERENCES

## Department of Computing and Information Technology

K. Khan and **W. Goodridge**. (2015), Fault Tolerant Multi-Criteria Multi-Path Routing in Wireless Sensor Networks. *I.J. Intelligent Systems and Applications*, 06, 55-63.

K. Khan and **W. Goodridge**. (2015), Energy Aware Ad Hoc On-Demand Multipath Distance Vector Routing. *I.J. Intelligent Systems and Applications*, 07, 50-56.

S. Lutchman and **P. Hosein** (2015), An Open Source Real-Time Data Portal, *Journal of ICT*, vol. 2 Issue 3, pp 289-302.

Ramneek, **P. Hosein**, W. Choi, W. Seok (2015), Network Neutrality Violation Detection for Streaming. Media Traffic in Wired and Wireless Networks. *KNOM Review Journal*, vol. 18, No. 1, pp 1-10

**Jordan, R.**, M. Birkin & A. Evans (2014) An Agent-based Model of Residential Mobility, Assessing the Impacts of Urban Regeneration Policy in the EASEL District. *Computers, Environment and Urban Systems*, Volume 48, pp. 49-63.

**Kaloo, V.**, and **Mohan, P.** (2015). Investigating the Value of Personalization in a Mobile Learning System. *Journal of Computers in Mathematics and Science Teaching*, 34 (2) (April 2015), 199-221.

Rudder, A., **T.D. Kieu**. (2015) A Lossless Data Hiding Scheme for VQ Indexes Based on Joint Neighboring Coding. *KSII Transactions on Internet and Information Systems*. Vol. 9, No. 8, pp. 2984-3004.

**Kieu, T.D.**, S. Ramroach. (2015) A Reversible Steganographic Scheme for VQ Indices Based on Joint Neighboring Coding. *Expert Systems with Applications*. Vol. 42, No. 2, pp. 713-722.

Mohammed, P., and **Mohan, P.** (2015). Dynamic Cultural Contextualisation of Educational Content in Intelligent Learning Environments using ICON. *International Journal of Artificial Intelligence in Education*, Special Issue on Culturally-Aware Educational Technologies, 25 (2) (June 2015), 249-270.

**Ragbir-Shripat, D.**, and **Mohan, P.** (2014). A TEL System for Teaching and Supporting Creativity in Tertiary Students: Incorporating the Views of Experts. *International Journal on Interaction Design & Architectures*, Special Issue on The Design of TeL with Evidence and Users, 23 (Winter 2014), 9-23.

**Sultan, S.** and **Mohan, P.** (2015) An Investigation into the Role of Mobile Technology in Collaborative Disease Management for Persons Living with Type 2 Diabetes. *EAI Endorsed Transactions on Pervasive Health and Technology*. Vol. 1 (e6).

## Department of Mathematics and Statistics

**Kuo, W., D. Tweedle** (2015) Primitive submodules for Drinfeld modules. *Mathematical Proceedings of the Cambridge Philosophical Society*, Vol. 159, Issue 02, pp 275-302.

**Jogie, D. C.**, Balswaroop Bhatt (2015) The study of flow and heat transfer of a viscous incompressible fluid between a rotating solid disk and a stationary permeable disk using Brinkman-Darcy model. *ZAMM* 1-13.

**Dialsingh, I.**, Austin, S., Altman, N. (2015) Estimation of the proportion of null hypotheses when the test statistics are discrete, *Bioinformatics*, Oxford University Press.

Pooransingh, S., Ramgulam, K., **Dialsingh, I.** (2014) Body Mass Index in Clinic Attenders: Patient Self- Perception versus Actual Measurements. *Advances in Public Health*.

Shirley, A., A. Sahai, **I. Dialsingh** (2014) On Improving Ratio/Product Estimator by Ratio/Product-Cum-Mean-per-unit Estimator Targeting More Efficient Use of Auxiliary Information. *Journal of Probability and Statistics*, vol 2014 8pages.

Victor M. Job, **S Rao Gunakala** (2015). Finite Element Analysis of Unsteady Radiative MHD Natural Convection Couette Flow between Permeable Plates with Viscous and Joule Dissipation. *International Journal of Pure and Applied Mathematics*, Vol.99 (2) pp.123-143

Sarah Balkissoon, **Sreedhara Rao Gunakala**, Donna M Comissiong, Victor Job, (2015), The Comparative Analysis of the Two Dimensional Laplace Equation Using the Galerkin Finite Element Method with the Exact Solution for Various Domains (Circular and Rectangular) with Triangular Elemental Meshing. *International Journal of Applied Mathematical Research* Vol.4 (1) pp.193-204

## Department of Physics

**Xsitaaz T. Chadee** and **Ricardo M. Clarke**, (2015). Daily near-surface large-scale atmospheric circulation patterns over the wider Caribbean. *Climate Dynamics* 44 (11-12): 2927-2946. (I.F.= 4.673)

Kaur Prabsharan, Mun-Sik Shin, Neha Sharma, Namarta Kaur, Anjali Joshi, So-Ryong Chae, Jin-Soo Park, Moon-Sung Kang and **S.S.Sekhon** (2015) Non-covalent functionalization of graphene with poly (diallyl dimethylammonium) chloride:

Effect of a non-ionic surfactant. *International Journal of Hydrogen Energy*, 40, 1541-1547. Journal Impact Factor = 3.313

Kaur, P, **Sekhon, S. S.**, Kumar, V. and Zavada, J. M. (2015). Enhanced stability of Eu in GaN nanoparticles: effect of Si co-doping. *Journal of Applied Physics*, 117, 224301-08. Journal Impact Factor = 2.183

**Davinder Pal Sharma**, Avatar Baldeo and Cassiel Phillip, (2015) Raspberry Pi based Smart Home for Deployment in the Smart Grid, *International Journal of Computer Applications*, Vol. 119, No. 4, June Pp. 6-10, DOI: 10.5120/21053-3700.

**Davinder Pal Sharma** and Jamin Atkins, (2014), Automatic Speech Recognition Systems- Challenges and Recent Implementation Trends, *International Journal of Signal and Imaging Systems Engineering*, Vol. 7, No. 4, Pp. 220 – 234, DOI: 10.1504/IJSISE.2014.066600.

**Davinder Pal Sharma**, Arvindra Sampath and Deepchand Gangasingh, (2014) Analysis of the Steelpan Notes using FFT Algorithm, *International Journal of Recent Trends in Engineering & Technology*, Vol. 11, No. 2, Pp. 612-622.

Sharlene Lata Beharry, **Ricardo Marcus Clarke**, Kishan Kumarsingh. (2015). Variations in extreme temperature and precipitation for a Caribbean island: Trinidad. *Theoretical and Applied Climatology* 122, (3-4), 783. (I.F. = 2.015)

**Keith De Souza and Roger Andrews**, (2015) Models for daily global solar radiation for the Caribbean island of Trinidad. *Journal of Renewable and Sustainable Energy*, 7(1):013132)

Hosein, R., **Haque, S.**, & Beckles, D (2014) Mud Volcanoes of Trinidad as Astrobiological analogue for Mars – Planetary Exploration: Habitats and planetary analogs- Special Issue of *Life*, 4(4) 566-585- cited in PubMed

Meckenstock, R. U., von Netzer, F., Stumpp, C., Lueders, T., Himmelberg, A. M., Hertkorn, N. Hosein, R. **Haque, S.** & Schulze-Makuch, D. (2014). Water droplets in oil are microhabitat for microbial life. *Science*, 345(6197), 673-676. (IF – 32.4; CIT:2)

## JOURNAL ABSTRACTS

### Department of Life Sciences

Starr, C.K. and **Sewlal, J.N.** (2014). Toward a national ecotourism guide on land arthropods. *Proceedings of 19th Biennial Conference of the Caribbean Academy of Sciences*. Pp 97.

Starr, C.K. and **Sewlal, J.N.** (2015). Repertorio comportamental de la avispa social *Mischocyttarus angulatus* (Hymenoptera:Vespidae). X Coloquio de la Sección del Norte Suramericano de la Unión. *Internacional para el Estudio de los Insectos Sociales* (IUSSI). Pp. 35.)

**Rouse-Miller, J., Bowrin, V.,** Sutton, F. (2014) Cassava Stem Tuber, An Alternative Sink Source. *American Society of Plant Biologist Conference* (Abst#. P25001-A)

## BOOKS & BOOK CHAPTERS

### Department of Chemistry

**Grace-Anne Bent E.** (2015), *A Caribbean Perspective on Acrylamide – the food toxin* (residual Levels in Caribbean foods and its mechanisms of interactions with compounds of biological importance), Lambert Academic publishing,

Keane Campbell, **Nigel Jalsa**, Leon Chin, Cheryl Remy, Louise Mason, Norman Lambert, Marine Mohammed, (2014), *Chemistry for CSEC*. Pearson Education Limited, England.

### Department of Life Sciences

**Chadee, D.D.**, Sutherland, J.M. and Agard, J.B. (Editors) (2014). *Flooding and Climate Change: sectorial Impacts and Adaptation Strategies for the Caribbean Region*. Nova Science Press, New York

Kuruचेve, V., Sangeetha, G., **Jayaraj, J.** Eds. (2015) *Sustainable Crop Disease Management Using Natural Products*, CABI, Oxfordshire, UK

**Barclay, G. F.** (2015). *Anatomy and Morphology of Seed Plants*. In: *eL.S. Chichester: John Wiley & Sons*. 20pp.

**Chadee, D.D.** and Sutherland, J.M. (2014) Introduction to Flooding and Climate Change in the Caribbean. In: *Flooding and Climate Change: Sectorial Impacts and Adaptation Strategies for the Caribbean Region* Chadee, Sutherland and Agard, (Eds.) Nova Science Press, New York p.1-9.

**Chadee, D.D.** and Sutherland, J.M. (2014). Flooding and Human Health in Trinidad. In: *Flooding and Climate Change: Sectorial Impacts and Adaptation Strategies for the Caribbean Region*, Chadee, Sutherland and Agard, (Eds.) Nova Science Press, New York p.97-122.

**Chadee, D.D.**, Sutherland, J.M and Gilles, J.L.R. (2014). Diel sugar feeding and reproductive behaviour of *Aedes aegypti* mosquitoes in Trinidad with implication for mass sterile insect releases. In: *Biology and behaviour of male mosquitoes in relation to new approaches to control disease transmitting mosquitoes Acta Tropica*. Lees, Chadee and Gilles (Eds.) (Supplement) 132: S86-S90.

# PUBLICATIONS AND CONFERENCES

**Chadee, D.D.** and J.L.R. Gilles. (2014). The diel copulating periodicity of mosquito, *Aedes aegypti* (Diptera: Culicidae) at indoor and outdoor sites in Trinidad, West Indies. **In:** *Biology and behaviour of male mosquitoes in relation to new approaches to control disease transmitting mosquitoes Acta Tropica*. Lees, Chadee and Gilles (Eds.) (Supplement) 132:S91-S95.

**Chadee, D.D.**, Sutherland, J.M. and Agard, J.B (2014). Preface. **In:** *Flooding and Climate Change: Sectorial Impacts and Adaptation Strategies for the Caribbean Region*, Chadee, Sutherland and Agard, Eds., Nova Science Press, New York p vii-ix.

**Farrell AD.** (2014). High Temperature Stress. Chapter 14.7. **In:** *Plants in Action*, 2nd edition. Australian Society of Plant Scientists.

Field, C.B., V.R. Barros, K.J. Mach, M.D. Mastrandrea, M. van Aalst, W.N. Adger, D.J. Arent, J. Barnett, R. Betts, T.E. Bilir, J. Birkmann, J. Carmin, **D.D. Chadee**, A.J. Challinor, M. Chatterjee, W. Cramer, D.J. Davidson, Y.O. Estrada, J.-P. Gattuso, Y. Hijikata, O. Hoegh-Guldberg, H.Q. Huang, G.E. Insarov, R.N. Jones, R.S. Kovats, P. Romero-Lankao, J.N. Larsen, I.J. Losada, J.A. Marengo, R.F. McLean, L.O. Mearns, R. Mechler, J.F. Morton, I. Niang, T. Oki, J.M. Olwoch, M. Opondo, E.S. Poloczanska, H.-O. Pörtner, M.H. Redsteer, A. Reisinger, A. Revi, D.N. Schmidt, M.R. Shaw, W. Solecki, D.A. Stone, J.M.R. Stone, K.M. Strzepek, A.G. Suarez, P. Tschakert, R. Valentini, S. Vicuña, A. Villamizar, K.E. Vincent, R. Warren, L.L. White, T.J. Wilbanks, P.P. Wong, and G.W. Yohe, (2014). Technical Summary. **In:** *Climate Change 2014: Impacts, Adaptation, and Vulnerability*. Part A: Global and Sectoral Aspects. Contribution of Working Group II to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change [Field, C.B., V.R. Barros, D.J. Dokken, K.J. Mach, M.D. Mastrandrea, T.E. Bilir, M. Chatterjee, K.L. Ebi, Y.O. Estrada, R.C. Genova, B. Girma, E.S. Kissel, A.N. Levy, S. MacCracken, P.R. Mastrandrea, and L.L. White (eds.)]. Cambridge University Press, Cambridge, United Kingdom and New York, NY, USA, pp. 35-94.

**Gobin J., Mohammed A, Agard JBR** (2014). Impacts of Freshwater Flooding in Coastal Zones. **In:** *Flooding and Climate Change: Sectorial Impacts and Adaptation Strategies for the Caribbean Region*. **Chadee DD**, Sutherland, JM and **Agard JBR**, (Eds.) Nova Publishers, New York, 221 pp.

**Jayaraj, J., Ali, N.** (2015). Use of seaweed products for growth promotion and disease management of crops. **In:** *Sustainable Crop Disease Management Using Natural Products*, Kurucheve, V., Sangeetha, G., **Jayaraj, J.**, (Eds.) CABI, Oxfordshire, UK, pp 160 – 183

**Jayaraj, J.**, Alleyne, A., (2015). Biocontrol agent formulations for plant disease control. **In:** *Sustainable Crop Disease Management Using Natural Products*, Kurucheve, V., Sangeetha, G., **Jayaraj, J.**, (Eds.) CABI, Oxfordshire, UK, pp 213 – 233.

Leonard Nurse, McLean, R., **Agard, John**, Briguglio, L.P., Duvat, Virginie, Pelesikoti, Netatua, Tompkins, Emma, Webb, Arthur, Campbell, John, **Chadee, D.D.**, Maharaj, Shobha, Morin, Veronique. van Oldenborgh, Geert Jan., Rolph Payet Daniel, Scot, Spencer, T., Yasuhara, Kazuya 2014. Small Islands Chapter. **In:** *Climate Change 2014: Impacts, Adaptation, and Vulnerability*. Part A: Global and Sectoral Aspects. Contribution of Working Group II to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change, Eds, Field, C.B., V.R. Barros, D.J. Dokken, K.J. Mach, M.D. Mastrandrea, T.E. Bilir, M. Chatterjee, K.L. Ebi, Y.O. Estrada, R.C. Genova, B. Girma, E.S. Kissel, A.N. Levy, S. MacCracken, P.R. Mastrandrea, and L.L.White, Cambridge University Press, Cambridge, United Kingdom and New York, NY, USA, pp.1613-1634.

**Mohammed A, Farrell AD, Gobin J, Agard JBR.** (2014). Effects of Freshwater Flooding in Mangroves in the Caribbean Region. **In:** *Flooding and Climate Change: Sectorial Impacts and Adaptation Strategies for the Caribbean Region*. Chadee D, Sutherland, JM and Agard JBR, (Eds.) Nova Publishers, New York, 221 pp.

Munns R, Angus J, Atkin O, Brummell D, **Farrell AD**, Gorsuch P, Hewett EW, Hurry V and Rawson H. (2014). Temperature: a driving variable for plant growth and development. Chapter 14, **In:** *Plants in Action* 2nd edition. Australian Society of Plant Scientists.

Olsson, L., **D.D. Chadee**, O. Hoegh-Guldberg, M. Oppenheimer, J.R. Porter, H.-O. Portner, D. Satterthwaite, K.R. Smith, M.I. Travasso, and P. Tschakert, 2014: Cross-chapter box on heat stress and heat waves. **In:** *Climate Change 2014: Impacts, Adaptation, and Vulnerability*. Part A: Global and Sectoral Aspects. Contribution of Working Group II to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change, Eds, Field, C.B., V.R. Barros, D.J. Dokken, K.J. Mach, M.D. Mastrandrea, T.E. Bilir, M. Chatterjee, K.L. Ebi, Y.O. Estrada, R.C. Genova, B. Girma, E.S. Kissel, A.N. Levy, S. MacCracken, P.R. Mastrandrea, and L.L.White, Cambridge University Press, Cambridge, United Kingdom and New York, NY, USA, pp. 109-111.

**Rajendran, R., Jayaraj, J.** (2015). Use of Chitin and Chitosan for plant disease management. **In:** *Sustainable Crop Disease Management Using Natural Products*, Kurucheve, V., Sangeetha, G., **Jayaraj, J.**, (Eds.) CABI, Oxfordshire, UK, pp 198 – 212.



Singh, D.P. and **Chadee, D.D.** (2014). Knowledge, Attitudes and Practices of households regarding Flooding in Trinidad, West Indies. **In:** *Flooding and Climate Change: Sectorial Impacts and Adaptation Strategies for the Caribbean Region*, Chadee D, Sutherland, JM and Agard JBR, (Eds.) Science Press, New York p. 123-135.

Smith, K.R., Woodward, A., Campbell-Lendrum, D., **Chadee, Dave D.**, Honda, Y., Liu, Q., Olwoch, J., Revich, B., Sauerborn, R., Confalonieri, U and Haines, A. (2014). Human Health: Impacts, Adaptation and Co-Benefits Chapter **In:** *Climate Change 2014. In: Impacts, Adaptation, and Vulnerability. Part A: Global and Sectoral Aspects. Contribution of Working Group II to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change*, Eds, Field, C.B., V.R. Barros, D.J. Dokken, K.J. Mach, M.D. Mastrandrea, T.E. Bilir, M. Chatterjee, K.L. Ebi, Y.O. Estrada, R.C. Genova, B. Girma, E.S. Kissel, A.N. Levy, S. MacCracken, P.R. Mastrandrea, and L.L. White, Cambridge University Press, Cambridge, United Kingdom and New York, NY, USA, pp. 709-754.

**St. Martin C.C.G., Ramsubhag, A.** (2015). Potential of compost for suppressing plant diseases. **In:** *Sustainable Crop Disease Management Using Natural Products*, Kurucheve, V., Sangeetha, G., Jayaraj, J., (Eds.) CABI, Oxfordshire, UK, pp 345 - 388

## Department of Computing and Information Technology

**Kaloo, V.**, and **Mohan, P.** (2015). A Method for Developing Mathematics Content for Mobile Learning. **In:** *Integrating Touch-Enabled and Mobile Devices into Contemporary Mathematics Education*. M. Meletiou-Mavrotheris, K. Mavrou, and E. Paparistodemou (Eds.), Hershey, Philadelphia: IGI Global, 177-191.

**Kaloo, V.**, and **Mohan, P.** (2015). Guidelines for Developing Mobile Learning Games for Mathematics Emerging from a Case Study in a Developing Country. In H. Crompton and J. Traxler (Eds.), *Mobile Learning and Mathematics: Foundations, Design, and Case Studies*. Oxford, UK: Routledge (an imprint of Taylor and Francis), 122-134.

**Sultan, S.** (2015) A Blended Learning Approach to Team-Oriented Work in Large Classes: A Facebook Case Study". In Ally, M. and Khan, B. (Eds.): *International Handbook of E-learning Volume 2*, Routledge.

## CONFERENCE PRESENTATIONS

### Department of Life Sciences

L. Arneaud, M. Oatham, **A.D. Farrell.** (2014)

*Sporadic fire impact on stand structure and reproductive activity of *Mauritia flexuosa* in a tropical savanna.*

Association for Tropical Biology and Conservation; 51<sup>st</sup> Annual Meeting.

S.R. Baldeosingh, R. Clarke, J.B. Agard and **D.D. Chadee** (2015) *The impact of climate change, sea-level rise and storm surge on the west coast of Trinidad, West Indies.* impact of Environmental Changes on Infectious Diseases meeting on 23rd-24th March 2015 in Meliga Stages Hotel, Barcelona, Spain

**D.D. Chadee** (2014)

*Current Aedes aegypti control tactics – their advantages and limitations.*

Thematic Planning meeting for the Sterile Insect Technique in Vienna, Austria, 16-20 June.

**D.D. Chadee** (2014).

*Human Health Modelling (STA)*

Global-local Caribbean Climate Change Adaptation and Mitigation scenarios, 12-13 February, The University of the West Indies St. Augustine Campus, Trinidad, West Indies.

**D.D. Chadee** (2015).

*Climate Change and the Environmental Challenges: Health Impacts on individual, community and civil society.*

International Symposium – Europe-Latin America and Caribbean: crossed views over Climate Change, from Local to Global, 4th June at the Medicis Hall of the Palais du Luxembourg (French Senate).

**D.D. Chadee** (2014)

*Risk of failure for SIT programs in the past, importance of understanding risk perception from the local populations.*

First Coordination and Consultative Meeting of the IAEA-TC Project RAS 5066 held at Industrial Technological Institute, Colombo 7, Sri Lanka from 5th-9th May.

**D.D. Chadee** (2014).

*Vector Control Management in the Caribbean Region: Lessons Ignored.*

Research & Education Networks Supporting Dengue Fever Management in the Caribbean on 12th June, Port of Spain, Trinidad, West Indies. Trinidad and Tobago

# PUBLICATIONS AND CONFERENCES

**D.D. Chadee** (2015).

*Entomological Surveillance, Control and Management: Lessons not Learnt.*

CARPHA Consultation and Partners forum- Chikungunya in the Caribbean: Meeting Today's Challenge and Preparing for the Future. 2-3 March, 2015 at the Hyatt Regency Trinidad, Port of Spain, Trinidad and Tobago.

**D.D. Chadee** (2015).

*An overview of the different existing trapping methods already available for Aedes and Anopheles and on-going activities in Trinidad and Tobago.*

Consultants Group Meeting on "Mosquito male Trapping methods to monitor the efficacy of SIT programs in the field, 16-20 February, Vienna, Austria.

**D.D. Chadee**, R. Martinez (2015).

*Climate Change and Aedes aegypti: Impacts on Dengue and Chikungunya transmission dynamics in Trinidad, West Indies.* impact of Environmental Changes on .Infectious Diseases meeting on 23rd-24th March, Meliga Stages Hotel, Barcelona, Spain.

**D.D. Chadee** (2015).

*Climate Change and Aedes aegypti adaptation: impacts on Communities, and civil society.*

RAF5072 - Second Coordination Meeting, 5-10 July, 2015, Pereybere, Mauritius.

**D.D. Chadee** (2015).

*Climate change and its impact on the behaviour and adaptation of Aedes aegypti in Latin America and the Caribbean region.* 60th Annual Council and Scientific Meetings of the Caribbean Public Health Agency, June 25-27, St. Georges University, True Blue Campus, Grenada, West Indies.

**A.D. Farrell**, A. Coolman and P. Umaharhan. (2015).

*Climate Change Adaption to drought and heat in cocoa.* International Fine Cocoa Innovation Centre symposium. Cocoa Research Centre, Trinidad.

**A.D. Farrell**, A. Coolman, P. Umaharhan, and A. Eitzinger (2015).

*Climate Change and Cacao- Example from the Caribbean.* The Americans Cacao Breeders' Working Group 2<sup>nd</sup> Annual Meeting, El Salvador

**A.D. Farrell**, Eitzinger A, A. Coolman, and P. Umaharhan. (2015).

*Climate Impacts and Resilience in Caribbean Cocoa.* Dry Season National Climate Outlook Forum, Tobago

**A.D. Farrell**, C. John-Bejai, C. Cooper, S. Mohammed, M. Oatham. (2014).

*Response to Heat and Light Stress in Two Tropical Savanna Sedges.* Plant Biology Europe 2014 FESPB/EPSO Congress.

F.K. Solomon Jr. **J. Rouse-Miller** and L. Roberts- Nkrumah. (2015)

*Ex vitro grafting of breadfruit microcuttings on chataigne rootstock.* International Breadfruit Conference 2015 July 5-10

**J. Jayaraj** and N. Ali (2015)

*Use of Ascophyllum seaweed extract as bioelicitor or biostimulant in tomato production in the southern Caribbean.*

VIII International Integrated Pest Management Symposium, March 23-26, Salt Palace Convention Center, Salt Lake City, Utah, USA.

**J. Jayaraj** (2014)

*Use of seaweed products for integrated disease management.*

Commonwealth Science Conference, Nov. 25-28., Bangalore, India.

L.B. Roberts-Nkrumah, **J. Rouse-Miller** R. Pemberton and E. Julian Duncan. (2015)

*A historical perspective on the role of plant propagation in the distribution, development and commercialisation of breadfruit as a crop for food and nutrition security.*

International Breadfruit Conference 2015 July 5-10

**A. Ramjagathesh, A. Ramkissoon, S. De Aspa, O.T. Daly, A. Ramsubhag, J. Jayaraj** (2015)

*Degradation of Oxalic acid (OA) producing Sclerotium rolfsii by biocontrol agents.*

National symposium on Challenges and management Approaches for Crop disease of National Importance – Status and Prospects, Feb. 12-14, Tamilnadu Agricultural University, AC&RI, Madurai, India.

S. Ritchie, G. Devine and **D.D. Chadee** (2015).

*Prioritized list of vector control for Dengue control: the feasibility matrix.* 2015 Partnership for Dengue Control, Workshop on vector control #2, Annecy, France, 2-3 February.

K.D. Sharma, C. Mahabir, J.M. Sutherland, **J.B. Agard**, and **D.D. Chadee** (2015)

*Exploratory-Space-Time Analysis of Dengue Incidence in Trinidad: A Retrospective Study using Travel Hubs as Dispersal points, 1998-2004.* 60th Annual Council and Scientific Meetings of the Caribbean Public Health Agency, June 25-27, St. Georges University, True Blue Campus, Grenada, West Indies.

**C.K. Starr** and **J.N. Sewlal** (2015).

*Repertorio comportamental de la avispa social Mischocyttarus angulatus (Hymenoptera:Vespidae).*

X Coloquio de la Sección del Norte Suramericano de la Unión Internacional para el Estudio de los Insectos Sociales (IUSSI). Pp. 35.

**C.K. Starr**, S.T. Ballah, **J.N. Sewlal**, R. Bhukal, S. Stewart and V.V. Quesnel (2015).

*El ciclo colonial de la avispa social Polistes lanio (Hymenoptera: Vespidae).*

X Coloquio de la Sección del Norte Suramericano de la Unión Internacional para el Estudio de los Insectos Sociales (IUSSI). Pp. 33.

## Department of Mathematics and Statistics

**S. Pooransingh., S Teelucksingh and I. Dialsingh** (2015)  
*Dengue deaths – length of hospital stay, hematological parameters and presence of co- morbidities.*  
60<sup>th</sup> Annual CARPHA Health Research Conference  
St. Georges University, Grenada, June

**S. Seebaransingh, I. Dialsingh and S. Pooransingh** (2015)  
*Quality of Street Food in Trinidad.*  
60<sup>th</sup> Annual CARPHA Health Research Conference  
St. Georges University, Grenada, June

**S. Rao Gunakala** (2014)  
*Finite Element Analysis of Unsteady Radiative MHD Natural Convection Couette Flow between Permeable Plates with Viscous and Joule Dissipation*  
Commonwealth Science Conference, November 25-28,  
Bangalore, India.

**S. Rao Gunakala,** (2015)  
*Effect of Rayleigh and Hartmann Numbers on Time-Dependent Hydromagnetic Free Convection Nanofluid Flows within a Wavy Trapezoidal Enclosure with Viscous and Joule Dissipation*  
International Conference on Mathematical Sciences 13<sup>th</sup> – 15<sup>th</sup> July, held at S. V University, India.

**S. Rao Gunakala,**  
*Cardinality of a set which is consisting of all equivalent metrics on nonempty set*  
National Seminar on Recent Trends and Future Prospect,  
December 10-11, sponsored by UGC, India and organized by  
Andhra Christian College, Guntur India.

## Department of Physics

**Xsitaaz T. Chadee,** Naresh R. Seegobin & Ricardo M. Clarke (2015)  
*Using an ensemble of PBL schemes in the WRF model for assessing the spatial uncertainty in the wind resources of Trinidad and Tobago: preliminary study*  
The Abdus Salam International Centre for Theoretical Physics,  
Trieste, Italy 13-17 July.

**N. Zyuzikov** (2015)  
*Modern problems of genetics, radiobiology, radioecology and evolution*  
IV International conference St Petersburg, Russia 2-6 June

**S. Williams** (2015)  
International Union for Physical and Engineering Sciences in Medicine (IUPESM 2015) World Congress on Medical Physics & Biomedical Engineering, 7<sup>th</sup> -12<sup>th</sup> June, Toronto, Canada

**S. Williams** (2015)  
*Age, gender, training and arm dominance – implications for kinaesthesia and movement performance in the upper extremities* (Abstract #: ISB 2015 – 996)  
25<sup>th</sup> Congress of the International Society of Biomechanics (ISB 2015) 12<sup>th</sup> – 16<sup>th</sup> July, Glasgow, UK.

**Haque, S.** & Sharma, D. (2015)  
*Science and Art – enhancing creativity in thinking*  
STEM Carib, Grand Cayman, 17-20 March

**Haque, S.** & Sharma, D. (2015)  
The impact of *Lusus Naturae* in the habitable zone in the solar system  
STEM Carib, Grand Cayman 17-20 March

Schulze-Makuch, D., Meckenstock, R. & **Haque, S.** (2014)  
*Microhabitats for microbial life in a liquid natural asphalt lake and their relevance as an astrobiological analog to Titan*  
European Astrobiology Network Association (EANA), 13-16 October, Edinburg, England.

## CONFERENCE PAPERS/PROCEEDINGS

### Department of Chemistry

Wilson, S. C., **Taylor, A. R.**, Sebastian H. (2015)  
*Novel Bis[5-(4-methoxyphenyl)-N-(n-alkyl)-salicylaldiminato]copper(II) Metallomesogens: Synthesis, Structures and Low Temperature Smectic A Liquid Crystal Phases.* *Liquid Crystals*  
Gordon Research Conference: Liquid Crystallinity in Soft Matter at and Beyond Equilibrium; University of New England, Biddeford, Maine, United States of America; June.

Wilson, S. C., **Taylor, A. R.**, Sebastian H. (2014)  
*New Copper Schiff Base Liquid Crystal Materials: Design, Synthesis and Structure-Property Relationships,* Commonwealth Science Conference 2014, Bangalore, India; 11 November

**Wilson, A. M.,** Bando, A. T., and Guiseppi-Elie, A. (2015)  
*Green Corrosion Inhibition: Evaluation of Aqueous Theobroma Cacao (Cocoa) Shell Extracts as a Corrosion Inhibitor for Mild Steel under Acidic and Basic Conditions.* *Faraday Discussions, The Faraday Division, Royal Society of Chemistry.*  
Corrosion Chemistry, 13-15 April, Chemistry Centre, Burlington House, London, UK.

# PUBLICATIONS AND CONFERENCES

## Department of Life Sciences

C. John-Bejai, **A. D. Farrell**, F. M. Cooper, S. Mohammed and **M. Oatham** (2014)

*Responses to excess heat and light stress in two tropical savanna sedges.*

Plant Biology Europe FESPB/EPSO Congress  
Dublin, Ireland, 22nd - 26th June

S. Evelyn, A. Farrell, **W. Elibox** and **P. Umaharan** (2014)

*Understanding the Link Between Water Relations and Vase-life in Anthurium andraenum (Hort.).*

American Society for Horticultural Science (ASHS) Annual Conference  
Florida USA, July 28-31

L. L. Arneaud, **M. P. Oatham**, **A. D. Farrell** (2014)

*Sporadic fires impact on stand structure and reproductive activity of Mauritia flexuosa in a tropical savanna (ASESA).*

51<sup>st</sup> Annual Meeting of the Association for Tropical Biology and conservation,  
Carins, Australia, 20–24 July

**D. D. Chadee** (2014)

*Human Health Modelling (STA). Presentation and Discussion of initial results.*

Global-local Caribbean Climate Change Adaptation and Mitigation scenarios,  
St. Augustine Campus, The University of the West Indies,  
Trinidad, West Indies, 12–13 February.

**D. D. Chadee** (2014)

*Risk of failure for SIT programs in the past, importance of understanding risk perception from the local populations.*

First Coordination and Consultative Meeting of the IAEA-TC Project RAS 5066  
Industrial Technological Institute, Colombo 7, Sri Lanka, 5–9 May

**Chadee, D.D.** (2014)

*Current Aedes aegypti control tactics – their advantages and limitations.*

Thematic Planning meeting for the Sterile Insect Technique  
Vienna, Austria, 16-20 June

**Starr, C.K.** and **Sewlal, J.N.** (2014).

*Toward a national ecotourism guide on land arthropods.*

In Proceedings 19th Biennial Conference of the Caribbean Academy of Sciences. Pp 97.

**Starr, C.K., Sewlal, J.N.** and David, K. (2014).

*Are stabilimenta in the webs of Argiope argentata (Araneae: Araneidae) an inducible defensive device?*

In Proceedings of 19th Biennial Conference of the Caribbean Academy of Sciences. Pp 61.

## Department of Computing and Information Technology

**DeFreitas, K.** and **Bernard, M.**, (2015)

*Comparative Analysis of Clustering Algorithms within a Web-Based LMS.*

9th European Conference on Data Mining, July.

Ramneek, **P. Hosein** and W. Seok, (2014)

*Load Metric for QoS-enabled cellular networks and its possible use in pricing strategies,*

IEEE Symposium on Wireless Technology and Applications, Sept, Kota Kinabalu Malaysia.

Ramneek, **P. Hosein**, W. Choi and W. Seok, (2015)

*Detecting Network Neutrality Violations through Packet Loss Statistics,*

IEEE Conference on Advanced Communications Technology, July, Pyeongchang, South Korea.

Ramneek, **P. Hosein**, W. Choi and W. Seok, (2015)

*Disruptive Network Applications and their Impact on Network Neutrality,*

Asia-Pacific Network Operations and Management Symposium, Aug, Busan, South Korea.

**Kalloor, V., Mohan, P.**, and Kinshuk (2015)

*An Efficient Method for Designing Learning Games for Mathematics.*

8th International Conference on Game and Entertainment Technologies (GET 2015), Las Palmas de Gran Canaria, Spain, 22-24 July.

**Nikov A.**, S. Stoeva, T. Rambharose, (2015)

*Swarm optimization-based personalization of interactive systems.*

Internat. Conf. on Mathematical Methods, Mathematical Models and Simulation in Science and Engineering (MMSSE 2015), Vienna, Austria, March 15-17, pp.257-263.

**Nikov A.**, S. Syne, G. Garcia, (2015)

*Emotional learner experience in neo-tropical animal wildlife eLearning.*

UNESCO Conference, Sofia, Bulgaria, 29 May.

Radoslavov A., **A. Nikov**, (2015)

*Emotional user experience design study of detergent packages.*

XIII International Scientific Conference "Management and Engineering'15", Sozopol, Bulgaria, June 21-24.

**Sultan, S.** and **Mohan, P.**, (2014)

*Don't Forget to Take Your Tablet: An Android Application for Type II Diabetes Self-Management Support.*

The 19<sup>th</sup> General Meeting and Biennial Caribbean Academy of Sciences Conference, 21-23 November, Lowlands, Tobago.

**Sultan, S.** (2014)

*An Investigation into Group Formation in Large Classes Using Social Media.*

The 19<sup>th</sup> General Meeting and Biennial Caribbean Academy of Sciences Conference, 21-23 November, Lowlands, Tobago.

## OTHER PUBLICATIONS

### Bulletin

#### Department of Life Sciences

**Baksh-Comeau, Y.S.** (2015). Victor Quesnel: The Passing of a Legend. *The Field Naturalist (Quarterly Bulletin)* January – March 2015 Issue No: 1/2015:1-4.

#### Department of Computing and Information Technology

**Jordan, R** & V. Asservaro, AgriNeTT app for farmers UWI App tech taking crops to new heights, <http://www.newspday.co.tt/businessday/0,211832.html>

### Technical Reports

#### Department of Life Sciences

**J. Jayaraman** and **A. Ramsubhag**; Efficacy of seaweed products for the management of diseases in field tomatoes (Acadian SeaPlants, Dartmouth, NS, Canada), Final Research Report.

**J. Jayaraman** and **A. Ramsubhag**; Identification of elicitor compounds from seaweeds of Trinidad and their evaluation for disease control in tropical vegetable crops (Conservation, Food and Health Foundation, Boston, MA, USA), Final Research Report.

**J. Jayaraman** and **A. Ramsubhag**; Use of seaweed products for environmental friendly crop protection (United Nations Development Programme), Final research Report.

**J. Jayaraman** and **A. Ramsubhag**; Developing sustainable disease management strategies to improve vegetable production towards self-sufficiency and food security in the Caribbean region (ACP Caribbean & Pacific Research Program for Sustainable Development), II Annual Research Report.

**A. Ramsubhag** and **J. Jayaraman**; Etiology of sudden decline and dieback of Columbian Red Cedar trees in Trinidad (Ministry of Environment and Forestry & FAO), Final Research Report.

### Patents

#### Department of Chemistry

*Organic Compounds and their Uses*

**Application number:** 20140357551

**Abstract:** The present application describes organic compounds of Formula (II) that are useful for the treatment, prevention and/or amelioration of human diseases.

**Type:** Application

**Filed:** August 18, 2014

**Issued:** December 4, 2014

**Assignee:** Novartis AG

**Inventors:** Trixi Brandl, Prakash Raman, Pascal Rigollier,

**Mohindra Seepersaud**, Oliver Simic

*Peptidomimetic Sulfamide Compounds and Antiviral Uses Thereof*

**Patent number:** 8840878

**Abstract:** The present application describes organic compounds that are useful for the treatment, prevention and/or amelioration of human diseases.

**Type:** Grant

**Filed:** September 13, 2012

**Issued:** September 23, 2014

**Assignee:** Novartis AG

**Inventors:** Trixi Brandl, Prakash Raman, Pascal Rigollier,

**Mohindra Seepersaud**, Oliver Simic

#### Department of Physics

Park Jin-Soo, **Satpal Singh Sekhon**, Prabhsharan Kaur, Mun-Sik Shin, (2014). *Functionalized Carbon Nanotubes and its Fabrication Method Thereof*. Korean Patent Number: 10-1383084 (Application Number: 2012-0076453) **(Registered on April 02, 2014)**

#### Department of Computing and Information Technology

C Van Rensburg, **P. Hosein** and A. Soong September 2014. *"System and method for synchronized and coordinated beam switching and scheduling in a wireless communications system"* September 2014.

# PUBLICATIONS AND CONFERENCES

## FACULTY OF SOCIAL SCIENCES

### JOURNAL PUBLICATIONS

#### Department of Behavioural Sciences

**Alea, N.** and Q. Wang (2015) Going global: The functions of autobiographical memory in cultural context. *Memory* 23: 1-10. DOI: 10.1080/09658211.2014.929704.

**Alea, N.**, S. Bluck and S. Ali (2015) Function in context: Why American and Trinidadian young and older adults remember the personal past. *Memory* 2: 55-68. DOI: 10.1080/09658211.2014.929704

**Berkeley, B.** (2015) Pioneer and Complementary Research: The True Research Taxonomy. *Open Access Library Journal* DOI: 10.4236/oalib.1101130.

**Berkeley, B.** (2014) Exploring Structured Thematic Inquiry in Social Research. *Open Access Library Journal* DOI: 10.4236/oalib.1100889.

**Berkeley, B.** (2015) Deconstructing Four Sociological Perspectives on Education: A Reinterpretation of Pupil Achievement. *Open Access Library Journal*, DOI: 10.4236/oalib.1101746.

**Berkeley, B.**, M. Thomas-Mason (2015) Mother-Daughter Conflict among 18 - 21 Years Old Adolescents: Structure, Causes and Management. *Open Access Library Journal*, DOI: 10.4236/oalib.1101491.

Davis, D. K., **N. Alea** and S. Bluck (2015) The difference between right and wrong: Accuracy of older and younger adults fictional text recall. *International Journal of Environmental Research and Public Health* 12, 10861-10885. DOI:10.3390/ijerph120910861.

**Johnson, E. J.** (2014) A case study on the impact of natural disaster on 'Women'. *Asian Journal of Environment and Disaster Management* 6:1, 1-11.

**Kerrigan, D.** (2015) Transnational Anti-Black Racism and State Violence in Trinidad in Fieldsights – Hot Spots. *Cultural Anthropology Online*, <http://culanth.org/fieldsights/692-transnational-anti-black-racism-and-state-violence-in-trinidad>

Liao, H.W., S. Bluck, **N. Alea** and C. L. Cheng (2015) Functions of autobiographical memory in Taiwanese and American emerging adults. *Memory* 4: 1-14. DOI: 10.1080/09658211.2015.1015572.

**Seepersad, R. and C. Descartes** (2015) Risk factors for victimization in elementary school-aged children in Trinidad. *Caribbean Journal of Criminology* 1: 2: 1-52.

**Seepersad, R., D. Williams, A. Patenaude.** (2014) To hold and train: The Trinidad and Tobago Prison Service. *Justice Report*, 29:1: 25-28.

**Wallace, W. C.**, C. Gibson, N. Gordon, R. Lakhan, J. Mahabir, C. Seetahal (2015) An exploratory study on domestic violence and the 'dark figure of crime' in Trinidad and Tobago. *Caribbean Diaspora Crime Prevention Gazette* 5:2&3.

#### Department of Economics

**Alghalith, M.** (2015) A note on transforming PDEs to ODEs. *International Journal of Financial Engineering* 2, 1-4.

**Alghalith, M.**, C. Floros and **R. Lalloo** (2015) A note on Dynamic Hedging: Empirical evidence TSE-100 and S&P 500 Futures Markets. *Journal of Risk Finance* 16, 190 - 196.

**Alghalith, M.** (2014) Taylor's series for non-differentiable functions. *Mathematical Economics Letters* 1, 43-45.

**Alghalith, M.** (2014) Introduction to optimization in finance. *Journal Optimization Theory and Applications* 161: 1 Print.

**Alghalith, M.** (2014) Option pricing: very simple formulas. *Journal of Derivatives and Hedge Funds* 20, 71-73.

**Alghalith, M., T. Polius and M. Franklin** (2014) The Impact of Oil Price on the Stock Market. *Economia Internazionale* 67, 433-438.

**Alghalith, M., T. Polius and M. Franklin** (2014). The Impact of the Oil Price on the Stock Market. *Economia Internazionale* 67: 4, 433-438.

**Bailey H.**, P. Kind and **A. La Foucade** (2014) Results from an Exploratory Study to Test the Performance of EQ-5D-3L Valuation Subsets Based on Orthogonal Designs and an Investigation Into Some Modelling and Transformation Alternatives for the Utility Function. *Health Economics Review* 4:29.

**M. Franklin** and E. Ince (2014) Avoiding Vertical Inefficiencies in Funding Tertiary Level Education (TLE) in Resource Abundant States. *Social and Economic Studies* 63:1, 111-153.

Mathurin, T., **S. Hutchinson, M. Franklin & C. Pemberton** (2015) Economic Assessment of Community-Based Tourism Events in Saint Lucia: A Case Study of Fish Fry Events in Anse-La-Raye. *30<sup>th</sup> Proceedings of the West Indies Agricultural Economics Conference*. Hazel Paterson-Andrews (ed.). Caribbean Agro-Economic Society, U.W.I.

**Mohammed, A-M.** and S. Sookram (2015) The Impact of Crime on Tourist Arrivals – Comparative Analysis of Jamaica and Trinidad and Tobago. *Social and Economic Studies* 64: 2.

**Mohammed, A-M,** S. Sookram and G. Saridakis (2014) Rationality. *Encyclopedia of Law and Economics*, pp 1-10. Springer: New York. DOI: 10.1007/978-1-4614-7883-6\_404-1.

Mounsey, A. and D. T. Polius (2015) Is It Time To Revisit The Savings Rate Floor in the ECCU?, *Economic Affairs* 35: 1, 75-92.

Saridakis, G., **Mohammed, A-M.** and S. Sookram (2015) Does Crime Affect Firm Innovation? Evidence from Trinidad and Tobago. *Economics Bulletin* 35: 2, 1205-1215.

## Department of Management Studies

**Arjoon, S.,** K. Shah. (2014) Through Thick and Thin? How self-determination drives the Corporate Sustainability Initiatives of Multinational Subsidiaries. *Business Strategy and the Environment* 20: 8: 498-511.

**Bhatnagar, C.,** P.S. Bhullar (2014) The significance of Value and its Relationship with a Firm's Operational Quality. *Indian Management Studies Journal* 18: 2: 53-62.

**Mohammed, K.** (2015) Designing a suitable Survey Instrument to Assess the Feasibility of Risk-Based Supervisory Framework for Credit Unions in T&T. *Journal of Strategic and International Studies*, X: 5: 66-71.

**Rambocas, M.,** R. Meneses, C. Monterio, P. Brito (2015) Direct Indirect Channel Structures. Evaluating the Impact of Channel Governance on Export Performance. *International Business Review* 21:1: 124-132.

**Ramkissoon-Babwah, N. M. Balkissoon.** (2014) WebQuest development in the blended classroom: What do students gain? *Caribbean Teaching Scholar* 4:2: 99-122.

St. Hill, N. and **A. Lewis** (2015) An Assessment of the Caribbean Tourism Organization's Collaborative Marketing Efforts: a member nation perspective. *Journal of Vacation Marketing* 21:1: 75-85.

**Wheeler, A., R. Singh.** (2014) Actively Building the 'A' and 'S' of the ASA Framework. *Society of Industrial & Organizational Psychology (SIOP) Symposium Proceedings*, Hawaii, USA May 9-15.

**Wilson, S.** (2014) Sequencing in Process Manufacturing – The Product Wheel Approach. In *Proceedings of the 2014 POMS 25th Annual Conference*, Atlanta, Georgia, ISBN -10: 0-615-78490-9; ISBN-13: 978-0-615-78490-8.

**Wilson, S.,** I. Sagewan-Alli, I. Calatayud. (2014) The Ecotourism Industry in the Caribbean: A Value Chain Analysis, *IDB Technical Note* 710.

## Department of Political Science

**Bissessar, A.** (2014) Whose Governance? IMF Austerities in a Small Island State: The Case of Jamaica. *Journal of Reviews on Global Economics*, 190-199.

**Bissessar, A.** (2014) Why Crime Plans Fail: Citizen Security Re-Examined in the Anglophone Caribbean. *International Journal of Liberal Arts and Social Science*. 2:6, 88-104.

**Bissessar, A.** (2014) The Tragedy of a Small Country: Combatting Substance Abuse and Illegal Drugs. *International Journal of Humanities and Social Science*: 4:9.

**Bissessar, A.** (2014) Challenges to Women's Leadership in Ex Colonial Societies, *International Journal of Gender and Women's Study*: 2:3.

**Rampersad, I.** (2014) The Anti-Cuban Embargo Movement in the United States. *Peace Review* 26:3 Routledge, pp 402-411.

**Rampersad, I.** (2014) Multiculturalism and the Challenge of Managing Diversity in Trinidad and Tobago. *Journal of Social Science for Policy Implications* 2: 1, American Research Institute, pp 127-149.

**Roach, C. M.** and C. Beddeau (2015) Engaging Citizens and Delivering Services: The Housing Corporation of Trinidad and Tobago. *International Journal of Public Administration in the Digital Age* 2:3, pp 61-79.

**Tudoroiu, T.** (2015) The Reciprocal Constitutive Features of a Middle Eastern Partnership: the Russian-Syrian Relation. *Journal of Eurasian Studies*, Elsevier, 6:2, pp 143-152.

# PUBLICATIONS AND CONFERENCES

## BOOKS & BOOK CHAPTERS

### Department of Economics

**Hosein, R., J. Khadan, R. Seecharan** (2014) *The Dynamics of Regional Integration in the 21st Century*, UWI Press

**Hosein R. and R. Seecharan** (2015) *Assessing Lewis' Industrialization by Invitation (IBI) in the context of the Atlantic Plant in Point Fortin*. In the *FIRES of HOPE: Trinidad and Tobago at 50*, Patrick Kent Watson (ed.). Ian Randle Publishers.

**Hosein R. and R. Seecharan** (2015) *Dutch Disease, Genuine Savings and the Role of Corporate Legitimacy: Combating the Potentiality of the Dutch Disease in Tobago*. In the *FIRES of HOPE: Trinidad and Tobago at 50*, Patrick Kent Watson (editor). Ian Randle Publishers.

**La Foucade A. and C. Metivier** (2015) *Income Poverty*. In: *The SAGE Encyclopedia of World Poverty, Second Edition* edited by Mehmet Odekon. SAGE Publications (Pages 789-791 ISBN: 9781483345727

**La Foucade A., C. Lapiste, K. Theodore and K. A. Gittens-Baynes** (2015) *Equity in Health*. In *The SAGE Encyclopedia of World Poverty, Second Edition* edited by Mehmet Odekon. SAGE Publications Pages 518-520 ISBN: 9781483345727

### Department of Management Studies

Roberts, S., Best, M. and **Lewis-Cameron, A.** (2014) *Contemporary Caribbean Tourism: Concepts and Cases*, Kingston: Ian Randle Publishers.

### Department of Behavioural Sciences

**Alea, N.** and Q. Wang, (2015) Ed. *Going global: The functions of autobiographical memory in cultural context*. Special Issue of *Memory*.

**Seepersad, R., D. Williams.** (2014) *Making Deterrence Work: Problems and Possibilities*. Arawak Publications. ISBN: 978-976-8249-30-2.

**Alea, N., J. A. Singer, B. L. Labunko Messier** (2015) "We-ness" in relationship-defining memories and marital satisfaction. In K. Fergus & K. Skerrett (Eds.), *Couple resilience across the lifespan: Emerging perspectives*, New York, NY: Springer.

**Alea, N.** and J. Rawlins (2014) *Introduction*. J. Rawlins & N. Alea (Eds.) In: *Ageing in the Caribbean*. West Palm Beach, FL, USA: Lifegate Publishing.

**Alea, N.** (2014). "Bring back de ole time days": Why Trinidadians remember. In: *Ageing in the Caribbean*. West Palm Beach, FL, USA: Lifegate Publishing.

**Kerrigan, D.** *Woodbrook on the path to Independence in Trinidad and Tobago at 50: A Model Nation?* (ed) Patrick Watson. Jamaica: Ian Randle Press.

**Seepersad, R.** (2015) *Gangs in Trinidad and Tobago*. Anthony Harriott and Charles Katz (Eds.) In: *Gangs in the Caribbean: Their Rise and impact on the patterns of crime, state and politics*. p. 126-153. University of the West Indies Press. ISBN 978-976-640-507-6.

Singer, J. A., B. L. Labunko Messier, **N. Alea**, and J. L. Baddeley (2015) *Mutuality and Marital Engagement – Type of Union Scale [ME (To US)]: Empirical support for a clinical instrument in couples therapy*. K. Fergus & K. Skerrett (Eds.), In: *Couple resilience across the lifespan: Emerging perspectives*, New York, NY: Springer.

**Williams, D., and R. Seepersad.** (2015) *Retribution vs. Reintegration: The Trinidad and Tobago Reality*. Jonathan D. Rosen and Marten Brienens (Eds.) In: *Prisons in the Americas in the 21st Century: Human Dumping Ground*. p. 93-114. Lanham, Maryland: Lexington Books. ISBN 978-0-7391-4131-1

### Department of Political Science

**Rampersad, I.** (2015) *Drugs and Drug Control in Trinidad and Tobago*. In: *Pan African Issues in Drugs and Drug Control: An International Perspective*. Ashgate Publishing.

## CONFERENCE PRESENTATIONS

### Department of Economics

**R. Hosein** (2014)  
*Review of the Regional Economy*  
COTE 2014  
St Augustine, Trinidad, October

**R. Hosein** (2015)  
*Why We Need to Diversify*  
*Making Energy Resources Work for You*. Community Engagement Series BPTT  
Port of Spain Instalment, May



## Department of Management Studies

**S. Akhter and B. Pacheco** (2015)

*International Diversification and Performance of Firms in Trinidad*  
Academy of International Business Midwest Chapter  
Conference  
Chicago,

**S. Arjoon** (2015)

*How Supervisors Can Support Student Autonomy*  
Centre for Teaching and Learning, Certificate in Research  
Supervisor Development, Centre for Teaching and Learning  
UWI, St. Augustine, March

**A. Lewis-Cameron** (2014)

*Experiential Tourism: Making that Emotional, Physical or Spiritual  
Connection*  
Caribbean Tourism Organization 7th Tourism Human Resources  
Conference on "Achieving High Performance in Caribbean  
Tourism in the New, Networked, Work Environment"  
Scarborough, Tobago, October 29-31

**K. Mohammed** (2014)

*Examination & Re-engineering of the Monitoring Instrument for  
Credit Unions to Risk-Based Examinations at the Trinidad and  
Tobago Credit Union Deposit Insurance Fund Co-operative Society  
Limited*  
Institute of Strategic & International Studies International  
Multidisciplinary Academic Conference  
Orlando, Florida, USA, August

**J. H. Stephenson** and E. Ng (2015)

*Assessing the effectiveness of new anti-age discrimination  
legislation in the United Kingdom* Equality, Diversity and  
Inclusion Conference  
Tel Aviv, Israel, July 6-8

## Department of Behavioural Sciences

**N. Alea, S. Ali and M. J. Arneaud** (2015)

*What I value and why I remember: Values and the functions of  
memory in a multi-ethnic lifespan Trinidadian sample.*  
Poster presented at the Society for Applied Research in  
Memory and Cognition  
Victoria, B.C., June

**S. Ali, N. Alea and B. Marciano** (2015)

*The bumps in Trinidadian life: Positive and negative reminiscence  
bumps in a Trinidadian sample.*  
Different perspectives on the reminiscence bump, Society for  
Applied Research in Memory and Cognition XI  
Victoria, B.C., June

**M. J. Arneaud, N. Alea and M. Espinet** (2015)

*Identity development in Trinidad: Status differences by age,  
adulthood transitions, and culture* International perspectives to  
identity in adulthood at the 22<sup>nd</sup> Annual Society for Research  
on Identity Formation  
Bellingham, Washington, USA, May

**C. Descartes** (2014)

*Socially Constructing Demographics and Psychological Constructs*  
Caribbean Psychology: Unmasking the Past, Claiming Our  
Future, the Caribbean Regional Conference of Psychology  
(CRCP) II  
Paramaribo, Suriname, November

**K. Nathaniel-DeCaires**

*Silence is Broken: the pedagogy of hope in the constructivist  
classroom*  
Association for Caribbean Social Work Educators (ACSWE) 13<sup>th</sup>  
Biennial conference of Caribbean and International Social Work  
Educators  
Grenada, July (2015)

## Department of Political Science

**H. Ghany** (2015)

*Term limits, recall and second ballots: the Constitution  
(Amendment) Bill 2014*  
Twelfth Workshop of Parliamentary Scholars and  
Parliamentarians  
Wroxton College, near Banbury, Oxfordshire, UK, July 25-26

**B. Ragoonath** (2015)

*Implementing a Code of Ethical Political Conduct in the run up to  
a General Elections in Trinidad and Tobago – Trials and Tribulations*  
Transparency Institute of Trinidad and Tobago, June 22

**I. Rampersad** (2015)

*Shanique Myrie and Regional Disintegration*  
Caribbean Studies Association 40<sup>th</sup> Annual Conference. The  
Caribbean in an Age of Global Apartheid  
New Orleans, USA, May 25-29

**I. Rampersad** (2015)

*Standing still or Standing Tall/ The CSME, the CCJ and Caribbean  
Integration*  
SALISES, UWI 16<sup>th</sup> Annual SALISES Conference. Towards  
Caribbean Prosperity and Happiness in an Equitable World  
Castries, St. Lucia, January 14-16

# PUBLICATIONS AND CONFERENCES

## **C. Roach** (2015)

*Anti-Government: Different This Time? Contracting and Insider Games in Public Administration and Management*  
American Society for Public Administration. Public Administration Theory Network Section Annual Conference Vancouver, Canada, May

## **C. Roach** (2015)

*The Relationship between Career Adaptability, Satisfaction and Career Certainty among Caribbean Students*  
Annual American Psychological Association Conference at the Division 17 Society of Vocational Psychology Student Poster Session  
Toronto, Canada, June

## **T. Tudoroiu** (2015)

*Dreaming of Crimea: A Secessionist Black Sea Ethnic Minority and its Role as Agent of New Russian Imperialism*  
International Studies Association 56<sup>th</sup> Annual Convention  
New Orleans, February 18-21

## **T. Tudoroiu** (2015)

*The Hidden Virtues of Populism*  
International Studies Association 56<sup>th</sup> Annual Convention  
New Orleans, February 18-21

## OTHER PUBLICATIONS

### Department of Economics

**D. Conrad** (2014) Preparation of the entries on global economic developments in the Caribbean Economic Performance Report for the Caribbean Centre for Money & Finance.

**D. Conrad** (2015) Assisted with preparation of the report titled "Financing for Development in Caribbean SIDS – A Case Study for Review of Eligibility Criteria for Access to Concessional Financing", p59.

### Newspaper Articles

**Brizan, Roxanne, and Keron Victor. 2014.** Self-Rule: the Ultimate All-Inclusive. *UWI Today*, October 5.

**Brizan, Roxanne. 2014.** Small Economies: better on their toes than on their knees. *UWI Today*, August 3.

**Brizan, Roxanne. 2014.** Caribbean Economies and Caribbean Economy. *Trinidad Express Newspaper*, August 27.

## Department of Management Studies

### Media Interviews

**Kerr, V.** Guardian Business Watch (CNC3 TV) with Judi Kanhai: March, May, June and August, 2014, Discussed various ethical and corporate governance issues surrounding the First Citizens Bank IPO saga and the TCL Shareholder ousting of Directors.

**Kerr, V.** Guardian Business Watch (CNC3 TV) with Judi Kanhai: August 26, 2014: Shareholders' dismissal of TCL Board.

**Kerr, V.** Guardian Business Watch (CNC3 TV) with Judi Kanhai: June 30, 2014: Issues arising from the FCB Annual General Meeting.

**Kerr, V.** Guardian Business Watch (CNC3 TV) with Judi Kanhai: The First Citizen's Bank Board Dismissal by Corporation Sole: <http://www.cnc3.co.tt/business/business-watch-2014-05-14>

**Kerr, V.** Guardian Business Watch (CNC3 TV) with Judi Kanhai: Ethics and Corporate Governance issues of The Rahaman First Citizens Bank IPO Saga: <http://www.cnc3.co.tt/business/business-watch-2014-03-28>

**Kerr, V.** Quoted in The Trinidad Guardian Newspaper. *Article titled: "Jamaican Corporate Governance Expert Slams T&T Code"*, by Natalie Briggs, *Sunday Business Guardian*, page 4, June 1, 2014. Also see: <http://www.guardian.co.tt/business/2014-06-01/jamaican-corporate-governance-expert-slams-tt-code>

**Kerr, V.** Executive Learning Facilitation (January –November 2014): Designed and co-facilitated a series of professionally Accredited learning workshops (one, two and three-days duration) for Board of Directors, Corporate Secretaries and Minute Taking Professionals delivered in Trinidad and Tobago, The OECS, Barbados and Jamaica.

## CENTRES & UNITS

### ANSA MCAL PSYCHOLOGICAL RESEARCH CENTRE

#### BOOKS & BOOK CHAPTERS

**Kostić, A.**, & Chadee, D. (2015). Emotional recognition, fear and nonverbal behaviour. In *The Social Psychology of Nonverbal Communication* (pp. 134 – 150). London, England: Palgrave Macmillan.

**Kostić, A.**, & Chadee, D. (2015). The Social Psychology of Nonverbal Communication. London, England: Palgrave Macmillan.

#### CONFERENCE PRESENTATIONS

**D. Chadee** (2015)

*Fear of crime: To be or not to be afraid.*

Professorial Inaugural Lecture

The University of the West Indies, St. Augustine, Trinidad. March

**D. Chadee** (2015)

*The paradoxes between victimization and sense of safety.*

Citizen Security Workshop hosted by The Sir Arthur Lewis Institute of Social and Economic Studies (SALISES) and the Banco de Desarrollo de América Latina (CAF), Trinidad. April

**D. Chadee** (2015)

*Relationship between altruistic fear and perceived risk of victimization, pragmatic fear and community.*

14<sup>th</sup> European Congress of Psychology, Milan, Italy. July

#### REVIEWS

Chadee, Derek. Rev. of *Fathering*

Chadee, Derek. Rev. of *Journal of Research in Crime and Delinquency*

Chadee, Derek. Rev. of *Caribbean Journal of Psychology*

Chadee, Derek. Rev. of *International Gambling Studies*

Chadee, Derek. Rev. of *Journal of Eastern Caribbean Studies*

Chadee, Derek. Rev. of *Social and Economic Studies*

## ARTHUR LOK JACK GRADUATE SCHOOL OF BUSINESS

### JOURNAL PUBLICATIONS

**Allahar, H.**, (2015), MBA Education: UK and Australian Schools in the Caribbean, *European Academic Research*, Vol. III, No. 2, May 2015

**Allahar, H.**, ((2015) Management Education and the Executive MBA, *Research Journal of Social Sciences and Management*, Vol.5 No. 3, 35-40.

**Allahar, H. & Snaggs, K.**, (2015), Driving Forces of Development Change: Case of a Caribbean Island, *American Research Thoughts* Vol. Issue 7. May 2015, pp.1607-1623

**Gundala, R & Singh, M** (2015), Student Perceptions on Live-Case Projects: Undergraduate Marketing Research - *International Journal of Teaching and Learning in Higher Education*: Vol. 26 No. 2 2014 (260-267)

**Muhammad, N., Gundala, R., Singh, M. & Harriger, J.** (2015), Graduate Marketing Students' Satisfaction in the Caribbean: A Longitudinal Case Study", *Quality Approaches in Higher Education*, Vol. 6 no. 1 (17-25)

**Khan, Z.** (2015), "Climate Change: Risks and Responses in the Caribbean" in *World Sustainable Development Outlook: Green Behavior Re-thinking policy for sustainability*, Edited by Allam Ahmed, World Association for Sustainable Development.

**Khan, Z.** (2015), The Impact of Climate Change on the Tourism Industry in the Caribbean" in *World Sustainable Development Outlook: Green Behavior Re-thinking policy for sustainability*, Edited by Allam Ahmed, World Association for Sustainable Development.

### CONFERENCE PRESENTATIONS

**G. Saha** (2015)

*Business Intelligence for Organizational Transformation*, 6<sup>TH</sup> ANNUAL MSBM ROUNDTABLE, Organizational Renewal, Transformation and Growth Kingston, Jamaica, West Indies

**G. Saha** (2015)

"Clinical Based Management for Pharmaceutical Practices", School of Pharmacy, Faculty of Medical Sciences, Mt. Hope, Trinidad

# PUBLICATIONS AND CONFERENCES

## OTHER PUBLICATIONS

Bailey, H., M. Pacheco, **M. Carrillo**, S., Lezama, C. Brathwaite (2014) Country Report: Trinidad and Tobago. *Global Entrepreneurship Monitor*.

**Ramsawak, R.** (2013) Manufacturing Plant Feasibility Study - Feasibility study for the development of a manufacturing plant in Trinidad and Tobago

## CENTRE FOR LANGUAGE LEARNING (CLL)

### CONFERENCE PRESENTATIONS

**B. Carter** (2014)

*"Evaluating a Caribbean Centre of Excellence for Languages"*  
22<sup>nd</sup> Annual Conference of the French Association of University Language Centre  
Université du Littoral Côte Opale (UCLOS),  
Boulogne-sur-Mer, France

**B. Carter** (2014)

*"Embrace the new decade of Confucius Institute"*  
9<sup>th</sup> Global Confucius Institute Conference,  
Xiamen, China

**B. Carter** (2015)

*"The Language and Competitiveness Project: Thinking outside the (English only) Box"*  
40<sup>th</sup> annual conference of the Caribbean Studies Association (CSA),  
New Orleans, Louisiana

**A. Ibrahim-Ali** (2015)

*"Defying established practice in the EFL classroom: the development of a theoretical framework for teaching and testing SE periphrastic verbs"*  
UWI's Quality Assurance Unit and Centre for Excellence in Teaching and Learning Regional conference on 'Institutionalising Best Practice in Higher Education'

## CENTRE FOR HEALTH ECONOMICS (HEU)

### CONFERENCE PRESENTATIONS

**S. Lalta** (2014)

*Small Caribbean Countries in the Medical Referrals Marketplace: Planning for the Future*  
General Health Insurance Symposium on Connecting Countries: Transforming Health Care through Engagement.  
Aruba, November

**S. Lalta** (2014)

*Role of Sustainable Health Financing in Strengthening Caribbean Health Systems*  
HCC-CARPHA-PAHO Meeting on Strengthening Health Systems, Supporting NCDs Action.  
Dominica, October

**S. Lalta** (2014)

*Barbados' Quest for Sustainable Health Financing and the Likely Role of Regional Health Insurance*  
2<sup>nd</sup> Queen Elizabeth Hospital Conference on Health Financing.  
Barbados, September

**S. Lalta, A. Cumberbatch** (2014)

*Ebola Disease as a Threat to Caribbean Health and Development*  
9<sup>th</sup> Caribbean Conference on Health Financing Initiatives.  
Trinidad and Tobago, November

**R. McLean** (2015)

*Sustainable and Transitional Financing and Resource Allocation for HIV and AIDS*  
International AIDS Society 8<sup>th</sup> Conference on HIV Pathogenesis, Treatment and Prevention.  
Vancouver, Canada, July

**R. McLean** (2015)

*Survey Findings of Stigma Measurements among Health Care Workers, in the Caribbean*  
Health Policy Project Expert Consultation on Scaling Up HIV Stigma Reduction in Health Facilities.  
HPP Health Offices. Washington D.C. USA, June

**R. McLean** (2015)

*The Relationship between Health Economics and Behaviour Change: The Case of the English-Speaking Caribbean.*  
CARPHA Behavioural Sciences Workshop.  
Trinidad Hilton Conference Centre. Trinidad and Tobago, March.

**R. McLean** (2015)

*The Importance of VIA Screening & Cryotherapy Programme in Trinidad and Tobago*

Launch of the Family Planning Association of Trinidad and Tobago, Visual Inspection with Acetate Acid and Cryotherapy Programme.

FPATT Conference Room, Trinidad and Tobago, March

**R. McLean** (2014)

*Social Determinants of Health – Its Relevance for Small Island States*

Caribbean One Health Conference hosted by UWI, UNESCO and PAHO.

Tobago Beach Resort, Tobago, November, 2014.

**R. McLean** (2014)

*An Assessment of the Dependency of the Financial Response to HIV*

CARICOM Meeting of the Council on Human and Social Development (COHSOD) Ministers of Health.

PAHO Head Offices. Washington D.C., USA, September

**C. Laptiste** (2014)

*Barbados National Health Accounts – Policy Implications of Findings.*

Dissemination of Results Meeting of the Health Systems 20/20 National Health Accounts Study.

Bridgetown, Barbados, December

**C. Laptiste, K. Gittens-Baynes, P. Edwards-Wescott, C. Metivier** (2014)

*An Analysis of the Financial Resources and Support Services Available to Children with Disabilities in Tobago.* The Caribbean Child Research Conference.

Jamaica Conference Centre, Jamaica, November

**C. Laptiste, P. Edwards-Wescott, V. Beharry** (2014)

*Cost Analysis and Efficiency in Health: Lessons of Experience.* 9<sup>th</sup> Caribbean Conference on National Health Financing Initiatives.

Magdalena Grand, Tobago, November

**K. Theodore** (2015)

*Innovative Funding Strategies for NCDs and Risk Factor* PAHO Forum of Key Stakeholders on NCD Issues in the Caribbean.

Barbados, June

**K. Theodore** (2014)

*Policy Implications of the National Health Accounts, the findings of the 2012 St. Vincent and the Grenadines NHA, and the methodology of the NHA*

Dissemination Meeting, National Health Accounts, St. Vincent and the Grenadines  
December

**P. Edwards-Wescott** (2015)

*Situation of Adolescent Sexual and Reproductive Health in Trinidad and Tobago in Respect to Adolescent Pregnancy*

UNFPA Workshop on, Sensitization and Training of Leaders of Faith Based Communities as Trainers in Sexual and Reproductive Health (SRH)

Academy of Nursing and Allied Health, El Dorado-July

**P. Edwards-Wescott** (2015)

*The Situation of Adolescents in the Caribbean and Trinidad and Tobago in specific in respect to vulnerability to HIV, STIs and Adolescent Pregnancy*

UNFPA Workshop on, Training of Trainers in Standards for Delivering Adolescent Sexual and Reproductive Health  
Academy of Nursing and Allied Health, El Dorado-July

**P. Edwards-Wescott** (2015)

*Key Elements of Findings from Regional Studies on Sexual, Cultural and Economic Factors that Contribute to Adolescent Pregnancy in the Caribbean*

UNFPA Master Training Workshop for Teachers in Trinidad and Tobago on Health and Family Life Education (HFLE)  
Academy of Nursing and Allied Health, El Dorado-July

**P. Edwards-Wescott** (2015)

*Introduction to Costing in Healthcare. Costing of Health Programmes: AIDS Impact Model (AIM) Overview and Demonstration*

Training Course, HEU, Centre for Health Economics UWI St. Augustine - April

**P. Edwards-Wescott** (2014)

*Cost Analysis and Efficiency in Health: Lessons of Experience* HEU hosted 9<sup>th</sup> Caribbean Conference on National Health Financing Initiatives. Magdalena Grand, Tobago November

**L. Ramnath** (2015)

*Measuring the Economic Impact of Chikungunya in the Caribbean* CARPHA Consultation and Partners' Forum on Chikungunya in the Caribbean: Meeting Today's Challenge and Preparing for the Future

Hyatt Regency, Trinidad and Tobago, March

# PUBLICATIONS AND CONFERENCES

## INSTITUTE FOR GENDER & DEVELOPMENT (IGDS)

### JOURNAL PUBLICATIONS

**S. Barratt** (2015) Go Thick Sauce Go: Facing My Demons at the Rainbow Cup Triathlon. *Caribbean Beat Magazine*. May 2015

**S. Barratt** and Christa Mohammed (2015) Counter Narratives – Daddies at the Mall. *Caribbean Review of Gender Studies*. Issue 8, 2014.

**P. Mohammed**. Chinese art: a little-known heritage. *Sunday Guardian*. November 9 2014

**A. Nixon** (2014) Terrains of Female Desire: Women Loving Women and Radical Acts of Self Care in Shalini Seereeram's Intimate Moments. *ARC Magazine*. Review Feature. 23 Dec 2014. Web.

**A. Nixon** (2014) Calling for Justice – In Solidarity with Trinidad's Highway Reroute Movement. *Feminist Conversations on Caribbean Life*. Code Red for Gender Justice. 5 Oct 2014. Web.

**A Nixon** (2014) Creating Space and Speaking Silence in Black Women's Performance Art – The Body Power of Gabrielle Civil's Fugue – Dissolution, Accra. *ARC Magazine*. Review Feature. Web.

### BOOKS & BOOK CHAPTERS

**G. Hosein** (2015) Democracy, Gender and Indian Muslim Modernity Trinidad. In *Islam and the Americas*, Aisha Khan (eds.) Gainesville: University Press of Florida, 249-268.

**P. Mohammed** (2015) Gender Equality and Gender Policy Making in the Caribbean In *Public Administration and Policy in the Caribbean*, Indianna D. Minto-Coy and Evan Berman (eds.) Taylor and Francis.

**P. Mohammed** (2015) Island Currents, Global Aesthetics: Islamic Iconography in Trinidad In *Islam in the Americas* Eds Aisha Khan, and Kevin Yelvington (eds.), University Press of Florida, Gainesville: 2015, pp. 295 to 326

**R. Reddock** (2014) "Split Me in Two" Gender, Identity, and "Race Mixing" in the Trinidad and Tobago Nation", Rebecca Chiyoko King-O'Riain, Stephen Small, Minelle Mahtani, Miri Song, Paul Spickard (eds) *Global Mixed Race*, New York and London, NYU Press, 2014, pp. 44-67.

**R. Reddock** (2014) "Up Against a Wall": Muslim Women's Struggle to Reclaim Masjid Space in Trinidad and Tobago" In *Islam and the Americas* Aisha Khan (ed.), Gainesville, University Press of Florida, 2015, pp. 217-248.

### CONFERENCE PRESENTATIONS

**S. Barratt** (2015)  
*Enhancing Quality of Craftsmanship through Mixed Methods Research Design*  
Mixed Methods Conference  
Mona, Jamaica, March

**S. Barratt** and Aleah Ranjitsingh (2015)  
*New Am I Mixed Enough? – Exploring the Politics of Mixed-Race Identities in Trinidad and Tobago*  
Caribbean Studies Association Conference.  
New Orleans, USA, May

**S. Barratt** and Amilcar Sanatan (2015)  
*Festival Economy: Capitalism, Inclusion and Exclusion in Trinidad Carnival*  
Caribbean Studies Association Conference.  
New Orleans, USA, May

**G. Hosein** and Hebe Verrest (2014)  
*Social protest, visibility and claiming space for development in Trinidad and Tobago*  
Centre for Latin America Research and Documentation (CEDLA)  
Conference The Visible City  
Amsterdam, The Netherlands, October 9.

**G. Hosein** (2014)  
*Sexual Rights and the Limits of Gender Mainstreaming Strategies to Advance Gender Justice in the Anglophone Caribbean*  
American Anthropological Association Conference  
UWI St. Augustine, Trinidad, December

**G. Hosein** (2015)  
*Married Elsewhere, Married Here: Lesbian Marriage and Homonormative Challenges to Caribbean State Sovereignty*  
Caribbean Studies Association Conference.  
New Orleans, USA, May

**G. Hosein** (2015)  
*Douglas Poetics and Politics in Indo-Caribbean Feminist Thought on Panel: Mixedness in Trinidad and Tobago: Epistemological Reflections and Identity Politics*  
Caribbean Studies Association Conference.  
New Orleans, USA, May

**P. Mohammed** (2014)

*From New Helots to New Diasporas*  
A retrospective on Professor Robin Cohen  
University of Oxford, UK, October

**P. Mohammed** (2015)

*Overview of Asian Diasporic Art*  
Expert meeting of the Chinese American Museum in Los Angeles Chinese American Museum Research Project: The Getty Museum Pacific Standard Time.  
Los Angeles, California, September

**P. Mohammed** (2015)

*Potential of Postgraduate research – Opening new doors*  
The Caribbean Today: Facing Challenges and Assessing Opportunities through Postgraduate Research, Department of Behavioural Sciences Post Graduate Research Conference  
St Augustine, Trinidad, April

**P. Mohammed** (2015)

Public lecture: "The Trouble with Men: Recurrent Themes in the Study of Men and Masculinity in the Caribbean"  
Les Jeudis de l'Université at Université des Antilles, Martinique April

**P. Mohammed** (2015)

Gender Deficit: The Challenge for Social Sustainability  
Forum on the Future of the Caribbean, University of the West Indies and  
The Hyatt Regency, Trinidad and Tobago, May

**P. Mohammed** (2015)

"The Snake-Charmer and Other Tales: The Image as Story"  
The Indian Diaspora: Identities, Trajectories And Transnationalities at  
U.W.I., St. Augustine May

**P. Mohammed** (2015)

Crossing Boundaries: Gender, Practice, and Policy - Caribbean Intransit Roundtable  
Caribbean Studies Association Conference.  
New Orleans, USA, May

**P. Mohammed** (2015)

"City on the Hill" – Documentary Film Screening  
Caribbean Studies Association Conference.  
New Orleans, USA, May

**P. Mohammed** (2015)

Presentation of Book Islam in the Americas Edited by Aisha Khan  
Caribbean Studies Association Conference.  
New Orleans, USA, May

**A. Nixon** (2014)

*Vexed Relations and Touristic Desire: Sex/Work in the Caribbean*  
Global Moral Panics Symposium  
Indiana University Bloomington, October

**A. Nixon** (2014)

*Erotic Justice and Caribbean Feminist Organizing for Gender and Sexual Equality*  
National Women's Studies Association Conference.  
Puerto Rico, November

**A. Nixon** (2015)

*Caribbean Sexualities, Digital Technologies, and the Caribbean IRN*  
Symposium The Caribbean Digital: A Small Axe Event.  
Columbia University, New York, December

**A. Nixon** (2015)

*The Problem of Human Rights and Gender equity Discourses – Movements for Gender and Sexual Justice in the Caribbean*  
Caribbean Studies Association Conference.  
New Orleans, USA, May

**A. Nixon** (2015)

*Roundtable on Barbara Christian: Legacy, Lessons, 21st century Black Feminisms*  
Caribbean Studies Association Conference.  
New Orleans, USA, May

**A. Nixon** (2015)

*Sex/Trade/Work in the Caribbean – Challenging Discourses on Human Trafficking*  
Caribbean Studies Association Conference.  
New Orleans, USA, May

**R. Reddock** (2014)

*Becoming Each Other: Interculturalisms, Grassroots Resistance and Cultural Creativity in Post-Colonial Trinidad and Tobago*  
World Congress of Sociology, International Sociological Association  
Yokohama, Japan, July

**R. Reddock** (2014)

*Welcome to Paradise: Gender, Labour, Violence and the Crisis: Global and Local Reflections*  
Material Matters in Times of Crisis Capitalism: Transnational Feminist and Decolonial Approaches  
Giessen, Germany, November

**R. Reddock** (2015)

*Meeting the Needs of Our Students: Developing ENGAGED AND EMPLOYABLE Citizens*  
Conference on Best Practices in Higher Education Teaching and Learning Complex, UWI St. Augustine, June.

# PUBLICATIONS AND CONFERENCES

## OTHER PUBLICATIONS

### Reviews

**P. Mohammed**, *Coolie Pink and Green* Reviewed in *Asian Diasporic Visual Cultures and the Americas* by Lomarsh Roopnarine, Volume 1, Issue 1-2, pp 219 –222. Brill Online Books and Journals: BrillOnline.com

### Film Screening

**P. Mohammed**, *Coolie Pink and Green* Screening and discussion at Cite Trinite, Les Amis de San Fernando, Martinique April 24 2015

**P. Mohammed**, *Coolie Pink and Green* Screening and discussion at Indian Diaspora Conference film evening. May 14<sup>th</sup> 2015

## INSTITUTE OF INTERNATIONAL RELATIONS (IIR)

### JOURNAL PUBLICATIONS

**Laguardia Martínez, J.** (2014) Las industrias culturales en la crisis económica global: El caso de la, muy agitada, industria editorial, *The Economy Journal* Barcelona <http://www.theeconomyjournal.com/es/notices/2014/02/las-industrias-culturales-en-la-crisis-economica-global-el-caso-de-la-muy-agitada-industria-editor-67060.php>

### BOOKS & BOOK CHAPTERS

**Bishop M. L.** (2014) Whither CARICOM. In *Re-mapping the Americas Trends in Region Making*. Ed. W. Andy Knight, Julián Castro-Rea and Hamid Ghany. Ashgate. ISBN: 978-1-4094-6402-0

**Laguardia Martínez, J.** (2014) Las industrias culturales en el contexto de la crisis económica global, *Temas de la Economía Mundial* (February 2014), Havana, Nueva Época II, No.25, pp. 113 – 125 <http://www.ciem.cu/publicaciones/pub/Temas%20No.%2025-2014.pdf>

**Girvan, N.** (2014) Caribbean Integration: Can Cultural Production Succeed where Politics and Economics have Failed? (Confessions of a Wayward Economist). In *Re-mapping the Americas Trends in Region Making*. Ed. W. Andy Knight, Julián Castro-Rea and Hamid Ghany. Ashgate. ISBN: 978-1-4094-6402-0

**Kirton, M.** (2014) CARICOM's Engagement with Latin America: The Community of Latin American and Caribbean States (CELAC), its Promise and Challenges. In *Re-mapping the Americas Trends in Region Making*. Ed. W. Andy Knight, Julián Castro-Rea and Hamid Ghany. Ashgate. ISBN: 978-1-4094-6402-0

**Knight, W. A.** J. Castro-Rea and **H. Ghany** (2014) Re-mapping the Americas. In *Re-mapping the Americas Trends in Region Making*. Ed. W. Andy Knight, Julián Castro-Rea and Hamid Ghany. Ashgate. ISBN: 978-1-4094-6402-0

**Knight, W. A.** (2014) The FTAA and the Untimely Demise. In *Re-mapping the Americas Trends in Region Making*. Ed. W. Andy Knight, Julián Castro-Rea and Hamid Ghany. Ashgate. ISBN: 978-1-4094-6402-0

**Montoute, A.** (2014) From Engagement to Influence: Civil Society Participation in the EPA Trade Negotiations and Regional Integration Processes. In *Re-mapping the Americas Trends in Region Making*. Ed. W. Andy Knight, Julián Castro-Rea and Hamid Ghany. Ashgate. ISBN: 978-1-4094-6402-0

### OTHER PUBLICATIONS

**Bishop, M. L.** (2014), 'Reparations for slavery?' SPERI Comment, 20 March. Available at: <http://speri.dept.shef.ac.uk/2014/03/20/reparations-slavery/>

**Bishop, M. L.** (2014), 'The Unravelling of Chavismo' SPERI Comment, 25 February. Available at: <http://speri.dept.shef.ac.uk/2014/02/25/unravelling-chavismo/>

## SIR ARTHUR LEWIS INSTITUTE OF SOCIAL & ECONOMIC STUDIES

### Journal Publications

Mohammed, A-M and **S. Sookram**. (2015). The Impact of Crime on Tourist Arrivals - A Comparative Analysis of Jamaica and Trinidad and Tobago. *Social and Economic Studies*, 64(2).

**Mohan, Preeya and Patrick Watson**. (2014). CARICOM Foreign Direct Investment Flows. *Social and Economic Studies*. 63(3 & 4): 281-306.

Saridakis, G., A-M. Mohammed, and **S. Sookram**. (2015). Does Crime Affect Firm Innovation? Evidence from Trinidad and Tobago. *Economics Bulletin*. 35(2): 1205-1215.



## BOOKS & BOOK CHAPTERS

**McCree, Roy.** 2015. The Fight Outside the Ring: female Boxing Officials in Trinidad and Tobago. **In** *Global Perspectives in Combat Sports: Women Warriors around the World*, edited by Alex Channon and Christopher, 104-118. Hampshire and New York: Palgrave MacMillan.

Mohammed, A-M, **S. Sookram**, and G. Saridakis. 2014. Rationality. **In** *Encyclopedia of Law and Economics*, pp 1-10. Springer: New York. DOI: 10.1007/978-1-4614-7883-6\_404-1.

**St. Bernard, Godfrey.** 2014. Strengthening Social Cohesion in the context of Resilience Building in Small States With Reference to Commonwealth Small States. **In** *Building the Resilience of Small States – A Revised Framework*. Edited by Denny Lewis-Bynoe. Commonwealth Secretariat. pp. 197- 237.

## CONFERENCE PAPERS/PROCEEDINGS

**G. St. Bernard** (2014)

*Prospective Merits of Early Childhood Care and Education in Trinidad and Tobago: An Exploratory Study.*  
WASD 12<sup>th</sup> International Conference – West Meets East: Sharing the Past and Current Experience To Benefit the Future, Le Meridien Versailles, Montreal, Canada, August.

**G. St. Bernard** (2014)

*Population Dynamics and Social Policy Imperatives for Anglophone Caribbean States – A Prognostic Assessment.*  
Conference on the Economy (COTE 2014),  
The University of the West Indies, St. Augustine, Trinidad and Tobago, October.

**G. St. Bernard** (2014)

*Educational Opportunities and the Impact of Disability Status: Exploring Policy Implications in Dominica and Saint Lucia.*  
Caribbean Child Research Conference,  
Jamaica Conference Centre, Kingston, Jamaica, November.

**G. St. Bernard** (2014)

*Vulnerability, Resilience and Prospects for Sustainable Development in Small States – The Case of the Anglophone Caribbean.*  
VIII International Conference on Caribbean Studies.  
Cátedra de Estudios del Caribe, University of Havana, Cuba, December.

**G. St. Bernard** (2015)

*Population Dynamics, International Migration and Urbanization: The Case of Four ACP Caribbean Countries.*  
Annual Meeting of the American Association of Geographers, Tampa Bay, Florida, The United States of America, April.

**G. St. Bernard** (2015)

*Measuring Youth Empowerment: Critical Reflection and Progressive Engagement of Theory and Methodology.*  
16<sup>th</sup> Annual SALISES Conference:  
Bay Garden Hotel, Rodney Bay/Gros Islet, St. Lucia, January

**G. St. Bernard** (2015)

*Demographics, Socio-Economic Criteria and the Determination of Urban-Rural Spatial Differences in the Caribbean – Empirical Evidence and Policy Implications.*  
16<sup>th</sup> Annual SALISES Conference:  
Bay Garden Hotel, Rodney Bay/Gros Islet, St. Lucia, January.

**G. St. Bernard** (2015)

*Understanding the Link between Overcrowding, Demographic Factors and Spatial Domains – A Framework for averting Selected Disaster-Related Crises in St. Vincent and the Grenadines” St. Vincent and the Grenadines Country Conference 2015,*  
The University of the West Indies, Open Campus, St. Vincent, March.

**G. St. Bernard** (2015)

*Exploring Ageing Parameters for Selected Caribbean Countries: Towards a Novel Approach.* 80<sup>th</sup> Annual Conference of the Population Association of America,  
San Diego, United States of America, 30 April – 2 May.

**R. McCree** (2015)

*Sport and Disability in Trinidad and Tobago: An Exploratory Study.*  
Towards Social Integration: Rights, Roles, Recognition of Persons with Disabilities.  
The Learning Resource Centre, UWI, St Augustine, Trinidad and Tobago April

**S. Sookram** (2015)

*Life in Bequia in the era of Climate Change: Societal Perception of Adaptation and Vulnerability.*  
SALISES 16<sup>th</sup> Annual Conference. Castries/Rodney Bay, St. Lucia, January

**S. Sookram** (2015)

*The Impact of Crime on Innovation in Firms Operating In Trinidad and Tobago.*  
*Academy of Criminal Justice Sciences 2015 Annual Meeting.*  
Orlando, Florida, March

**I. Sagewan** (2014)

Panel discussion on Competitiveness at the VIII Competitiveness Forum of the Americas, Hyatt Regency Port of Spain, October.

# PUBLICATIONS AND CONFERENCES

**I. Sagewan** (2015)

*Cocoa, Chocolate, Cosmetics, Tourism: Wherein lies the Prosperity for Trinidad Fine flavour Cocoa*

Panel on Caribbean competitiveness at the SALISES 2015 Conference, January

**I. Sagewan** (2015)

*Competitiveness Through Value Chains: Caribbean case studies.*

Suriname Competitiveness Unit, Suriname, February.





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