



UWI
ST. AUGUSTINE
CAMPUS

A NEW DAY



THE UWI

75

ROOTED
READY
RISING

1948 - 2023



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About this Report

After two years of COVID-19 lockdowns, life slowly began to return to the St. Augustine Campus in the 2021/2022 academic year. The period also marked the final year of the last Strategic Plan, and preparations for the transition from one Campus Principal to the next—not quite a re-birth but certainly there was the feeling of starting afresh.

In this report, the Campus celebrates the joyous return of our students and staff. We share the hope and anticipation of some of our alumni who are embarking on new entrepreneurial ventures on their own or through the exciting UrpreneurPlus Accelerator programme which is a partnership involving UWI Ventures and the Unit Trust Corporation (UTC) of Trinidad & Tobago. We also feature one Faculty project that is teaching entrepreneurial skills to disadvantaged persons in need of a second chance, and a sweet commercial project that could be the future of the Campus. We also bring you the story of one student who, like the Campus, is focused on overcoming all challenges to seize the possibilities of this new day.

COVER PHOTO: SHEREEN ALI



A Publication of
The Marketing & Communications Office
The University of the West Indies,
St. Augustine Campus

FACULTY OF

Engineering



Professor Edwin Ekwue
DEAN

Dean's Summary

The Faculty continued and advanced its plans to introduce the Master of Engineering (MEng) degree programme to ensure that its graduates acquire the full educational base to achieve full professional registration status. This will culminate in a four-year degree programme in the Faculty. The courses in the Pre-Engineering Programme were revised during the last academic year and the number of students registered for the programme has grown from nine to thirty-seven. The number of students in the programme will continue to grow especially since the admission policy of the programme was changed to admit, in addition to students who achieved the lower grades at CAPE, students who achieved high grades in CSEC Mathematics, Additional Mathematics, and other relevant subjects.

The Department of Chemical Engineering upgraded the facilities in the Wet, Analytical, Science of Materials and Food Science and Technology Laboratories and underwent a quality assurance review. Virtual re-accreditation was conducted by the Institution of Chemical Engineers (IChemE) of the United Kingdom resulting in full accreditation of its programmes up to 2026.

The Department of Civil and Environmental Engineering maintained its ranking as the first in the Caribbean to reaccredit all its undergraduate and postgraduate programmes. The Joint Board of Moderators conducted the reaccreditation virtually. The MSc Coastal Engineering and Management Programme was accredited during this visit.

Staff in the Department of Electrical and Computer Science conducted research in image processing, biomedical engineering and mobile applications for small-scale fisheries, multi-processor systems, linear circuit applications, control systems, energy efficiency and renewable energy. Staff continued to publish in international refereed journals and conferences. They also provided robust university, professional and public service in their respective areas of expertise.

Staff of Department of Geomatics Engineering and Land Management continued to distinguish themselves locally, regionally, and in the wider international community, receiving honours and recognition from The UWI and other bodies. Two staff members continued serving as Coordinating Lead Authors, expert reviewers, and review editors for Intergovernmental Panel on Climate Change (IPCC) publications. One member of staff continued to serve as a scientific member of the International Science Council. The Department of Mechanical and Manufacturing Engineering continued its research and outreach in many areas including the UNDP-GEF 6 project on District Cooling Pilot Site, which seeks to replace traditional refrigerant with liquefied natural gas. There was also the investigation of possible use of methanol as a marine and vehicle fuel in Trinidad and Tobago.

Enrolment

The total enrolment of students in the undergraduate and certificate programmes in the Faculty of Engineering decreased slightly in the 2021/2022 Academic Year. The Faculty also experienced a reduction in its new student enrolment in its Postgraduate Diploma, MSc. and MPhil programmes during the year under review.

Graduation

Despite the pandemic, the Faculty of Engineering partnered with sponsors to honour its top-performing students for 2021/22 at its Prizes and Awards Ceremony held in November 2022. Close to 300 undergraduate students graduated with 67 of them awarded first class honours. The Faculty graduated 120 MSc and MASc students with 32 distinctions. Seven candidates were awarded their PhDs.

Student Awards

Thirteen students in the Chemical Engineering department won internships in a several companies including Touchstone, EOG, Heritage, ResiLog, BpTT, NEC, SHELL, PROMAN. The students from the Petroleum Studies Unit programme continued to participate in the Imperial Barrel Awards, the PetroBowl competition, and to present technical papers at regional and international conferences. The Department of Electrical and Computer Engineering engaged 12 companies for over 20 student internships for the 2021/2022 summer period, inclusive of graduate internships with two companies. There were also six unpaid internships with six supervisors and two students returned from the Goldman Sachs' London internship where one attained full employment.

Uchenna Bacchus won the Americas region IMechE "Speak Out for Engineering" competition, **Christian Virgil**, PhD student in Industrial Engineering obtained the McGill-UWI Queen Elizabeth II Diamond Jubilee Scholarship programme in 2022, and **Josh Henry**, PhD student in Mechanical Engineering received an Emerging Leaders in the Americas Program scholarship to facilitate a semester exchange at York University in Canada.

Research

Department of Chemical Engineering

Dr Sharad Maharaj's areas of focus included, but was not limited to, Mathematical modelling and optimization of an ammonia synthesis converter, Performance evaluation of a purification system in a methanol plant, Solubility studies in supercritical CO₂ with curcuma longa, and Automating Assessment in Chemical Engineering Education.

Dr Jeffrey Smith focused his research on PET recycling; Thermal degradation kinetics of Polyethylene Terephthalate (PET) from waste soft drinks bottles; Analysis of the literature and theory on Surface Area and Pore size Distribution Measurements in Activated Carbons via combined N₂ and CO₂ adsorption, and the impact of temperature on the measurement of state of charge for lithium pouch cells using ultrasound.

Dr Dhurjati Chakrabarti's research included studies on Three-phase flow in pipeline; Rheology, emulsion, and viscoelasticity; Modelling of Liquid/Liquid Phase Separation/ Petroleum Emulsions, and the impact of surfactants and particles on the stability of emulsion systems.

Mrs Thérèse Lee Chan chose to study Process control and optimization, A feasibility study on CO₂ emission reduction in the Point Lisas Industrial Estate, and Improving the drying capability in the instrument Air Plant in a Gas Processing facility.

Dr Shelly Singh-Gryzbon's research was focused on Biofluid Mechanics, Hemodynamic analysis of potential surgical options for Fontan patients, Comparing healthy and stenotic hemodynamics in the coronary arteries, Development of a COVID-19 vaccine: Behind the Scenes (a review paper), and Computational Fluid Dynamics.

Food Science and Technology

Dr Saheeda Mujaffar's research focus included Cocoa (Theobroma cacao) drying studies, Extraction and characterisation of single-cell proteins from pelagic sargassum in Trinidad and Tobago, Hot Air (oven) freeze drying of banana (Musa acuminata AA Group) slices.

Professor Rohanie Maharaj's research included, but was not limited to, The Quality and potential storage life of Trinidad minimally process pineapple, An analysis of the antimicrobial effects of West Indian Bay leaf, Culantro and Turmeric against common foodborne pathogenic and spoilage bacteria, and the Development of a composite Breadfruit flour by-product to aid in a nutritious choice in the school meals.

Petroleum Studies Unit

Petroleum Engineering

Professor Raffie Hosein's research focused on Rock Mechanical properties of shallow unconsolidated sandstone formations; PVT Phase behaviour, Characterisation and Modeling of the recovery of oil, natural gas and gas condensates from Trinidad reservoirs; Oil and Gas field development in Trinidad and Tobago: small fields with complex geology.

Dr Lorraine Sobers focused on Carbon Dioxide Enhanced Oil Recovery, Climate Change Response of Small Island Development States, and Carbon Dioxide Emission Reduction in Trinidad.

Mr Hamid Hassanali's research involved Determination of Individual Layer Permeability and Skin in Multilayer

Reservoirs, Developing a wellbore stability basis of design for the Columbus Basin and assessing the impact of faults on the wellbores in the Basin, and Developing a GAP model in REPSOL's Teak field to optimize gas injection and ultimately maximize oil production.

Petroleum Geoscience

Professor Brent Wilson's research centred on the following areas, Foraminifera, the Orinoco Plume and Guiana current off Tobago, Regional aspects of assemblage turnover, The use of replicate samples in micropaleontology, and The impact of Kick 'em Jenny on Foraminiferal communities.

Dr Oshaine Blake focused on research on Thermal effects during CO₂ injection, Analysis of 3DHR Shallow and 3D OBC seismic for risking development of the Galeota block, East Coast, Trinidad, and Geomechanics and Reservoir properties of the Cretaceous Naparima Hill formation of Trinidad: Implications for Unconventional Exploration and Production.

Dr Anastasia Baboolal studied, Organic Geochemistry, Organic Petrology, Mineralogy, and Igneous and Metamorphic Petrology.

Department of Civil and Environmental Engineering

The Department's areas of research included **Dr Richard Clarke's** studies on Construction time, motion, and cost study of a new, innovative, affordable hurricane and earthquake resistant house for the Caribbean, Modified Confined Masonry-An innovative Seismic shear wall for new housing construction in the Caribbean, and Seismic retrofit design solutions for Caribbean Steel Connections.

Dr Abraham Mwasha studied Manufacturing, Patenting and commercialization of Multi-faced blocks RDI Fund Innovation Proof of Concept Grant-5th Project value TT\$350,000.00, while **Dr Vincent Cooper** continued researching the impact of agriculture on water quality in Guanapo. The research is being done in collaboration with the Ministry of Agriculture.

Dr Kailas Banerjee's research was wide-ranging and included areas such as Environmental Radiation monitoring in Central Range Fault zone and associated mud-volcanoes; Scope of Disaster Management in building resilience in the construction industry, and E-waste management. **Professor Hazi Azamathullah's** research was focused on a Climate Change Project on St Lucia.

Dr Festus Olutoge's research focused on Compressive strength of slag based Geopolymer concrete incorporated with Rice husk ash with different Molarity, and Compressive strength slag based Geopolymer concrete incorporated with Palm oil fuel ash.

Dr Jovanca Smith focused on Multi-scale modelling for sustainable structural design, concrete fracture mechanics, sustainable concrete, engineering education; and MPhil supervision: Rekha Rampit-A performance enhancement technique for recycled concrete aggregates.

Mr Aaron Chadee's research included a focus on the Implications of COVID-19 pandemic on construction contracts in the Caribbean, Collaboration and development of research unit between Construction Management and Hydrology, and Risky decision making of unethical practices on construction projects.

Department of Electrical and Computer Engineering

The UWI COVID-19 Engineering Response Team was formed by the St. Augustine Campus Principal in March of 2020. The team consists of DECE staff with the aim of investigating ways in which The UWI could leverage its engineering expertise to support the nation and the wider region in responding to the then-emerging pandemic. The team identified several critical areas with some of the following initiatives and systems realized and some still ongoing:

- The Protect a Doctor Kit and donations of video laryngoscopes aimed to provide doctors with the necessary PPE.
- The UWI-Shield: The UWI entered into licensing agreements to mass manufacture this face protection equipment.
- The UWI-ARAD: An air recirculation and decontamination unit that when independently tested achieves ISO clean room levels. Conversations are ongoing for the adoption of these units in NWRHA hospitals.
- The UWI-Vent: A high quality medical ventilator to combat the existing global shortages.
- The UWI-Sentry: An autonomous disinfection robotic platform to reduce the rate of fomite-mediated transmissions.

The team was awarded an RDI grant of \$650,000 to fund three of the projects led by **Dr Craig Ramlal**. The Department also recognizes the appointment of Mr Jeevan Persad who is now the chair of CARICOM's Regional Project Team for the development of Regional Standards for Face Masks. To insulate the region from future outbreaks, the department recognizes the need to establish a medical engineering and manufacturing industry. These pilot projects represent the initial steppingstone towards that ideal.

Department of Geomatics Engineering and Land Management

Bheshem Ramlal and Raid Al-Tahir developed a Methodology and Prototype for using Satellite Imagery, Unmanned Aerial Vehicle (Drones), and Remote Sensing Technology for collecting geospatial data to estimate and forecast crop production levels in Trinidad and Tobago. NAMDEVCO, Ministry of Agriculture, Lands and Fisheries, GORTT, March 2022- March 2023, TT\$ 920,000.

Bheshem Ramlal focused his research on a Geospatial Earth Observation Data Cube for the Caribbean (Digital Earth Caribbean). Work to be done in collaboration with Mexican National Institute for Geography and Statistics (INEGI) and Ministry of Foreign Affairs, Government of Mexico (SRE) to develop and implement system to be hosted by the UWI St. Augustine with participation from all UWI Campuses and all countries in the Caribbean Region. July 2022 – July 2027. US\$ 400,000.

Department of Mechanical and Manufacturing

The research interests within the Department are diverse and include **Professor Boppana Chowdary's** focus on Design complexity as a driver for additive manufacturing process improvement, Enhancement of Manufacturing Engineering Education in Trinidad and Tobago, and the effects of Process parameters on the Flexural Strength of 3D printed plastics. Professor Chowdary also supervised MPhil/PhD research, 'The implications of Industry 4.0 for Lean Manufacturing and Applications within Latin American and Caribbean SME's', Mr Stefan Harrison: PhD Manufacturing Engineering.

Professor Edwin Ekwue's research focused on Greenhouse technology and controlled environment agriculture, the effect of machinery traffic and soil amendments on soil erosion and cultivation. Professor Ekwue also supervised MPhil/PhD research, 'Two-stage cross flow Pre-Filtration of Turbid River Water', PhD in Mechanical Engineering, Ms Goldie Davies, and 'The impact of wastewater in irrigated agriculture', MPhil Research in Agricultural Engineering, Ms Carlotta Bharat.

Professor Kit Fai Pun commenced a book report: Writing a Caribbean Industrial Engineering Text/Case Book, and Value Engineering and Management Practices in Industrial Enterprises: Preparing for a Casebook Publication. He also supervised MPhil/PhD research, 'Developing Entrepreneurship in Industrial Engineering Education and Practices', MPhil in Industrial Engineering, Ms Gobin, Janelle, and 'Development of a Resilient Organisation Model for Manufacturers in Trinidad and Tobago', PhD in Industrial Engineering, Ms Jaggernath-Furlonge, Surujdaye.

Dr Krishpersad Manohar's focus was on Novel designs of wind turbine systems, Thermoelectric air conditioning systems, Replacement of traditional refrigerants in air conditioning systems, and Wave Energy conversion systems.

Other areas of research by staff included: **Dr Jacqueline Bridge's** focus on Shape Memory Alloys for vibration mitigation; Nonlinear dynamics in engineering structures, and Mathematical modelling and analysis of wave energy conversion systems. Dr Bridge also supervised MPhil/PhD research, 'Recent Advances in Pressurised Bolted Joint Assembly Research and its Industrial Applications: A Systematic Literature Review', MPhil in Mechanical Engineering, Mr Vedanand

Ramdath. **Dr Graham King's** focus on The Energy and Economics of Vehicle Electrification in the Caribbean and Small Island Developing States; Digital Transformation and Industry 4.0 in Manufacturing and Energy Sectors in Trinidad & Tobago, and Innovation and engendering an effective innovation ecosystem in Trinidad & Tobago. **Dr Chris Maharaj's** research included Alternative use of waste materials (e.g. plastic and tyre waste), Mechanical design optimization (mechanical and electromechanical systems), Failure analysis of mechanical and structural components, and a Life assessment of components subjected to severe conditions. **Dr Anthony Adeyanju's** focus involved research in Biomass Gasification and Pyrolysis, research in wind Energy Technologies, research in Solar Thermal Energy Technologies, and research in refrigeration and air-conditioning/Eco-Cooler system.

Research interests within the Department included **Dr Richard Bachoo's** research on Flow induced vibration in Process Piping Systems, High frequency structural vibration, and Vibration of composite materials. **Dr Ruel Ellis's** research on E-Learning Curriculum Design, Development and Implementation, and Protected Agriculture Systems Design and Development.

Dr Cilla Pemberton focused on Value Stream Mapping of Indigenous Industries, Lean Healthcare, and Engineering Entrepreneurship Education. Dr Pemberton supervised MPhil/PhD research, 'A Gender Transformative Approach to Engineering in Trinidad and Tobago', PhD in Industrial Engineering, Ms Satira Maharaj.

Dr Renique Murray researched Energy Harvesting, Biofuels, and Development of Agricultural Machinery while **Dr Kuldeep Ojha** researched advanced machining processes, Lean Manufacturing, and Tribology and Maintenance. **Dr Robert**

Birch's supervised MPhil/PhD research, 'Investigating Cocoa Butter Extraction Methods: An Overview', MPhil in Mechanical Engineering, Mr Raechard Bernard.

Strategic Review

Access

In seeking to provide a university for all, the Faculty revised the Pre-Engineering programme. The number of students within the programme grew from nine to thirty-seven within the year. The Department of Chemical Engineering (DCE) graduated five students from Guyana from the UWI MSc Petroleum Engineering programme, which started at the University of Guyana on August 31, 2019. The Department of Geomatics Engineering and Land Management (DGELM) approved the part time programmes, BSc in Geomatics and BSc in Land Management (Valuation), while the Department of Mechanical and Manufacturing Engineering (DMME) began revising the Engineering Asset Management programme to facilitate the transition from face to face to online. Challenges occurred in the development of an efficient system to respond to non-local administrative student issues.

During the period of review, the Faculty developed short courses, software training programmes and lab facilities (in particular the Rock Mechanics Facilities) to provide a service to the industry. The Department is fully capable of offering online courses and programmes, remote access to software training, virtual labs, and field trips. The Department website was also updated in order to showcase the accomplishments. And services that were on offer.

The Department of Civil and Environmental Engineering (DCEE) maintained its ranking as first with the re-accreditation of all undergraduate and postgraduate programmes in the department by the Joint Board of Moderators (JBM) during their re-accreditation visit on 2-3 December 2021. The MSc programme on Coastal Engineering and Management was given full accreditation by the JBM during their accreditation visit on 2-3 December 2021.

A review of its programmes was done by the Department of Electrical and Computer Engineering (DECE) with a view to delivering modules online so as to provide greater access to programmes by Caribbean students, working nationals enrolled in our graduate programme, and international students. However, the uncertainty surrounding the funding of a 4th year (GATE and CGC) of the revised programme for CEng status proved to be a challenge. The DGELM implemented recommendations made from the Quality Assurance review of four programmes. The DMME hosted several short courses in Engineering Asset Management in February and March 2022. Many of the EAM short courses are taught by international specialists whose payment have been delayed due to UWI's cash flow limitations.

In the area of improving the quality of teaching and learning and student development, the faculty was able to conclude its wireless upgrade project. The DCE upgraded its facilities in all laboratories in Block 8: Wet Lab, Analytical and Science of Materials Lab, and Block 9: Food Science and Technology Lab. The DCEE revised the undergraduate programmes in order to benefit from the BSc in Civil and Environmental Engineering

(part time degree) becoming more flexible for qualified students who have full time jobs, and to get the approval of a 4 year Meng programme, which would lead to graduates of the department being eligible for CEng professional registration. The Department also revised the Quality manual and created 20, 30-minute videos for teaching and learning in the postgraduate course, Seismic Design.

The DECE submitted its Quality Assurance Action plan report on June 7th, 2022, as well as several other reports: 2020/2021 IET Annual Report, Semester I 2020/2021 IET Covid-impact report, Semester II 2020/2021 IET Covid-impact report, and IET Monitoring review. Both Undergraduate and Postgraduate programmes received a two-year accreditation extension to 2024/2025. At the DGELM, a new 3+1 programme is being designed, and the BSc in Geomatics continues to be accredited. Building plant deficiencies are being dealt with, student-staff liaison committee and student monitoring also continued. The DMME encouraged academic staff to participate in Monday Morning Mentor series to improve teaching skills and to explore other methods of assessing student learning.

The Faculty, in improving the quality, quantity, and impact of research, innovation and publication continued many innovative projects. Five staff members received grants approximating \$2.7 million from the Research, Development, and Innovation (RDI) fund. Two (2) RDI projects were continued during the academic year including Manufacturing, Patenting and Commercialization of Multi-faced Blocks in DCEE (\$350,000) and Hospitech: Supporting In-hospital COVID-19 Response through Technology (\$650,000) in the DECE.

Lunchtime Seminar Series continued on Thursdays at the DCE. The IChemE TTMG webinar: *Developing a Hydrogen Energy in Trinidad and Tobago* was conducted, and staff members made technical presentations at international conferences and technical papers were published in international peer reviewed Journals with a high impact factor. Research on Rock Mechanics with Funding from Ministry of Energy and Energy Industries, bpTT, Faculty of Engineering, Department of Chemical Engineering continued, and five rooms in Block 9 were refurbished to provide offices for Research Assistants.

The DCEE continued the RDI Funded Project: *The Development of a Travel Demand Model for Trinidad*. A stakeholder meeting was held as well as a Household Traffic Survey. The RDI Project: *Manufacturing, Patenting and Commercialization of multi-faceted blocks* was initiated.

Grants were awarded for the development of COVID-19 related projects at the DECE. These included the RDI Grant of TT\$650,000, COVID-19 special project fund of TT\$40,000 and a Canadian High Commission grant. A purchase order (TT\$100,000) was submitted for the purchase of new servers and high processing computers to enable intensive simulation and research. However, due to the difficulty in attracting top quality staff, understaffing was an issue and a challenge. Lack of funding for Postgraduate students, RAs etc., means that full time research degrees are not feasible for many prospective research students from a financial standpoint.

At the DGELM and DMME staff continued to publish in peer-reviewed and archival journals, and staff collaborated with researchers at other universities. Staff at the DGELM were involved in high level international research initiatives, such as the Intergovernmental panel on Climate Change.

Alignment

The Faculty focused on increasing and improving academic industry research partnerships during the period under review. At the Engineering Institute (EI), a new Advisory Board was established by Mr Derek Hudson, former President of SHELL T&T that includes Dean, Deputy Deans and other industry members. EI also gained membership within the Energy Chamber for networking, outreach, and representation by the Faculty on key engineering areas. EI completed the following Industry Led Research: The UWI-Methanex Collaborative Venture – Preliminary Feasibility Assessment of Methanol Use as a fuel for Trinidad and Tobago which was completed in time and within budget (TT\$165,000) as expected by the client, and Hydrogen blending initiative with NGC, which was a student led exercise.

The DCE held virtual meetings in Guyana and Suriname to market the Department's programmes. It also updated the Department's website to showcase programmes, achievements, and opportunities available to students and services that the Department can offer to stakeholders. New Prizes for students were provided by Proman Limited (Trinidad and Tobago), Arawak and Company Limited, Trinity Exploration and Production PLC (Trinidad and Tobago), and by Dr Saheeda Mujaffar. During this time, research collaboration was established with NGC, UWI/SHELL, Penn State, UWI/UTT/UT-, Proman Limited (Trinidad and Tobago), Johnson Matthey, UK, University of Guadeloupe, Blue Mountains, Ministry of Energy and Energy Industries, bpTT, PowerGen and Trinidad and Tobago Solid Waste Management Company Limited. The University of the West Indies Society of Petroleum Engineers (SPE) Student Chapter also won the 2021 Presidential Award for Outstanding Student Chapter for the second time.

The DCEE hosted several webinars and lectures during the 2021/2022 period. These included the webinars on *Managing the effects of sea level rise on sandy coasts*, held on 23 September 2021 by the Coastal Engineering Unit; *Oil spill analysis: An application in the Gulf of Paria*, held on 4 November 2021 by the Coastal Engineering Unit, and exchange lectures between UWI and UMainz on 11 November 2021 were delivered by Dr Azamathulla and Professor Stephan Mai. In addition to the hosting of webinars and lectures, the DCEE managed to develop pre-partnership activity through the design and construction of a prototype for a New Hurricane-resistant Roof; Proof-of-concept testing of new types of earthquake-resistant walls. A research project on the impact of agricultural practices on river water quality in Guanapo, in collaboration with the Ministry of Agriculture, was part of a Material Transfer Agreement (being) formulated with UWI. Additional to this the DCEE developed partnerships with Concrete Technology for the development of laboratory equipment for research. The UN Adaptation Fund approved the Concept Note (CN) for the project "Multi-sectoral Adaptation Measures to Climate Change in the South Oropouche Basin for River Flood Relief". The CN was prepared by a UWI/Viridia projects collaboration. Work has begun on the development of the full proposal for the project, which is worth USD10M. The EI/Stacie will be the executing organization.

The CSL successfully continued during semester 2 at the DECE. However, the delays with acquisition of parts for project execution, led to delays with final submissions and inevitable semester 1 registration challenges. With regards to staffing, Grade 3 Clerical Assistant post was converted to a Grade 5, while a request was made for the permanent appointment of two members of staff (Grade 1 Maintenance Assistant, and Grade 7 Engineering Technician).

Reopening conversations with The UWI, bMobile and Huawei on the bMobile-UWI Innovation Laboratory powered by Huawei occurred due to the expiration of the MOU. Intended funding commitments did not materialise. Huawei ePartner received notification indicating the UWI Innovation Laboratory is approved as a UWI Huawei ICT Academy and a Huawei HCIA-Datcom 5-day training Course was developed.

At the DGELM, plans were designed to improve Academic-Industry Research Partnerships and Academic-Government research initiatives continued with the THA, Bahamas, and other entities. Currently the DGELM is engaging the Government of Grenada. The DMME continued discussions re: the GOTT/UWI partnership exploring refrigeration using non-traditional refrigerants (for both research and training). Equipment identified and to be donated to the Department in 2022/23 with associated training of technical staff. Several requests for collaborative projects in the design, fabrication, and testing of agricultural/food-processing machinery was received. In collaboration with the Engineering Institute, the Department is examining how to monetise these. TTMA/UWI/MIC-IT signed an MOU for an Industry 4.0 training facility.

Agility

The Engineering institute completed consulting services to Design and Implement a Property Business Registration System for the Ministry of the Attorney General and Legal Affairs. However, testing services at the UWI Lab Facilities for UWI Pavement Material and Testing Services for Danny's Enterprises Limited, and Aggregate Materials for CO Williams Construction Ltd. - St. Lucia is ongoing. The EI held an Introduction to GIS for Use in the Classroom for the Tobago House of Assembly

and trained assessors at the Trinidad and Tobago Bureau of Standards in ISO Accreditation – Engineering Services. Short courses on Digital Transformation & Design Thinking were also implemented.

The DCE delivered the MSc Petroleum Engineering programme at the University of Guyana (UG), while the DCEE had an enhanced educational, scientific, and cultural cooperation with the University of Mainz. The DCE also developed several short courses, software training programmes, laboratory, and research facilities to provide a service to stakeholders. At the DECE revision sessions for CCREEE on Basic Demand Projection, Basic Demand Side Management, and Grid Modelling were updated.

To generate economies of scale and scope for the UWI, the DCE received support from several entities. In 2020/2021, the Department received funding support of TT\$3.0M from the MEEI for the operations of the BSc Petroleum Geoscience programme, and to offer 30 scholarships and incentives to students in the BSc and MSc programmes in the Petroleum Studies Unit. Funding support of TT\$1MM from bpTT for the operations of our BSc Petroleum Geoscience and MSc Reservoir Engineering Programmes and to offer scholarships for three BSc Petroleum Geoscience students were received at a value of TT\$30,000 each. Funding support of US\$150,000 from Proman Limited (Trinidad and Tobago) for the Dennis Patrick MHTL Chair in Petroleum Engineering was also received. Schlumberger continued its support to the PGSC programme and by extension the PSU with a software package donation valued at TT\$40,136,362.87. Licenses will be issued as a three-year right to use (2019-2022). This is the largest three-year

software donation to any programme in Trinidad and Tobago. Dr Lee Leon took part in a staff exchange with the University of Mainz, where he spent one week visit in July 2022. Covid-19 projects at the DECE are ready to be commercialized. With partnerships with officials from the Ministry of Health (MoH), prototypes were developed and tested with invention disclosures completed for: Air Recirculation and Decontamination unit (ARAD), and UWI-V+ continuous positive airway pressure device.

During the 2021/2022 period, the Faculty sought to foster a creative, caring, accountable, motivated, professional team. This was facilitated in different ways. The Faculty of Engineering staff continued to attend several campus seminars. Some staff, including academic and ATS Staff, were promoted, with many ATS staff obtaining their Associate, Bachelor's, Master's degrees, and PhD degrees. More regular staff meetings were held within the Faculty's departments to ensure that staff and students' health were not compromised while dealing with the strains of the COVID-19 pandemic. Conformity to campus, WHO, and OSHA rules were applied to ensure staff and students' safety, while on campus.

Due to the impact of COVID-19, Orientation and Academic Advising continued to be conducted on-line. All programme delivery and assessments continued online, and programme assessment of some courses were changed from traditional final exams to 100 % coursework and final assessments. Virtual internships, virtual labs, fieldtrips (with drone technology), virtual rock tours, remote access to data rooms and software were provided to students to conduct their coursework, labs software exercises, and project reports to ensure all required learning outcomes were achieved. Projects and Coursework with presentation components were conducted via ZOOM.

VPN access continued to be rolled out to many key staff in the Faculty during the Covid-19 lockdown. Efforts are ongoing at the DCEE to recruit three academic staff for the three vacancies approved for the department. At the DGELM, CPD and short courses continued to be offered to government and NGOs. The DMME filled the position of Secretary in the Main Office and hired a tenure-track lecturer in Mechanical Engineering (Applied Mechanics and Design). One lecturer was promoted to the rank of Professor.

Distinguished Visitors

Professor Emeritus Ronald J Steel,

Department of Geological Sciences,
Jackson School of Geosciences,

Ms Jan Entwistle

President,
Institute of Structural Engineers of the UK

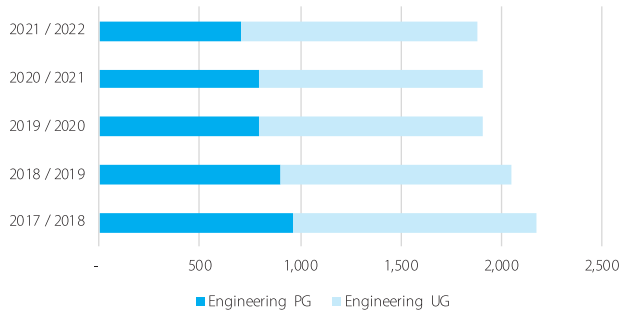
Professor Stephan Mai

University of Mainz
Germany

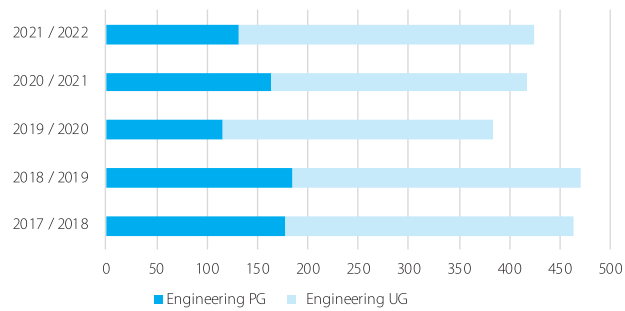
Graphs

Data courtesy the Campus Office for Planning & Institutional Research (COPIR)

Enrolment Trends – Engineering



Graduation Trends – Engineering



FACULTY OF

Food & Agriculture



Professor Mark Wuddivira
DEAN

Dean's Summary

For the period being reported, the FFA's strategy was aligned to The UWI Strategic Objectives to promote Phase 1 of the *Triple A Strategic Plan (2022-2027)*, of Access, Alignment and Agility, which focused on increasing access to the faculty, alignment with industry and stakeholders' needs while remaining agile in response to all opportunities which presented themselves. Despite the challenges faced by the COVID-19 pandemic and operating remotely during this period, the Faculty of Food and Agriculture (FFA) acquitted itself very well in the reporting year 2021/2022. The FFA, through its Departments of Agricultural Economics and Extension (DAEE), Food Production (DFP), Geography (DG), and its Business Development Unit (BDU), continued to focus on its aim to be the regional and national hub for innovations in teaching, learning and research in all things agricultural, food and nutrition security, environmental matters, agricultural extension, and outreach activities.

The FFA has worked to convert several of its programmes to blended/online teaching/learning, and procured several high-impact projects, including the completion of a Service Level Agreement with the Ministry of Youth Development and National Security (MYDNS) to teach the professional certificate (CPE) in Shade House Production and Management to 100 youths selected by the MYDNS and specially admitted to the University and certified.

The Faculty secured a very impactful and lucrative Global Environment Facility (GEF Project, staff completed PG Certificates in University Teaching and Learning, produced impactful publications, engaged the faculty in fun, team-building activities, all while ensuring that students did well and graduated. During the year, the Faculty continued to consult with its stakeholders and reviewed its

courses and programmes to ensure they aligned to industry requirements and standards and made them more attractive for increased access.

The Faculty of Food and Agriculture (FFA) celebrated its 100th centennial year in 2021/2022. To commemorate this significant achievement, the FFA was involved in the planning and organising of a number of activities such as the hosting of an international conference under the theme *Celebrating a Hundred Years of Agriculture: Past, Present & Future*, from which came a commemorative special issue comprising two best articles in the iconic *Tropical Agriculture* journal from each decade of the 100 years was published. A launch to plant 100 trees was attended and opened by the Minister in the Ministry of Agriculture Land and Fisheries, Senator the Honourable Avinash Singh, and Pro Vice-Chancellor and Campus Principal, Professor Brian Copeland.

Enrolment

Overall, the FFA continues to struggle with enrolment with new students. Undergraduate enrolment was 489 students, and postgraduate students' enrolment increased (due to the revision of MSc programmes for delivery via blended mode) from 166 to 187. However, the total enrolment numbers were 676 (36 lower than the previous year's 712).

Graduation

The FFA graduated 180 undergraduate students, 30 of them with First Class Honours Degrees. A total of 35 postgraduate degrees were awarded in areas of Food Safety and Quality, Livestock Science, Soil Science, Tropical Crop Protection, Agri-Food Safety and Quality Assurance, Tropical Animal Science

and Production, Tropical Crop Protection, Value Addition for Food and Nutrition Security.

Postgraduate

PhD Degrees were awarded to:

- **Dr Kegan Jones** - Livestock Science (May 2022)
- **Dr Sophia Balfour** - Food Safety & Quality (May 2022)

Neila Ramjattan (MPhil in Crop Science) was selected for the MASHAV scholarship to attend the training programme "Feeding the Future: Food Safety and Technology in Times of Global Change." The training programme was conducted by The International School of Agricultural Sciences of the Hebrew University of Jerusalem's Robert H. Smith Faculty of Agriculture, Food & Environment at the Rehovot campus from June 19 to July 7, 2022.

Outstanding Students

Scholarships

In the reporting year, **Ms Tynessa Gay** (Technical Assistant and PhD Agricultural Economics candidate) was awarded an internship as part of the 2022 cohort of the McGill-UWI Queen Elizabeth Scholars (QES) Climate Adaptation and Resilient Communities: Policy, Research and Practice Programme in partnership with the University of the West Indies. The McGill-UWI Queen Elizabeth Scholars Scholarship Programme, funded by Universities Canada, builds on over 30 years of close inter-university collaborations between McGill University and University of the West Indies (UWI) to implement a scholarship programme focused on a critical current challenge to Canada, the Caribbean region and globally. Ms Gay will carry out work over a three-month period at the McGill University, Canada on the "*Expected and Unexpected Consequences of Government Policies to Reduce Flood Risk in Quebec*".

Ms Sunshine De Caires (PhD candidate in Tropical Earth and Environmental Science) was an award recipient of the Emerging Leaders in the Americas Programme (ELAP) scholarship paid by the Canadian Bureau for International Education on behalf of the Department of Foreign Affairs and International Trade Canada. This scholarship was provided on academic merit and Ms De Caires was a Graduate Research Trainee for six months (February to July 2022) at the University of Saskatchewan, Saskatoon, Canada.

Prizes

The Head of Department Prize

The Department awarded several prizes to outstanding students during the 2021/2022 academic year. The Head of Department Prize was awarded to: **Kaitlan Jagroopsingh** - Best Performance in Major in Family and Consumer Sciences or Major in Nutritional Sciences or Major in Foods and Foodservice System Management, Level 1, **Karishma Singh** - Best Performance in Human Nutrition and Dietetics, Level 1 **Ashley Sealey** - Best performance in the Undergraduate Diploma in Agriculture Level 1, **Jemyah Libert** - Best performance in ENRM Level 1, **Melanie Garib** - Best performance in Geography. In Year 2, recipients of the HoD prize were, **Isaiah Small** - Best Performance in Agribusiness Management, **Alexandria Jaggernaut** - Best Performance in Major in Family and Consumer Sciences or Major in Nutritional Sciences or Major in Foods and Foodservice System Management, **Sophie Rackal** - Best Performance in Human Nutrition and Dietetics, **Jabez Van-John** - Best performance in the Undergraduate Diploma in Agriculture, **Yaneir Henry** - Best performance in the BSc Agriculture, **Xavier Joseph** - Best performance in the BSc Agriculture, **Renrick Williams** - Best performance in Agricultural Technology Major, and **Karena Seetaldass**

- Best performance in ENRM. At level three, the Head of Department Prize was awarded for the best performance in Agricultural Technology Major to **Ethan Redhead**, for the best Year III performance in ENRM and Geography to **Yashoda Ramkissoon**, and for the best performance in the ENRM Major Overall to **Anika Charlemagne**.

Several other prizes were awarded to students, such as the Dr Sunney D. Alexis & Collette Lewis-James Memorial Prize for Best Performance in Human Nutrition and Dietetics awarded to **Ashleigh Lai**, the IICA Prize for Best Final Year Project demonstrating excellence in Agribusiness to **Nathan Johnson**, the Human Nutrition and Dietetics Prize for Best Final Year Project demonstrating excellence in Human Nutrition and Dietetics to **Alexi Woo**, and the Nutritional Sciences Prize for Best Performance for the Major in Nutritional Sciences to **Daniella Lewis**.

The Entrepreneurship Major Prize for Best Performance for the Major in Entrepreneurship over Years II and III was awarded to **Justin Edwards** and **Daree Myers**, the Alumni Association Prize for Best Performance in Major in Family and Consumer Sciences or Major in Nutritional Sciences or Major in Foods and Foodservice System Management awarded to **Terry-Ann Melville**, the Wayne Ganpat Prize for Best Final Year Project demonstrating excellence in Agricultural Extension to **Kumar Sobiah**, and the Professor Richard A.I. Brathwaite Prize, awarded for the best performance in the BSc Agriculture Year III was given to **Gabriel Balgobin**. The Frederick Hardy Prize was awarded to the year III student who obtained the highest marks in courses taken in Soil Science at the levels II and III examinations including the project; this went to **Gabriel Balgobin**. The Principal's Prize was awarded for the best performance in the BSc Agriculture

over Years I to III to **Josiah Mongru**, the EXIMBANK Prize, awarded for the best Graduating Student in Geography to **Anika Charlemagne**, the CIC Insurance Brokers Ltd. Prize, awarded for the best Final Year Geography Project went to **Sara Piango**.

Special Prizes

A number of special prizes were also awarded to outstanding students during the review period. The Thompson, Badrie-Maharaj & Associates Attorneys-at-law Prize was awarded for the best final year project in microbiology or food safety in the School of Agriculture to **Caitlin Yarna**; the Agricultural Development Bank (ADB) Prize, awarded for the best Livestock Project went to **Mikhail Allamani**; and the Norman Girvan Award for Excellence, awarded to the academically excellent student with the best final year undergraduate project in the Department of Food Production went to **Oren Gordon**.

The Professor Gary Wayne Garcia Livestock Prize, awarded to the best graduating student in Livestock Science went to **Mikhail Allamani**, The Garden Club Prize, awarded for the best performance in Crop Science/ Horticulture over levels II and III including the research project went to **Josiah Mongru**; the Professor Lawrence Wilson Prize Awarded for the best undergraduate final year project in Post Production Technology went to **Akeiba Inniss**; the Currie Memorial Prize, awarded to the student who excelled in extracurricular activities, subject to satisfactory academic performance went to **Gabriel Balgobin**. The Top/Outstanding Undergraduate Student for the Year 2021/2022 – Faculty Prize, awarded for the best Year I performance went to **Jemyah Libert**.

Top/Outstanding Postgraduate Students for the Year

The Ministry of Agriculture, Land and Fisheries Prize was awarded for the best performing student in the mandatory research project of the MSc Agricultural Food Safety and Quality Assurance to **Dr Lisa Musai**; the Ministry of Agriculture, Land and Fisheries Prize was awarded for the best performing student in the core courses of the Diploma/MSc Agricultural Food Safety and Quality Assurance to **Nicholas Ali**; the Muriel Turnbull Prize was awarded for the best oral presentation in the MSc Agricultural Food Safety and Quality Assurance Research Project to **Kelvene Spencer**, and the Faculty Prize was awarded to **Doreen Jodhan** (MPhil Geography).

Programmes

The new Postgraduate Diploma in Climate Resilient Agricultural Extension and Community Development received approval in June 2022 for it to be offered from September 2022 from the Accreditation Council of Trinidad and Tobago (ACTT). The BSc Major in Disaster Risk Resilience for Agriculture and the Environment (DRRAE) was approved in 2021/2022 for delivery in 2023-24, and the MSc Food Security, and PG Diploma in Pesticide Technology and Management was also approved for delivery. The Minor in GIS proposal was developed in the 2021/2022 academic year and is currently in the approval stages. The FFA anticipates that this minor will be ready in time for the Semester 1 2023/2024 academic year.

The Faculty successfully converted several programmes and courses for blended teaching and learning. These included the MSc/PG Diploma Tropical Crop Protection, MSc Tropical Animal Science and Production (with option of receiving the award of PG Diploma in Tropical Animal Science and Production), MSc Value Addition for Food and Nutrition Security, and the MSc in Environmental Geography.

Research

Research Grants

Support for the Value Chain Analysis and Action Plan Development for the Seabob Fishery Value Chain in Guyana (FISH4ACP Phase II) – GCP/GLO/028/EC, FAO funded – USD\$29,980.

Principal Investigator: Dr Sharon Hutchinson

Investigators: Dr Govind Seepersad (DAEE), Mr Omardath Maharaj (DAEE), Dr Talia Esnard (Department of Management Studies), Dr Deborah McFee (IGDS), and Zaheer Hosein (Department of Life Sciences)

Potential Impact: Project completed in November 2021. Greater efficiency in the allocation of human and capital resources in the development of the Guyana Seabob industry. The social and economic reports developed identified gaps in the Seabob Value Chain, in addition to strengths, weaknesses opportunities and threats to actors and linkages along this Value Chain. This work also strengthens the development of follow-up business development plans for this sector and would also assist Guyana in maintaining in MSC Certification for the commercial Seabob Industry.

Dr Sharon Hutchinson was the winner of one of two micro-grants (US\$7,500) from UWI CERMES in July 2022. This was for an LOA entitled “Climate-Poverty Vulnerability Assessment for Adaptive Capacity Enhancement in Trinidad and Tobago”. CERMES is providing micro-grants for in-country fieldwork as a follow-up to the FAO-UWI online course on ‘Addressing the climate-change and poverty nexus’. The aim is for outstanding course participants to apply learning from the course to

demonstrate the utility of coastal climate-poverty nexus concepts in Caribbean locations. This grant is being used primarily to provide partial support for the PhD Agricultural Economics student, Mr Jesse Williams.

Dr Lystra Fletcher-Paul and Dr Roopnarine

LoA, FAO, SLC *Support for raising awareness and capacity building in Agricultural innovation to promote sustainable Food Systems in the Caribbean-* US\$10,000.

Dr R. Roopnarine (Lead), Dr Gaius Eudoxie, Dr Lystra Fletcher-Paul, Dr Oral Daley, Dr Marsha Singh, Dr Afiya John and Professor Neela Badrie

LoA FAO, SLC *Case study on the impacts of Climate Change on Food Safety in the Caribbean -*US\$40,688.

Dr Ronald Roopnarine, Dr Gaius Eudoxie and Dr Oral Daley

LoA FAO, Headquarters *Technical services to support the development of two concept notes (one national and one regional) for submission to the Adaptation Fund to contribute to enhancing climate-resilience of food systems in small island developing states in the Caribbean-* US\$33,863.

Dr Ronald Roopnarine

FAO Headquarters/UWI; Project Lead- Case Study on the Impacts of Climate Change on Food Safety in the Caribbean -November 2021- November 2022- Project Lead (38 000 USD) and FAO SLC/UWI- Support for raising awareness and capacity building in Agricultural innovation to promote sustainable Food Systems in the Caribbean October 2021 December 2021 (US\$10,000.).

Research Activities

Dr Gaius Eudoxie

GEF project entitled *'Caribbean Small Island Developing States (SIDS) Multicountry Soil Management Initiative for Integrated Landscape Restoration and Sustainable Food Systems: Phase 1 (CSIDS-SOILCARE Phase 1)*.

Dr Oral Daley led the consultation with CARDI to formalize the project component to improve the availability of market preferred and climate resilient sweet potato varieties/genotypes and enhance production and processing technology through field research activities with the view to increase industry productivity.

Dr Ronald Roopnarine

Through the research conducted with Dr Roopnarine's MSc Student (Akil Crichlow) *"Examining the Influence of Nature-Based Interventions on Soil Moisture Regimes and Slope Stability"* they were able to quantify the moisture regime of a heavy clay soil under various treatments. It was found that the Vetiver Grass Treatment resulted in the Greatest Reduction range (27.1638% to 34.0034%) across four depths (20, 40, 60, &100).

Developing a Wastewater Reuse Standard for treated wastewater in Trinidad and Tobago for agriculture and landscaping uses in collaboration with The Ministry of Public Utilities and the Trinidad and Tobago Bureau of Standards.

FAO SLC/UWI; Project Lead- Technical services to support the development of two concept notes (one national and one regional) for submission to the Adaptation Fund to contribute

to enhancing climate-resilience of food systems in small island developing states in the Caribbean from November 2021- November 2022.

Dr Kegan Farrick

Dr Kegan Farrick worked with the UWI as part of multidisciplinary team on a project entitled *Water Resources Situational Analysis (WRSA)* funded by BHP. Dr Farrick's MPhil student, Jesse Francis published an article under his supervision: *Exotic tropical pine forest impacts on rainfall interception: Canopy, understory, and litter*.

Dr Junior Darsan

Dr Junior Darsan, and postgraduate student Christopher Alexis worked on revisions to a manuscript submitted to ocean and coastal management, *"A critical analysis of modelling techniques in coastal environments, a Small Island Developing States perspective"*.

Dr Gabrielle Thongs

Dr Thongs joined a new UWI St Augustine research team that sought to analyse the relationship among the contaminants in water samples, poverty, crime, and education levels in Trinidad and Tobago. Dr Thongs will be leading the GIS analysis for the project. Dr Thongs was also awarded a grant of \$10,000 from the United Nations Office for Disaster Risk Reduction (UNDRR) as part of a \$30,000 grant jointly held with the Global Institute for Climate Smart and Resilient Development, UWI. Work on the grant has started and Dr Thongs developed the questionnaire that will be distributed to four Caribbean countries (including Trinidad and Tobago, St Lucia, St Vincent, and Jamaica). Along

with the grant, Dr Thongs was chosen by the UNDRR to attend a DRR course offered by a University in Singapore and the Singapore Cooperation programme. The course in disaster financing, climate change adaptation financing and mitigation measures is facilitated through the Ministry of Foreign Affairs of Trinidad & Tobago and Singapore.

Dr Arlette Saint Ville

Dr Saint Ville is a co-investigator on a project jointly led by PI Dr Professor Unwin (Cambridge), and Dr M Murphy (UWI Cave Hill) titled *Community Food for Human Nutrition and Planetary Health in Small Islands (Global CFaH)* that has been approved for funding by the NIHR Global Health Research Group. As part of her postdoctoral research conducted in Saint Kitts, a paper led by Dr Saint Ville's (and co-authors) titled "*Participatory Evaluation towards Building nutrition-sensitive value chains for school feeding in the Caribbean: A Stakeholder- driven approach, combining theory of change and group model building*" has been submitted to the *Frontiers Journal*, and is currently under revision.

Dr Saint Ville's PhD student, Tracy Marshall published an article under her supervision: *The Impact of a Complex Disaster on Household Food Security in Caribbean SIDS with colleagues from Department of Food Production.*

Upcoming Initiatives

The FFA has the advantage of having several important components of the food security pillars in one space, which allows for exceedingly rich cross-disciplinary research, teaching and learning experiences. The Faculty's research has informed national and regional policies in food and nutrition security, fisheries management, agriculture, and watershed management. Graduates are entrepreneurs in the agricultural

and food sectors, workers in the health sector, and are involved in consultancy, policy making or management at the regional level. In this light, many opportunities have arisen and continue to be presented for collaborations and partnerships. The FFA is excited about having its first cohort of CPE students from MYDNS in the current academic year and an additional two cohorts to follow in the upcoming years. The Faculty is also looking forward to further collaborations with the MYDNS in offering another three cohorts of 100 students, the CPE in Aquaculture and Aquaponics. FFA is also collaborating with the Ministry of Agriculture and Fisheries in Jamaica to sign an MOU to offer its Research and Development staff courses and programmes from the FFA.

The Faculty will also be in talks with national and regional Ministers of Agriculture and their Permanent Secretaries to find solutions to food and nutrition security and add its contributions to CARICOM's 25 by 25 Initiative to lower the regional food importation bill by 25% by 2025. In this vein, to reduce the burden of NCDs and obesity on our regional healthcare system, the FFA, in an effort to strengthen regional preventive medicine, is in active collaboration with the Faculty of Medical Sciences on Food, Diets, and Health Outcomes in the Caribbean. This will culminate in workshops, seminars, and conferences to sensitize stakeholders about approaching medical care using the food system approach. The FFA is leading a collaborative effort with the main animal production, health, and wildlife technocrats from the MOH, MALF, SVM, and Wildlife section of the Forestry Division in developing a policy guideline and action plan to combat the threat of an outbreak of the highly Pathogenic Avian Influenza (HPAI) H5N1 (bird flu) that is capable of crippling the poultry industry with untold consequences on food security, food import, and public health, leading to famine.

Distinguished Visitors

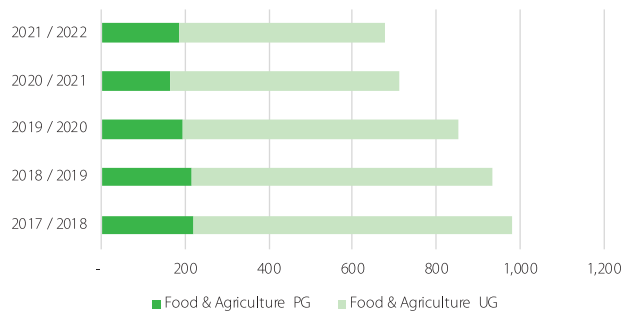
Dr Julia Kotzebue

Assistant Professor of Sustainable and Integrated Spatial Development
Department of Economic and Social Geography
University of Hamburg, Germany

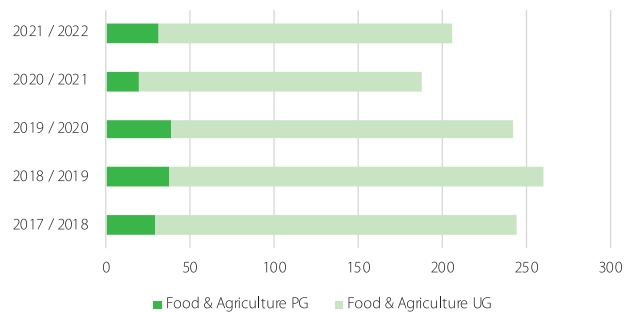
Graphs

Data courtesy the Campus Office for Planning & Institutional Research (COPIR)

Enrolment Trends – Food & Agriculture



Graduation Trends – Food & Agriculture



FACULTY OF

Humanities & Education



Professor Elizabeth Walcott-Hackshaw
DEAN

Dean's Summary

In academic year 2021/2022, the Faculty continued its remote operations because of the Covid-19 pandemic and heightened safety protocols on the Campus, and within the country as a whole. Yet, despite challenges faced due to the pandemic, the Faculty still managed to have an active year and achieved some modest accomplishments.

We also continued to re-engineer our processes to increase the efficiency of our remote processes and enhance our engagement with our students. Most of our activities were successfully conducted online. The Faculty continued to apply online modes to teaching and learning, as well as our administrative processes. We were also able to continue operationalising the UWI's Triple-A Strategic Plan and its strategic themes of Access, Alignment and Agility. The Faculty continued to push its efforts to focus on critical areas at the centre of the society's needs, as staff engaged all aspects of continuous development with respect to teaching and learning, outreach activities and entrepreneurship. This was done through hosting several targeted workshops and webinars. We also continued the development of outreach and entrepreneurial activities that are directly aligned to the needs of the society. Some of the challenges that we experienced during the period include a general lack of funding, closure, cancellations and postponements due to the pandemic, the length of time it took to get the requisite approvals, as well as the lack of dedicated staff to devote to certain projects.

During the period under review, FHE's staff also worked assiduously on a number of publications. These include Books (5), Chapters in Books (15), Essays in Books (2), Refereed Articles (28), and Refereed Conference Proceedings (4). Additional scholarly activities include 4 Creative Works (Short Fiction/Musical Compositions), 2 Productions, Screenings and Films, 1 blog, 5 Research papers, and 4 Newspaper Articles/Newsletters.

Graduation

Undergraduate

The FHE awarded 35 undergraduate diplomas and certificates in 2021/2022 compared with 59 in 2020/2021.

Two hundred and seventeen undergraduate degrees were awarded in 2021/2022, compared with 261 in 2020/2021. Of the 217 undergraduate degrees awarded in 2021/2022, 62 were First Class Honours degrees, compared with 60 First Class Honours degrees in 2020/2021. One hundred and three Upper Second Class degrees were awarded, 32 obtained Lower Second Class, and 20 were awarded Pass degrees. Altogether, a total of 252 students graduated from FHE undergraduate programmes in 2021/2022.

Top Undergraduate Student in the academic year 2021/2022

The top Student in the FHE was **Patti-Anne Ali** who graduated with a Bachelor of Arts Degree in Literatures in English with a Minor in Theatre Arts. Ms Ali obtained a Grade Point Average of 4.04.

Postgraduate

The Faculty awarded one postgraduate diploma/certificate in 2021/2022. Eighty five postgraduate degrees were awarded, of which 80 were MFA/MA/MEd/MPhil degrees, and five doctorates in 2021/2022. The 5 doctoral degrees were as follows:

- Raena De Four – Education (*High Commendation*)
- Natalie Suepaul – Education
- Robert Ramesar – Cultural Studies
- Victoria Chang – Literatures in English (*High Commendation*)
- Benignus Bitu – Education

Student Achievements

Film Unit

The student film *Plant Speech* was screened at the 40th FILMSCHOOLFEST MUNICH 2021. This festival is one of the most prominent film school festivals worldwide and a coveted accolade among young filmmakers. The film was produced as a FILM 3001 Sound and Visual assignment and was directed by Jovan Lalla (Film) and Leeanna Maharaj (Communication Studies). Both students were invited to attend the festival in Germany and were accompanied by course lecturer Andreas Antonopoulos.

Two student films were screened at the 2021 Trinidad and Tobago Film Festival: *Grief* by Corinna Sequea, and *Clash* by Kwame Boatswain and Xavier Kistow-Davis. Three graduates of the UWI Film Programme played major roles in the creation of a highly successful feature film that aired on Trinidad and Tobago's national television station TTT on Sunday April 17th, 2022. The Film entitled *A Fresh Start* addressed family life issues within early marriages, with an aim to help mend broken homes. The film resonated with many viewers, resulting in it becoming the most viewed video on local channel TTT's Youtube Channel, garnering over 500,000 views in 4 weeks. The alumni involved were: **Kivonne Ramsawak** (also currently a UWI staff member) Director/Editor/Screenplay/Camera; **Stephan De Shong** - Director/ Camera/ Lighting; and **Chenelle Spooner** - Assistant Director.

Film staff and alumnus **Shea Best** won Best Director for his film *Vulnerable* at the New Wave Short Film Festival 2021; an international film festival based in Munich. *Vulnerable* is a short film shot and produced on the twin island state of Trinidad and Tobago. The film also won Best Psychological Drama Short in the Hollywood in the Tiber Film Festival in Rome. The 2021/2022 Capstone class received financial support from international company Tutelage Care Group (U.K) in the sum of GBP 2000 towards the production of their film *Oya*.

LCCS

Deborah Matthews, PhD candidate in the Cultural Studies programme was awarded an Erasmus + Scholarship to Oulu University of Applied Sciences- Finland (Jan- May 2022). **Sonja Dumas**, PhD candidate in Cultural Studies was awarded a residency (2021/2022) through Black Spatial Relics New Performance Residency that supports the development of eight new performance works about enslavement, justice and freedom. It is based at the Center for the Study of Slavery and Justice at Brown University, Providence, Rhode Island.

DMLL

During the academic year 2021/2022 third year students were selected and given a special dispensation to do semester 2 of the Academic Year 2021/2022 at the Universidad de Valladolid in Spain. These students were, **Daniel Jagassar**, **Janine Jennings**, **Viktoria King**, **Ryanna Persad**, and **Sameera Sultan**. Several French students were able to take up English Assistant positions, which has been a usual occurrence, since 1969. These students were, **Lois Sealey**, **Savannah Sandy**, **Ariel Boynes-Mohan**, and **Mackala Lewis**.

Programmes

The FHE has worked on the new/revised programmes/courses during the academic year 2021/2022. Within the Centre for Language Learning, 3-credit courses for the UWI Foreign Language Requirement (Chinese, French, Japanese and Spanish) were introduced, while the Department of History revised its MA in History Programme and is presently awaiting final approval from the Finance and General-Purpose Committee of The UWI. It should come on stream in the academic year 2023/2024. At the Department of Literary, Cultural and Communication Studies, the new BA in Journalism was approved. Discussions with COSTAATT to facilitate matriculation of students from their Associate Degree programme have been ongoing.

The School of Education undertook a number of ventures during the period under review. These include the renewal of the BEd Primary General programme guided by the Ministry of Education's PCR curriculum, and the renewal of the In-Service PG Dip Ed programme previously delayed, but to be initiated in the 2022/2023 academic period. The School initiated a proposal for the transition of the PG Dip Ed into a self-financing programme, and one for the Pre-Service PG Dip Ed programme to be reviewed with a view to offer a Pre-Service option. All approvals for the MEd Reading programme were received and the first cohort are expected in September 2023/2024. The revised MA TVET programme was resubmitted for approval, while the Sign Language course received full approval. The School also completed review of the postgraduate manual, streamlined admissions committee for Dip Ed and Postgraduate matters, and initiated review of all PG programmes that have met the 3-5 years threshold for review.

Adjustment in teaching and learning for 2021/2022

The Faculty continued several adjustments with respect to teaching and learning and general operations in 2021/2022. These included the continuation of all teaching via remote delivery for the entire academic year 2021/2022, as well as utilizing 100 percent coursework via alternative assessments. The Faculty continued complete in-house virtual Orientation and Academic Advising system for use in 2021/2022 academic year, and continued its operations using adapted systems and protocols of its core business processes, which boosted productivity in many areas and produced effective cost-saving measures. Some of these are included conducting virtual Faculty Board Meetings, Seminars, workshops, and panel discussions. Other routine and ad hoc meetings also took place remotely.

Research

Department of History

Dr Liazzat and J. K. Bonate embarked on research areas during the period under review. These included the book project, *Correspondence between Northern Mozambican Chiefs and the Portuguese Administration at the End of the Nineteenth Century: Islam, the Slave Trade and the Wars of the 'Effective Occupation', under contract with The British Academy*, Fontes Historiae Africanae series/Oxford University Press. Additional research areas include research on Cabo Delgado Insurgency: Islam, Youth and the 'Resource Curse' in Northern Mozambique; research on Islamic Insurgency in Cabo Delgado, Mozambique; research on Islamic Law and Matriliney in Mozambique; and research on Muslim Women and Political Power in Pre-Colonial Mozambique.

Dr Gelien Matthews focused their research on the topic, From Milner Hall to Freedom Hall. **Dr Debbie Mc Collin's** research was focused on the history of Healthcare in Trinidad and Tobago 1938-1962; the Child Welfare League of Trinidad and Tobago, the Overseas Nursing Association and the West Indies, and the History of Tobago.

Dr Ronald C. Noel focused on a comparative study of Form Sixth students and their eligibility to obtain national scholarships in Trinidad and Tobago. Dr Noel also conducted research on *Venganza: The Origins of Resentment in the Conflict between the Republic of Haiti and the Dominican Republic*, The Labours of the Black and White Odd Fellows Lodges in the United States and the Caribbean, and Induisticism: The art and science of rejuvenating African culture and science for industrial applications.

Dr Allison Ramsay focused on a range of topics including, the History of Fraternal Organisations (Caribbean, Fiji), Landships in Barbados, Museums (Caribbean, Pacific Islands), and Caribbean Cultural Expressions, Heritage, Socio-Cultural Institutions. **Dr Sherry-Ann Singh's** research included the study of the "Diaspora in the Caribbean" – *Oxford Bibliographies in Hinduism*, The Indian Diaspora: Identities, Trajectories and Transnationalities, and "Formation of East Indian Communities in the Caribbean" – *The Cambridge History of the Caribbean*.

Dr Jerome Teelucksingh took the review period to study Caribbean Masculinity, and Tourism in the Caribbean during the early 21st Century. **Dr Michael Toussaint** focused on a range of topics, including but not limited to, the Legacy of

Patrick Manning, Prime Minister of the Rep. of Trinidad and Tobago, 1990-1994 and 2002-2010, Africans in the Americas before Columbus. Status of the Debate African Foodways in the New World; Runaway Indentured East Indians on the Spanish Main, An exploration of (East) Indian and African West; Indian Migration to Tucupita and El Callão respectively in Venezuela during the late nineteenth century; the Illegal (post 1805/6) Slave Trade between Trinidad and Venezuela in the Nineteenth Century; and Trinidad and Tobago and Venezuelan Carnivals: History, Similarities and Differences.

Film Unit

Ms Lynnessa Parks of the UWI Film Programme, in collaboration with the Faculty of Food & Agriculture produced a documentary film commemorating the 100th Anniversary of the study of agriculture in Trinidad and Tobago. Ms Parks conceptualized and directed the film over the course of nine months. She utilized the skills of current film students and alumni of the Film Programme to successfully complete the project which is set to air on television stations throughout the Caribbean in 2023.

School of Education

Dr Paulson Skerrit took part in several projects, including the BRIGHTSTART Project, JUMPSTART Project, CARILIT-development of E-tutor, and the Ozzypie Intelligent Speller Project.

Innovation and Entrepreneurship Projects – FHE UWI/OUAS

In view of the transformative events that took place in the period under review the Faculty felt the need to focus on these national and international developments in its outreach programmes.

Social Innovation Lab

The FHE in partnership with Finland's 4Learning Ltd is preparing to offer a Social Entrepreneurship Lab programme, which will focus on fighting poverty. Additionally, a collaboration will be pursued with The Laventille East Port-of-Spain Development Company and The GORTT Community Recovery Development Committee to promote this programme.

FHE UWI/OUAS Partnership Plans

The FHE continued to partner with Oulu university of Applied Sciences (OUAS), Finland in 2021/2022. As part fulfilment of an Erasmus Staff Mobility Exchange, staff from the FHE visited OUAS where several strategic meetings were convened. Key deliverables coming out from the meetings included expanding the partnership to develop a collaboration with the OUAS Language and Communication and the Cultural Units, possible development of a joint Masters course/programme in Educational Entrepreneurship, and applications for joint grant funding for projects.

FHE Innovation and Entrepreneurship Programme

The FHE UWI partnered with different agencies to launch the first instalment of the Innovation and Entrepreneurship to Fight Poverty Programme. This programme gave the opportunity to persons from a wide cross-section of society to engage in design-based learning that can lead to startups. The sponsors/partners include, the Division of Community Development, Enterprise Development and Labour, The Tobago House of Assembly; East Laventille Port-of-Spain Development Company; and the Rotary Club of Port of Spain West.

The UWI, in conjunction with the 4Learning Ltd Finland ran a programme titled Innovation and Entrepreneurship to Fight Poverty Course from March to May 2022. The programme, used a QuadroHelix approach, was based on human-centred pedagogies and was multidisciplinary and intergenerational in nature.

A key focus of the programme was to provide opportunities for learning for persons who might not have had these opportunities throughout their lives but were willing to learn. As such, the matriculation requirements for the programme was that they had access to a computer and internet and were willing to learn. They did not have to be lettered. There were 28 participants in the programme and each was sponsored. The participants who engaged in the programme came from several communities in Trinidad and Tobago. The objective of the programme was for participants to find solutions to real problems in multidisciplinary teams, and the programme exposed participants to, Problem Identification, Research to Defining the Problem, Ideation, Solution Finding, Prototyping, and Testing.

The projects of two teams are being considered to move to the next phase of building out their prototypes further, by working with sponsors. One project sought to find a solution to get more young males in employment. The other project sought to embed more creativity in primary schools by developing a VAPA programme to be taught in primary schools, which would have as a spin off the creation of employment for persons specifically trained and experienced in the arts.

Toward this end, the UWI Programme Coordinator will meet with our sponsors. Firstly, to present the programme evaluations, from both participants and coordinators. Secondly, to let the participants present the two projects that are under consideration to move to the next phase of building them out. Thirdly, to get sponsors' feedback on the merit and viability of these projects and to discuss the way forward in terms of building out the two projects. Fourthly, to garner general feedback from sponsors on the programme. Certificates of Participation and Achievement were distributed to participants. The next Programme is planned to begin in 2023.

FHE UWI/OUAS Partnership: Plans For Beyond 2022

Several meetings were held with key OUAS University personnel, **Dr Heather Cateau** and **Dr Freddy James**, as well as a local educational innovator and entrepreneur. Several meetings were held with UWI FHE Representatives and various key stakeholders of Oulu University of Applied Sciences (OUAS), inclusive of the Director of Study Affairs and Internationalisation. Key deliverables coming out from the meetings included possible ways to collaborate in terms of Language and Communication education. The possibilities of developing a joint Masters course and Dr Niemelä shared the OUAS's new model for innovation, entrepreneurship and start-ups.

Using a Quadro-Helix Approach, which facilitated sponsorship from local governmental and corporate entities, the UWI Faculty of Humanities and Education (FHE) in partnership with Finland's 4Learning Ltd completed a Social Entrepreneurship Lab programme, titled: Innovation and Entrepreneurship to Fight Poverty to 27 participants, who were trained to find solutions for real world problems using a design-based approach, predicated on human development pedagogies.

Locally, collaborators were the East Port-of-Spain Development Company, The West Port of Spain Rotary Club and the Tobago House of Assembly and implemented this 15-week programme from March to May 2022. In keeping with a philosophy of inclusiveness this programme was opened to persons including those who were not necessarily lettered or had the conventional O' level and A' level qualifications. Two team projects from this programme are under discussion to be built out further and implemented. The meeting with the entrepreneur was to do an evaluation of the programme and to plan a way forward for more projects of this nature.

It was agreed to continue the partnership through continued collaboration developing entrepreneurial and innovative teaching and learning models, expanding the partnership to develop a collaboration with the OUAS Language and Communication and the Cultural Units, and discussing plans to develop a joint Masters programme in Educational Entrepreneurship, and applications for joint grant funding for projects.

Strategic Review

Access

Dean's Office

All teaching continued via remote delivery and continued in summer 2021/2022 using 100% coursework assessments. Journalism courses were introduced during the summer semester.

Dean's Office (Film Unit)

Activities were initiated to expand access/recruitment of regional/ international/part-time students via engagement with the University of Guyana and Instituto Cubano del Arte e Industria Cinematograficos and Escuela Internacional de Cine y Television en Cuba (EICTV). The revived course FILM 3001 Sound & Visual Dynamics continued to attract a healthy intake and garner awards and international exhibition for work produced in the class.

Dr Yao Ramesar visited with various institutions in Jamaica: Caribbean School of Media and Communication (CARIMAC, The UWI Mona Campus); Edna Manley College of the Visual and Performing Arts; and The National Gallery of Jamaica. The main objective of the meetings was to foster partnerships with the UWI St. Augustine Film Degree Programme. A continuum of meetings was also held in London with the London Film School, British Film Institute (BFI) and various UK-based filmmakers.

Centre for Language Learning

Approval of 3-credit blended Foreign Language requirement courses for Chinese, French, Japanese, and Spanish was received. Courses for all four languages have been approved for a September 2022 rollout. All CLL courses continued to be delivered remotely. This allowed CLL to maintain reach beyond Trinidad and Tobago, with 31 individuals not based in Trinidad and Tobago participating in CLL courses over the period. During the period under review, the Centre's academic full-time staff's research profile was elevated with exploration of in-house applications in teaching and learning.

Department of History

During the 2021/2022 period the Department saw student participation in our annual CSEC and CAPE workshops and participation in History Fest essay writing and spoken word competitions. However, there is a noticeable limited number of students reading History at the secondary school level. The Department offered 2 first year History courses, 3-second year History, and 4 third year History courses, in addition to the Caribbean Studies research project at the undergraduate level. At the postgraduate level two Caribbean History courses were offered. Included in our student enrolment were students from St. Vincent, St. Lucia, Barbados, and Grenada. The academic year saw a successful implementation of the mentoring programme and the student liaison committee. Close supervision of students' dissertations and graduation of students both at the undergraduate and graduate levels occurred. However, some students persisted in late and /or non-submission of assignments. Despite challenges faced during the pandemic, lecturers continued to publish, bringing its tally of books to 36. Commitments to teaching and University service among other factors sometimes interfere with research and writing.

Department of Modern Language & Linguistics

Revenue-earning TESOL programme was restructured and will be ready for offer in 2023-2024. The length of time necessary to receive all necessary approvals to move forward and advertise was a challenge. Approval to offer the Masters in Speech-Language Pathology Programme in blended mode is being sought in order to tap into a full market of interested persons who are unable to study fully face to face in Trinidad. QA Review of the Spanish programme was completed and an Action Plan will be presented to AQAC.

Department of Creative & Festival Arts

Due to the pandemic, all courses at the DCFA were assessed at 100% coursework. Review of Certificate programmes to consolidate them to one year in duration occurred. Sub-committees have not had the chance to have full meetings due to the heavy schedule; this will resume in January 2023. Increased application for grants through Campus Research occurred, and a grant was received from the Music Unit of the DCFA.

School of Education

During the COVID-19 pandemic, the PG DipEd team successfully ran the PG DipEd programme in full online mode (asynchronous & synchronous), transitioning from a blended modality. Because of the change from BBC to Zoom, PT tutors who were not assigned dedicated Zoom accounts and had no access to myeLearning had to either make their own arrangements to meet with students or relied on FT staff sending them Zoom links to classes and downloading student assignments for them. Students too were unable for a short period to access myeLearning, the library, and other amenities due to the need for adjustments for managing and delivering the out-of-sync programme.

The SoE continues to revise its assessment rubrics and staff and student handbooks to improve the clarity of information and to enhance learner experience through access to up-to-date and thorough information about its PG DipEd programme. Development of a dedicated student webpage occurred on the upgraded SoE website to enable students' enhanced access to information, forms, student testimonials, and more, thereby attracting potential students and enhancing the student experience. The PG DipEd team has improved the student experience by streamlining the student selection process through the creation of shared, online, and fillable criteria forms and Excel master sheets. The PG DipEd team has also created a shared "Students' Matters" table for the recording and timely treatment of students' issues/requests.

Alignment

Dean's Office

The Faculty continued systems to adjust several of its core business processes which boosted productivity and saved cost. Some of these included major, and routine meetings being done virtually: Faculty Board meetings, Assessment and Promotions meetings, general staff meetings, meetings with staff and students, and Faculty Book meetings. The FHE UWI partnered with different agencies to launch the first instalment of the Innovation and Entrepreneurship to Fight Poverty Programme. This is a programme which gives the opportunity to persons from a wide cross-section of society to engage in design-based learning that can lead to startups. During the 2021/2022 period, MOUs and collaborations took place with international universities. The FHE continued to work on the introduction of a multidisciplinary incubator lab with OAMK Labs of Oulu University and collaborated with the University of St. Andrews.

Centre for Language Learning

The CLL collaborated with the Embassy of Japan and the Japan Foundation during the period, which allowed for the Fourth Annual Japanese Language Speech competition to be held virtually on September 19, 2021. Resumption of standardised test for Japanese Language Proficiency Test (JLPT) conducted on July 3, 2022. The CLL also implemented the Confucius Institute Headquarters mandate, and held online cultural workshops (Chinese festivals) with local camp hosted by El Centro de Excelencia (July 2022).

Department of History

Members of the public served as panellists and/or roundtables discussants in History Fest 2021: "Positioning the Pandemic: History of Health, Disease and Medicine in the Caribbean". The Eric Williams memorial collection was transferred from Alma Jordan Library to the National Library of Trinidad to Knox Street Port-of Spain in collaboration with NALIS. The Department partnered with and St. Andrews University Scotland for a Museum project. In June 2020, the Department launched its Let's Talk History web series, 5-minute presentations on various topics in Caribbean History and contemporary issues. Ten episodes have been done so far. On February 2021, our CAPE and CSEC presentations were done virtually and incorporated into the Let's Talk History series. The History Cross Campus Senior Academic lecture series continued and widening by including the Open Campus and the Five Island Campus.

Department of Modern Language & Linguistics

The Department coordinated and facilitated the ESL-CLIL Train-the-Trainer online workshop from 12th July to 28th August 2021 to equip 98 primary school teachers to deliver content and language to 5–9-year-old local and migrant children in Trinidad and Tobago.

Department of Creative & Festival Arts

The DCFA audit was completed, and amendments have commenced. Outreach efforts have included online Visual Arts Exhibitions as well as Theatre and Dance performances. F2F musical performances, inclusive of tours, have commenced with performances in Martinique, as well as within the national community.

Department of Literary, Cultural and Communication Studies

The Department continued to engage various communities through the hosting of various online events. The 24th Annual Campus Literature Week took place from March 21-25, 2022. It featured readings from various participants from all over the region and further afield and garnered a great deal of public interest as the online format allowed for more scheduled activities. On the final day, there was a live presentation by Nii Parkes – Conversations, Languages, Worlds. The Cultural Studies Section hosted a virtual one day conference on the calypsonian Shadow entitled: *Dreadness: The Mystical Power, Philosophy and Performance of the Shadow*. The opening night garnered 182 persons and the conference proceedings are currently being prepared for a dedicated issue of *Tout Moun*.

The Literatures in English section commemorated the birthday of VS Naipaul on August 17th, 2022. One member of the LiE Section, Dr V. Maharaj held a book launch with participants including Sue Ann Barrett, Bhoë Tewarie, Victoria Chang, Renuka Anandjit, and Tyrone Ali who spoke about Maharaj's re-imagining of Naipaul's classic *The Mystic Masseur* in her own novel, *The Mystic Masseurs Wife*. Staff participated in "Emancipation as Unfinished Business: Portraits of Black Women Academics in Higher Education Across the Diaspora" a qualitative research study led by Associate Professor Saran

Stewart, Director of Academic Affairs and Director of Global Education, Hartford Campus at the Neag School of Education, University of Connecticut. Academic Team members participated in the United Maroon Indigenous Peoples (UMIP) Movement.

Agility

Centre for Language Learning

The CLL offered Spanish for Business Professionals for AMCOR Rigid Packaging. Full resumption of conduct of IELTS (Test of English) monthly, and UK VI (UK Visa and Immigration) IELTS. CELTA (training for teaching English as a Second/Foreign Language) programme was remotely delivered in August 2021 and the CLL expanded its remote delivery of Spanish for Specific Purposes (SSP) in addition to English as a Second Language (ESL) courses for PADF. The CLL managed two PADF projects during the period: one for Aruba and Curaçao, and another in Trinidad and Tobago. The former involved the delivery of a SSP course for 60 frontline professionals and government workers. The latter saw the delivery of an ESL programme for 60 migrants and SSP for 20 professionals.

Department of History

The Department facilitated the study abroad programme of North American students on St. Augustine Campus. However, one of the challenges were the financial limitations of UWI students to afford travel. There was a reduction in the number of part-time educators. The Department has contributed to the design of the Certificate in Liberal Arts to increase student enrolment. The Department secured promotion and further education of members of academic auxiliary staff. HR's inability to waive or cover cost of education and provide professional development proved to be a challenge in this area. The

Department continued offering HIST 2807-DigitalHistory and using technology in course delivery. This was also met with challenges of the inability of some students to afford technology, along with connectivity issues.

Department of Modern Language & Linguistics

The DMLL improved the Caribbean Interpreting and Translation Bureau's Operations and Service during the 2021/2022 period. Income increased since the reopening of the campus and activities in face-to-face mode as equipment rental is a big part of CITB's income. However, this was hindered by the challenge of the shortage of staff to make it more profitable (AP and OJT not renewed).

Department of Creative & Festival Arts

The Music Unit of the DCFA has continued joint community projects with NGC through the pan yard teaching project. The DCFA won a competitive bid from the Caribbean Development Bank for the offering of a Caribbean Festivals Accelerator. The DCFA website has undergone the first phase of a two-phased approach to website update. The content has been updated and a new design has been chosen for the population of the website.

School of Education

In response to the MOE's indication to discontinue sponsorship of the PG DipEd programme, the SoE has prepared a proposal for a self-financed PG DipEd programme, which has been reviewed by the Bursary and carded for submission to CF&GPC in Dec 2022. Memo prepared to CF&GPC to assist the Bursary with clearing up an issue of outstanding MOE payments for PG DipEd VAPA cohorts 2018/2019, 2020/2021 and 2021/2022.

Distinguished Visitors

Creative and Festival Arts

Anthony Chow Lin On (Chinese Laundry),
Managing Director, HRN/ Broadcaster/Promoter

Andre Hoyte,
Senior Business Development Officer,
National Cultural Foundation, Barbados

Carnival Studies
Dr Deborah Hickling-Gordon,
Principal Consultant, Ink & Vision Ltd.

Nigel Jordan,
CEO, Twigs Naturals,

Farley Joseph,
founder/CEO DianJen Center for
Music Industry Education

Musical Arts

Marcus Ash

Dr Dawn Batson

Sarah Barnes
Taiwan

Robert Chappell
Costa Rica

Ray Funk

Todd Hammes
Wisconsin

Richard Holly
North Carolina (Dean)

Ray Holman

Adrian Jaikaran

Dave Longfellow
Virginia Beach PanFest

Drew Lang
Dallas Texas (USA)

Demika Lawrence
Trinidad

Mazzi and Merlin Gill
Gills Pan Shop

Dr Andrew Martin
St. Paul Minnesota (USA)

Eugene Novotney
California

**Michaela Salerni
(Ward-Lewis)**
Delaware

Sule Sampson

Briele Scott
Connecticut (USA)

Robert Snider
Nebraska (US Navy Band)

Film Unit

Gian Franco
(Senior Media and Entertainment
Executive)

Kirk Garner

Rebekah Guillien

Latisha Leslie

**Professor Patricia
Mohammed**

David Paris

Storm Saulter
Director

Kseniya Yorsh
Belarusian film producer

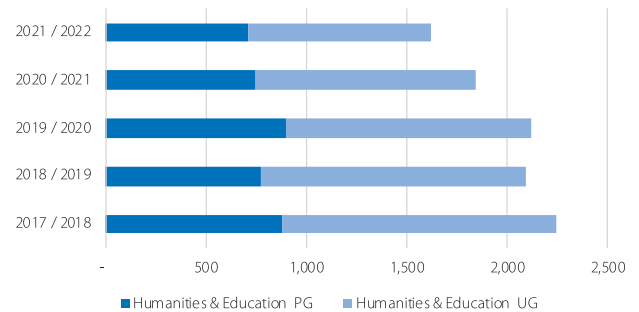
**Department of
Modern Languages
and Linguistics**

Dr Guillermo Molina Morales
Visiting Lecturer

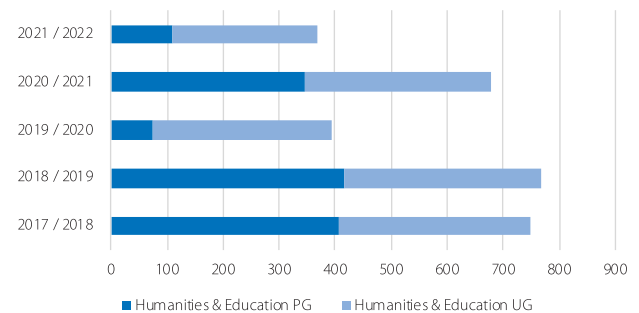
Graphs

*Data courtesy the Campus Office for Planning
& Institutional Research (COPIR)*

Enrolment Trends – Humanities & Education



Graduation Trends – Humanities & Education



FACULTY OF LAW



Dr Timothy Affonso
DEAN (Ag.)

Dean's Summary

The Faculty of Law continued its upward trajectory in terms of its performance. Even amidst the continuation of the COVID-19 crisis, the Faculty, with a small sized staff of 11 on average, performed well throughout the year at both undergraduate and postgraduate studies.

Through its activities and management of key issues, the Faculty of Law's commitment was evident to the UWI Triple A strategy *Access, Alignment and Agility*. Research projects continued, undergraduate withdrawals continued to decline, and postgraduate student numbers rose again. Ongoing work through Faculty and personal research projects combined research and teaching projects such as the Faculty's International Human Rights Clinic (IHRC) continued. Innovative assessments were introduced to examine students on a range of abilities as the Faculty had to further embrace online learning. All activities continued while there had to be a temporary change of Dean when Professor Antoine was unfortunately involved in an accident. The Faculty of Law was grateful to Mr John Jeremie SC, a Senior Lecturer, for stepping in and acting as Dean for most of the remainder of the academic year.

Enrolment

The Faculty of Law continued to be a much sought-after faculty, attracting applicants with high quality academic qualifications, including first-degree holders and national scholarship winners. Students were selected on a competitive merit basis which resulted in increased student intake numbers. Faculty also maintained its policy of adjusted entrance criteria for regional students; applicants from law enforcement and mature students, who may not otherwise meet the traditional requirements.

Graduation

The number of graduates in the Faculty's undergraduate and postgraduate programs endured despite the challenges faced by COVID-19. Student dropouts on average continued a trajectory of declining.

Postgraduate

Special Scholarship for Law Students

The Faculty's initiative to broaden and diversify access to legal education continues to offer the Makandal Daaga Scholarship in Law. An innovative scholarship, the Makandal Daaga Scholarship in Law is aimed at the underprivileged by allowing applicants to matriculate to the UWI based on outstanding social activism.

Student Performance Incentives

Dean's Honour List (LLB)

The Dean's Honour List highlights students who have attained a GPA of 3.60 and above in Levels 1, 2, and 3 of each Semester of the academic year continued to be a popular incentive for student performance.

Performance Monitoring

In an effort to properly manage the output of the Faculty, tracking mechanisms to augment those which already exist were introduced. This included the introduction of a system for tracking postgraduate students data, a QR Code for registration which assisted with the tracking of data from Faculty events via Google docs, and a revision of the internal procedure for tracking PhD applications.

Prize-Award Ceremony

The Faculty of Law held its second Prize Award ceremony virtually. The Faculty's Prize Award ceremony was held on Friday 28th January 2022 with the theme, "The only time success comes before hard work is in the dictionary". The feature address was delivered by Ms Roberta Clarke. Ms Clarke is an activist for social justice and gender equality and is a Commissioner of the Inter-American Commission for Human Rights for the period 2022-2025. She is also the Chair, of the Harassment Committee of the Caribbean Court of Justice, the President of the Coalition against Domestic Violence, Trinidad and Tobago, and the Chair of the Barbados Population Commission.

Student Experience – Paid Internships

The Faculty of Law is committed to the development of the student experience. Faculty started the internship schemes to offer students a real-world practical experience. This allowed students to develop critical skills to enhance their professional development while building their networks. During the June to August period, Faculty partnered with the following institutions to provide this experience for our students:

- Linklaters LLP (an international law firm)
- The Trinidad & Tobago Fair Trading Commission

Research

EDF Human Rights Project

The Faculty continued to implement the donor project '*Strengthening Trinidad and Tobago's Human Rights Capacity through Innovative Legal Education*', funded by the European Development Fund (EDF project) for the amount of TT\$1.5M, and administered by the Ministry of Planning. The project manager is Keisha Garcia, and the Project Leader is Professor Rosemarie Antoine. This two-year project involves an innovative legal education concept integrating the Faculty's new International Human Rights Clinic and corresponding LLB course with NGOs, the state, faculty staff, students and practising attorneys within a dynamic programme of research, advocacy, activism, litigation and outreach.

Strategic Review

Access

Student entrance criteria was waived as per University instructions, to allow for admission based on CAPE UNIT 1 or CAPE UNIT 2 results only due to COVID-19 challenges. Collaboration between course-directors and tutors was improved in order to provide the maximum quality experience for our students. Continuation of discussions on the implementation of Faculty Summer School programme. The Faculty started the internship schemes to offer students a real-world practical experience, this allowed students to develop critical skills to enhance their professional development while building their networks. The Faculty also confirmed the Faculty Supplemental Policy. Teaching load was regulated to allow for increased Research/ Publication from staff and Faculty continued collaboration with University Global Online Director, and the delivery of PG course.

Alignment

The Faculty of Law recognises the importance of partnerships with external stakeholders. Due to the limited opportunities which exist for students to directly interact with the legal community, the need for this became critical. The pathway was created, and partnerships were formed with the Law Association of Trinidad & Tobago, and the Public Defenders Department. Multidisciplinary discussions involving a psychologist, criminologist, and defence attorneys occurred. Tracking mechanisms, to augment those which already exist were introduced. This included the introduction of a system for tracking postgraduate students' data, a QR Code for registration which assisted with the tracking of data from Faculty events via Google docs, and a revision of the internal procedure for tracking PhD applications.

Agility

Recruitment of a Senior Lecturer and Lecturer commenced and the Faculty continued extensive training to ensure efficient and effective delivery of teaching.

Distinguished Visitors

Mr Kevin Ramnarine

Former Energy Minister

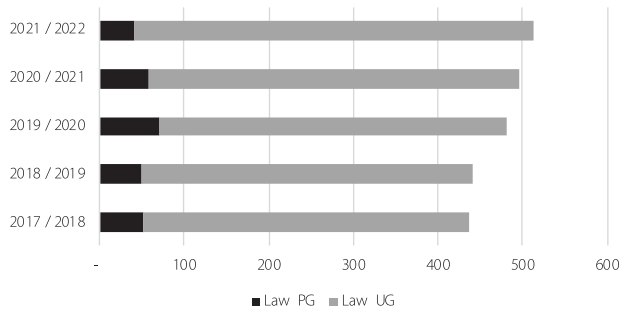
His Excellency Peter Cavendish

European Union Ambassador to Trinidad and Tobago

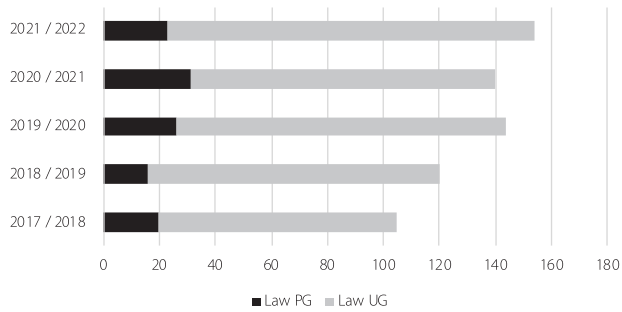
Graphs

Data courtesy the Campus Office for Planning & Institutional Research (COPIR)

Enrolment Trends – Law



Graduation Trends – Law



FACULTY OF

Medical Sciences



Professor Terence Seemungal
DEAN

Dean's Summary

As 2022 began, COVID-19 and its consequences continue to pose a critical threat to all sectors in the world. However, it did not prevent the Faculty of Medical Sciences in realizing its mission and vision in alignment with the University of West Indies.

Over the past 32 years The University of the West Indies, Faculty of Medical Sciences (The UWI-FMS) has been serving its stakeholders by creating a very diligent and competent healthcare workforce for the country, region, and the world. The UWI-FMS currently delivers six major undergraduate disciplines: dentistry, medicine, nursing, optometry, pharmacy, and veterinary medicine, run through five Schools and about forty (40) postgraduate programmes to about 3,000 students with strong support of about Six Hundred (600) academic, administrative, technical, and service staff including 21 professors, 17 Senior lecturers and 87 lecturers, along with the commendable support of numerous associate clinical and part time staff. Since the introduction of the University's Triple "A" (Access, Alignment, and Agility) Strategy, UWI-FMS-STA has strived aggressively to achieve the objectives stated in the Triple A Strategy, and we are now embarking upon the 2022-2027 strategic plan.

The FMS resumed full face-face teaching of all clinical and laboratory, along with large class lecture sessions in 2021/2022 based on the exemption granted by the Ministry of Health and directives of the UWI senior management. With the BUS approval, multiple examinations (Face to Face/Online/ Asynchronous) were conducted successfully for delayed cohorts of graduates of different programmes in the Faculty and thus meeting the urgent need for healthcare professionals by various government and non- government healthcare entities.

While the world continues to grapple with the effects of COVID-19 on public health, the Faculty continues its support to national and regional community through its laboratory testing services and clinical services in the public healthcare sector. Professor Terence Seemungal, Dean, FMS, was appointed by the PM, Dr Keith Rowley, as Chair of a five-member committee to look at COVID-19 clinical outcomes in Trinidad & Tobago. The committee comprised of Professor Seemungal (FMS, UWI), Professor Emerita Phyllis Pitt-Miller (FMS, UWI), Dr Anton Cumberbatch, Dr Vidya Dean, and Professor Donald Simeon (FMS, UWI). The committee completed its task and submitted their report and recommendations to the Government in February 2022.

For the reporting period the Faculty launched approved courses such as DM Paediatric Surgery, BSc Midwifery, and curricula in Gender Based Violence (GBV) for health care students and professionals. The curricula were customized to the national and regional health education needs and global health challenges. The CCHSRD conducted many outreach activities in the form of a national conference, symposia, workshops, and training sessions bringing our primary stakeholders (professionals from Ministry of Health) on board.

Over the past year, the Faculty has published 206 papers in peer reviewed journals, more particularly on COVID-19's impact nationally, regionally, and internationally. It is pertinent to mention that the members of the Faculty have attracted handsome amounts of grant funding, donations (approximately USD\$507,250. €\$817,000 and TTD\$17,299,025.) and selected publications have emanated from these grant fundings.

The FMS firmly believes in fostering continuous quality improvement through self-assessment and peer review. This has been demonstrated by its Schools and Departments/ Programmes that have gone through both internal and external quality assurance and accreditation exercises. It is worth mentioning that the MBBS programme has recently gone through a self-assessment exercise in preparation for the CAAM-HP accreditation visit which is expected in semester I of the next academic year, and the DVM programme accreditation exercise is carded for early 2023.

Enrolment

Undergraduate

Department of Clinical Medical Sciences

There are over 400 students enrolled in the undergraduate MBBS clinical programme, 4th and 5th Year Clerkship, excluding repeaters.

School of Nursing

Nineteen students have registered for the third cohort of this programme for Academic year 2021/2022. This cohort is fully self-funded compared to the other two cohorts which were sponsored by the Ministry of Health.

School of Pharmacy

In September 2021, the School of Pharmacy accepted 72 students into the BSc Full-Time Programme. The School usually aims to accept 60 students, but in recent years we have accepted closer to 70. Additionally, six students were accepted into the Mixed Mode BSc Pharmacy Programme; the first cohort in two years.

School of Veterinary Medicine

Thirty-five students enrolled in the undergraduate programme, and one for the postgraduate programme in 2021/2022.

School of Dentistry

The School of Dentistry has full enrolment in 2021/2022 and continues to be at capacity.

Postgraduate

Department of Clinical Medical Sciences

The current enrolment in the post graduate programme is over 60 trainees.

DM Paediatrics

Thirteen trainees enrolled between 1 August 2021, to 31 December 2021. Of these, six graduated. Four trainees enrolled in January 2022, and as of 31 July 2022, there were 11 residents in training in the DM Paediatrics Programme.

DM Radiology

DM Part I has a total enrolment of 20 residents, while DM Part II had only an enrolment of seven (1 resident took a leave of absence). At the May/June 2022 exams, 12 residents were successful at the Part I exams. There were no Part II residents at this sitting.

DM Psychiatry

Total enrolment in the DM Psychiatry was 28 residents. Twelve applications came in for the DM Psychiatry Programme, of which 8 were accepted.

DM Internal Medicine

Total enrolment in the DM Internal Medicine programme was 13 residents. One resident successfully completed the Part I in November/December 2021. Three residents successfully completed the Part II of the programme in November/December 2021 and obtained their award of degrees in DM Internal Medicine. One resident was on leave of absence for Semester II 2021/2022.

Diploma in the Management of HIV

There was no enrolment for the reporting period. One student from Dominica was delayed in completing the practicum component because of the COVID-19 pandemic. The student successfully completed the programme in August 2022.

Department of Clinical Surgical Sciences

Optometry Unit

The Optometry Unit enrolled 16 students for the academic year 2021/2022, which is above the breakeven enrolment number of 12 students. The Unit successfully held face-to-face OSCEs under COVID-19 conditions in January 2022 which allowed its final-year students to progress to graduation after a 6-month delay due to COVID-19. It also allowed a new batch of year 4 students to commence their final year. They are due to sit their final exams in December 2022. This batch will be the last set of students out of synch, due to COVID-19, with the normal academic semesters.

Achievement and Awards

Department of Pre-Clinical Sciences

Timmy Ramnanansingh was acclaimed the *Best Student Researcher*, and *Best Oral Presentation* at the 2nd Annual Trinidad and Tobago National Health Research Conference (2021).

School of Nursing

Brenslley-Ann Devenish-Mohammed, received First Class Honours during the period under review.

School of Pharmacy

Five students received National Bursary Awards. Amongst the graduating class there were two awards as follows: Valedictorian – **Kiana Gajadhar**, and Ethical Principles – **Alyssa George**.

School of Veterinary Medicine

The World Veterinary Association MSD Animal Health award for 2021 was received by one of UWI-SVM's students, **Kishana Murray**. This was a competitive award with over 400 applicants from 50 different countries. The students received a bursary of US\$2500. https://www.worldvet.org/uploads/news/docs/2020_wva_msd_scholarship_press_release_compressed.pdf. Fourteen DVM students qualified for the Dean's Honour List in 2021/2022.

School of Dentistry

Two students, **Samantha Bissessar** and **Geetavali Persad** tied as the top performing students in the May 2022 final DDS examinations. These were the delayed DDS final examinations for class of 2021 held in May 2022.

Research

School of Medicine

Department of Pre-Clinical Sciences

Performing research during the COVID-19 shutdowns was challenging, especially where projects required face-to-face interactions with study participants. Nonetheless, the Department produced seven conference presentations, and seven peer reviewed journal articles, and six research grants worth approximately US\$330,000 were secured. Results from

projects completed or underway have implications for cancer diagnosis and treatment, COVID-19 monitoring and control, future pandemic preparedness, prevention, and treatment of viral diseases of public health importance in the Caribbean, diabetes and other chronic diseases, antibiotic use, glaucoma, and mental health.

COVID-19: Infectious Disease Molecular Epidemiology for Pathogen Control & Tracking (COVID-19 IMPACT)

Investigators: **N. S. D. Sahadeo, S. Nicholls**, F. R. R. Moreira, Á. O'Toole, **V. Ramkissoon**, C. Whittaker, V. Hill, J. T. McCrone, **N. Mohammed, A. Ramjag, A. Brown-Jordan**, S. C. Hill, R. Singh, S-M Nathaniel Girdharrie, A. Hinds, N. Ramkissoon, K. V. Parag, N. Nandram, R. Parasram, Z. Khan-Mohammed, L. Edghill, L. Indar, A. Andrewin, R. Sealey-Thomas, P. McMillan, A. Oyinloye, K. George, I. Potter, J. Lee, D. Johnson, S. Charles, N. Singh, J. Bisor-McKenzie, H. Laws, S. Belmar-George, S. Keizer-Beache, S. Greenaway-Duberry, N. Ashwood, **J. E. Foster, K. Georges, R. Naidu, M. Ivey, S. Giddings, R. Haracksingh, A. Ramsbhag, J. Jayaraman, C. Chinnadurai, C. Oura, O. G. Pybus, J. St. John, G. Gonzalez-Escobar, N. R. Faria, C. V. F. Carrington**.

This UWI-led collaborative study established local capacity for rapid SARS-CoV-2 whole genomes sequencing and carried out genomic surveillance for SARS-CoV-2 variants of concern to Trinidad and Tobago and 16 other member states of the Caribbean Public Health Agency (CARPHA). To date, over 5000 samples have been sequenced and 138 distinct SARS-CoV-2 lineages were identified including five variants of concern (VOC). The rapid detection and reporting of VOC by the project helped inform public health policy and decision-making for economic reopening, international travel restrictions and work policies.

Building capacity for pathogen genomic surveillance to strengthen preparedness for infectious disease health emergencies in the Caribbean subregion.

Investigators: N. S. D. Sahadeo, S. Nicholls, V. Ramkissoon, A. Ramjag, A. Brown-Jordan, N. Mohammed, C. V. F. Carrington.

This project developed laboratory infrastructure and human resources to sustain capacity for pathogen genomic surveillance in the Caribbean. The study contributes to strengthening the region's response to COVID-19 and preparedness for future infectious disease health emergencies in the Caribbean subregion.

SARS CoV 2 Genomic Surveillance Strengthening and Support

Investigators: A. Brown-Jordan, N. S. D. Sahadeo, S. Nicholls, V. Ramkissoon, A. Ramjag, N. Mohammed, C. V. F. Carrington.

This project enhanced genomic surveillance capacity for the Caribbean region through technical training of staff and strengthening of testing systems. Activities included organisation and facilitation of a Client and Referral Network Whole Genome Sequencing Sensitisation workshop on 24th Nov 2021 which targeted laboratories submitting SARS-CoV-2 samples for sequencing by the UWI laboratory and other stakeholders. The event included 42 participants from at least ten referring laboratories. This project contributes to strengthening the region's response to COVID-19 and preparedness for future infectious disease health emergencies in the Caribbean sub-region.

Beyond COVID-19 IMPACT: Establishing a sustained capacity for genomic surveillance in Trinidad and Tobago.

Investigators: N. S. D. Sahadeo, S. Nicholls, V. Ramkissoon, A. Ramjag, A. Brown-Jordan, N. Mohammed, C. V. F. Carrington.

This capacity building activity sought to enhance capacity

for pathogen genomic sequencing in order to better support public health bodies. It facilitated the purchase of equipment that doubled the UWI's capacity for high-throughput whole genome sequencing. In addition to increasing the throughput and efficiency of SARS-COV-2 genomic surveillance, the capacity built has been applied to other pathogens of public health importance. This project contributes to strengthening the region's response to COVID-19 and preparedness for future infectious disease health emergencies in the Caribbean sub-region.

The Effect of Gentamicin on Lateral Line – Evoked Potential (LLEP) Thresholds of the Goldfish (Carassius auratus) – A Novel Technique

Investigator: **J. Ramcharitar**

Many commonly used pharmaceutical agents are known to cause damage to human hearing and balance (i.e., ototoxicity). Among these are antibiotics such as gentamicin. The inner ear of fishes possesses remarkable structural and functional similarities to that of humans, and have been popular models in a range of preclinical biomedical lines of research. In this study the use of the lateral line system for detecting ototoxic effects was assessed. The work provided proof of principle for a novel experimental technique for acquiring lateral line – evoked potentials (LLEPs) and demonstrated that LLEPs offer a unique and powerful means by which ototoxic effects can be detected and measured. The use of LLEPs has the potential to expand the use of fish models in biomedical research.

Major Research in Progress

Characterization of emerging viruses and protective immune responses against them in humans.

Investigators: A. Ramjag, G. Simmons, C. V. F. Carrington

Emerging viruses are becoming increasingly common. With each newly arrived virus there is need to rapidly characterise

the virus and develop specific tests, vaccines, or therapeutics. This requires knowledge of the viruses' genetic structure and an understanding of the human immune response to the virus. The aim of this study is to detect and characterise emerging viruses associated with acute undifferentiated fevers and to characterise immune responses against them. This study will provide data that will contribute to the development of novel diagnostic tests, therapeutics and vaccines.

Further Capacity Building for Pandemic Preparedness

Investigators: A. Brown-Jordan, S. Nicholls, N. S. D. Sahadeo, V. Ramkissoon, A. Ramjag, N. Mohammed, C. V. F. Carrington.

This project is facilitating better pathogen genomic surveillance by providing support for personnel, the purchase of equipment to increase capacity and efficiency, and the implementation of protocols for detection and sequencing of pathogens other than SARS-CoV-2 such as rabies and monkeypox. In addition to sustaining SARS-Cov-2 genomic surveillance, this project will strengthen systems for genomic surveillance for future infectious disease health emergencies in Caribbean sub-region.

Dietary modulation of gut microbiome and host gene expression across human evolution and the emergence of modern human disease.

Investigators: **Foster JE**, Ramroop R, Singh H.

This multi-site study seeks to understand how nutrients and the gut microbiome have converged to impact gene expression in the human host, and to look for evidence on how this 3-way interaction has impacted disease in vulnerable groups across human evolution. Our theory is that dietary changes across evolution have influenced the emergence of specific microbiome constitutions in modern humans resulting in certain diseases. By sampling the gut microbiome and disease markers of different human populations related by

common ancestry (African descent - contrasting traditional vs industrialised nutrition, and healthy vs those showing markers of metabolic syndrome) we will be able to determine the variation in gut microbiome associated with such diseases. The results of this study will improve understanding of factors underlying certain chronic diseases.

Peripheral Endothelial Dysfunction in Glaucoma.

Investigators: J. Mohan, N. Farnon, K. Rocke, C. Petty.

Glaucoma is the second leading cause of blindness worldwide, accounting for 12.3% of blindness according to the WHO in 2002. Vascular endothelial dysfunction in large blood vessels (brachial artery) has been found in glaucoma patients but if and how this affects regulation of blood flow at the *microcirculatory level* has not been explored. The aim of this study is to determine the vascular endothelial function of the skin *micro-circulation* using a combination of iontophoresis of vasodilatory chemicals and Laser Doppler Flowmetry in patients with glaucoma and controls. The relationship between the vasodilatory responses and changes in the optic disc or visual fields in the eye will be investigated. This study will add to the growing body of evidence of vascular endothelial dysfunction in glaucoma and if an association is found between vasodilatory responses and glaucomatous changes in the eye, this could be an important area for treatment in open - angle glaucoma.

Exploring the Factors Influencing Covid-19 Vaccine Hesitancy among the Adult Population of Trinidad and Tobago.

Investigators: D. Lamont, R.J. La Foucade, V. Latchman, A. La Bastide, V. Latchmepersad, R. Lal, J. Lochan, A. Kong, B Bhagwandeem, J. Mohan.

Vaccine hesitancy refers to the delay in acceptance or refusal of vaccination despite availability of vaccination services. Globally, as of September 2022, COVID-19 was responsible for

619.13 million cases and 6.55 million deaths. At that time Trinidad and Tobago had 182,181 total positive cases and 4,207 deaths. The country's vaccination rate was 51.2%. The aim of this study was to explore socio-demographic, individual, social/organisational, and vaccine-specific factors influencing public attitudes towards COVID-19 vaccines among the adult population of Trinidad and Tobago. Understanding why persons are hesitant toward the COVID-19 vaccines can aid in increasing vaccination rates.

Grants

Christine V. F. Carrington

- *AHF Global Public Health Initiative (2022) SARS-CoV-2 genomic sequencing continuity for variant surveillance in Trinidad and Tobago. Role: Principal Investigator.*
- *Pan American Health Organisation (2022) Capacity Building for Pandemic Preparedness. Role: Principal Investigator.*
- *Pan American Health Organisation (2022) SARS-CoV-2 genomic surveillance and capacity building to respond to future infectious disease health emergencies in the Caribbean sub-region. Role: Principal Investigator.*
- *Trinidad & Tobago Ministry of Health (2022) SARS-CoV-2 Variant of Concern Sequencing. Role: Principal Investigator.*
- *Pan American Health Organisation (2021) To improve genomic surveillance capacity for the Caribbean region through technical training of staff and strengthening of testing systems. Role: Principal Investigator.*
- *AHF Global Public Health Initiative (2021). Beyond COVID-19 IMPACT: Establishing a sustained capacity for genomic surveillance in Trinidad and Tobago*

Department of Para-Clinical Sciences

Akpaka, Patrick

The Department of Paraclinical Sciences, and Genome Research Limited (incorporated in England) developed an MOU for a collaboration study with Sanger Institute. The Department involvement with the staff of the institute followed the reading of one recent publication and included the DNA isolates of 200 isolates from our work. The Institute will contribute US\$2,100 for the DNA extraction.

Edwards, Robert Jeffrey

The incidence of histoplasmosis and cryptococcosis in PLHIV attending a large HIV Clinic in Trinidad. Study supported by the Fungal Infection Trust, UK Charity No: 1147658. November 2021-April 2022.

Vaccine Hesitancy among Clients Attending the HIV Clinic in Trinidad. Study supported by the Medical Research Foundation of Trinidad and Tobago – August-September 2021.

Expanding Access to Sexual and Reproductive Health and non-communicable disease screening for Refugees and Asylum Seekers from Venezuela – Julia Taft Refugee Fund, United States Embassy awarded to the Medical Research Foundation of Trinidad and Tobago 2021.

Khan, Raveed

Lead Researcher: Professor Rohan Maharaj.

Junior Research Faculty member of The Eastern Caribbean Health Outcomes Research Network (ECHORN). The Eastern Caribbean Health Outcomes Research Network (ECHORN) is a collaborative research study that examines the lifestyles, eating habits, and health behaviours associated with cancer, diabetes and heart disease in adult men and women living in the Eastern Caribbean.

Vaillant, Angel J.

Known risk factors, socio-demographics, lifestyle, and diet of a Caribbean immigrant population in the US.

Department of Clinical Medical Sciences

Major Research in Progress

Ali, Ronan

Monplaisir T, Teelucksingh S, Ali R, Nayak S – Evaluation of clinical and biochemical profile of patients undergoing coronary angiography at a selected hospital in Trinidad.

Heart failure interventions in Black and Indian South Caribbean people -Utilization Study - The HIBISCUS Project Group. A cross campus collaboration between St. Augustine and Cave Hill campuses of the UWI. Global Hearts Initiative, a hypertension control project being implemented across the Caribbean.

Ali R, Baboolal N, Teelucksingh S, Sakhamuei S et al.

DiSCoVID Cohort Study Trinidad and Tobago. Study on Disease Severity, Complications, and Outcomes in COVID-19 patients in Trinidad and Tobago. The severe acute respiratory syndrome coronavirus-2 (SARS CoV-2) infection is responsible for the current coronavirus disease 2019 (COVID-19) pandemic affecting nearly six million people worldwide to date. Infection with this virus is causing a broad clinical spectrum and varying outcomes. Locally there are now 117 cases of COVID-19 with 8 deaths and 108 recovered cases. We propose an observational cohort study of patients managed in Trinidad and Tobago Health facilities for a SARS-CoV-2 infection. The study seeks to establish a database of all COVID-19 patients in Trinidad and Tobago, including their sociodemographic, clinical, biochemical, radiological characteristics, and disease severity, complications, and outcomes.

Baboolal, Nelleen

COVID-19 Psychiatric Morbidity (in progress)

International Collaborations

Bodkyn, Curt

Co-Caribbean Physician Lead / Country Lead

The Sick Kids International Caribbean initiative (SCI).

The SickKids – Caribbean Collaboration in Cancer and Blood Disorders focuses on the development of research, education and training in Paediatric Oncology and blood disorders in the Caribbean. The main objective is to build capacity for the delivery of care for children with cancer and blood disorders in the Caribbean region. This is a TT\$40M (CAN\$8M) philanthropic fund across six islands: Jamaica, St Lucia, St Vincent and the Grenadines, Bahamas, Barbados and Trinidad and Tobago. Funds are administrated by the UWI.

Benefits to The University of the West Indies, St Augustine campus for Phase 1 2013-2018 and Phase 2 (2018-2021):

- Enhancement of UWI Telehealth unit, Mount Hope, Trinidad. This unit supports teaching for Paediatric DM residents and nursing students.
- Development of the post registration programme for Paediatric Oncology nursing PHON 0101-9. Providing 28 scholarships (TT\$588,000) in 2016-2017 for the participating countries in the project. The programme is conducted on the STA campus. A third cohort has been approved for phase 2 (TT\$294,000).
- Support of salary for Telehealth coordinator – TT\$697,200 (0.5 FTE-\$139,434/yr). To be continued for 3 years in Phase 2 (TT\$418,304). Contracted through UWI, St Augustine.
- Salary for Research nurse on the project – TT\$1.08M. To be continued for 3 years in Phase 2 (TT\$684,000). Contracted through UWI, St Augustine.

- Miscellaneous fund for educational resources – TT\$52,800 in Phase 1 and TT\$31,674 in Phase 2.

Grants

Bodkyn, Curt

SickKids Global/ Catalyst grant. Childhood Cancer Drug access in the Caribbean; A SickKids Caribbean Initiative. Country PI Childhood cancer outcomes in the English-speaking Caribbean (ESC) lag behind those achieved in most high-income countries (HICs), despite wide variation in per capita GDP and health system context in the region. Improved access to essential medicines for children with cancer and sickle cell disease (SCD) has been identified as a regional priority. This study looks at elucidating the challenges and solutions related to essential medicines access is integral to strengthening effective childhood cancer and SCD care strategies. Objectives: (i) identify the determinants of drug access; and (ii) determine the availability and cost of essential childhood cancer and SCD drugs in Trinidad and Tobago, The Bahamas, Barbados, and Jamaica.

American Society of Hematology (ASH), Children's International Consortium on Acute Leukaemia (C-ICAL). Country PI

This study consortium developed a treatment protocol for children with ALL in the Caribbean to improve survival and reduce early tumour related deaths. In collaboration with the ASH, the protocol was developed with the limitation of the Caribbean setting in mind optimizing treatment to international standards. Patients on study will be followed for 5 years to monitor outcomes and early tumour related deaths. The Caribbean countries involved are Trinidad and Tobago, Bahamas, Barbados, and Jamaica.

Bahadursingh, Prithviraj

Prevalence of obesity in children with Autism Spectrum Disorder

Fernandes, Maritza

Participating in Caribbean Collaborative Paediatric COVID-19 Survey as investigator.

This multi-centre observational cohort study aims to determine the distribution and clinical course of COVID-19 disease among children 0-16 years old in the Caribbean.

Objectives: Describe epidemiological, clinical and laboratory data of children admitted to hospitals or government isolation facility with proven COVID-19 disease. Identify atypical presentations, comorbidities, risk factors, complications, or reinfection among the COVID-19 infected paediatric population, and describe any clinical outcomes 6 months after discharge.

Giddings, Stanley

Awarded the following extramural grant:

ISR-17-10114 (Gilead Investigator Sponsored Research grant) – Screening and linkage to care of hepatitis C in Trinidad and Tobago. TT\$179,083.75. Approvals have been obtained to proceed with the study. Received study material from Abbott Laboratories to assist in conduct of the study. US\$12,318.

Member of a Caribbean research team that was developed during the COVID-19 pandemic and in the process of gaining approval to participate in the Solidarity Trial – an international clinical trial to help find an effective treatment for COVID-19. Member of the Tropical Medicine Cluster: Infectious Diseases at The UWI, an interdisciplinary research cluster for the study of infectious diseases.

Hutchinson, Gerard

Co-Principal Investigator for in the INTREPID project which is investigating first episode psychosis in diverse settings (India, Nigeria, Trinidad). Funded now by the Medical Research Council and initially the Wellcome Trust.

Khan K, Baboolal N, Reid S, Hutchinson G, Hypolite I, Ivey M, Malcolm T.

Psychological and Mental Health Impact of COVID-19 Pandemic (PSYMIC) in Trinidad and Tobago.

Khan, Katija

- UWI Rapid Response Needs Assessment Survey on Psychosocial Impact of COVID-19 pandemic on staff and students.
- Assessing online readiness, psychosocial impact, and career planning in medical students at UWI in light of COVID-19 pandemic.
- Caribbean attitudes towards suicide (A cross-cultural comparison of four Caribbean countries: two with high suicide rates (Trinidad and Tobago and Guyana) and two with low suicide rates (Barbados and Jamaica).
- Predictors of recidivism in Trinidad and Tobago (A retrospective study analysing an existing database of persons admitted to the prison system to identify a psychological, social, and demographic profile of recidivists in the criminal justice system).
- Stress, Coping and burnout in Medical Students.

Rampersad Fidel, Maharaj Paramanand

Review of radiological findings of COVID-19 patients.

Reid, Sandra

Public Mental Health Impact of COVID-19 in Trinidad and Tobago. (Principal Investigator) 2020.

This is a 5-year study being done in collaboration with the Ministry of Health and the Centre for Mental Health, Swineburne University of Technology, Australia. It examines the mental health and psychological impact of COVID-19 on the population as the pandemic evolves, to guide interventions and reduce the public mental health burden of the pandemic.

National Alcohol Policy in Trinidad and Tobago. (Principal Investigator) 2014-Present. Following consultation on, and revision of the draft national alcohol policy of Trinidad and Tobago, this project seeks to gather the supporting evidence for the role of alcohol as a major public health hazard. The data will be used to lobby for the implementation of the national alcohol policy in Trinidad and Tobago.

Sakhamuri, Sateesh

- Multinational SOLIDARITY clinical trial – Trinidad and Tobago for COVID-19 disease – currently waiting for approvals.
- Member of Burden of Obstructive Lung Disease (BOLD) initiative research group, Trinidad and Tobago.
- Sleep Apnea Risk factors and Co-morbidities study in a Trinidad and Tobago cohort.
- Factors influencing the frequent healthcare resource utilization among poorly controlled asthmatics.
- Spirometry in specialty clinics and its standardization.

Sandy, Sherry

- Currently a protocol is being established to allow Trinidad and Tobago to partake in an international database for Huntington's Disease entitled Enroll-HD. This is in collaboration with University of the Montreal.
- A centre-to-centre movement disorder programme has been established between Trinidad and Tobago that will allow international movement disorder experts to use telemedicine to assist in the management of local patients. A research protocol is being written to allow evaluation of this programme.
- Ethical approval from the UWI Ethic board has been obtained for a study entitled,
- 'Virtual Epilepsy Clinic Trials in Outcomes Research-Trinidad' which proposes to evaluate the safety and efficacy of a body suit in an outpatient setting to detect seizure activity whilst the interpretation is read offsite.

Seecheran, Naveen

Cytochrome P-450 Polymorphism Epidemiology and prevalence in Trinidad: The CYPHER TNT Study – REC approval obtained, intending to apply for CRP intramural grant. Research interest focuses on improving the management of coronary artery disease. Currently conducting phase 1 and 2a clinical trials evaluating platelet biology, thrombosis physiology, in addition to several epidemiologic studies. This multifaceted approach will assist in developing strategies for treating the cardiovascular disease spectrum and its devastating sequelae.

Translational Research:

Implementing phase I and II studies of pharmacotherapies aimed at platelet inhibition.

Clinical Research:

Developing new paradigms for individually tailored antithrombotic therapy.

Singh, Virendra

- Gender Bias in the referrals and treatment of patients with short stature.
- Use of urine microalbuminuria testing to stratify the referrals diabetic retinopathy screening.
- Clinical spectrum of COVID-19 in West Indian Children.
- Effects of the "COVID-19 Stay at home mandate" on the body mass index (BMI) of children ages 5-18 years being managed for obesity / overweight at the Paediatrics Out-Patients' Clinic at the EWMSC.
- Paediatric Eastern Caribbean Health Outcomes Research Network (P-ECHORN) Cohort Wave 1: Intergenerational Factors that Contribute to Cardiovascular Risk in the Eastern Caribbean.
- Effect of the duration of the final MBBS Medicine OSCE assessment on the performance of exiting medical students.

School of Nursing

Industry Collaboration

The School collaborated with the Pan American Health Organization (PAHO) to review and develop two curricula for health professional students at the Undergraduate and Graduate levels. This resulted in training approximately 70 Undergraduate and Graduate students in GBV through the piloting of the curricula.

Project Funding

The School received a grant of \$58,100(USD) from the Multi Country Global Leadership initiative in collaboration with the Caribbean Regional Midwives Association (CRMA) and Jhpiego.

Data collection has started, and the intention of this project is to conduct a formative assessment of Respectful Maternity care (RMC) in Trinidad and Tobago.

Citations

A least seven research papers and five citations from research activity reported for the period.

School of Pharmacy

Patent

Dr Rajiv Dahiya (Patent granted as Granted as Co-Investigator)

Malviya, R., N.K. Fuloria, S. Fuloria, V. Subramaniam, D.U. Meenakshi, V.G. Vanteddu, **R. Dahiya**, S. Dahiya, K. Narra, P. Ganesan. *Nanoparticle Formulation and Method for Preparation Thereof*. Australian Patent, Application No. 2021101624, Patent category: Innovation, Filing & effective date of patent: 29th March 2021, Publication/Granting date: 20th May, 2021; Expiry date: 29th March, 2029. Available from: <http://pericles.ipaustralia.gov.au/ols/auspat/applicationDetails.do?applicationNo=2021101624>

UG Research Project Supervised

(Year 2 MBBS Public Health Research Program)

B. Beharry, A. Bharath, A. Bissoon, D. Blackman, A. Boodram, A. Buchoon, A. Bujhawan, K. Campbell.

Research Project entitled "A systematic review on the use of herbal medications in the COVID-19 pandemic worldwide" under Faculty of Medical Sciences, The University of the West Indies, St Augustine, Trinidad & Tobago (Sep 2021 to Nov 2022)

School of Veterinary Medicine

Major Research Completed

Adesiyun & K. Georges

Prevalence and characteristics of *Salmonella* spp. isolated from broiler processing plants and retail outlets in Trinidad and Tobago.

Major Research In Progress

R. Charles & K Georges

Detection of Tick Species of Wild and Domestic Animals and their Pathogens of Veterinary and Public Health Significance in Trinidad and Tobago.

C. Phillips

Distribution, prevalence and characterization of clinically important aquatic viruses and mycobacteria species in fish and shrimp throughout Trinidad and Tobago. October 2018-Present. CRP.5.OCT18.81 (TT\$35,000).

K. Georges

Detection of Benzimidazole Resistance in Gastrointestinal Nematodes (GIN) affecting Sheep in Trinidad and Tobago using Real-Time Polymerase Chain Reaction (RT-PCR).

C. Oura

- Identification of Culicoides biting midge species and the viruses that they transmit within Trinidad and Tobago.
- The influence of host dynamics on the viral diversity of ticks in Trinidad.

C. Sant

- Application of Reverse Line Blot Hybridization to detect tick transmitted haemopathogens in the blood of cattle in Trinidad and Tobago.

R. Suepaul

- Infectious organisms and pathology of fauna of Trinidad (opossum and mongoose).
- A study of the specified aetiologies of pulmonary lesions identified at necropsy in sheep and goats in Trinidad.

J. Johnson

- Evaluation of Aphrodisiac potential of "Caribbean Natural Viagra" Bois Bande (*Parinari ampestris*) bark extract in male rats.

T. Auguste

- A comparison of emergency procedures performed in dogs and cats prior and during the 'stay-at-home' order for COVID-19 at the Small Animal Clinic, Veterinary Teaching Hospital, School of Veterinary Medicine, The University of the West Indies, Trinidad and Tobago.
- Retrospective study of canine splenic masses in the Small Animal Clinic, Veterinary Teaching Hospital, School of Veterinary Medicine, The University of the West Indies, Trinidad and Tobago.

Dr J. White

- CRP.3. MAR 18.25 Investigation of the causes of catastrophic breakdown resulting in immediate euthanasia and sudden death in the thoroughbred racing population at the Arima Race Club (ARC), Trinidad (December 2018-present).
- Designed study and currently collecting data investigating catastrophic musculoskeletal injury in Jamaica (June 2018-present)
- Case Series: Location, surgical findings and prognosis of surgical lesions requiring arthroscopic treatment in the Caribbean Thoroughbred racing population (2016-present).

Projects (Completed)

A. Persad as P.I.

Developing practical guidance on food safety in the management of aquaponics systems in the sea moss value chain (29400.00 USD)
Aquaponic produce have relatively low levels of contamination with generic *E. coli* and no evidence of *Salmonella* or *Listeria spp.* contamination. We can therefore conclude that aquaponic produce once grown using good production practices pose minimal threat to food safety.

Impact on community:

- Microbial safety of aquaponic produce was investigated and results presented at the National Health Research Conference (25th November 2022)
- Good Agricultural Practice guidelines were developed for improving the microbial safety of aquaponic produce were developed and provided to FAO.

K. Georges P.I.

FAO project on The promotion of food safety and meat hygiene in the poultry cottage industry (45300 USD)

The Major Impact for the FAO Pluck Shop Project:

A manual was created for pluck shop operators, and another was created for the Public Health Inspectorate. This project adopted a "One health Framework" interlinking human and animal health and supporting the financial funding sector in improving quality standards of pluck shop operations. Hard copies of the pluck shop operators manual were distributed to all of the Agricultural Development Bank's Frontline branches / Business Development Units.

According to Denise Dickson -Cunningham, Manager New Business & Product Development.

"They have been very well received! The manual is a comprehensive document outlining the art and science, including statutory requirements of poultry value added business operations. The graphics and resource documents are very useful and we look forward to accessing the e-copy as part of our recently approved 'Going Green Initiative'."

The ADB has a mandate to assist with funding the modernisation of the sector and support for the adoption of quality assurance standards. The manual was also distributed using ADB's mobile banking unit to conduct an outreach programme nationwide. The manuals were also delivered to the Public Health Inspectorate to be used in the conduction of workshops to Public Health Officers by the office of the Public Health Inspectorate, Ministry of Health.

C. Oura

UWI lead on a multiple partner (EU and PAHO funded) *Climate Change and Health Leadership* fellowship series (June 2020- May 2025) €817 000.

Dr V. Sundaram received Campus Research & Publication Fund (No. CRP.3. MAR18.16(1), 2022) worth TT\$74,215.00 for the project titled "Evaluation of 150 kHz electromagnetic radiation on polycystic ovary syndrome (PCOS) in the dehydroepiandrosterone (DHEA)-induced PCOS rat model" on February 2022 for the period of one year.

Grants

Quarterly HIV Programme Data Review and Review of the Treatment Cascade For 2021.

Budget: US\$20,450.

Funding Agency: Trinidad and Tobago Ministry of Health.

Duration of Project: April 2021 to September 2022.

Sites were visited throughout the country and conducted independent reviews of the data collected in the national HIV programme (focusing on process, quality, and reporting). The findings were used to make recommendations to improve the quality of data collected and reported. If implemented, we expect that there will be more accurate estimates of the number of persons infected, on treatment and who have their disease under control in Trinidad and Tobago. This would lead to more efficient and effective use of resources in the management of persons infected and affected by HIV/AIDS.

Research Opportunities Resulting from COVID-19

The Impact of COVID-19 Control Measures on Non-Communicable Disease Risk Factor and Metabolic Health: A Comparison of Three Caribbean Countries

CCHSRD continued data collection for collaborative project with colleagues from Mona and Cave Hill Campuses to examine the effect of COVID-19 control measures on NCD risk factors (specifically dietary intake, physical activity, smoking, sleep, and other lifestyle practices) and metabolic health in Barbados, Jamaica, and Trinidad and Tobago; and to further assess the effect of specific legislative changes by socioeconomic status, demographic factors as well as cross country comparisons.

Faculty of Medical Sciences COVID-19 Research Group

This comprised researchers from the Faculty of Medical Sciences, CCHSRD, Faculty of Social Sciences, Sir Arthur Lewis Institute for Social and Economic Studies (SALISES) and Faculty of Engineering. Over 50 projects were conducted over the period 2021 to 2022. Of these, 35 resulted in publication in peer-reviewed journals, or presentation at conferences by July 2022.

Reverse Research Day

CCHSRD, in collaboration with The Ministry of Health (MOH), Trinidad and Tobago (T&T) hosted the country's first Reverse Research Day (RRD) on July 18th, 2022, at Hyatt Regency Hotel, Port of Spain. This is a novel mechanism to bring key stakeholders together so that they can jointly identify and prioritize areas for which research evidence is urgently needed to guide policymaking. This concept is innovative as unlike traditional research conferences, the decision makers are the ones delivering the presentations and the researchers are in the audience to learn about the former's research priorities.

At the RRD, focal points from the MoH delivered brief presentations on the Ministry's Strategic Priorities and the associated research gaps. Following which, working groups comprising representatives from the MOH, Regional Health Authorities, academic institutions, professional associations, and Civil Society Organisations (CSOs) were convened to deliberate on the research needs within the SPAs, determine if there is existing relevant data and/or research evidence, develop research questions for the top priority research needs, brainstorm funding opportunities for research projects, establish collaborative teams, and develop a follow up plan to prepare research proposals.

The generation of research evidence linked to these Strategic Priority Areas is essential to inform decision-making at the MOH and work on the proposals continued after the RRD.

Strategic Review

Access

Department of Pre-Clinical Sciences

The Department saw an increase in the use of online resources and social media for teaching and other interactions with students and academic staff. A January 2021 intake was facilitated for MBBS students. Slow internal procurement processes, supply chain delays, and inadequate laboratory infrastructure however, plagued the department during the period.

Department of Clinical Medical Sciences

A Fellowship in Cardiovascular Medicine was approved to be offered, however, budget cuts limited increasing the number of ACLs to assist with UG clinical training. All new and current staff members attended CETL training yearly in their respective specialty areas. Face-to Face training to be fully reinstated with some limited restrictions still in place. Approval was also received for the hire of 2 full time lecturers in Radiology and 1 in Psychiatry. Appraisal instrument for academic staff (clinical and teaching) developed by the FMS and implemented by the DCMS continue to be used.

Department of Clinical Surgical Sciences

Approval for the Doctor of Medicine (Paediatric Surgery) was received on 15th June 2022. Several Academic members of staff have graduated the CUTL programme, and a curriculum committee has been formed within the Department with the aim of reviewing curriculum. The Department advertised for a

second time a Research Technician and three applicants were shortlisted. The aim is that with the hiring of this person an increase in the number of publications, research applications and grant applications will occur.

School of Nursing

A new programme, BSc Midwifery, was launched, which aligned with MoH manpower needs. However, non-approval of scholarship funding by the MoH delayed the start date. Nineteen fee paying students enrolled in the Post Registration Diploma in Health Visiting which is fully self-funded. UWison is reviewing its programme offerings and a Proposal of Certified Nursing Assistant is currently pending approval. Plans are underway for a Curriculum Retreat to review the BSc Nursing Pre-Registration Programme. A review was conducted for the MSc Nursing Programme. The School is also awaiting formal approval of the revised MScN curricula.

Fulbright Scholar Professor Barbara Pieper visited from Wayne State University for a four-month period from January 12, 2020, to May 12, 2020. Following this visit she developed a proposal and curriculum for the MSc Advanced Practice Nursing.

A least seven research papers and five citations from research activity reported for the period.

School of Dentistry

The Department continued implementation of a new DDS GPA-based curriculum. Quality Review Action Plan arising out of the 2021 Quality Review was accepted by Campus and implementation is underway.

School of Veterinary Medicine

A Curriculum Review retreat was conducted on June 2nd & 3rd 2022.

School of Pharmacy

The School of Pharmacy continued to offer the BSc Pharmacy Mix Mode programme to students within the region. The School offered a course in IV Admixtures to boost training for mixing of Chemotherapeutics for in service pharmacist. Training Seminars in Research and Teaching and Learning also occurred during the period.

Department of Para-Clinical Sciences

New Year 1 MBBS January intake for MDSC 1405 and 1406 occurred, as well as the introduction of new courses: MDSC 2407 – Research Project I (Semester I), and MDSC 2406 Introduction to Research Methods and Biostatistics (Semester II). Understaffing of academics, technical and administrative staff proved to be a challenge during this period. DM OSCE, a new course for DM Family Medicine was approved for May/June 2021/2022, and The PG programmes DM Anatomical Pathology, DM Haematology, and Blood Banking started in Semester I 2021/2022. The absence of involvement of the staff in the Clinical Diagnostic setting within the EWMSC affected the development of postgraduate programmes. This lack of available training to the next generation of clinical pathologists has led to frustration by staff members as they are unable to fully practice the skills in which they have been trained.

Submission of the DM in Medical Microbiology programme was slated to start for Academic Year 2021/2022 but was not able to due to lengthy approvals. Development of a new proposal for the New Course for MPhil in Pathology (Immunology). This new course, Fundamental of Clinical Immunology is being designed and proposed to strengthen the existing programmes for MPhil Immunology postgraduate students.

Caribbean Centre for Health Sciences Research and Development (CCHSRD)

The Centre improved the quantity, quality, and impact of research at the FMS by launching the Research Discussion Forum. This provided capacity development for academic staff who have joined. The Centre also worked with five Government Ministries to facilitate uptake of research into policy development: Ministry of Health, Ministry of Labour, Ministry of Planning and Development, Ministry of Social Development and Family Services, and Ministry of Sport and Community Development. This includes building their capacity in evidence informed policymaking as well as co-producing evidence briefs for policy that addressed priority issues (as defined by the Ministries).

Alignment

Department of Pre-Clinical Sciences

Staff were heavily engaged in public service, public education, and outreach activities, especially with regards to COVID-19. Staff representation on Boards of local, regional, and international organisations, and other professional activities. Technical Cooperation Agreement between UWI and World Health Organisation/Pan American Health Organisation occurred, designating UWI Department of Preclinical Sciences sequencing laboratory as a PAHO Reference Sequencing Laboratory within their COVID-19 Genomic Surveillance Regional Network. The Department was involved in academic research partnerships with 3 local, 2 regional and 14 international academic and public health institutions. Five major research projects were completed and five are underway. Six research grants worth USD330,000 were secured. The Department produced seven conference presentations/ invited seminars and seven peer-reviewed publications. However, research output was affected by COVID-19 restrictions and reduced postgraduate student

intake. Limited funding opportunities and skewed distribution of publications across academic staff (i.e. most publications are from a few people) also proved to be a challenge.

Department of Clinical Medical Sciences

Dr Prithviraj Bahadursingh initiated a proposal to establish a UWI/SWRHA Speech pathology clinic for the training of Speech Pathology students, as well as provision of services for patients of the SWRHA. The initial stakeholder meeting held on February 12th, 2021, was successful in terms of an agreement to establish the clinic. Follow up collaborative meetings are planned. The clinic started in January 2022. Dr Curt Bodkyn, was a member of a panel discussion on “Challenges in Childhood Cancer Care in Latin America and the Caribbean” hosted by the Pan American Health Organization (PAHO), in collaboration with the World Health Organization (WHO). This discussion was held on September 30th, 2021, via Zoom Conference. Dr Katija Khan presented, A role for psychologists in the Caribbean Dementia Landscape at the STRIDE Jamaica Lecture Series for the Caribbean College of Family Physicians, on April 28, 2022. She also presented, Destigmatising Mental Health at the National Energy Skills Training Centre, on March 2, 2022, and, Sex and Gender Diversity, at Naparima Girls’ High School. Dr Anil Ramlakhansingh took part in a COVID-19 Vaccination panel discussion and gave talks on Neurological complications of COVID-19. Dr Sandra Reid hosted educational YouTube videos and FaceBook links as output from the research project “Breaking the Silence: A Multi-Sectoral Approach to Preventing and Addressing Child Sexual Abuse in Trinidad and Tobago” (SD Reid - Co-Principal Investigator) a. Break the Silence Webpage and FaceBook page <http://sta.uwi.edu/igds/breakthesilence/> <https://www.facebook.com/breakthesilenceendCSA>

Professor Surujpal Teelucksingh was the project lead in Screening, Diagnosis and Treatment of Diabetes in Pregnancy from which the following was established: a national screening protocol, training manual, and a Learning Information System. Academic staff has been receiving extramural grants, funds from the Campus Research and Publication Fund and other sources such as the RDI Fund of the Government of Trinidad and Tobago. Several of the staff members have received grants for research. Scheduled weekly research meetings. Department researchers are in collaboration with other departments within the Faculty of Medical Sciences, other faculties of the University of the West Indies and other universities, in a wide range of research activities. Research activity include dementia, aging and cognition, Chronic Obstructive Pulmonary Disease, Regional Non-Communicable Diseases Surveillance on obesity, hypertension and hyperlipidaemia in children.

Department of Clinical Surgical Science

Ophthalmology and Optometry worked together for World Sight Day 2021 with the theme "Love your Eyes". The focus was on health promotion of proper eye care and regular visits. The Optometry Unit is in conversation with the Trinidad and Tobago Blind Welfare Association to formalise an agreement in which the Optometry Clinic provides care to its members, should their members desire care.

School of Nursing

The UWISoN participated in several collaborative research papers with London South Bank University, as well as PAHO/WHO to develop two curricula for GBV Scoping. Reviews were conducted to enhance research output. Dr Maureen George, Professor of Nursing, Columbia University assisted with this exercise.

School of Dentistry

The School's outreach programme Community Chest donation of \$90,000 was made to facilitate treatment of children with special needs. Bryden Pi donation of \$2000 was made to facilitate the screening and examination of children of the Amica House Orphanage.

School of Veterinary Medicine

The SVM received a satisfactory rating of the SVM Virology Lab by PANAFTOSA

School of Pharmacy

Staff and students visited health centres and delivered lectures throughout the year. The School of Pharmacy also invites and keep associate staff within the private pharmacy sector.

Department of Para-Clinical Sciences

The Department's Cepheid GeneXpert is being utilized towards community service efforts. The testing of Chronic Myeloid Leukemia (CML) is being offered free of charge to the public through the NCRHA's clinic and specialist services from Paraclinical Sciences' staff. FMS Annual Year 2 research project was conducted by Paraclinical Sciences held in Semester I, 2021 – 2022. However, COVID-19 limited the students' research processes.

Agility

Department of Pre-Clinical Sciences

The Department is involved in cross faculty research collaborations. Staff have been involved in several training workshops including several aimed at improving pedagogy and discipline specific research skills.

Department of Clinical Medical Sciences

Dr Curt Bodkyn continued international collaborations as the Co-Caribbean Physician Lead / Country Lead on The Sick Kids International Caribbean initiative (SCI). The SickKids – Caribbean Collaboration in Cancer and Blood Disorders focuses on the development of research, education and training in Paediatric Oncology and blood disorders in the Caribbean. The main objective is to build capacity for the delivery of care for children with cancer and blood disorders in the Caribbean region. This is a TT\$40M (CA\$8M) philanthropic fund across six islands: Jamaica, St Lucia, St Vincent and the Grenadines, Bahamas, Barbados and Trinidad and Tobago. Funds are administrated by the UWI. Professor Gerard Hutchinson principal Investigator for the INTREPID project, which is investigating first episode psychosis in diverse settings (India, Nigeria, Trinidad) funded now by the Medical Research Council and initially the Welcome Trust.

Department of Clinical Surgical Science

Advanced Paediatric Life Support (APLS) resumed as a hybrid course. It was divided into three parts (Virtual, Logbook and 1 Day Face to Face). The Intercollegiate Basic Surgical Skills and the Surgical Skills for Students and Health Care Professionals also resumed. The number of candidates were reduced, and the groups worked in pods; smaller groups were used for the Intercollegiate Basic Surgical Skills and the Surgical Skills for Students and Health Care Professionals.

School of Nursing

UWISO_N was declared a PAHO/ WHO Collaborating Centre in Nursing & Midwifery. UWISO_N continues to form linkages with Regional and International Universities- Regional Nursing Body (RNB)-CARICOM, Five Islands Campus, London South Bank University, Columbia University and Birmingham City University. UWISO_N continues to encourage the research output of staff, through training programmes and the alignment of staff as

supervisors to students pursuing BScN and MScN programmes, as well as other training initiatives to build capacity. MoU between UWISO_N and Birmingham City University to develop co-operation and promote mutual understanding and excellence in practice-based education, research, and knowledge exchange between the Parties.

School of Veterinary Medicine

The School developed a promotional video for recruiting students. Closing of admissions portal by senior management has eroded SVM staff morale. However, the Director motivated staff to promote the School using internal talent and resources.

School of Pharmacy

The School continues to have a constant intake of 60 students and increase where it can and utilizes staff from other Schools, such as the medical school, to deliver content so as to reduce the burden and increase efficiency.

Department of Para-Clinical Sciences

An MOU for a Collaboration Study with Genome Research Limited was made but due to the lengthy processes at The UWI this project was approved for the Academic Year 2022/2023.

Caribbean Centre for Health Sciences Research and Development (CCHSRD)

A member of the Partnership for Evidence and Equity in Responsive Social Systems (PEERSS) which brings together partners from 13 countries to learn from, and support each other in promoting the use of research evidence in policymaking. Consultancy for the Ministry of Health for project entitled: Quarterly HIV Programme Data Review and Review of the Treatment Cascade For 2021. Income generated was TT\$139,060. The Centre developed research capacity of FMS academic staff by hosting two research skills training workshops. It also provided technical support to them throughout the research process i.e., from study design to preparation of manuscripts for publication.

Distinguished Visitors

School of Medicine

Department of Pre-Clinical Sciences

The Honourable Minister of Health,

Dr Terence Deyalsingh

Member of Parliament
Government of Trinidad and Tobago

Visiting Researchers

Dr Daniel Maloney

Postdoctoral Research Associate
The University of Edinburgh

Dr Aine O'Toole

Postdoctoral Research Associate
The University of Edinburgh

School of Nursing

Professor Jennifer Dohrn

Professor of Nursing/Director PAHO/WHO
Collaborating Centre
Columbia University

Dr Maureen George

Professor of Nursing
Columbia University

Dr Jaime Panton

Associate Professor of Nursing
Columbia University

School of Veterinary Medicine

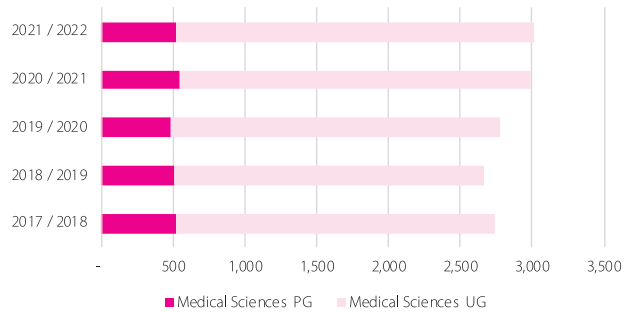
Dr Joy St John

Executive Director
CARPHA – Caribbean Public Health Agency,
Trinidad and Tobago

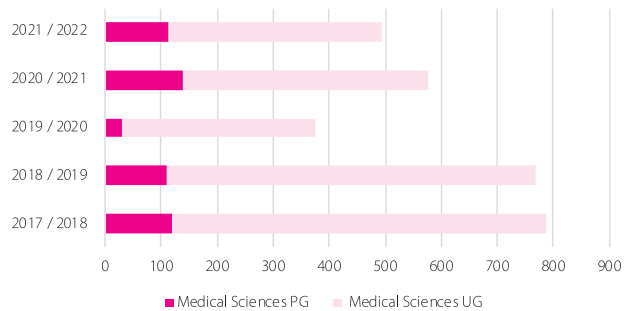
Graphs

Data courtesy the Campus Office for Planning & Institutional Research (COPIR)

Enrolment Trends – Medical Sciences

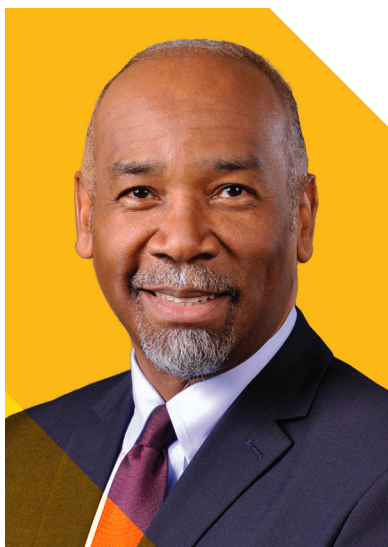


Graduation Trends – Medical Sciences



FACULTY OF

Science & Technology



Dr Brian N. Cockburn
DEAN

Dean's Summary

After more than two years working remotely, and in some instances on an in-person rotation system, the St Augustine Campus welcomed staff fully in June 2022. Staff responded to the demands of prevailing public health guidelines given that the COVID-19 pandemic continued to require adjustments to working conditions. Remote teaching for all undergraduate courses continued except for mandatory in-person laboratory classes. Lectures and tutorials were recorded to assist students who may have experienced unreliable connectivity. Staff implemented various measures to improve access to teaching and learning as well as to mitigate the impact of COVID-19. These measures included the review of programme offerings relative to CARICOM/National Qualifications Frameworks and other discipline specific guidelines (CQF/NQF/ACM), and identifying opportunities for continuing professional education (CPE) and micro-credentials; expansion of blended/mixed modes of course delivery and student engagement in current and new curricula; and strategically utilizing digital/social media platforms as tools for enhanced engagement with local, regional and international students.

The Department of Computing & IT (DCIT) continued its internship programme and 52 students took up paid internships across 15 companies. Ultimately, three companies offered employment opportunities to interns and a total of 10 interns stayed on as full-time staff. The Department of Mathematics & Statistics (DMS) conducted its virtual UWI Math Fair online in 2022 using appropriate video conferencing and virtual means of communication. The event attracted over 5,000 visitors. The Department of Physics started offering standalone courses from its MSC programmes to assist working professionals in the medical and renewable energy sectors. The Faculty also developed the PG Certificate and Diploma in Medical

Radiation Science for online delivery. Additional measures included the increase in the number of guest lectures by expert practitioners in local and regional industries, rotating critical, but undersubscribed courses on alternate years for greater cost-effectiveness, and developing partnerships with industry stakeholders towards designing online training in various fields.

Achievements & Areas of Progress

Upgrade of Chemistry Facilities

The programme for major refurbishment of the undergraduate teaching laboratories (located in Chemistry Building C1) to modern industry standards was advanced to a completed architectural design for the support services annex. Through the Campus Projects Office, discussions with the Government for funding the additional stages continues. This is anticipated to significantly enhance the undergraduate student experience.

Review of the Chemistry Curriculum

This project is near completion, including incorporation of all the major recommendations of the Quality Assurance Audit of 2020. Implementation for the 2022/2023 academic year is projected. With the necessities of a recalibrated teaching and learning experience for increasingly digital and electronic forms, the Department is excited by the opportunities to expand its reach nationally and internationally with a modernized curriculum.

The new MPhil/PhD programme in Renewable Energy Technology was approved and shall be offered from September 2021.

RedHat Academy

The DCIT teamed up with the RedHat Academy after the Campus signed an Agreement permitting the Department to use RedHat Cloud infrastructure to provide access to cutting-edge technology to its students. The key objectives involved integration of a lab-based curriculum with some of its courses, as well as to provide opportunities for staff to be trained in key fast-paced technologies.

UWI MATH Fair 2021

The Department of Mathematics and Statistics, with support from the Dean, hosted the Annual UWI MATH Fair on 12th March 2021. The theme was "Relevance of Math in a Pandemic". The event was held online and saw 2,803 students and 105 teachers registering to attend, from 43 schools in Trinidad and Tobago. Up to the day of the event, there were 3,713 unique visitors and 7,760 total visits to the website.

Internship Programme

From May to August 2021, the DCIT safely maintained its Internship Programme in the face of increasing COVID-19 infection numbers during a national lockdown. Thirty-five students took up paid Internships across 10 companies.

The Faculty's contributions towards combating the COVID-19 pandemic and the recovery locally and regionally

Mr S. Smart of the DMS volunteered/collaborated with the Government of Trinidad and Tobago's Ministry of Health (MoH) through the Caribbean Actuarial Association (CAA) in providing statistical help to their CAA/MOH COVID-19 Team. Dr Davinder Pal Sharma contributed to a paper on 'Automatic Detection

of COVID-19 Diseases using U-Net Architecture Based Fully Convolutional Network”, Biomedical Signal Processing & Control, Elsevier, Vol. 67, May 2021, 102518. (IF 3.88)

Upcoming initiatives

As a significant investment in research and development, and stimulus to the income-generating capability of the Department, the Faculty committed to support funding for the acquisition of a new Gas Chromatograph Mass Spectrometer Instrument (GCMS) to offer expert services to external and internal clients. The Department of Physics is in the final stages of receiving approval for a PG Diploma/Certificate in the area of Medical Radiation Science. The Department will also be developing a PG Certificate/Diploma in Renewable Energy Technology. Targeted outreach to growing oil and gas sector in Guyana at the postgraduate Certificate, Diploma, and Master’s level in Occupational Health and Safety will be done. The Faculty plans to support UWI entrepreneurship in local cocoa products by providing quality assurance and quality control services with cost-effective specialized analyses. Micro-credential and short courses across all programmes will also be developed and facilitated. The Department of Physics’ proposal for conversion of the MSc Biomedical Physics from in-person delivery, to blended, is awaiting BGSR approval.

The Pre-Science (N1) Programme

The Pre-Science (N1) programme has sustained its growth in the number of students registering, as it remains a viable option among secondary school students and other prospects. In 2021, because of the COVID-19 pandemic, it was necessary to amend the academic calendar to ensure that all applicants for the Pre-Science (N1) programme received the opportunity

to receive offers pending receipt of their results. This measure was considered necessary as it was evident that CSEC results would be delayed.

COVID-19 has taught us that agility is essential as the global picture is constantly evolving. We continue to anticipate and address the challenges innovatively while adhering to our extensive quality assurance systems. The health, safety and well-being of our students and staff continue to be our highest priorities in line with our mandate as major stakeholders in higher education.

Outstanding Students

Department of Chemistry

The Atlantic LNG Company of Trinidad and Tobago provided its first scholarship to the MSc OESH programme in 2017, in honour of their deceased Vice President, Mr Henley Harewood. For the academic year 2021/2022, the company awarded three of the OESH students in the sum of TTD\$15,000.00 each. The most outstanding undergraduate students in Chemistry for 2021/2022 was **Mr Regan Roopchand**. He graduated with a GPA of 4.18. He was awarded The Southern Systems Limited Prize for the best graduating students in Chemistry for 2021/2022. **Mr Roopchand** also won the Western Scientific Co. LTD. prize for the best Year III performance in Chemistry & Management, and the Massy Gas Products Trinidad Ltd. Prize for the best Year III performance in Chemistry. **Ms Kylieena Pantin** won the prize for the Most Outstanding Student Performance in the MSc Occupational and Environmental Safety and Health Programme for 2021/2022. She graduated with distinction. Ms Pantin is a previous recipient of the Henley Harewood Scholarship.

Department of Computing & Information Technology

Undergraduate

The Head of Department Prize

Allyssa Sampath

Awarded for the Best Year I Performance in Computer Science.

Ethan Lee Chong

Awarded for the Best Year I Performance in Information - Technology.

Jewel Coker

Awarded for the Best Year III Performance in Information Technology.

Other Prizes

The Tucker Energy Services Holdings Ltd. Prize: **Daniel Yatali** - Awarded for the Best Year II Performance in Computer Science. The RBC Ltd Prize: **Nikosi Lessey** - Awarded for the Best Year II Performance in Information Technology. The FUJITSU Caribbean (Trinidad) Ltd. Prize: **Justin Baldeosingh** - Awarded for the Best Year III Performance in Computer Science, the Atlantic Co. of Trinidad and Tobago Prize, awarded to the Most Outstanding Graduate: Most Outstanding Overall Graduate, and the ZS Medullan Award, Awarded to the Graduate in Computer Science with the Highest GPA.

Postgraduate

Teleios Systems Ltd. Prize: **Kyle Chadee** - Awarded for the Best MSc Research Project in Computer Science

Department of Life Sciences

Head of Department Prize

Kadisha Udit

Awarded for the Best Year I performance in Biology

Vandana Ramdeen- Awarded for the best Yr. III performance in Environmental Science & Sustainable Technology

Asa Wright Nature Centre Prize

Kavesh Ramnarace Singh

Awarded for the best Yr. I performance in Environmental Science

Nicole Duncan

Awarded for the best Yr. II performance in Environmental Science

Joint Winners

Jemima Jn Baptiste and **Alana Nelson**

THE MASSY GROUP PRIZE

Awarded for best Yr. II performance in Biology

Cheyenne Boodhram and **Shankar Nandram**

THE ST. AUGUSTINE MEDICAL LABORATORY PRIZE

Awarded for the best performance in the Microbiology Specialisation

Vianney-Marie Williams and **Marissa Auguste**

THE ASA WRIGHT NATURE CENTRE PRIZE

Awarded for the best Yr. III performance in Environmental Science

Syam Dookeran and Shivannah Singh

THE ST. AUGUSTINE MEDICAL LABORATORY PRIZE
Awarded for the best performance in Biotechnology
Specialisation

Jacob Whiby YR. III THE MASSY GROUP PRIZE- Awarded
for the best Yr. III performance in Biology] and THE
ENVIRONMENTAL MANAGEMENT AUTHORITY PRIZE- Awarded
for the Best Research Project – Zoology; THE TRINIDAD AND
TOBAGO FIELD NATURALISTS' CLUB—DR VICTOR QUESNEL
PRIZE - Awarded for the best performance in the Plant
Biology Specialisation, THE TRINIDAD AND TOBAGO FIELD
NATURALISTS' CLUB—DR ELISHA TIKASINGH PRIZE -Awarded
for the best performance in the Zoology.

Kory Puckerin THE JULIAN KENNY PRIZE IN NATURAL
HISTORY- Awarded to the final year undergraduate student
majoring in a Life Science discipline and displaying a strong
interest in Natural History, and THE INSTITUTE OF MARINE
AFFAIRS PRIZE -Awarded for the best performance in the
Marine Biology Specialisation.

Triven Johhoo - THE SPECIAL DEPARTMENT PRIZE -Awarded
for the best Yr. III performance in Biochemistry

Scandia Cruz -THE PROFESSOR E.J. DUNCAN PRIZE- Awarded
for the Best Research Project in Plant Science

Chanelle Ali - THE PROFESSOR DAVE CHADEE PRIZE
- Awarded for the best performance in the Ecology &
Environmental Biology Specialization

Nadia Cisse **THE BIOCHEMISTRY AWARD**: [Awarded for
Outstanding Personal Achievement]

Shirniah Emmanuel YR. II - THE BRYDEN PI LIMITED PRIZE:
[Awarded for the best Yr. II performance in Biochemistry]

Department of Mathematics & Statistics

Undergraduate

Ruthven Hans Kurbanali II - The Powergen Prize - Awarded
for the best Year I performance in Mathematics

Zainab Hanif -The Guardian Life of Trinidad & Tobago Prize -
Awarded for the best Year II performance in Mathematics

Joshua Davis -The TATIL Group Prize - Awarded for the best
Year III performance in Mathematics

Kerneka Waldron -The Winston A. Richards Prize in Statistics-
Awarded for the best Year II and Year III performance in
Statistics

Joshua Davis -The Harold Ramkissoon Prize - Awarded for the
best Year II and Year III performance in Mathematics

Chandini Gunpat -The Professor Sam Broverman Prize for
Mathematics of Finance - Awarded to the Year II Actuarial
Science student with the highest average mark for the
courses - MATH 2211: Mathematics for Finance I, MATH
2212: Mathematics for Finance II; and Bankers Association of
Trinidad and Tobago (BATT) Prize - Awarded for the best Year II
performance in Actuarial Science

Joel Phillips - Subba Rao Gunakala Prize - Awarded for the Best Academic Performance in the Year I Actuarial Science

Samir Elattwy -The Robin Antoine Prize - Awarded for the Best Year III Performance in the Actuarial Science programme

Department of Physics

Head of Department Prize

Jaasiel Edwards - Awarded for the best overall Year I performance in ALL Level 1 Physics CORE courses

Achong Kaylan-Marie -Awarded for the best performance in the Physics Major Research Project

Other Awards and Prizes

Mr Brandon Rajkumar– Awardee of the Erasmus Mundus Scholarship 2022.

Ms Gabrielle Mootilal– Full Bright Scholarship 2022

Ms Monica Boodhan – Awardee of Erasmus Mobility Grant funded by the European Union – 2022- Visit to Surrey University for one week as part of a one year program for Pedagogical research; Awardee of Aquatech International Scholarship to attend the IDA World Congress in Sydney- led roundtable discussion on Tackling Sustainable Development Goals and co-chaired several technician sessions; President’s award for tireless service by CaribDA at the biennial conference in Aruba – June/July 2022.

Ms Ariel Chitan – Awardee of the International mobility grant – M2 Programme in Sciences of the Universe and Space Technologies at the Paris Observatory, Paris Sciences et Lettres University.

Ms Nalini Dookie (PG Student)- Awarded an internship with the Caribbean Centre for Renewable Energy and Energy Efficiency in 2021

Kenia Joseph -THE AZAD W. HARRIPAUL PRIZE - Awarded to the student with the highest marks for the course Bioengineering; NUCLEAR ASSOCIATES IMAGING LTD PRIZE TO BE CHANGED TO THE ANTHONY ARCHIBALD PRIZE-Awarded to the most outstanding student in Introduction to Medical Physics

Sutherland Ulrika -THE EDESEL VERNON REID MEMORIAL PRIZE - Awarded for the best performance in Ceramics Science

Prithivi D. Dharamdass -THE BRUNO MITCHELL PRIZE -Awarded for the best performance in Astrophysics course

Kaira Paul -THE FREDERICK IGNATIUS CAMPAYNE PRIZE -Awarded for best performance in Quantum Mechanics, and THE AA LAQUIS PRIZE - Awarded to the student with the highest overall mark in BMET 3000 for the academic year on the condition that the mark is greater than 74 percent.

Graduation

Undergraduate

Department of Chemistry

A total of 73 students graduated with Chemistry over the academic year 2021/2022; 13 students graduated with First Class Honours.

Department of Mathematics & Statistics

A total of 84 students graduated from the faculty over the academic year 2021/2022.

Department of Physics

The Department graduated 126 students during the 2021/2022 period.

Postgraduate

Department of Chemistry

Three MPhil students graduated in 2021/2022, namely **Sharda Babwah, Kiezel Kydd** and **Ruth Seepersad** were awarded the MPhil in Chemistry. The MSc Occupational and Environmental Safety and Health programme graduated 21 students in 2021/2022.

Department of Computing & Information Technology

Dr Kris Manohar PhD was awarded in April 2022.

Teaching and Learning Adjustments due to COVID-19

Department of Chemistry

A detailed plan was prepared for hybrid delivery of our lab courses in Semesters I and II 2021/2022 under COVID-19 restrictions. Over twenty-seven (27) in-house prepared lab videos were used to supplement the virtual delivery of four of the Department's lab courses. Actual face-to-face lab sessions were conducted for five of the Department's undergraduate lab courses, inclusive of the research project course, in both Semesters I & II. PG students continued to pursue their research work in the lab, though on a limited basis, which they started in Semester II 2020/2021. The Chemistry Help Desk (CHD) continued to operate its online service, started in Semester I 2020/2021 via the MyeLearning platform and Blackboard Collaborate in Semesters I and II 2021/2022. Lectures and tutorials classes for theory or non-lab courses were delivered in virtual format via the MyeLearning platform and Blackboard Collaborate.

Department of Computing and Information Technology

2021/2022 saw the start of aggressive revisions of both the undergraduate CS/IT and postgraduate curriculums. Teams were formed and Dr Kris Manohar and Mr Nicholas Mendez wrote a computer program to automate the linking of topics from the Association of Computer Machinery (ACM) to inform lecturers of the missing topics from our current course MS Word outlines. This made it easy for lecturers to update their course outlines and allowed for the use of standardized course outline templates. The computer program had the ability to collate and merge all the new course outlines once updating was completed. Another major area where staff worked in teams was to prepare the Self-Assessment Quality Assurance Review document.

Department of Physics

The Department developed fully online PG Certificate and Diploma in Medical Radiation Science, as well as the offering of single courses at the MSc level. Conversion of the MSc Biomedical Physics from face-to-face delivery to blended to increase the number of full fee paying national, regional and international students. The BMET Coordinator (Dr Andrea Joseph) and staff liaised with health sector companies to develop online lab exercises for one of the BMET laboratory courses. Development and offer of the MPhil and PhD in Renewable Energy Technology also occurred.

The Department of Physics, through its Prizes Committee, re-established its networking and donor recognition event meant to facilitate networking between prize donors and their awardees, as well as provide a platform for the faculty and the department to convey in person, their gratitude for the continued sponsorship from these donors. The Departmental

ILC continues to connect with industry partners to promote visibility and relevance of the department. The Department started a Seminar Series with University of Miami and the UWI Mona Campus. First talk on this series was delivered by Professor Galeazzi Massimiliano on "Probing the X-ray sky with sounding Rockets, the University of Miami DXL Mission" on 17th March 2022.

Research

Department of Chemistry

PhD Candidate **Ms Winnette Collimore** completed her studies of pesticide residues in local fruits and vegetables, developed a new sensor for rapid on-site monitoring of excess levels of common pesticides and applied her findings to dietary risk assessments of pesticide exposure across several age groups. Her submitted thesis, *"The monitoring and quantification of organochlorine and organophosphate pesticide residues in foods consumed in Trinidad and Tobago"* is due for examination in Semester 1 of 2022/2023.

Department of Computing & Information Technology

CIBC Grant – ETHEREUM BASED BLOCK CHAIN

Key Officers: **Dr Wayne Goodridge** (UWI, STA),
Dr Koffka Khan (UWI, STA)

Our Distributed Vehicle Management architecture simplifies the financial and asset management of vehicle loans. At the core of our work is the Asset Token (ATK) which is a compliant ERC-20 token and is pegged to the Trinidad and Tobago Dollar. With this token in our private blockchain network, banks can interact with the digital market. Our work includes a Vehicle Token (VTK) which is a Non-Fungible Token (NFT) representation of a Real-World Asset (RWA). As a proof of concept (POC) we have implemented the following distributed applications (DApps):

Initial Coin offering, Asset Token DAPP, Dealership DAPP, Insurance DAPP, Licensing DAPP, and Customer DAPP.

JUMPSTART Project

Universal Service Fund Grant: (Oct 2021 - Sep 2022)

P.I.: Dr Andre Coy (UWI, Mona),

Co-PI: Dr Yewande Lewis-Fokum (UWI, Mona).

Key Officers: **Dr Phaedra S. Mohammed** (UWI, STA),
Dr Paulson Skerrit (UWI, STA)

This project aims to investigate the effectiveness of using a Speech and Language Technology (SLT) enabled Intelligent Tutor to assist primary school children with gaining mastery of literacy skills in Jamaica. The tutor is multi-modal, and carefully designed for Caribbean contexts using techniques from computational linguistics, speech recognition, socio-cultural modelling, and educational technology techniques. It aims to facilitate two-way, dynamic communication between a learner and the system. The work intends to supplement the current efforts to teach reading and literacy skills to students under age 10 who are struggling, who will benefit from increased practice, or who may not be reached by the efforts of the classroom teacher.

BRIGHTSTART Project

Futures Forum on Learning Grant:

P.I.: Dr Andre Coy (UWI, Mona), Co-PI: **Dr Phaedra S. Mohammed** (UWI, STA)

Project Team: Dr Yewande Lewis-Fokum (UWI, Mona), Dr Paulson Skerrit (UWI, STA); Mr Asad Mohammed (UWI, STA); Ms Aneeqah Hosein (UWI, Mona).

This project aims to produce a fully functional automated reading tutor that will enable vulnerable young children to access personalized reading instruction in Trinidad. The solution aims to increase the number of young children that are reading before the age of 10. The tutor will supplement current reading instruction and provide targeted attention and feedback to underserved children who are not reached, because of large class sizes and difficult socioeconomic circumstances. The solution's novelty arises from the application of speech technologies to Caribbean-accented language recognition and synthesis, and its adaptive selection of culturally relevant learning materials.

CRP Grant - Development of image analysis tools and systems for assessment of plant infection and stress associated damages

Dr Vijayanandh Rajamanickam - Project Principal
Fund approved: April 14, 2022

Project duration: 2 years

Research collaborators: Professor Jayaraj Jayaraman (UWI, STA) and Professor Adesh Ramsubhag (UWI, STA)

The primary goal of this research is to develop a user-friendly image analysis tool to automate all measurements for different types of plants and optimize methods for assessment of stress which will be useful to farmers and researchers. The outcomes of this research are creation of a digital database that consists of the library of images for plant specimens and interpretation of biotic and abiotic stress in various factors, development of a machine-based assessment system for evaluating the resistance level of plant types to various stress factors in the Caribbean region and automated measurement methodologies for different types of plant stresses and associated damages.

Department of Life Sciences

(In progress)

Professor J. Jayaraman and Professor A. Ramsubhag (June 2019-to present)

Identification and characterization of elicitor molecules from local seaweeds for plant protection. Currently under testing phase.

Professor J. Jayaraman and Professor A. Ramsubhag (June 2020-to present)

Valourization of seaweeds for value added products

Professor A. Ramsubhag and Professor J. Jayaraman (June 2019-to present)

Identification of novel antibiotic compounds from microbes

Professor A. Ramsubhag and Professor J. Jayaraman (June 2021-to present)

Crop microbiome profiling

Dr Luke Rostant (MSc Co-ordinator), Professor John Agard (MSc Chair), and Mrs Lee Ann Beddoe (Prog. Manager) (June 2019 - ongoing)

In conjunction with the Environmental Management Authority: continues work on "Public Sector Investment Programme (PSIP)- To develop a Management plan for the Ocelot (*Leopardus pardalis*)" and continues work on the National Restoration, Carbon Sequestration, Wildlife, and Livelihoods project.

Dr Sephra Rampersad (2016 – ongoing)

Epidemiological profiling of major fungal phytopathogens

Dr Sephra Rampersad (2018 to present)

Novel microorganisms with industrial value

Dr Ayub Khan (2018 to present)

Continued joint projects with the Department of Chemistry for identification, isolation, and testing of natural products with pest management potential.

(Dr Ayub Khan, Dr F. Mohammed and Dr Y. Powder-George)

Identification of antidiabetic and insecticidal active agents from Mauby Bark extracts.

Dr Amy Deacon in collaboration with Professor Anne Magurran at the University of St Andrews (2019 - to present)

Patterns of aquatic biodiversity in the Northern Range.

Led by **Dr Amy Deacon** (2021-2023)

Improving the accessibility of biodiversity data in Trinidad and Tobago - Department of Life Sciences/UWIZM in collaboration with National Herbarium and National Museum & Art Gallery of T&T.

Dr Adrian Lennon (2014 to present)

Mitigation of Cadmium uptake in *Theobroma cacao*

(Dr Adrian Lennon, Dr Winston Elibox and Dr A Farrell) 2017 to present

Responses to high light intensity by *Theobroma cacao*

Dr Adrian Lennon and Dr A Farrell (2022)

Drought responses in *Theobroma cacao*

Dr Winston Elibox and Dr Lambert Motilal (2016 to present)

Genetic Diversity and Ancestry of On-Farm *Cocoa* (*Theobroma cacao* L.) In Trinidad

Dr Winston Elibox and Professor Pathmanathan Umaharan (2019 to present)

Optimizing the growing medium for anthurium (*Anthurium andraeanum* Hort.) cultivation using locally sourced materials

Dr Winston Elibox and Professor Pathmanathan Umaharan (2018 to present)

Genetic Characterization of Caribbean Hop Pepper, *Capsicum chinense* Jacq.

Mike Oatham, and the National Herbarium of Trinidad and Tobago, Francisco Morales, Keisha Manaure, Nechiea Falby-Peters (2019 to present)

Construction of Electronic Key to the Vascular Plants of Trinidad and Tobago.

Dr J. Francisco Morales and Dr Mary Endress (Zurich University) (2021 to present)

Elucidating relationships in Apocynaceae: four phylogenetic studies involving several subtribes

Dr J. Francisco Morales (2021 to present)

Monograph of the genus *Mandevilla* (Apocynaceae)

Dr J. Francisco Morales and Dr Alfredo Cascante (University of Costa Rica) (2022 to present)

A phylogenetic study of *Werauhia* (Bromeliaceae)

Dr J. Francisco Morales (2021 to present)

A revision of the genus *Dendropanax* (Araliaceae) in Mexico, Central America and the West Indies.

Dr J. Francisco Morales (2020 to present)

Flora Mesoamericana: treatments for different families (project coordinated by the Missouri Botanical Garden).

Department of Mathematics & Statistics

One hundred and fifty-seven citations were recorded for the DMS during the 2021/2022 period.

Department of Physics

Staff at the Department pursued a number of research topics, such as, Futuristic Role of Nanoparticles for Treatment of COVID-19, Relativistic effects on triple black holes: Burrau's problem revisited, Microbial Degradation Rates of Natural Bitumen, Transitioning from 100 percent natural gas power to include renewable energy in a hydrocarbon economy, and Enhanced two-photon absorption of frequency-entangled NOON states in type-I SPDC.

Patents, industry Collaborations, Inventions, & Innovations

Dr Ricardo Clarke (RC) and Dr Xsitaaz Chadee (XC)

The Physics Department was engaged in a partnership with the UNIPET on a solar project to power computers at a computer laboratory in the Department of Computing and Information Technology, Faculty of Science and Technology. An educational workshop surrounding the installation of the solar system on the rooftop of the Natural Sciences building was developed by the Physics Department together with the UNIPET for the participation of postgraduate students including the Master of Renewable Energy Technology students. The students would receive practical experience in the design and installation of a solar system. The solar system would also provide opportunities for research projects.

The Physics Department continues to partner with Trinity Exploration and Production on ongoing projects which include solar and wind assessments for the south-eastern area of Trinidad under a 2021 MOU. The Physics Department and the

Department of Geomatics Engineering and Land Management, with Trinity Exploration and Production have partnered with the National Trust of Trinidad and Tobago to assess installation of technologies to harness renewable energy source(s) on Caledonia and Craig Islands. An MOU to this effect has been drafted and this collaboration resulted in the procurement and installation of a solar resource assessment station (US\$48,000). In addition, we collaborated with M&C and Trinity in the production of a short video of this station and its importance for new research in solar energy.

Dr Andrea Joseph (AJ)

The Physics Department has partnered with the IAEA (International Atomic Energy Agency), local educational and health institutions and other Caribbean countries on the Caribbean Project: Building Capacity in the Use of Stable Isotope Techniques to Address Childhood Obesity in English-Speaking Member States. The Industry Liaison Committee of the Department of Physics spearheaded a meeting between the Head of Department and three companies (Skygrid Global Security and Investigations, Frank Mouttet Limited, and Cole & Associates Engineered Safety Systems Limited) as a first step in working towards establishing internships for our Electronics students.

Dr Xsitaaz Chadee (XC) and Ms Nkese Mc Shine(NM)

The department (via Nkese Mc Shine) participated in the Metrology for Meteorology (M4M) in the Caribbean Project which was conducted by the CARICOM Regional Organisation for Standards & Quality (CROSQ) and the Physikalisch Technische Bundesanstalt (PTB) (the German Metrology Institute) and we collaborated with CROSQ-PTB in the production of its report: CROSQ and PTB (CARICOM Regional Organisation for Standards and Quality and Physikalisch-Technische Bundesanstalt National Metrology Institute).

Professor Shirin Haque (SH)

Grant: IAU NOC 4000 Euros for Astronomy outreach to underserved communities 2022

Grant: CRP TT\$15,000 – Upgrade, maintenance, and data acquisition at SATU 2021

Dr Nikolay Zyuzikov (NZ)

The Campus Research and Publication Fund “Occupational exposure to ionizing radiation in Trinidad and Tobago: A cytogenetic evaluation of radiation dose among industrial radiographers, using the Micronuclei Assay”, (TT\$36,100).

Strategic Review

Access

Department of Chemistry

During the period 2021/2022, the Department reviewed programme offerings relative to CARICOM/National Qualifications Frameworks (CQF/NQF) and identified opportunities for continuing professional education (CPE) and micro-credentials. Blended/mixed modes of course delivery and student engagement in current and new curriculum were also expanded, while guest lectures by expert practitioners in local and regional industries were increased. Undersubscribed courses continued to be offered in alternate years and the Research Outreach Consulting and Analytical Services (ROCAS) expanded their services to include partnership arrangements with external stakeholders to facilitate testing and evaluation of applicable prototype technologies and innovations.

A partnership was developed with the Energy Chamber to design online training in Analysis in Health Safety and Environment. The Department solicited alternate student awards where external businesses decline/discontinue support due to pandemic hardships. During this period the use of digital/social media platforms as tools for enhanced engagement with local, regional, and international students was promoted by the Department. Open-source digital resources for visualization of molecules and introductory chemical calculations of reaction mechanisms were also promoted as part of the promotion of digital tools.

Infrastructural repairs to the Department Computer Laboratory for undergraduate research are 75% completed delayed in large part by pandemic closures of the Campus. The Department improved the *Chemistry Help Desk* Services through increased availability of full-time academic staff, greater participation of teaching assistants, and fixed venues. The laboratory demonstrator training program was revised to deliver closer attention to students due to the likelihood that the pandemic had deprived them of first-hand practical experience in part, or fully during their secondary school training. Support to the operations of the *Chemists in Action (CHEMIA)* student group continued to stimulate enthusiasm and interest in Chemistry through the provision of office space, administrative support and promotion of planned student activities.

Scheduling of major NMR instruments service by equipment supplier in 2022, to optimize performance in support of natural products and synthetic research projects, as well as service analyses to UWI and external clients. A marked increase in academic staff applications to, and awards from, the Campus Research and Publication Fund was noticed during the time under review. The Department therefore introduced

preliminary screening with freeware data analytics tools to generate research projects aiming to synthesize therapeutic molecules. Candidate systems with low drug-likeness scores are thus eliminated with commensurate benefits in throughput and cost savings in chemical inputs. As well as conference and workshop participation, academic advisory committee meetings for graduate students now consistently urge students to collate, manage, and partition their work into publishable units prior to completing their programme of study.

Temporary appointment of an instrument technician provided dramatic return-to-service of teaching laboratory equipment, research equipment servicing, and the refurbishment of the liquid nitrogen plant. The electrical grounding project for high-frequency analytical instrumentation (NMR suite) in the C4 Building was completed, as well as the service and certification of vacuum, high pressure and fire detection systems in Teaching lab building C1 and TLC. Several technician training events in analytical instrumentation were conducted through demonstration and guided hands-on activities, as well as training of administrative and technical service staff in emergency response and safety procedures.

Department of Computing & Information Technology

The DCIT completed its review of the UG programmes for Computer Science and Information Technology. The most recent ACM guidelines were used. The Department also started updating the MSc in Computer Science and Data Science and aim to complete in Semester II 2022-2023. The Department attracted several following grants, CIBC Grant – Ethereum Based Blockchain; Jumpstart Project – Speech and Language Technology Enabled - Intelligent Tutor; Universal Service Fund Grant: (Oct 2021 - Sep 2022); Brightstart Project – Automated Reading Personalised Tutor; Futures Forum on Learning Grant,

and CRP Grant - Development of image analysis tools and systems for assessment of plant infection and stress associated damages.

The DCIT continued the use of some RedHat Lab materials in the teaching of CS and IT courses, thereby giving students the opportunity to get first-hand experience in Cloud Technologies, Java, and Linux based systems. Teaching and IT Staff also completed the training that RedHat provided. As a result of Human Resource constraints, not all members of the IT staff were able to take advantage of the training session.

In May-August 2022, the DCIT continued its Internship Programme, with 52 students taking up paid internships across 15 companies. At the end of the programme, three companies offered employment opportunities to interns and a total of 10 interns stayed on as full-time staff. Students' writing, public speaking, and communication skills. Staff of DCIT coordinated the International Collegiate Programming Competition 2021 with the primary target audience: Tertiary Student of UWI (St. Augustine), COSTAATT, and UWI Roytec and 16 student participants. The National contest was held successfully and two UWI teams qualified and represented Trinidad and Tobago at the 2021 Caribbean Finals of the ICPC. None of the qualified teams participated in the regional contest because of health concerns.

Department of Life Sciences

The MSc Biodiversity (Sust. Dev.) has been suspended for 2022/2023 and is undergoing revision as the programme was unsustainable in its present format. There have been several guest lectures by expert researchers and practitioners (local, regional and foreign). The QA review was completed and the DLS is in the process of initiating some of the suggestions.

At the same time, a few of the suggestions were already in place within the DLS. The DLS is working on a strategy to encourage academic staff to engage in the development of new initiatives. Curriculum renewal initiatives and initiatives to improve the quality of teaching/learning/throughput has been a very slow process for instance the revision of the Biology with Specialisations.

The DLS continued to promote digital/social media platforms as tools for enhanced engagement with local, regional and international students and is working with the Faculty's Industry Liaison Committee to complete a draft Internship document. The laboratory demonstrator training programme was revised in order to deliver closer attention to students. The DLS's and the FST's recent revision exercise of the Appointments and Promotion Instrument allowed for clarity, discussions and suggestions, many of which were incorporated.

There continues to be an increase in academic staff and PG student applications to, and awards from, the Campus Research and Publication Fund (Staff and Students). There continues to be an increase in academic staff and PG student research publications. PG students continue to be advised to participate in conferences and workshops and to attempt to publish their PG work as they progress.

Department of Mathematics & Statistics

The Department continued to review its courses to ensure that courses programmes are aligned with regional/national needs and adhere to quality assurance guidelines. Due to the online delivery of courses during Covid 19, there is a demand for online courses and academic staff are increasingly enthusiastic about offering courses through blended formats. The challenge identified during the Covid 19 era was one of authentic assessment in the online mode. With classes back to in-person

teaching, this challenge can be addressed more fully. The Department conducted the UWI Math Fair in 2018, 2019, 2021 and 2022. While 2018 and 2019 fairs were in-person, 2021 and 2022 were online only. The Department plans to engage with secondary school teachers and students through this event with a blended event in 2023. Though the response has been great with more than 1500 secondary school children participating from 43 schools in Trinidad, the Department would like to increase the participation among other schools in the Caribbean. This needs more advertisements to garner greater interest and more incentives for both teachers and students to participate. The Department conducts in-person and/or virtual student/staff liaison meetings. The respective lecturers address students' concerns, and the minutes of these meetings are forwarded to the Faculty board.

Lecturers continued to make themselves available to students via emails and myeLearning. In conjunction with the Dean, Faculty of Science and Technology, the Department of Mathematics and Statistics continued operation of the Mathematics Help Centre during the Covid 19 crisis. A designated email address was created and assigned to the MHC on April 20th, 2021: sta-mathhelpcentre@sta.uwi.edu

Most of the challenges on the part of lecturers were technological due to the nature of teaching mathematics online during the Covid 19 crisis. The lecturers are more settled in now with online teaching and we can extend the services to Mona and Cave Hill campuses by engaging their faculty members. Each year, the number of students visiting the MATH Help Centre gradually increased. The Department also extended the services to FSS and FoE students. Several in-person virtual seminars were held to encourage staff and graduate students to publish their research work in peer-reviewed journals.

Department of Physics

New Undergraduate and Postgraduate programmes were introduced in the review period. The Department started offering MPhil and PhD programmes in Renewable Energy Technology from September 2021 and developed a fully online PG Certificate and Diploma in Medical Radiation Science. The Department also started offering single courses out of its MSc programmes to assist working professionals in the medical and renewable energy sectors. The approval process for the development of new programmes is very cumbersome and time consuming. It took around two years for each proposal and professional support to conduct surveys is needed.

The Quality Assurance Review was conducted during November 15-19, 2021. The Review Team concluded and stated, "the Physics Department is in good health, with a solid, broad curriculum and it is adapting well to student and stakeholder needs with new programmes that are tied to the demands of the country. It offers a good combination of undergraduate and graduate offerings for students at all levels. Overall, there seems to be broad satisfaction among students and teaching staff about the programme and good engagement in research. The Department is actively engaging the community and looking into expanding its offering to adapt to the changing economy".

To support teaching and learning, the Department was able to fill three vacant academic positions in the areas of Electronics, Renewable Energy and Medical Physics. To cater to the requirements of Electronics and Computer based (simulation) experiments/projects of UGs as well as PG courses and seminar facilities, a proposal for a new Computer / Electronics lab/ seminar room (Room 414) was prepared in collaboration with DFM, CITS and Campus Security. The proposal was updated based on CPC feedback, the tender evaluation has been

done and is now waiting for F&GPC approval. This facility can be used to generate revenue through rental, the running of summer/certificate programs and workshops. New equipment for BIPH 6110 (Medical Physics Laboratory II) for MSc students was purchased at the cost of \$277K.

Work continues on the installation of a Meteorological Tower for Renewable Energy / Environmental research, and the Department procured a SODAR system through a loan agreement, from the University of Applied Science, Flensburg, Germany to facilitate research and MSc Projects in the area of Renewable Energy (Wind).

The BMET coordinator and staff liaised with the health sector companies in order to develop online lab exercises for one of the BMET laboratory courses. The Department commenced work on the development of a new lab (Room 414) in December 2019 and is awaiting approval to start work. Requests of academic staff members to purchase necessary equipment to further facilitate their research were supported. Applications of research students to attend conferences, workshops or training were also supported.

The Department was able to publish 15 research papers in refereed journals, made seven conference presentations, and publish one book chapter and one article in a magazine, with an overall accomplishment of 855 citations. Academic members were able to secure three research grants from the International Astronomy Union (4000 Euros) and CRPF (TT\$15,000 + TTD\$36,100).

The Department participated in the Metrology for Meteorology (M4M) in the Caribbean Project which was conducted by the CARICOM Regional Organisation for Standards & Quality

(CROSQ) and the Physikalisch Technische Bundesanstalt (PTB) (the German Metrology Institute) and it collaborated with CROSQ-PTB in the production of its report. There is a partnership between staff of the Physics Department and the IAEA (International Atomic Energy Agency), local educational and health institutions and, other Caribbean countries on the Caribbean Project: Building Capacity in the Use of Stable Isotope Techniques to Address Childhood Obesity in English-Speaking Member States.

Alignment

Department of Chemistry

During the review period, the Department hosted secondary school visits to teaching and research lab facilities on request by designated science teachers, programme coordinators or school administrators. Support to the Faculty outreach activities with secondary school talks by academic staff continued.

During 2021/2022, the Department acted as the organizing desk of International Union of Pure and Applied Sciences (IUPAC) programme: Connecting Caribbean Women in Science, held February 2021, provided representation on the *Trinidad and Tobago Laboratory Accreditation Committee* as of July 2021, and representation at the *Cartagena Convention Open-Ended Working-Group (OEWG) on Monitoring and Assessment, United Nations Environment Programme* in developing "Protocol Concerning Pollution from Land-Based Sources". The Department made a feature presentation on "CARICOM Regional Standards" on *World Standards Day* on October 2021. The *International Chemistry Olympiad* finals were held for local competitors, and the *Chemtastic Weekend Festival* for secondary level students was held in July 2022 with sponsorship from the American Chemical Society. A full day of activities with female secondary level students was held in celebration of International Day for Women and Girls in Science.

A Memorandum of Understanding with the Trinidad and Tobago Manufacturing Association in June 2021 was signed and is expected to facilitate knowledge sharing and internships for students of the Chemistry Analytical and Industrial programmes. Consultations with the Ministry of Planning and Development regarding pesticide management policy also occurred during the period.

The Department held founding membership of the *Trinidad and Tobago Chemical Society*, in 2021 and sponsored the *Dr Yomica Powder-George Award for Academic Excellence in Chemistry*, Bishop's High School, Tobago. An Associate Professional was requested for assignment to the implementation of the Quality Management System for the Department's analytical services and to engage the TTBS with the phased certification of the Department's testing equipment, facilities and analysis methods.

The Department resumed discussions with the Trinidad and Tobago Bureau of Standards (TTBS) for the development of a certification standard for locally produced honey, toward expansion of honey product exports.

Collaborations with the Ministry of Health (Port of Spain General Hospital), and the Ministry of Agriculture Land and Fisheries continued.

The Department was the organizing desk for Frontiers of Research in Caribbean Science and Technology (FORECAST) Conference 2022 - "Science and Technology: A D.R.I.V.E.R. of Transformation", and the *Commonwealth Chemistry Virtual Conference, 2021*. The Department was invited to be part of the representation of the Faculty of Science and Technology promotions desk (FST Media) to significant events within the Department involving external stakeholders. The Department also had representation at the *Commonwealth Chemistry, Federation of Chemical Sciences, 2021*.

Department of Computing & Information Technology

During the 2021/2022 period, the DCIT participated in several outreach activities. In 2021 these include the Cybersecurity Concepts Boot Camp (CCB), the International Collegiate Programming Competition, and the Huawei Seeds for the Future programme. Other programmes that the DCIT took part in or hosted include the World Science Day Commemorative Panel on Virtual Learning, AI Tech Talk, Goldman Sachs Africa and Caribbean 2022 recruiting initiative, Women in STEM Part II: Leaders of Change, and the Caribbean Communication for Development Session (Intersection of AI, and Women in Engineering). The Department also participated in the FST Postgraduate Graduation Preparation event and UWI Open Day. In 2022, the DCIT participated in the Fujitsu in ICT Virtual Celebration, Web Development Boot Camp (WDB), and the DCIT internship programme.

Department of Life Sciences

The Department of Life Sciences engaged in several outreach activities including community, national and regional engagement. The DLS continued to host secondary school visits to teaching and research lab facilities and support the Faculty outreach activities with secondary school talks by academic staff. The DLS continued to run the Annual Bioblitz which is now in its 12th year (<https://sta.uwi.edu/fst/lifesciences/bioblitz-events-trinidad-tobago>).

The DLS is engaged in preparation (revision in some cases) of a number of Manuals/Protocols in Academic and Administrative Processes eg. onboarding of Lecturers and visitors to DLS, Health and Safety Manuals (In the Labs, In the Field), templates for requests for: Leave, Travel, Sabbaticals etc. The COVID pandemic stymied many of our team-building events such as cricket, cooking competition, Christmas party, and these

activities will be re-commenced as we are now back to face-to-face operations. The DLS is working with the Faculty's Industry Liaison Committee and has completed a draft internship document. We propose to roll out this Internship Programme in May 2023. In an attempt to seek funding for research activities several proposals were submitted; some of which were successful. The Department proposes to request that Consultancies are better managed within the UWI and within Departments. It is proposed that all Consultancies in addition to a UWI fee, pays a percentage (20%) into the Departmental Research Fund. The Department proposes to utilize approximately 20% of revenue generated by self-financing MScs to be deposited into the Departmental Research Fund.

The SARGOOD research project was developed by a consortium of 5 Institutions with the aim of developing technologies for valorization of Sargassum biomass, as a means of helping to address problems this seaweed is causing in the region. The participating institutes are The Université des Antilles (UA) – Guadeloupe (lead), The University of the West-Indies (UWI)- partner (Trinidad & Tobago), - The Universidade de Sao-Paulo (USP) - partner (Brasil), The Institut Polytechnique de Toulouse (INPT) – partner (Europe) and 100% ZEB, Smart Island, Guadeloupe - partner (Startup Caribbean). The project is funded by the INTERREG CARAIBES-EDF. The UWI-SARGOOD project focuses on optimizing plant biostimulant production and evaluation, understanding the mechanisms of action of active biomolecules, and optimizing Sargassum-based value-added compost production for plant and crop use. A farmer's workshop was conducted at UWI St. Augustine on Oct. 15th 2022 to highlight the research developments and disseminate information on the importance of seaweed products in plant production. More than 60 farmers benefitted from the research updates provided by the workshop, and they also received

samples of seaweed extracts developed by the UWI team for evaluation in their crops.

Department of Mathematics & Statistics

The Department hosted the UWI MATH Fair in collaboration with the Office of the Dean, FST in the years 2018, 2019, 2021 and 2022. The UWI MATH Fair was advertised on social media via the FST website and FST Facebook page, all with the guidance of the UWI Marketing & Communications Department to ensure compliance with the UWI branding. The Department aims to reach a broader audience while being mindful of advertising costs.

Department of Physics

Academic members were involved in the several professional activities including, at the exhibition on Atomic Energy of India: A Glorious Past, A Resplendent Future, Organized by High Commission of India, T&T, 17th Feb; panellist representation for session on “Preparation for and Planning of Renewable Energy Expansion and Grid Resilience” at The Caribbean Electric Utility Services Corporation (CARILEC) Conference on “Renewable Energy & Smart Grid Conference & Trade Show. (29-30 Sep. 2021). The Department was invited to lecture at Amirkabir University of Technology, Iran- Winter School, on Nanofibers, Application and Technology (NAT) 15 February, 2022, and the lecture on Nanotechnology, basics – Methods and applications, Career Point University, India, 25 Oct 2021. The Department was invited to lecture once again at the University of Rajasthan, Jaipur India - Fourth Generation Photovoltaics: Hybrid materials, International Conference on Renewable Energy (ICRE) from 25 - 27 February 2022; and on Nanotechnology at S D College Haryana Town, Punjab, Nov 10, 2021.

The Department started a seminar series with the University of Miami and the UWI Mona Campus. The first presentation was delivered by Professor Galeazzi Massimiliano on “Probing the X-ray sky with sounding Rockets the University of Miami DXL Mission”. The Department conducted outreach activities with various schools, N1 students, and final year students in an effort to increase admissions of UG, as well as PG programmes. Physics Day was celebrated on 3rd February 2022 by FST Student Council, The UWI St Augustine Campus and academic members.

The Physics Department engaged in a partnership with the local energy company UNIPET on a solar project to power computers at a computer laboratory in the Department of Computing and Information Technology, Faculty of Science and Technology. An educational workshop surrounding the installation of the solar system on the rooftop of the Natural Sciences building was developed by the Physics Department together with UNIPET for use by postgraduate students including the those pursuing the Master’s in Renewable Energy Technology. The students received practical experience in the design and installation of a solar system. The solar system also provides opportunities for research projects. The Physics Department continues to partner with Trinity Exploration and Production on ongoing projects which include solar and wind assessments for the south-eastern area of Trinidad under a 2021 MOU.

The Physics Department and the Department of Geomatics Engineering and Land Management with Trinity Exploration and Production have partnered with the National Trust of Trinidad and Tobago to assess installation of technologies to harness renewable energy source(s) on Caledonia and Craig Islands. An MOU to this effect has been drafted.

The Industry Liaison Committee of the Department of Physics spearheaded a meeting with three companies (Skygrid Global Security and Investigations, Frank Mouttet Limited, and Cole & Associates Engineered Safety Systems Limited) as a first step in working towards establishing internships for our electronics students. The Department continued to provide internships to its BSc Biomedical Technology Students.

In preparation for producing the Quality Assurance Action Plan, all departmental, academic, and administrative stakeholders were engaged. All staff members came together recently to celebrate Professor Haque's advancement to Professor and the planning committee will re-commence plans for a Physics Staff engagement and family day.

Agility

Department of Chemistry

The Department of Chemistry continued international collaborations with research partnerships and visits to the Centre for Functional Nanomaterials (CFN) – Brookhaven National Laboratory, the Centre for Integrated Nanotechnologies (CINT) – Los Alamos National Laboratory (LANL), and the School of Nanoscience and Nano Engineering, North Carolina.

A collation and review of *Phytochemical Research of Terrestrial Plants, 1968-2021*, was completed for the identification of natural products, drug precursors or extraction/isolation technologies with commercial potential. Research in Analytical Chemistry was reviewed for innovations in measurement technologies with entrepreneurial opportunity potential, and novel sensors for pesticide, fungicides, and heavy metal contaminants were identified as thematic priority areas to focus on in the next biennium.

During the review period, the Department provided expert representation at the *Mechanical and Manufacturing Engineering European Union Project "Methanol-Biofuel Diesel Substitution"*, and formalized terms of use for space offered to the Cocoa Research Unit to facilitate quality assurance testing for its commercialization projects. Scale-up of hand-sanitizer production to meet expected demand with the re-opening of the Campus for face-to-face activities was done and on-site work with the Lake Asphalt Company of Trinidad and Tobago on manufacturing plant design for licensed products was resumed.

The Department held an international marketing campaign through social media for the MSc OESH short courses launched. New OESH offerings at the Certificate and Diploma level was targeted to workers in the expanding industrial sector of Guyana, with a fact-finding and promotional visit planned for early 2023.

A feasibility study of shipping laboratory apparatus, research equipment and chemicals to a US port with subsequent freight forwarding to Trinidad explored for cost savings in response to spiralling international direct shipping prices and pandemic supply chain disruptions.

Advanced purchase arrangements were established with an international chemical supplier of liquid helium to buffer price increases between quarterly resupply orders. The MSc OESH lecture room was upgraded for simultaneous on-line and in-person lectures to benefit remote and international participants. of Personal Protective Equipment for all technical staff was also audited or procurement in anticipation of full return to in-person activities.

During the 2021/2022 period the sharing of graduate research Chemistry seminars was implemented across all campuses to enhance participation, cross-fertilize research project ideas, and diversify feedback to higher degree candidates.

To mitigate risks to students and technicians, a review and planned upgrade of video recording equipment for laboratory spaces was done ensuring the security of the facilities, instruments, and workers with the Department. Additionally, training of academic staff in digital and virtual delivery modes continued as offered through the Centre of Excellence in Teaching and Learning. The Department also promoted digital file systems for information exchange and reduction in printing costs.

Department of Computing & Information Technology

The Department of Computing and Information Technology (DCIT) hosted our Online Web Development Boot Camp (WDB) in July 2022. There were 47 participants, 10 of whom had received scholarships sponsored by Mr Rikard Hosein – a DCIT alumnus. Twelve, Year 1 student mentors provided support to cover the cost of attending the camp (TT\$625) having just completed INFO 1601. The income from the camp was TT \$29,375. The 12 mentors were each paid a stipend of TT \$500. for their services. The DCIT, in collaboration with the Information Systems Audit and Control Association (ISACA) hosted the Cybersecurity Concepts Boot Camp (CCB) which offered a week of stimulating activities held fully online on behalf of The University of the West Indies (UWI), St Augustine Campus from 06-13 August 2021.

Department of Life Sciences

The DLS is still engaged in a review and revision of the self-financing MSc programmes. The DLS is attempting to ensure that cost allocations/expenditure etc. are now correctly accounted for as they appeared not to be so before. The business strategy is focused on the revision of the DLS's 2 MSc programmes. The aim is to make these programmes sustainable and truly self-financing and more relevant to today's world. The DLS continues to attempt to seek funding for research activities. Several proposals were submitted, some of which were successful.

The DLS has begun to improve on its advertisement and highlighting the good scientific (and other) work of our staff (Academic and ATS) and our PG students. Our display boards along the corridors of our building are highly visible and are being read and noticed by all persons walking through the area.

The DLS continues to update its webpage through the Faculty Office. All relevant documents are online. Having said that, the Department could improve on this service if we had our own such person to make updates to webpages, create content, and be responsible for other related functions.

Department of Mathematics & Statistics

The Department created a tailor-made short course on Power Bi for the officials of The Tobago Tourism Agency limited. This generated revenue for the Department. Several courses were also offered in the FST Summer School; however, several courses were cancelled due to low enrolment. The Department also offered several short courses on Computational Statistics from August 2019, and from 2022 these services were extended to offer short courses twice a year in January and August. These courses have generated funds in the range of TT\$25,000

to TT\$78,000 per year. The Department also offered a short course to the Department of Fisheries in the Tobago House of Assembly (in collaboration with the FAO of the United Nations in August 2020). There is a recognised need to advertise these courses globally, however, the advertising costs are prohibitive. During 2020-2022, the Math Help Centre (MHC) continued to operate online via MyeLearning and Blackboard Collaborate. It is now offering services both in-person and through the online mode. We want to extend the services to Mona and Cavehill campuses through the active collaboration and advice of faculty in these campuses.

Department of Physics

Two staff members of the Physics Department are involved in different projects with the IAEA (International Atomic Energy Agency). In an effort to generate international partnerships the Department hosted a Materials for Energy Online workshop from 2-3 December 2021, commenced a seminar series with the University of Miami and UWI Mona Campus in March 2022. Academic staff also continued their research collaborations with their international partners.

The Department was able to generate income through its two self-financed MSc programmes with new enrolments. Advertisement of the services offered by the Department's revenue generating unit, Electronics workshop, Electron Microscopy Unit (EMU), and X-ray Diffraction Unit (XDU) continues.

Distinguished Visitors

Department of Chemistry

Professor Bryan Brooks

Distinguished Professor,
Environmental Science and Biomedical Studies
Baylor University

Dr Marissa Gowrie

Deputy Environmental Manager/National Ozone Officer,
Environmental Policy and Planning Division,
Ministry of Planning and Development, Trinidad and Tobago

Department of Life Sciences

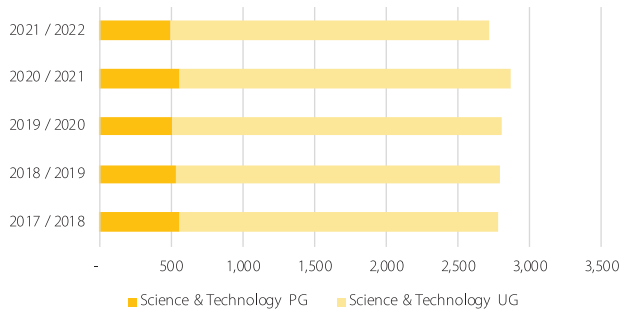
Dr Eliza Glowka

Assistant professor, Department of Animal Morphology
Faculty of Biology, Adam Mickiewicz University in Poznan

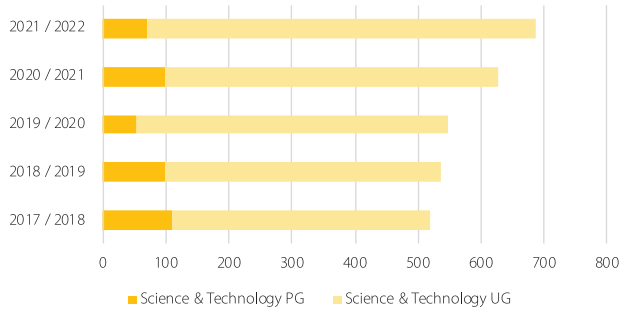
Graphs

Data courtesy the Campus Office for Planning & Institutional Research (COPIR)

Enrolment Trends – Science & Technology



Graduation Trends – Science & Technology



FACULTY OF

Social Sciences



Dr Acolla Lewis-Cameron

DEAN

Dean's Summary

The Faculty of Social Sciences (FSS) has demonstrated resilient commitment and productivity in 2021/2022 successfully graduating a total of 1,353 students at the undergraduate and postgraduate levels. Despite the global challenges and impact of the COVID-19 pandemic, members demonstrated remarkable scholarship evidenced by the high volume of research output, activity, and outreach. Over 100 conference presentations, seminars, workshops, and seminars to local, regional and international audiences on virtual and/or physical platforms were successfully conducted. Moreover, the Faculty generated more than 60 publications in this academic year.

The spectrum of conference topics was diverse; ranging from "The Role of Digital Marketing and Traditional Communications" and "Creating a Domestic Violence Safety Plan for Individuals in the Caribbean" to "The Impact of Politics, Ethnicity and Class on the Caribbean Court of Justice" and "Migration to the Middle East explained: Motivations for Trinbagonians Travels to the Islamic State". Partnerships were forged between the FSS and the Ministry of Social Development and Family Services as well as the Ministry of Youth Development and National Service.

The FSS' Business Development Unit (BDU) also flourished, as opportunities were seized to generate revenue by hosting innovative events, seminars and workshops virtually, that

attended to the knowledge and networking needs of stakeholders. The workshop on Business Communication titled *"Effective Business Communication for Big Success"*, and the seminar entitled *"Building Mental Resilience: Your COVID-19 Response"* were some of the more profitable events. The BDU models in an embryonic state, a financial framework that will greatly shift The University into business mode to thrive in socio-economic downturns. With continued focus on "providing personalized learning pathways", the BDU has the potential to generate inexhaustible streams of income through micro-credentialing that would then feed into core products and services.

Over the 2021/2022 period, the FSS' flagship Conference On The Economy (COTE) remained consistent in relevance and output, beginning with COTE Youth collaborating with Queen's Royal College for the Red Card Rape Culture Session, hosting debate competitions among secondary and tertiary education schools, and also facilitating conference sessions from November 24-26, 2021 themed *"Accelerating Caribbean Development: Retooling and Restructuring Caribbean Economics Post COVID-19"*.

Additionally, members of FSS demonstrated accessibility, agility and alignment in their outreach activities to target groups when, for example, COTE Youth collaborated with the Faculty's Distance Education and Outreach Committee to conduct the Secondary School Outreach Lectures for CAPE students. The Trade and Economic Development Unit (TEDU) also exemplified community outreach, completing National and Regional Discussions on the National Budget 2022. Noteworthy, are the numerous appointments/promotions received by diligent members over the 2020/2021 academic year: international awards for commendable service, promotions within The

University, and service on local statutory and international editorial boards. These accomplishments can only redound to the benefit of The University as its brilliant minds continue to articulate and activate best practices and innovative thought.

The Faculty of Social Sciences is realizing its vision incrementally to be 'socially engaged and solutions oriented' in all its deliverables, and our future is as bright as the orange that brands us.

Enrolment

The Department of Behavioural Sciences received 346 new students from various programmes. While there was a 22% drop in the percentage of undergraduate students, the department welcomed 195 students. At the postgraduate level, 96 students registered across social work, mediation, criminology, sociology, child and youth, and psychology. This was a marginal dip of 7%.

Achievements and Awards

De La Rue Scholarship Recipient, Central Bank of Trinidad and Tobago (2021): **Johan Richards**, Master's in Public Sector Management.

Ms Shaienne St Hilaire, minor candidate in Public Sector Management was selected to represent the Department of Political Science at the virtual 12th UNESCO Youth Forum held on 19 November 2021 in Paris, France. The theme was *"Co-creating with Youth, the Post-COVID-19 Period"*.

Maria R Vasquez, BSc International Relations (Special), Department of Political Science was accepted to Queen's University for an exciting exchange opportunity in 2022 through The UWI International Office, St Augustine Campus.

Top Students

- Best Academic Performance - Level I:
Arianne Bridgela, BSc Psychology
- Best Academic Performance - Level II:
Amanda Samaroo, BSc Management Studies
- Silver Gilt Medal Best Academic Performance – Level III, and Hugh Springer Prize:
Sarah Hosein, BSc International Relations
- Charles Kennedy Prize:
Ruqayyah Scott, BSc Economics
- Cross Campus Social Sciences First Year Prize:
Jezze Benjamin, BSc Management Studies (Special)

Research

Research Findings

The Public Service Motivation Model has significance within the Caribbean context and the corresponding study findings earned a best paper award internationally as the research contribution to the literature in comparative public administration shows a dark side to Public Service Motivation which shifts from mainstream North American scholarship in this field. Public managers in the public service demonstrate high public service motivations but are sometimes frustrated and may think of leaving but do not. The study has relevance for leadership practices in public organizations in developing nations such as the Caribbean where we have a unique context, cultural experiences, and history that shape our responses to challenges faced within public bureaucracies. Findings also highlight that person-organization fit matters as there is congruence to persons' values and their identification with their organizations and leadership practices.

Psychology Research Labs

Psychology Research Lab 1:

“The Certainty of Uncertainty”

Lab members: Professor Derek Chadee, Josiah Gosyne, Suraiyah Ramsingh, Dionne Brewster-Phillip

In 2021, the research lab, “The Certainty of Uncertainty” was established to investigate how individual’s risk perception of COVID-19, risk propensity and risk perception of the COVID-19 vaccines may affect individual financial, social and health risk-taking. This research continues to offer a unique approach to risk perception with the inclusion of the psychological concept - signal potential. Signal potential empirically examines dread and unknown risk (Slovic et al., 1984) which has absented itself from previous psychological research on this topic.

Research Lab 2:

Juvenile Delinquency and Copycat Crime in Adolescence

Lab members: Professor Derek Chadee, Lynae Roach, Dionne Brewster-Phillip

This research lab examines the influence of individual, peers, and parents viewing of violent media content such as movies, video games and music. The viewing of violent media has a negative impact on behavior which can lead adolescents to partake in delinquent behavior and copycat behavior. Constant exposure to violent media desensitizes children and adolescents to the pain of others, reduces empathy and pro-social behaviors. The research findings from this study would contribute to the literature on violent media engagement, copycat crime, and juvenile delinquency.

Research Lab 3:

Misinformation and the COVID-19 pandemic

Lab members: Professor Derek Chadee, Dionne Brewster-Phillip, Keshan Williams, Khelan Ragoobar.

This research examines how social media misinformation, emotions, and self-construal influences individual health decision-making towards COVID-19. This research synthesizes variables from research on decision-making, information processing, emotions, and self-construal to study the psychological mechanisms that underlie the decision-making process. The research and publications generated will contribute to the understanding of health decision-making and inform policy on how to effectively communicate health information.

Major Research/Project Funding Received and Potential Impact

Partnership with Inter-American Development Bank, Ministry of Public Administration Stakeholders' Engagement in Civil Service Training and Digital Transformation for the Government of Trinidad and Tobago. Survey on Training Needs Analysis (March 2022-July/August 2022)

The Department of Political Science was invited as an outreach stakeholder partnership in executing this unique and extensive Public Service Training Needs Analysis Initiative. The Head of Department served as Research Team-Lead representing The UWI in partnership with Inter-American Development Bank Research Project, along with other UWI collaborators; local tertiary stakeholder institutions such as Cipriani Labour College and overseas stakeholder institutions in Brazil and the UK. The Training Needs Analysis (TNA) Stakeholder Engagement in Civil

Service Training and Digital Transformation for the Government of Trinidad and Tobago, Ministry of Public Administration was the first of its kind to conduct a census design to generate findings. The Department of Political Science, represented by Head of Department served in their pilots (quantitative and qualitative); final surveys and experiments; qualitative analysis-e.g., focus groups and other qualitative analyses. The findings were included in IADB's final report and presentations to the TT Government, Ministry of Public Administration. The TNA Analysis of all Public Service Employees outreach initiative was conducted from March-July/August 2022 and will be used to inform future training assessments for all civil servants and determine strategies to be used for addressing the digital readiness of public servants among other areas.

Campus Research and Publication (CRP) Funding

- Dr Christine Descartes – The Impact of the Covid-19 Pandemic on the Mental Health of Children and Adolescents in Trinidad and Tobago.
- Dr Christine Descartes (on behalf of Ms Mala Ramesar – PhD Psychology) - "The Developmental Risk Factors of Male Juvenile Delinquency; an Examination of Psychosocial Outcomes".
- Dr Talia Esnard – Intimate Partner Violence (IPV) in Trinidad and Tobago: Perceptions and Experiences.
- Dr Shelene Gomes (on behalf of Mr Nathan Chapman – PhD Sociology) "Are we stuck in a time warp?" Exploring narratives of "Frame Case" within the context of "Neo-Colonial Oppression" in 21st century Trinidad and Tobago".
- Dr Camille Huggins – Department of Behavioural Sciences Post Graduate Conference – Deconstructing the "New Normal": Prospects and Challenges for Caribbean Societies

Signed Agreements/Memoranda of Understanding

A Memorandum of Understanding was signed between The University of The West Indies, St. Augustine Campus, and South Carolina State University in June 2022. There was engagement in outreach activities with the Central Bank of Trinidad and Tobago, National Export Facilitation Organization of Trinidad and Tobago (EXPORTT), Tobago House of Assembly (THA), Eco-Industrial Development Company of Tobago (E-IDCOT) Limited, and Tobago Tourism Agency Limited.

Strategic Review

Access

Department of Behavioural Sciences

The Sociology unit held an essay competition on the pandemic for CAPE students, 42 students participated. A prize giving ceremony followed with an invitation to teachers, students and parents who participated. Two students who placed in this competition have since enrolled in the programme. With the number of submissions, this posed a challenge for willing staff to mark in a timely manner. Sustained outreach with virtual sessions for incoming students, interested persons, unpaid training of persons for the Tobago House of Assembly, Trinidad and Tobago Police Academy, Trinidad and Tobago Youth Club, and the Ministry of Social Development and Family Services. There were other webinars conducted for the Ministry of Youth Development and National Service.

During the 2021/2022 period, two criminology courses have been developed; Intro to Criminology and The Psychology of Criminal Behaviour to supplement the current slate of courses in the programme. The introduction of the second course, once approved, will also allow for students to do a double major in

Criminology and Psychology. Ongoing commitments and slow progress of course reviews are a current challenge with respect to this. The Department introduced two statistics workshops for undergraduate and post graduate students (one in each semester). Dr Kendra Pitt assumed duties during the academic year; her inclusion allows for a focus on social work and social policy, with expertise in disability studies. However, the main challenge that was experienced was the inability for the staff member to join with onboarding, given the uncertainties in the early onset of the COVID-19 pandemic. The advancement of the Developmental Psychology Lab within the Psychology unit occurred, and it aimed to deepen collaboration between staff and students and to stimulate greater research and publications. There are at least two ongoing projects through this lab and one successful grant application with staff and students in psychology. Lack of resources and funding to support intended initiatives with regards to research is a major challenge. The department established a Mentoring and Research Cluster as a collaboration with postgraduate students and staff to encourage collaborative and multidisciplinary research in key areas of intimate partner violence, policing, displacement persons, and youth studies. There are at least three interdisciplinary publications, with conferences and one approved CRP from UWI coming out of this initiative. Lack of funding to do some of this work and time for persons to commit has arisen as a challenge.

Sociology students visited the Apito Park in Diego Martin, and the First Peoples Site in Port of Spain to expand and enhance their experience. The Sociology Unit hosted a Postgraduate and Undergraduate Mentoring programme (PUMP) where mentors were awarded certificates of participation.

The Department was able to sustain a high number of publications which included 22 publications with seven regional and international journals, five Books, and 10 Book chapters. Several members of our staff were appointed as reviewers and associate editors, while some participated in 20 regional and international conferences. The Department hosted a biennial graduate conference on deconstructing the new normal; a topic, which centred on the challenges of coping during the pandemic and the prospects for addressing some of the perennial problems within the broader society; 300 persons registered for the event with over 100 persons attending the opening ceremony. The conference also allowed for partnerships with the Children's Authority of Trinidad and Tobago, The Rape Crisis Centre, and the Caribbean Court of Justice. Getting sponsorship and engagement of industry partners for this virtual event, as well as finding a way for people attending to network and deepen the connections proved to be a challenge. Eight country studies on the use of excessive force among law enforcement were pursued.

Department of Economics

During the period under review, the Department formed a curriculum committee to review course outlines for both UG and PG courses, and a virtual staff retreat was held to determine the learning outcomes of Department programmes. The Department also completed several projects such as a Mapping Exercise for all Department UG courses to audit the KSAs of the courses with learning outcomes of the BSc Economics, and 25% of the Department's quality manual.

Focusing on areas that would benefit students, the department held focus group meetings with employers and alumni to determine expectations and requirements of Department Graduates and established at least one supervisory committee meeting per semester for all PG research students to improve

feedback and completion rates in the MPhil/ PhD programmes. Online student surveys were conducted to monitor course evaluations, and feedback for coursework was provided within two weeks of submission. Improvements were made in the areas of academic staff attendance to student research seminars, resource access for all Instructors, Teaching and Part-time lecturers; In particular, access to myelearning and timely contracts. Continuous improvement in the delivery of academic advising and mentorship of students, with respect to the Academic Advising Manual for the Department of Economics. A committee to develop a written set of guidelines on what constitutes a high-quality journal was initiated within the 2021/2022 period. Staff contributions to publications, conferences (Refereed and non-refereed), book chapters, and technical reports continued.

Department of Management Studies

UWI/FIFA/CIES Open Public Lecture Series: were hosted with an intention to host three seminars annually, as a stakeholder engagement and sport management programme recruitment drive. DOMS engaged in a curriculum review exercise, where all programmes underwent curriculum mapping, leading to proposals to convert undergraduate specialisations to majors.

At the postgraduate level, changes were made to programme structure to improve programme delivery and a new postgraduate course in Brand Management was introduced and the MSc Research Project Rubric updated. DOMS engaged with 10 companies for internship opportunities for undergraduate students. A Departmental review of MSc Research Project supervision was undertaken. It investigated issues such as student progress rate, and student-supervisor ratio. Research Methodology, and Multivariate Statistics courses are now offered in the same semester to leverage the related course content.

Department of Political Science

A curriculum renewal initiative under the Strategic Plan Exercise Phase 2 was rolled out. This included Course Rationalization where DPS reviewed the International Relations (IR) Special and revised courses on offer. Changes proposed include: six courses to be reviewed and merged into three new ones in keeping with Stakeholders' Analysis Findings and curricula reforms. An introduction to IR course was added at the 2nd level. A foreign language proficiency 'for credit' (previously no credit and 1 semester) courses proposed for 2 semesters (consistent with Vice Chancellor cross-campus initiative and DPS Stakeholders' Analysis Findings).

Additionally, an IR Major is being proposed in keeping with market demands and allowing for more options for students wanting to pursue one or two minors making them more competitive for workforce readiness competencies. A proposal to have students attend not-for-credit workshops which should also enhance their workforce readiness skill sets was also made. Curricula renewal initiatives under the Strategic Plan Exercise Phase 2 have been staggered so other programmes will be reviewed in the following year. This may extend the programme rationalization initiative over a longer period. New IR Major programme will have to go through ACTT and GATE approvals which may have implications for student enrolment if not GATE approved and resources when programme is approved within The UWI.

In keeping with curricula and pedagogical reforms, as well as the learnings from COVID-19, the DPS has considered different modalities (e.g. hybrid/blended in addition to face-to-face) across its programmes. Under Strategic Planning Exercise Phase 2, Digitization was a major focus. Staff have been sorting the hard copy files to remove duplications, as well as scanning for electronic access of said files. Staffing and other resources for the creation of

a digital records management system has been a major challenge. Phase 2 also included Staff Rationalization Initiatives where the DPS has operationalized a cross-training philosophy. This has resulted in all ATS staff having equal access to all training being offered from the Faculty and across the University (e.g., Canva, Taak, Procurement, MS Office, Data Analysis, MyeLearning, FSS CAPPS, Effective Communication, Mould Assessment, Customer Service, and Professional Development). The DPS continues to have staff constraints given our strategic priorities and temporary staff was hired to assist in this shortfall while working to meet needs of the department. DPS has reinforced its partnerships in learning using this enrichment to enhance curricula development & pedagogy. Students receive experiential learning and refine practical leadership and management skills and competencies via these practitioners and professionals in their fields and bridge gaps for effective praxis. E.g., distinguished visitors, guest speakers, professors, & or dignitaries to classes across UG & PG levels. Efforts via annual appraisals to encourage staff to set targets to increase /improve research publication given Faculty publications with international/comparative research.

The Department's preparation for Quality Assurance coincides with the Course Rationalization Initiative thereby allowing this process to be two-fold in allowing curricula and pedagogical reforms, reviewing alumni and stakeholders' engagement. DPS has completed the Quality Evaluation Document and it was submitted on January 3rd, 2022. The DPS is resource constrained but has temporary staff helping to bridge this shortfall as it prepares. In keeping with international best practices, The UWI has partnerships with international institutions and this has facilitated opportunities for the DPS students to apply for competitive scholarships in exchange opportunities which can improve the quality of student development and reinforcing The UWI as a first choice in facilitating these kinds of opportunities.

The DPS created a Cross Campus initiative with the OAS in introducing a law course (free and virtual platform for a five-week period), and DPS students were able to enrol from two UG programmes, IR Special, and PSM with Law for Social Sciences during summer 2022. Forty-one students enrolled with two concurrent cohorts one from May 23rd - June 27th, 2022 and the second cohort from June 28th - July 26th, 2022.

Alignment

Department of Behavioural Sciences

Several staff members served as advisors on local and regional boards. Several seminars were hosted by various units in the department which included, *Strategies for creating sustainable social enterprises*, *Gender Based Awareness*, *Fostering Youth Engagement*, and *Challenges for seasonal Caribbean migrants in Canada*. Currently the Department is facilitating nine ongoing research projects which address issues of terrorism, intimate partner violence, sexual harassment, and the impact of COVID-19 on students' anxiety, mental health, wellbeing and school engagement. Some of the projects emerged as a partnership with Medical Sciences staff and with others in the department. Many students benefited from the engagement of key stakeholders, specifically, as guest lecturers or as part of a panel discussion. This led to guest lectures by Dr Khadijah Williams, Director, The Village Academy, Jamaica; Mr Brian Caesar, Clerk of the House, National Parliament of Trinidad and Tobago, and Ms Onika Mars-Founder and CEO, Women of Substance, Tobago. The Social work programme held their annual social work month with an awareness campaign on Gender Based Violence and a virtual International Student Exchange with Sandwell Children's Trust in the UK, The University of Johannesburg, University of Aruba, University of Guyana, and Florida A & M University. Dr Seepersad produced

three technical reports within Criminology for the Office of the Prime Minister and for UNAM Mexico. Criminology staff also provided expert advice to CARICOM, IMPACS, and the Living Water Community.

Department of Economics

Consultations were conducted with departmental stakeholders (staff, employers, current students and alumni), and the Vision, Mission, and Aims of the Department were revised. Focus Group meetings with departmental stakeholders were conducted for SWOT analysis to inform strategic objectives. During the 2021/2022 period outreach done for secondary and tertiary students via, COTE Youth Armchair discussion "Crisis is opportunity. COVID -19 The Way forward," and via the Debate Knockoffs and Debate Finals conducted on the 29 October and 12 November 2020. Participating secondary and tertiary schools included Northgate College, SWAHA Hindu College, Presentation College Chaguanas, Parvati Girls Hindu College, UWI School of Business & Applied Studies (Roytec) and the University of the Southern Caribbean (USC). Secondary Schools students pursuing CAPE Economics were invited to join virtual lecture sessions for selected topics in ECON 1002 (Introduction to Macroeconomics) and ECON 2020 (Caribbean Economy). In collaboration with COTE Youth, Queens Royal College, the Department hosted to host a Youth Forum on March 04, 2021, discussing issues on the Future of Education, Food Security, Agricultural Diversification and COVID-19, COVID-19 and the rights of Children, and Entrepreneurial Opportunities in the New Normal. With COTE Youth, UWI Roytec and Queens Royal College and IDGS Ignite, the Department hosted a Youth Forum on *Revolutionizing Education in the Caribbean*, and *She's Royal: A Red Card Rape Culture Session* respectfully.

Industry specific seminars for economists were offered under the Demas-Rampersad Seminar Series. The Trade and Economic Development Unit (TEDU) conducted a number of industry specific virtual seminars entitled *National Conversations* to discuss current affairs that affect the economy. The annual Conference on the Economy (COTE) was hosted under the theme *Crisis is opportunity: COVID-19 The Way forward*. The conference is used to engage industry professionals and technocrats on current research that is happening in the field of economics and featured presentations from the Departments of Economics St Augustine, Mona, and Cave Hill campuses.

Department of Management Studies

The partnership with Republic Bank with the Management Challenge, will be continued with a revised MOU with new structure for the Management Challenge. An MOU with South Carolina State University was signed in June 2022. The Department also engaged in outreach activities with Central Bank, exporTT, THA, EDICOT and Tobago Tourism Agency.

Department of Political Science

The DPS engaged in outreach activities initiated by lecturers to allow students to have diverse interactions with external stakeholders at community, national & regional levels – for example, the Caribbean Court of Justice Outreach initiative for IR Special students. The DPS also engaged in community outreach to At Risk Secondary schools in Laventille, through the STEM and Life Skills Project in collaboration with Fulbright Alumni Association of TT, US Embassy, The UWI and UTT. This project continued from the previous academic year and this

phase included purchasing robotics tools and computers for a Math Lab, and ensuring infrastructures were completed for the students' use. However, COVID-19 protocols delayed students' access. Externally, funding is limited so the team has been reaching out to civil society, private and other organizations to supplement for other areas of need.

Due to COVID-19, many organizations are financially constrained. Activities during the review period explored, supporting, or initiating major research projects reflective of DPS programmes that included a broad spectrum of local, regional and international research agendas. E.g., comparative administration within public human resource management research, new public management multi-country studies, and international relations study. Staff productivity is not consistent across the Department, however. DPS continued to streamline gains of the online advising system which was effective during the pandemic. Ongoing academic advising was maintained during this period and facilitated by remote platforms (e.g., Zoom, MS Teams, MS Forms). The system also helped to improve the quality and range of advising efforts to our students with DPS' participation and prompt responses.

The Department's HoD, was Team Member for Ministerial Excellence Programme, as FSS Representative with Caribbean Centre for Development Administration (CARICAD). This is a re-engaged partnership, for Ministerial Excellence Training Programme and Curriculum Development for Seminar workshops (May 2022-present). An MOU was signed with CARICAD and FSS, STA The UWI since 2018 under former Dean, Professor Ann Bissessar.

The DPS was invited as an outreach stakeholder to partner in executing Stakeholder Engagement in Civil Service Training and Digital Transformation for the Government of Trinidad and Tobago, Ministry of Public Administration, and Inter-American Development Bank. The HoD served as Research Team-Lead representing The UWI in partnership with Inter-American Development Bank Research Project, along with other UWI collaborators, local tertiary stakeholder institutions such as Cipriani Labour College and overseas stakeholder institutions in Brazil and the UK. The Training Needs Analysis (TNA) Stakeholder Engagement in Civil Service Training and Digital Transformation for the Government of Trinidad and Tobago, Ministry of Public Administration was the first of its kind to conduct a census design to generate findings. The findings were included in IADB's final report and presentations to the TT Government, Ministry of Public Administration. The TNA Analysis of all Public Service Employees outreach initiative was conducted from March-July/August 2022.

Agility

Department of Behavioural Sciences

Training of court officers and service professionals within the Judiciary for the Turks and Caicos occurred as a paid five-day service offered through our mediation programme and presented an opportunity to generate revenues for the Department. Mediation students also received a 40-hour training to have them certified as mediators. Finding mediators on the ground to support the training sessions during the COVID-19 period and having to adjust the delivery based on the sole use of virtual training during this period was a challenge. The Department had a Paid National Leadership workshop with 100 young persons for the Ministry of Youth Development and National Service (MYDNS). However, lack of physical space

to host the face-to-face sessions became a challenge, as well as the short space of time between submission of proposal and finalization of project by ministry executives. The department also completed a paid training workshop for the THA on Managing and Leading Youth Development. Low levels of attendance during various modules occurred due in large part to the balancing of work and training for registered people. Staff were part of two professional development workshops on programme rationalization and faculty assessment. Limited time and willingness to engage.

Department of Economics

Students were encouraged by supervisors to attend and present at conferences which can be paid out of Department Graduate Account. The Department incorporated a blended approach to class delivery to reduce cost expenditures and refurbishment work was initiated to address health and safety violations in infrastructure. Completion of consultancies by research unit: Trade and Economic Development Unit (TEDU) occurred, and staff engaged in strategic planning exercises. Public and Professional service provided by staff to various international and national; Boards; Journals and Committees. The Department increased its social media presence and use of online communications to engage various stakeholders on departmental activities. Greater use of online systems, such as 365 Bookings, digitized academic advising forms and student query forms to facilitate academic advising of students.

Department of Management Studies

The Entrepreneurship Unit continued to operate in training programmes within The UWI, and development of The UWI Entrepreneurship & Innovation Ecosystem, via input into UWI Ventures and STACIE.

Distinguished Visitors

Mr Brian Caesar

Clerk of the House, National Parliament of Trinidad and Tobago

Inspector Gushier Grant

Crime and Problem Analysis Branch, Trinidad and Tobago Police Service, Trinidad and Tobago

ACP Collis Hazel

Trinidad and Tobago Police Service, Trinidad and Tobago

Miss Onika Mars

Founder and CEO, Women of Substance, Trinidad and Tobago

Dr Safeeya Mohamed

Chief Executive Officer and Founder
SISU Global Wellness, Trinidad and Tobago

Justice Heather Seale

Judge,
Industrial Court of Trinidad and Tobago, Trinidad and Tobago

Mr Richard Solomon

Principal Consultant and Managing Director, Development Consulting Centre Limited, Trinidad and Tobago and Chief Executive Officer, INFOSEV People Tech Solutions Limited, Nigeria.

Professor Fauziah Sh. Ahmad (Al Jabri)

Deputy Dean (Academic & Student Affairs),
Azman Hashim International Business School (AHIBS), University
Teknologi Malaysia (UTM), Malaysia

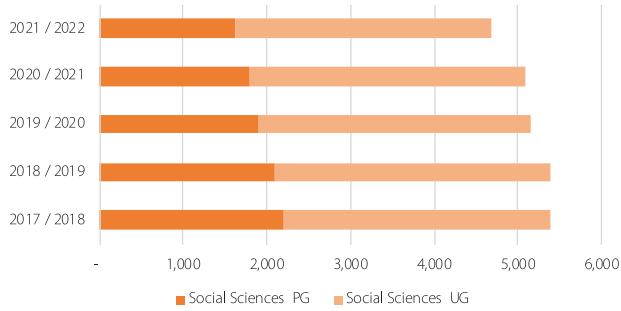
Dr Khadijah Williams

The Village Academy, Jamaica

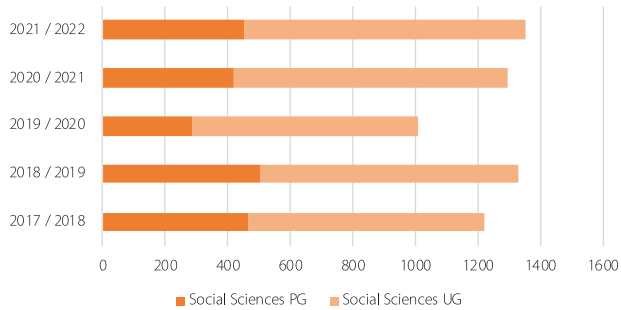
Graphs

Data courtesy the Campus Office for Planning & Institutional Research (COPIR)

Enrolment Trends – Social Sciences



Graduation Trends – Social Sciences



FACULTY OF Sport



Dr Akshai Mansingh
DEAN

Dean's Summary

This academic year was another challenging year for students and staff. Teaching remained virtual though cross campus teaching was strengthened across all Academies. Whereas academic standards were maintained, the lack of sporting activities impacted on the overall student experience. On the field we continued to see our students excel at international and national levels and our teams that did compete performed creditably. Students from the Faculty's Mona Academy competed at the Olympics in 2021 and at the World Championships in 2022. With the worst of the pandemic behind us, we look forward to more student engagement and sporting activities in the upcoming years.



Dr Anand Rampersad
HEAD OF THE ST. AUGUSTINE ACADEMY OF SPORT

Academy of Sport

At the St. Augustine Campus, activities at the Academy of Sport were limited by the restrictions imposed by the national authorities to manage the COVID-19 pandemic. The Academy was unable to host annual competitions like the Half Marathon or T20 tournaments, nor could it entertain requests for use of the facilities until the COVID-19 protocols were reduced by the government. This forced an inward operational focus on the Academy, and a new operational strategy was put forward which would see the Academy transitioning into a high-performance centre, fully integrated into the national sporting framework of Trinidad and Tobago. A comprehensive document detailing the plans for same was developed by the Head (Ag.). However, without sufficient academic staff to oversee and lead on certain initiatives and operations, development of the document was placed on hold.

After several challenges and delays the following outcomes were realised:

- the pool can not be fixed, and a new pool should be constructed.
- the HVAC system should be replaced.
- the campus annual budget should make provision for the above as well as the construction of a shed to house the maintenance equipment.
- After some doing, the plumbing leaks were addressed by DFM.

Teaching, Learning and Student Development

Faculty (Cross Campus) Developments

The Faculty focussed on income generating short courses this year. Workshops in Applied Governance and Sports Injury Management and certificate courses in Sport Broadcasting Level 2 and Sport Marketing were successfully developed and delivered. Cross campus comments were solicited for two 3-credit free electives – Sport Experience, and Sport Marketing. However, these were not received in time for submission to AQAC. We plan to advance same during 2022/2023.

The first foray into MOOCs (Massive Open Online Courses) was very successful. With the support of the Office of Online Learning we were able to develop the content for the course “West Indies Cricket: Our Story” and it was launched on June 27, 2022, on the Future Learn platform. The first report on the course statistics, confirmed that there were 66 active learners out of the 117 joiners who accessed the course during the period. Positive comments were received from the learners with some stating that the course had either met or exceeded their expectations.

St. Augustine Academy of Sport

The Faculty continued cross campus teaching between the Mona and St. Augustine campuses with the use of the Cross Campus Moodle platform. The St. Augustine students highlighted concerns about the deficiencies of online lab tutorials, as well as access to classroom space for studies and logging on to online sessions. This was resolved by granting access to the classroom area at SPEC two days per week. Additionally, arrangements were made for students and their tutor to utilise the gym area so that labs could be face-to-face.

Programme Development

The development of a BSc in Field and Pitch Preparation and Management was discussed with the Ministry of Sport. The objective would be to train facility managers as well as managers assigned to the regional and municipal corporations, so that sport facilities could be properly maintained. While these talks had to be curtailed, the past head of the Cave Hill Academy indicated that a similar degree was being pursued with Melbourne Polytechnic of Australia. As such, it was agreed that the two Academies would work together to bring this to fruition.

Sporting Activities & Outreach

Cricket

The ICC/CWI Cricket World Cup matches scheduled to be hosted in Trinidad and Tobago used the St. Augustine Academy as one of the training venues for the event. The training sessions progressed well, without any major hindrances or eventualities. The Academy received three covers, a set of nets and two water extractors, from the SportTT, in exchange for a reduction in the invoice amount for the facility rental.

The East Zone Cricket League commenced over the weekend of March 19 and 20, 2022 with two games being played at the Sir Frank Worrell Cricket Field. Despite challenges involved in gaining clearance for external persons to enter the campus while it was still closed because of COVID, and the quick turnaround required for preparation of the pitch, the matches were held successfully, with only minor issues.

Table Tennis

The FIFA CIES Programme's table tennis tournament was hosted on November 20, 2022 at the Sport and Physical Education Centre (SPEC) indoor facility. Facility staff prepared in accordance with COVID-19 protocols, with the organisers to finalise the details, format, and other aspects to facilitate the hosting of the event.

FIFA/CIES Programme Graduation Ceremony

The FIFA/CIES programme hosted their graduation ceremony on at the SPEC. The small ceremony was attended by approximately 40 persons, with several key personnel of the Campus being present to present awards and deliver speeches. The ceremony took place on the south lawn of the building, facing the Sir Frank Worrell Cricket Field.

Facilities

Upgrading of the SAAS Fitness Centre

Approval was granted for a request submitted to the Student Amenities Fund Committee in 2019, for the purchase of minor equipment for the fitness centre. Given the elapsed time, it was noted that the prices of the requested equipment would have increased, thus RFQ's were sent out to the same suppliers for updated invoices. The equipment

was sourced internally, through the collaborative input from the various department of the St. Augustine Campus.

Research

**The following information represents the research activities undertaken by the UWI Faculty of Sport as a whole and not the St. Augustine Academy of Sport, unless otherwise stated.*

The Faculty hosted the inaugural Sports Law Conference in collaboration with the Faculties of Law at Cave Hill, Mona, and St. Augustine in September 2021. Although no income was generated, the conference was well received by all the participants. Material from the conference was used in the delivery of the Sport Law courses at the undergraduate and graduate levels. Faculty members from all campuses contributed to the 15 articles published in the Sport Matters column of the Trinidad Guardian. This included articles from graduate students of the Faculty.

A collaborative research project involving Faculty members, the Resource Centre for Sports Expertise and Performance in the Antilles Guyane (CREPS Antilles Guyane), and the Faculty of Sport Sciences Université des Antilles was successfully completed in November 2021. The project sought to examine several aspects of elite coaching in the region – including an identification of educational needs of coaches as well as the challenges faced by them and administrators. Plans have already been made to advance to Phase 2 of the project based on the report.

A Climate Change and Sport Study was commissioned by the Faculty to guide its work in relation to Climate Change and Sport in the Caribbean region. Funding valued at USD\$22,500 was

procured through the UNDP. The final report was received in December 2021 and shared publicly in a discussion on Climate Change and Sport. This was a feature segment of the webinar titled UWI-UNDP Public Policy Think Tank for a Blue Economy.

The first phase of this study focused on athletics, cricket, and football, three of the most popular sports in the region. The study will be used to inform the development of academic courses and research as well as the Faculty's outreach activities aimed at producing SDG-engaged, well-rounded graduates and at ensuring that existing and future sport facilities are more climate-resilient.

Strategic Review

**The following information represents the activities undertaken by the UWI Faculty of Sport as a whole and not the St. Augustine Academy of Sport, unless otherwise stated.*

Access

Overall, the Faculty welcomed a fourth cohort of students despite a 24% decline in new student enrolment in comparison with 2020/2021. There were serious delays in the processing of applications and some applicants were receiving offers after the semester had started. The lack of government funding for the Sports programmes at the St. Augustine Academy also deterred some applicants there.

The Faculty received approval for new certificate programmes in Sport Broadcasting and Sport Marketing. The Faculty also developed a new undergraduate course - Sport Marketing and Public Relations which is to be offered as a free elective at all campuses. The Faculty developed course content for a MOOC (Massive Open Online Course) – "West Indies Cricket: Our Story"

with support from the Office of Online Learning for delivery on the Future Learn platform. The course was launched successfully on June 26, 2022.

Cross campus teaching continued between the Mona, and St. Augustine campuses using the Cross Campus Moodle (CCM) platform and this year the Cave Hill and Open campuses were added. Challenges were related to access to the platform in the first weeks of the semester and internet connectivity issues.

The Faculty hosted the inaugural Sports Law Conference in collaboration with the Faculties of Law at Cave Hill, Mona and St. Augustine in September 2021. Two peer reviewed and nine non-refereed scholarly articles were published from faculty at the Mona Academy of Sport. Faculty members contributed over 15 articles for publication in the *Sport Matters* column of the Trinidad Guardian. All article submissions were edited by Former Head of the St. Augustine Academy, Emeritus Professor Funso Aiyejina. The Faculty took advantage of a similar opportunity from the Jamaica Gleaner.

Finally, the Faculty commissioned a Climate Change and Sport Study with funding valued at USD22,500 received through UNDP.

Alignment

Wellness initiatives for the respective campus communities were pursued on the Open Campus, Mona, and St. Augustine Campuses. At St. Augustine, the Academy continued its Online Fitness sessions via Zoom, free of charge to the campus community and conducted by the academy's five gym attendants.

Partnership agreements were maintained with the Caribbean Premier League (CPL), Trinidad Guardian, SporTT (Trinidad), Jamaica Cricket Association, Jamaica Hockey Federation, KSAFA, National Powerlifting Association (Jamaica), and the Americas Federation of Netball Associations (AFNA). The Faculty facilitated an AFNA leadership course and helped organise and execute their strategic planning process. Similar assistance was rendered to the Trinidad and Tobago Netball Federation.

The Faculty signed a new MOU with the Rugby League in Jamaica to collaborate on lending expertise of the Mona Academy of Sport staff to the medical committee of the Rugby League. The PUMA contract was renewed to supply gears for the Mona track and field team for another three years. Partnership feasibilities were explored with Rajasthan Royals, CANOC, World Athletics, University of Guantanamo Cuba, University of Regina, and the Pan Am Sports Association.

Agility

Delivery of the Cricket West Indies (CWI)/UWI Level II and III Coaching course generated TTD\$81,067.46 at the St. Augustine Academy of Sport. Income generation at the Mona Academy of Sport (MAS) was JMD\$139,595.51 and from the Sports Medicine Clinic: JMD\$6,033,105.77). Income generation at the Cave Hill Academy of Sport: BD\$51,283.00).

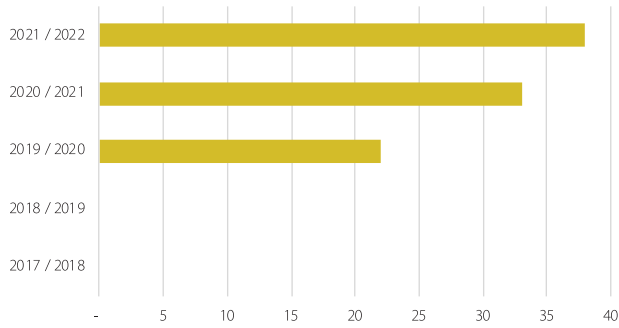
During the 2021/2022 period, the process of leasing the swimming pool at the Mona Bowl was done by a third party. To save costs, members of the Open Campus Academy of Sport took on new responsibilities in the areas of programme management, course delivery and development, and two persons were redeployed to other sections of the Open Campus which were understaffed.

The Faculty filled the post of Head, St. Augustine Academy of Sport with effect from August 1, 2022, and oversaw the completion of the project management consultancy and technical consultancy for the Usain Bolt UWI Sport & Exercise Medicine Centre.

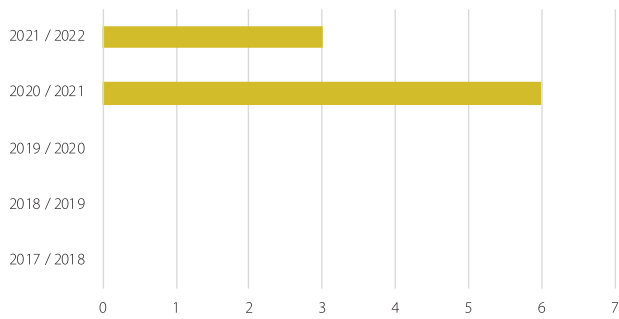
Graphs

Data courtesy the Campus Office for
Planning & Institutional Research (COPIR)

Enrolment Trends – Sport (UG Only)



Graduation Trends – Sport (UG Only)



Centres & Institutes

ANSA McAL Psychological Research Centre

In the academic year 2021/2022, the ANSA McAL Psychological Research Centre (AMPRC) maintained its commitment to engaging in activities aligned with The University of the West Indies (UWI) Triple A Strategy. The Centre continued to collaborate internationally, including the publication of the second edition of Theories in Social Psychology with a range of international authors. The Centre also continued its work on the Bridging the C.R.I.M.E. (Community, Research, Innovation, Monitoring, Empowerment) Divide project, which is moving forward to data collection in February 2023. The Centre remained supportive of the Psi Chi, The International Honour Society in Psychology, UWI St. Augustine Chapter. The Centre also continues to support the development of research skills for both undergraduate and graduate students through the Psychology Seminar Series and Research Labs. We look forward to our activities planned for the academic year 2022/2023.

Research

Bridging the C.R.I.M.E. Divide (Ongoing)

Crime is a major social and economic issue affecting Trinidad and Tobago that holds a significant adverse effect, on individuals, families, communities, and the nation directly and indirectly. The effects of crime and violence are experienced from the decrease in human welfare to perceptual and emotional changes, to social fragmentation and economic decline. The

Bridging the C.R.I.M.E. Divide is an ongoing research project by the ANSA McAL Psychological Research Centre (AMPRC) that adopts a social innovation approach to address the challenges of crime and violence. Crime and violence pose a significant threat to sustainable development in Trinidad and Tobago. The social innovative approach adopted by the Centre included partnering with stakeholders to investigate how various divides within Trinidad and Tobago affect crime perceptions, victimization, and responses to victimization and to cultivate strategies for addressing these divides. Several stakeholder meetings were conducted towards the preparation of the measuring instrument.

The COVID-19 pandemic and strategies to reduce to spread of the virus delayed the data collection phase of the project. The new date for the commencement of data collection is anticipated to be February 2023.

Webinar: Performance Anxiety and You

The ANSA McAL Psychological Research Centre, in collaboration with the Department of Creative and Festival Arts (DCFA), hosted Dr Daniel Ramjattan of Wilfrid Laurier University Canada for a virtual music performance and anxiety seminar. Faculty, musicians, students, and media attended the seminar, which provided a theoretical overview of anxiety and practical tips to manage performance anxiety. This demonstrated how a theoretical understanding of behaviour could facilitate real-world solutions to other disciplines.

Theories in Social Psychology, 2nd Edition

The second edition of *Theories in Social Psychology* was published in March 2022. Also edited by Professor Derek Chadee, this expanded second edition fills a substantial gap in the current literature by articulating important psychological theories. New and revised content helps students understand the construction and complexity of key theories, while inspiring researchers of social behaviour to reflect on their current work and consider future areas of investigation.

Psychology Research Labs

The ANSA McAL Psychological Research Centre established research labs in 2020 as a collaborative effort by students and research assistants. The labs enhance undergraduate and postgraduate students' research skills and experience and allow students to exercise the research skills they developed during degree programmes and apply them to relevant research topics.

Research Lab 1: "The Certainty of Uncertainty"

The research lab, "The Certainty of Uncertainty" developed to investigate how an individual's risk perception of COVID-19, risk propensity and risk perception of the COVID-19 vaccines may affect individual financial, social and health risk-taking. This research offers a unique approach to risk perception with the inclusion of the psychological concept of signal potential. Signal potential empirically examines dread and unknown risk (Slovic et al., 1984) which has absented itself from previous psychological research on this topic. Additionally, this research investigates the novel concepts around COVID-19, which may yield pertinent insights into the population's behaviour and psychological position toward the pandemic.

The findings of this study will offer insights into the risk psychology of COVID-19 and other epidemics, and thus provide foundational links to how health risk perception plays a role in generalized and vaccination behaviour. These findings may inform health authorities on the best course of action when disseminating health information to the public.

Research Lab 2: Juvenile Delinquency and Copycat Crime in Adolescence

This research lab examines the influence of adolescents, their peers, and parents viewing of violent media, including movies, video games and music. The viewing of violent media has a negative impact on behaviour, which can lead adolescents to partake in delinquency and copycat criminal behaviour. Research suggests that repeated exposure to violent media desensitizes children to the pain of others and reduces empathy and pro-social behaviours. The study examines peer relationships because during adolescence individuals are usually closer to their friends as they navigate the identity formation process. Vicarious reinforcement comes into play as adolescents observe the behaviour of their close peers and may imitate negative behaviours in situations when they perceive the consequences of these behaviours to be desirable. Parents' choice of violent media consumption is also very important since the home is the first place in which socialization begins. The research findings from this study would contribute to the literature on violent media engagement, copycat crime, and juvenile delinquency.

Research Lab 3: I see, I am, I do. The Media and Self on Youth Risk Behaviours

This study examines how symbols and models in popular media shape adolescents' self-concept. This research predicts that adolescents' self-concept is shaped by symbols in the

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media, which can influence their tendency to engage in delinquency, risky behaviour, and copycat behaviour. This study sees it as important to capture different levels of juvenile deviant behaviour. The research findings of this study would significantly contribute to the literature on media exposure and identity formation in adolescence and copycat crime in the Caribbean.

Research Writing Series

The ANSA McAL Psychological Research Centre created a Research Writing Series to develop resources directed at expanding students' understanding and engagement with the research process. The series consists of two videos on developing a Literature Review and on developing a research methodology video for researchers and students. The first video has been uploaded to the Centre's YouTube channel while the other is being edited.

Student Awards

For the last twenty-nine years, the TATIL Group has presented four prizes to the top three research groups for PSYC 3025 Research Projects in Psychology.

First place Prize: "The Plight of Tomorrow: The Impact of Anxiety on Academic Procrastination." Ariel Bostic, Kezia Gaskin, Zion Gopeesingh, Josiah Aaron Gosyne, and Suraiyah Ramsingh.

Second Place Prize: "Social Loneliness, Self-Esteem, and Friendship Quality." Michelle Manny, Raabia Maharaj, Kimberley Elcock, Marc Mohammed, and Inderia Singh.

Third Place Prize (tied):

- "Determining the impact of transitioning to online learning on the University of the West Indies, St. Augustine campus student's psychosocial wellbeing (anxiety and depression) and resilience during the COVID-19 pandemic." Harsh

Ramdass, Zakiyah Ali, Zaria Bembry, Celina Manohar, and Syla Isaie.

- "The stressful Challenges associated with the COVID-19 pandemic, and the coping mechanisms of final year UWI students." Aryan Ramsubhag, Carlene Pereira, Shivanni Ramsawak, and Arianna Weatherhead.

ANSA McAL Psychological Research Centre Prize Best Final Year Psychology Student

The ANSA McAL Psychological Research Centre Best Final Year Psychology Student is awarded to the student with the highest grades and who excelled in Year III. Mikyra Le Gendre-Cooper was awarded the prize at the Faculty's Evening of Excellence.

PSI CHI: International Honour Society in Psychology, UWI St Augustine Chapter

The PSI CHI International Honour Society Psychology, UWI St. Augustine Chapter, initiated by the ANSA McAL Psychological Research Centre has received support from the Centre since the Chapter's installation in 2013. In January 2022, Psi Chi Central Office acknowledged and commended the PSI CHI UWI St. Augustine Chapter's 10-year anniversary and activities of the Chapter that encourage student excellence. The Chapter hosted several events in the 2021/2022 academic year. These included, but were not limited to, Guild Fest – Student Orientation, World Suicide Prevention Day (10th September), Online sessions and social media posts to acknowledge mental health awareness days, Anti-Bullying Awareness Week (14th – 18th September), National Women's Health and Fitness Day (28th September), Mental Illness Awareness Week (2nd – 8th October), International Stress Awareness Week (2nd – 5th November), World AIDS Day (1st December), International Day of Persons with Disabilities (3rd December), and - Human Rights Day (10th December).

Strategy Appraisal

The ANSA McAL Psychological Research Centre has consistently sought to improve its quality of teaching and learning through exposing students to various branches or research areas in Psychology. By using research labs, students were provided with the opportunity to expand their knowledge and explore their specific research interests. To further students' knowledge of the research writing process, the Centre has developed and produced a video research series on the research process. This series addresses frequently asked questions students have on conducting research. The first instalment was published on the ANSA Mc Psychological Research Centre Facebook and YouTube page.

To produce high-quality and impactful research through the adoption of new and innovative approaches, the social innovation approach was utilised in developing the methodology for the *Bridging the C.R.I.M.E. Divide* project. This is anticipated to encourage the use of similar approaches by students and staff at The UWI. The Centre is currently conducting research into several areas of concern which arose out of the global pandemic including health decision-making and misinformation and social media.

The Centre also uses psychology to promote activism and public advocacy via the promotion of proper mental health management. Through PSICHI, virtual initiatives and in-person engagement were facilitated to bring awareness of mental health issues. The Centre has also fostered relationships with researchers across the globe through engagement with visiting academic scholars, hosting a webinar on music performance and anxiety, and publications by internationally recognized publishers.

Distinguished Visitors

Dr Camille Garsee

Senior Lecturer
Middlesex University London

Dr Daniel Ramjattan

Wilfrid Laurier University,
Canada

Centre for Health Economics (HEU)

Despite the challenges posed by the COVID-19 Pandemic, the HEU, Centre for Health Economics successfully executed its mandate to be a resource and technical partner to national and regional agencies through the execution of its research and capacity development agenda. During the academic year 2021/2022, the Centre pursued its research thrust in the broad areas of Sustainable Health Sector Financing, Health Systems Analysis with a focus on efficiency, costs and cost-effectiveness, National Health Accounts, Health Impact Assessments and Health and Economic Policy Analysis. The research projects undertaken, and the technical support provided by the Centre over the course of the academic year also aligned with The University of the West Indies' (UWI's) strategic goals.

Among the interesting and impactful projects undertaken by the Centre, two which brought immense satisfaction were the successfully executed, **Caribbean Community of Practice Virtual Workshops on COVID-19**, done in collaboration with the Rockefeller Foundation and the Inter-American Development Bank, and the PAHO funded, **Capacity Building in Health Economics and Health Financing Modules**. The latter targeted managers in the field of healthcare across the Caribbean.

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As part of the response of The UWI to provide critical technical support in the region and make substantial contributions to the quality of life of people of the Caribbean, The Centre, in collaboration with the Ministry of Social Development and Family Services and the UNDP, is currently involved in the development of a **National Register of Vulnerable Persons for Trinidad and Tobago**, the completion and operationalisation of this Register is anticipated to impact on and improve the conditions under which people live in Trinidad and Tobago.

Highlights

The Centre in its capacity as a WHO Collaborating Centre for Health Economics and Financing, provided support in the Region under the theme *Technical Support for Health Financing in the Non-Spanish Speaking Countries*. The HEU, also undertook a MOU with the Office of the Prime Minister, National AIDS Coordinating Committee (OPM-NACC) to support the National HIV Programme in Trinidad and Tobago. Agreements were also broached with the Bermuda Health Council to produce an **EQ-5D-3L Value Set** and a **Set of EQ-5D Population Norms** for Bermuda and with the Network of NGOs of Trinidad and Tobago for the Advancement of Women to estimate the Economic Costs of Family Violence in Trinidad and Tobago. Other activities of the Centre included the completion of the UNAIDS commissioned project on **Costing of the OECS Regional Strategic Plan 2021-2026** and the execution of studies commissioned by the PAHO to determine the **Fiscal Space for Health Financing**, the **Macroeconomic Profile** and the **Burden of Disease** in Barbados.

The HEU utilized the available technology to engage stakeholders by hosting webinars and virtual workshops during the period under review. In addition, the Centre in collaboration with PAHO, hosted two country-specific workshops on

Financial Protection in Health for St. Kitts and Nevis and Grenada. These workshops were held to create awareness of, and appreciation for, financial protection as countries press towards Universal Health Coverage.

Teaching and Learning

The staff of the Centre adjusted to online delivery of courses and consistently supported the teaching of the Health Economics courses at the BSc., MSc., MPhil and PhD. levels of the Faculty of Social Sciences through collaborative arrangements with the Department of Economics. Instruction in the Health Economics module in the Master's in Public Health programme at the St. Augustine and Cave Hill Campuses were also executed by members of the Centre. In addition, members of staff of the Centre supported supervision of graduate research students, specifically in the Faculty of Social Sciences.

Participation in the teaching and learning process continued and extended to non-UWI customers as the HEU executed a Pan American Health Organisation (PAHO) funded capacity building workshop in Health Economics and Financing for 21 managers in the health sector across the Caribbean Region. Participants attending were from Aruba, Curacao, Jamaica, St Maarten and Trinidad and Tobago. The four-module training programme ran from 7 September to 18 November 2021. Each module comprised four on-line sessions, which were delivered via the HEU's Moodle platform. The modules included: Health Financing for Universal Health Coverage; The Case of Costing in Healthcare; Economic Evaluation for Managers in Healthcare: WHO Cross-Programmatic Efficiency Analysis; and the Use of Instruments/Indicators for Monitoring and Evaluating the Performance of Financing. Facilitators included: Althea La Foucade, Christine Laptiste, Vyjanti Beharry, Charmaine Metivier, Stanley Lalta, Patricia Edwards-Wescott, Henry Bailey, and Roxanne Brizan-St. Martin.

Programmes

The following courses were offered as online, stand-alone courses to members of the public:

System of Health Accounts 2011 (SHA 2011)

The Introduction to Health Accounts workshops were conducted virtually in August 2021 with participants from a range of health institutions in Barbados. The primary aim of the workshops was to build capacity in health accounts and to encourage its consistent use to aid policy making among participating countries. The first two-day workshop (14th and 15th August 2021) introduced participants to the System of Health Accounts while the second three-day workshop (23rd, 24th and 25th August) introduced participants to the Health Accounts Production Tool. Facilitators were **Don Bethelmie**, Roxanne Brizan-St. Martin, and **Haleema Ali Sisbane**

Financial Protection in Health Capacity Building Workshops: Grenada and St. Kitts and Nevis.

The HEU, together with PAHO hosted two country-specific workshops for St. Kitts and Nevis and Grenada on September 9th and 10th 2021. The objective of the workshops was to create awareness of, and appreciation for, financial protection by outlining key concepts, procedures, requirements, and interpretations regarding the financial protection indicators. The training modules included the following: Conceptual Overview of Universal Health Coverage; Financial Protection Monitoring in Health; Measuring Out-of-Pocket Payments; and Measurement of Household Welfare and Poverty. Facilitators included **Don Bethelmie and Samuel Gabriel**.

Assessing Caribbean Countries' Progress towards Universal Health Coverage using the Health Financing Progress Matrix. This virtual workshop was a two-part health financing

assessment hosted by the HEU, in collaboration with the Pan-American Health Organization (PAHO), and the Ministries of Health (MoH) of Antigua and Barbuda and Barbados. These workshops were held on August 24th and 25th 2021 (Antigua and Barbuda) and September 2nd and 3rd 2021 (Barbados). The objective of these workshops was to sensitize country working groups on the WHO Health Financing Progress Matrix and collaborate with teams to conduct the Health Financing Progress Matrix Assessment. In addition, during this reporting period, July 12th, 2022, part one of this workshop was conducted virtually for participants in St. Vincent and the Grenadines. Each country working group comprised at least 12 local representatives. Facilitators included Dr Stanley Lalta, **Charmaine Metivier**, and **Patricia Edwards-Wescott**.

Research

The Centre completed a number of research projects during the academic year, 2021/2022. This research agenda was primarily driven by the demands of regional Governments and other research institutions. The HEU also partnered with regional and international agencies and formalized significant relationships with key stakeholders. The designation of the Centre as a World Health Organization Collaborating Centre (WHOCC) for Health Economics and Financing continues to provide opportunities for research projects and the furtherance of the Centre's mandate.

Major Funded Research Projects - Completed COVID-19 Caribbean Community of Practice Study (2021/2022)

The CCoP project provided opportunities for research and the production of several knowledge products on six thematic areas: The Impact of the COVID-19 Pandemic on the Mental Health of Healthcare Workers; The Impact of COVID-19 on the Mental Health of the General Population; Maintaining Health Services during

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the COVID-19 Pandemic; Behaviour Change and COVID-19; Vulnerable Groups and COVID-19; and Post-COVID-19 Economic Recovery.

This Rockefeller Foundation funded study was supported by the Inter-American Development Bank (IADB) and focused on fostering collaboration and knowledge exchange among countries of the Caribbean. The aims were to identify, adapt, and scale up best practices to improve critical pillars of responding to the COVID-19 pandemic. The COVID-19 Caribbean Community of Practice (CCOP) allowed countries to share and develop a harmonized and more integrated response to the COVID-19 pandemic. The methodology employed included primary data gathering using six online conferences and the use of baseline, midline and end line surveys involving participants from Jamaica, The Bahamas and Trinidad and Tobago. Technical Reports were produced for each thematic area explored: Problem Briefs, Action Memos and Policy Briefs. Findings were also presented in the form of technical reports, survey reports and a health policy recommendation report. Investigators included **Althea La Foucade, Christine Laptiste, Roger Mc Lean, Kimoy Worrell, Haleema Ali-Sisbane, Vyjanti Beharry, Kimberly-Ann Gittens-Baynes, Patricia Edwards-Wescott.**

Improving Household Security and Public Health in the Caribbean Community (CARICOM).

This International Development Research Centre (IDRC)-funded project was executed by the Centre in collaboration with other regional and international research groups. The research described by gender, age, socio-economic group and geographic location, the current nutritional adequacy of diets of children, women and men, and the sources of food consumed. Under this project, the HEU investigated the

factors that drive current consumption patterns of persons in the CARICOM and focused on three Caribbean countries—St. Kitts and Nevis, St. Vincent and the Grenadines, and Jamaica. The project investigated the core factors that influence the decision to consume unhealthy foods as opposed to healthy foods and conducted sensitivity analyses to forecast the consumption response of consumers under varying levels and types of fiscal interventions. The study found evidence required to fill the evidence gap in public policy and public health decision-making in addressing the risk factors associated with non-communicable diseases. Three separate reports were produced from this study: Consumer Eating Patterns, Price Elasticities of Demand, and Policy Recommendations: Jamaica; St. Vincent and The Grenadines and St. Kitts & Nevis. Investigators include **Althea La Foucade, Karl Theodore, Vyjanti Beharry, Charmaine Metivier, Samuel Gabriel, Christine Laptiste, Patricia Edwards-Wescott.**

Future Health Spending and Treatment Patterns in Latin America and the Caribbean Index Country Report: Trinidad and Tobago.

This study involved collaboration among The University of the West Indies, Mona; the HEU, Centre for Health Economics and Johns Hopkins University. Investigators included T. Alafia Samuels, **Althea La Foucade, Karl Theodore, Christine Laptiste, Vyjanti Beharry, Charmaine Metivier,** Krishna D. Rao, Andrés I. Vecino Ortiz, Tim Robertson, Angelica Lopez Hernandez, Caitlin Noonan.

Three-Year Estimate of the Cost of the OECS Regional Strategic Framework for HIV.

A UNAIDS commissioned project that entailed a three-year costing of the Organisation of Eastern Caribbean States' (OECS) Human Immunodeficiency Virus (HIV)/Sexually Transmitted

Infections (STI)/Tuberculosis (TB) Regional Strategic Framework (RSF) 2021-2026. The study was undertaken in a context where implementation will occur as the world is dealing with the short to medium term impacts of the COVID-19 pandemic. It involved a multi-country focus and incorporated input from a wide range of stakeholders from across the OECS, capturing their vision for a comprehensive, evidence-based, and integrated public health response. The OECS RSF aimed to improve the quality of services delivered to key populations (KPs), by reducing gaps in prevention, treatment, and viral suppression, while increasing HIV testing. Additionally, the framework was designed to build the capacity of the agencies involved in implementing these activities at all levels. The Final Report was submitted to UNAIDS in 2021. Researchers involved were Karl Theodore, **Christine Laptiste, Roger Mc Lean, Althea La Foucade, Vyjanti Beharry.**

Technical Support to Selected OECS Countries

Under a letter of agreement with the PAHO, this study undertaken by the HEU engaged selected countries across the OECS to build evidence to support the development of health financing arrangements and policies, including those seeking to improve financial protection. Findings of the research were presented in several reports. Technical submissions included: Report on the System of Health Accounts Online Course, December 2021; The Health Financing Progress Matrix: Assessing Antigua and Barbuda's Advancement towards Universal Health Coverage, Reports 1 & 2 (September and October, 2021); The Health Financing Progress Matrix: Assessing Barbados' Advancement towards Universal Health Coverage, Reports 1 & 2 (September and October 2021); Fiscal Space for Health Financing in Barbados, November 2021; The Burden of Disease in Barbados. November 2021; Overview Report: Introduction to Financial Monitoring in Health Workshop, St.

Kitts and Nevis and Grenada (September and November 2021); and Cost Analysis and Efficiency Report of the Services at Joseph Nathaniel France (JNF) General Hospital and the Alexandra Hospital in the Federation of St. Kitts and Nevis. Contributors: **Althea La Foucade, Christine Laptiste, Vyjanti Beharry, Kimberly-Ann Gittens-Baynes, Charmaine Metivier, Stanley Lalta, Patricia Edwards-Wescott, Don Bethlemie, Kimoy Worrell, Stephanie Theodore,** Dr Claudia Pescetto, Dr Guillermo Sandoval, Dr Juan Pablo Pagano, Dr Joseph Kutzin, Dr Matthew Jowett and Dr Bruno Meessen.

EQ-5D Valuation and Population Norms Study for Bermuda

Based on an agreement between the Bermuda Health Council and the HEU, the Centre set out to produce an EQ-5D-3L Value set, as well as a set of EQ-5D Population Norms for Bermuda. These results will allow for clinico-economic analysis (including Cost Utility Analysis) to be conducted using preferences of the Bermuda population. Investigator: Henry Bailey.

Global AIDS Monitoring (GAM) Reports

The HEU was commissioned and funded by the Office of the Prime Minister (OPM) under a two-year MOU to conduct an HIV Health Accounts Audit to support National HIV programming, as well as Trinidad and Tobago's reporting for the UNAIDS GAM Report (Indicator 8), and the Caribbean Regional Strategic Framework. During 2021/2022 the Centre derived an HIV Specific Health Account; captured the Domestic Budget for HIV as guided by Indicator 8.1 of the GAM Report; the Antiretroviral Treatment (ART) volumes and unit prices as guided by Indicator 8.2 of the GAM Report and the HIV expenditure as guided by Indicator 8.3 of the GAM Report. The Output: Global AIDS Monitoring (GAM) Results for Indicator 8.1- 8.3: Analysis Notes and Finding will greatly assist the reporting of the NACC-OPM.

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Investigators were: **Christine Laptiste**, Roxanne Brizan-St. Martin, **Althea La Foucade**, **Roger Mc Lean**, **Karl Theodore** with support from **Don Bethelmie**, Anton Cumberbatch and **Vyjanti Beharry**.

The Economic Cost of Family Violence against Women and Children

This study was funded by the European Union Spotlight Initiative. It involved a collaboration of the Network of NGOs of Trinidad and Tobago for the Advancement of Women, The University of the West Indies, HEU Centre for Health Economics, Asha Natalia Maharaj and Tricia Basdeo-Gobin. The study utilised a mix of primary and secondary approaches. A key aspect on the primary data collection approach was a survey among employees in three Spotlight jurisdictions (Mayaro/Rio Claro; Tunapuna/Piarco and Tobago). The findings of the survey will inform the estimation of the cost of family violence at various levels including costs to the state, to organisations, businesses and to individuals. The HEU team of Investigators included **Althea La Foucade**, **Christine Laptiste**, **Kimberly-Ann Gittens-Baynes**, **Roger Mc Lean**, **Charmaine Metivier**, **Samuel Gabriel**, **Vyjanti Beharry** and **Patricia Edwards-Wescott**.

Distinguished Visitors

Ms Jewel Ali

Head of Office
International Organization for Migration

Mr Jaime Arkin

Managing Director, Affluence Reach
Nairobi, Kenya

Mrs Lisa Bayley

Specialist, Communications for Health
Pan American Health Organization

Ms Krista Carr

Executive Vice President (CEO)
Inclusion Canada

Ms Diana Medina

Regional Community Engagement and Accountability (CEA) Manager
International Federation of Red Cross and Red Crescent Societies, Canada

Mr Dean T. Chambliss

Sub regional Program Director
Pan American Health Organization

Professor Denise Eldemire-Shearer

Professor Public Health and Ageing & Director
Mona Ageing and Wellness Centre UWI, Mona Jamaica

Dr Katija Khan

Clinical Psychologist
Faculty of Medical Science, UWI St. Augustine, Trinidad

Dr Claudio Mora-García

Senior Researcher
INCAE Business School, Costa Rica

Dr Laura Ospina Pinillas

Assistant Professor, Department of Psychiatry and Mental Health
Pontificia Universidad Javeriana - School of Medicine, Bogotá, Colombia.

Dr Natalia Pasternak Taschner

Research Scholar
Centre for Science and Society, Columbia University
Research Fellow
Institute of Biomedical Sciences, University of Sao Paulo

Dr Guillermo Sandoval

Advisor, Health Economics and Financing
PAHO Pan American Health Organization

Ms Sannia Sutherland,

Programme Coordinator
Caribbean Vulnerable Communities

Mr Davlin Thomas

Chief Executive Officer
North Central Health Authority (NCRHA), Trinidad

Dr Gabriel Vivas

Advisor Health Systems and Services
PAHO/WHO Office for The Bahamas

Institute for Gender & Development (IGDS)

Academic year 2021/2022 was a transition year for the IGDS St. Augustine Unit. After five years at the helm, Dr Gabrielle Hosein handed over leadership responsibilities to Dr Sue Ann Barratt, an IGDS PhD alumni who has worked as both part-time and full-time faculty since her studentship. This transition occurred during the extraordinary circumstances created by the COVID-19 pandemic, with staff continuing to adapt to remote and rotational work modes, modified deliverables to adhere to public health restrictions, and distance from colleagues whose collegiality, creativity and support blooms in the Institute space. However, the staff of the IGDS demonstrated an incredibly adaptive capacity to persist with continuous communication through regular meetings (via online platforms) and other forms of communication using telephone or other messaging platforms and devices. The IGDS mandates were pursued with commitment. Thus, this report details the range of actions and interventions that demonstrate the collective commitment to the business continuity of the IGDS even while confronted with unique limiting conditions. Outlined are some key developments that build on the Unit's teaching, research, and outreach over the year.

Strategic evaluation and planning structured this transitioning year with the staff of the unit collectively evaluating strengths and weaknesses and formulating short, medium and long term strategic and operational plans, approaches and methodologies to direct the Unit's responsiveness to University level and Institute level mandates and objectives. Rooted in the principle of sustainability, the Unit reinforced the Triple M Strategy—Mainstreaming, Mentorship, and Movement Building—as core to achieving its mandates, and asserting articulated

measurability and quantifiable outcomes as key to its goal of Transformative Impact through student recruitment and throughput, responsiveness to all clients and stakeholders, knowledge production with tangible outputs in the form of a range of publications and productions, monetizing intellectual property, market presence both online and offline, and behaviour change.

From this position, the Unit focussed on continuing to enhance its strategic partnerships and collaborations with its Gender Advisory Board, Board of Studies, and stakeholders both internal and external to The UWI. This was done through various fundraising efforts, collaborative research and advocacy, and cross faculty collaborations, which are ongoing pursuits.

Another major transition emerged in the academic year 2021/2022. In November 2021, the IGDS was assigned new accommodations at Gordon Street, St Augustine, at a property previously occupied by the Optometry Unit of the Faculty of Medical Sciences. The property is off the main Campus, near the UWI Seismic Research Centre, the Hugh Wooding Law School, and the Department of Creative and Festival Arts. The portion of the property assigned to the IGDS features two buildings, one single storey and one two-storey building with relatively large parking space and outdoor lawn space. This property, however, requires repair and renovation to effectively accommodate the IGDS staff and to be functional to its purpose. Negotiations are continuing around financial allotments to meet these requirements. Following finalisation of these the procurement process will begin, with the Department of Facilities Management leading the repair, renovation and transition of Unit staff and assets. Of great significance is the expected support from the Digicel Foundation, which has pledged the sum of \$ TT100,000.00 through the Unit's relationship with

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Digicel Trinidad and Tobago CEO Abraham Smith, a member of the Institute's Gender Advisory Board.

The 2021/2022 academic year continued to pose challenges to students as they navigated the remote structure and the financial demands of tertiary education in the climate of uncertainty created, not only by the pandemic, but by larger economic forces affecting funding support from the state, as well as the ability to personally invest in further education. It is expected that these financial challenges will persist for some time and will have a direct impact on student recruitment, especially, along with student throughput.

This reinforces the pressing significance of the Unit's continued work on curriculum and pedagogical review and development, and work with regional colleagues to harmonize graduate courses and cross-campus offering of undergraduate courses, to continue to develop an innovative new structure for an online graduate programme.

In addition, the Unit embarked on the creation of its first Massive Online Open Course (MOOC) titled Transformative Feminist Leadership, in collaboration with Future Learn and guided by the Office of Online Learning. This course is expected to function not only as a tool for capacity building in a large market, but a recruitment and market research tool. It is expected to be launched on the Future Learn online platform in September 2022.

Teaching staff were each responsible for full course loads of between four and six courses over the academic year and continued with elements of graduate and undergraduate programme curriculum and pedagogical review (CPR) process to increase enrolment and better integration of IGDS

courses across faculties. This year, Dr Angelique Nixon returned to the position of IGDS SAU Graduate Studies Coordinator, and Dr Gabrielle Hosein held the position of Undergraduate Studies Coordinator, with responsibilities for CRP at those teaching levels.

Enrolment

The academic year 2021–2022 was a year when undergraduate course enrolment continued to be affected by both the Covid-19 pandemic and related financial challenges in Trinidad and Tobago. Classes were offered remotely, and, for a second year, 100% coursework was approved for all undergraduate courses offered by the IGDS.

Graduates - Minors

In academic year 2021/2022, there were four minors in Gender Studies, offered through the Faculty of Humanities and Education, and ten minors in Gender and Development Studies, offered through the Faculty of Social Science.

UG Course Enrolment

Student enrolment was lower in most courses offered by the IGDS in both semesters, in particular, in the Introduction to Women's Studies (34), Gender and Development with Reference to Caribbean Society (28), and Sex, Gender and Society: Sociological Perspectives (31).

Curriculum and Pedagogical Review (CPR) mainly comprised engagement with the Faculty of Food and Agriculture regarding introduction of a Minor. As well, all undergraduate courses were reviewed by CETL and academic staff for submission to the Board for Undergraduate Studies (BUS) so that the shift to 100% coursework could be made permanent.

IGDS Silvers – Internal Student Recognition

IGDS SAU held a virtual celebration for students on 27 October 2021, honouring the eleven Minors in Gender and Development Studies (FSS), two Minors in Gender Studies (FHE) and recognising five of these students for their dedication and contribution to the IGDS Ignites.

Postgraduate

Student enrolment was lower in most programmes offered by the IGDS, in particular the Postgraduate Diploma in Gender and Development Studies (0), PhD in Interdisciplinary Gender Studies (2), MPhil in Interdisciplinary Gender Studies (1), and MSc in Gender and Development Studies (0).

Graduate Studies Coordination

The academic year 2021/2022 was not a usual intake year for the IGDS SAU Graduate Programme (for Diploma/MSc), but for rolling admissions for the MPhil/PhD programme, three research students were accepted and joined. The cohort from 2020/2021 continued with three students withdrawing for various reasons. The IGDS continued to support returning students through various challenges, personal and research, faced because of the pandemic. Two students were transitioned from MPhil into the MSc programme and one student completed the diploma and has transitioned into the MSc. Three students withdrew from previous cohorts for various reasons. Several extension requests were processed and approved. We are pleased to report the successful throughput of seven graduate students who completed the programme – six MSc (one research project and five internships) and one postgraduate diploma. Three examinations are in progress – one PhD and two MSc research projects. At the end of this academic year, a total of 32 students are registered in our graduate programme (2 Diploma, 10 MSc, 8 MPhil, 12 PhD).

Graduate Research Seminars

Three students completed research seminars in December 2021.

Pete Roderick, MSc Gender and Development Studies. Presented Sexual Orientation Discrimination in Corporate Trinidad and Tobago.

Jade Trim, MPhil Interdisciplinary Gender Studies. Presented How Yuh Get Yuh Hair So? Exploring Afro-descended Women's Interpretations of 'Natural' Hair, Presentation of Self and Other in Trinidad.

Petronetta Pierre Robertson, PhD Interdisciplinary Gender Studies (Practice-Based Research). Presented Pause Between the Sentences: Discourses of Love, Romance, and Intimate Partner Violence in Trinidad.

This academic year, the institute continued the regional graduate workshop sessions, spearheaded by the Dr Dalea Bean, Graduate Coordinator at the RCO, with two workshops facilitated by SAU lecturer and graduate coordinator, Dr Angelique Nixon (writing a literature review in semester one and conceptual frameworks and applying feminist theory co-facilitated with Dr Tonya Haynes (NBU) in semester two), and one by Professor Susanne Zwingel, Fulbright scholar in residence at SAU, in semester two (on coding and interpretivist research).

Additionally, the SAU graduate studies coordinator held sessions to facilitate student support and feedback focusing on, an orientation session for the Returning and New students which was well attended; end of semester check-in sessions and troubleshooting with the new and continuing students, especially around course performance and completion, and continued registration and support for completing students. The Institute also focused on One-on-One check-ins with MPhil and PhD students to review their progress, discuss performance

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and research, future plans, and pathways to completion; and MSc continuous assessment meetings for research projects.

Dr Angelique Nixon spearheaded coordination of graduate studies this academic year with renewed efforts for regional harmonisation and working towards a regional MSc programme. The IGDS regional graduate sub-committee met regularly and engaged with the review process of the graduate programmes. Curriculum review at the graduate level continues with regional harmonisation and programme revamping to meet changing environments.

Regional Graduate Studies Coordination

The first regional graduate course was offered in semester two as a team-taught course with online delivery. "Feminist Epistemology and Methodology" is led by Dr Angelique Nixon, Dr Halimah DeShong, and Dr Natasha Mortley. This course was very successful with 14 total students. Student feedback from the course experience was very positive with support for future courses being taught regionally and as a team. Harmonisation of IGDS graduate courses continues with "Sexualities, Bodies, and Power" at SAU and NBU. Further, "Gender, Ethnicity and Class" included two graduate students from the NBU along with four SAU graduate students and two graduate students from faculty of social sciences.

IGDS Gold and Student Recognition

IGDS SAU held a virtual celebration of students on 27 October 2021, honouring the seven graduating postgraduate students with special awards going to **Candice Arthur-Frederick** for "Extraordinary Performance" and **Satira Maharaj** for "Outstanding Work and Research".

Kelsie Joseph, UWI IGDS Undergraduate student, received the **2022 Sociologists for Women in Society Undergraduate Social Action Award**, for her work on the Catcalls of UWI and IGDS Ignite. The Undergraduate Social Action Award is given annually to recognize students or a team of students making a substantial contribution to improving the lives of women in society through activism.

Renuka Anandjit, IGDS PhD student, was a recipient of an award for Outstanding Service to The Guild of Students by A Member at the Guild of Students Diamond Jubilee Gala and Awards Ceremony hosted on May 29, 2022. The Gala honoured the Guild's legacy in Student Representation and Leadership, Social Activism, and Nation Building over the last six decades under the theme "Celebrating the Past... Living in the Present... Embracing the Future".

Graduates 2021/2022

Inaugural Regional Graduate Research Symposium

IGDS RCO and Units across the region collaborated towards the Inaugural Regional Graduate Research Symposium that showcased on May 26, 2022. Presentations were made by eight students from across three Campuses under the themes, *Interrogating Caribbean Masculinities*; *Race. Gender. Body. Media*; and *Love, Leadership and Gender Justice*. SAU postgraduate students participated as Panel Chairs – Tivia Collins, PhD Candidate – and as presenters.

Alessandra Hereman, MPhil Candidate presented "Investigating Gender Nonconformity: Resistance, Dreams, and Subversive Potential of People Assigned Female at Birth", **Anusha J. Ragbir**, PhD Candidate presented "Shading Indianness: Framing Colour, Identity and Resistance among Indo-Trinidadian Women and Girls in the 21st Century", and **Petronetta Pierre-Robertson**, PhD Candidate presented "Pause Between the Sentences: Discourses of Love, Romance, and Intimate Partner Violence in Trinidad".

Online Learning and Capacity Building **Feminist Transformational Leadership (FTL)**

This is a three-week online course facilitated by the IGDS STA Unit on the Future Learn platform. Women leaders are not necessarily feminist leaders, and with that caveat, this course examines the ways in which selected powerful women leaders have employed principles of FTL and how it contributed to their success, and how they approached challenges. Participants will be empowered and confident to apply principles learned to their own contexts and endeavours, whether within a formal organisation or in activism; whether already in a formal or informal leadership role, or aspiring to lead.

Research and University Collaboration **A Sexual Culture of Justice: Strengthening LGBTQI & GBV Partnerships, Capacity & Efficacy to Promote & Protect Rights in T&T**

Led by The UWI, Institute for Gender and Development Studies, St Augustine Campus Project Lead Researcher: Dr Angeliqne Nixon

Successful Award for *“Respect for fundamental human rights and freedoms in Trinidad and Tobago”* Human Rights Grant, European Commission, Trinidad and Tobago Delegation

Project Budget Total: EUR 187,974 (EUR 166,000 from EU) | 2017 to 2021

Knowledge e-portal: www.portal.caribbeansexualities.org

Project formally completed in March 2021 | Research and Community Engagement Ongoing

Project Overview

“A Sexual Culture of Justice: Strengthening LGBTQI & GBV Partnerships, Capacity & Efficacy to Promote & Protect Rights in T&T” is an activity-based, human rights project funded by the European Union and implemented by The University of the West Indies, Institute for Gender and Development Studies (IGDS). The project began in April 2017 and was extended to and completed in March 2021. The formal partners included six LGBTI and feminist Civil Society Organisations in Trinidad and Tobago: CAISO, Friends for Life, I Am One, The Silver Lining Foundation, Womantra and the Women’s Caucus. Other local and regional partners included the Caribbean IRN, Caribbean Male Action Network, the Equal Opportunity Commission, Say Something TT, and Trinidad & Tobago Transgender Coalition.

This community-university collaboration provided four years of support for some of the longest-standing and newest local efforts to transform approaches to partner violence, homophobia, bullying and policing, while building partnerships and organisational capacity (especially for small civil society organisations). Overall, this project produced new local/regional analysis and solutions for ways to approach gender-based violence and LGBTI discrimination – and achieved all its outcomes and objectives. These approaches are best seen through the intersectional action campaigns, education materials, training toolkits and workshops, as well as the research activities that produced data needed to support calls for gender and sexual justice policy and legislative changes. The methodology of activities were rooted in transformational education, empowerment, Caribbean feminist praxis, and self-directed and creative action. The project was ambitious and far reaching with some very public aspects to the work, but also private and sustained efforts for community building and resilience within LGBTQI+ communities especially.

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Knowledge e-portal www.portal.caribbeansexualities.org

All knowledge products and an overview of completed activities can be found on the knowledge e-portal. The project's knowledge products, research, and community engagements continue as ongoing through CSO partners and IGDS activities and project lead, Dr Angelique Nixon's research activities and publication. The knowledge e-portal continues to be updated and hosted by the Caribbean IRN.

Let's Talk Consent and CSE (Comprehensive Sex Education)

IGDS Special Lunchtime Seminar | 8 December 2021 presented by **Dr Krystal Nandini Ghisyawan** Director of Research, The Silver Lining Foundation

Dr Angelique V. Nixon, IGDS Lecturer and Project Lead Researcher, A Sexual Culture of Justice

An interactive discussion on tools for preventing gender-based violence through frameworks of sexual rights and sex positivity. The presenters shared knowledge and materials created through the completed human rights project "A Sexual Culture of Justice" and advocacy for social change and advancement of sexual rights. This seminar offered practical engagement in how we transform harmful gender and sexual norms, and relatedly, how we build a culture of consent and empowerment around sex and sexuality. Community-based actions on GBV prevention and research findings on gender-based bullying in schools provide evidence and offer pathways for new approaches in our work to end GBV.

Sexual Rights and Justice

Factsheets prepared with Psyche Gonzales. December 2021. https://issuu.com/igdssau/docs/sexual_rights_factsheet_2021_

IGDS/PADF Break the Silence Adapted Toolkit Roll-out Training of Trainers in Guyana and Trinidad & Tobago

Phase 1 – The IGDS, with the support of PADF facilitated 8 three-hour Train the Trainers sessions to service providers and civil society representatives involved in providing services to the Spanish-speaking migrants in the three territories. Due to COVID19 restrictions, all sessions were delivered virtually via the Zoom interface and hosted a maximum number of 40 participants per session. The territories represented by the participants were Trinidad, Tobago, and Guyana. Organizations responsible for project coordination are the Institute for Gender and Development Studies (Project oversight and Trinidad-based training), ChildLink (Guyana-based training) and Women of Substance (Tobago-based training). Specific to the content of the Rompe El Silencio Manual, the objectives of the training are to equip a core group of master trainers with a comprehensive understanding of the material within the toolkit and the ability to deliver training to groups who may call on their organizations to provide support for work around Child Sexual Abuse (CSA) within the migrant communities. March 17–31, 2021.

Phase 2 Champions Facilitate – After the first phase of workshops, in accordance with the objectives of the training, a core group of trained intermediate trainers (qualified during phase 1) facilitated sessions tailored to different key audiences to demonstrate their ability to provide support for work around Child Sexual Abuse (CSA) within the migrant communities utilizing the material and content provided within the BTS Manual. This second phase of training took place from April 26 to June 10 2021.

Feedback and challenges

Due to COVID19 restrictions, the sessions were conducted virtually via Zoom which lent some technical difficulties at increment moments throughout the training. These issues included drops in internet connection in the absence of ethernet accessibility for facilitator's

laptop, dips in audio and participant inaccessibility to files shared in-session via the Zoom chat due to their use of cellular devices to attend the sessions. Limited screen sharing in break out groups also posed an issue as it limited the extent to which participants could interact with each other and with the content. Coordinating Organizations in Guyana and training teams in Trinidad have indicated a keen interest in working with the manual beyond the July 31 official end of the project. The IGDS is exploring the mechanics of continued partnership and support for the work of the coordinating organizations as they seek to integrate the facilitation of the Adapted BTS Manual into their annual work programmes.

Project Deliverables

Based on the training undertaken during Phase 2 of the project, the IGDS team was able to work with the Alma Jordan Library BOS Representative Ms Georgia Alexander to copyright the output workshop energizer, The Privilege Bank. This tool has made its way into the IGDS SherOes initiative coordinated by the Regional Coordinating Office.

Project Resource Development and Partnerships

As a component of the BTS/PADF Phase 2 initiative, a Facilitators Guide was completed and designed and can be used as a stand-alone guide for IGDS and other online training. As an alternative space to capture critical CSA information for distribution the Institute will use the Lunchtime Seminar Series (LTS). Specifically, the November 19, World Children's Day LTS entitled *Managing Child Sexual Abuse and Disclosure: Creating Safe Spaces for Children* by MS Nadine Lewis- Agard. The LTS was designed to produce an interactive session on safe space creation. The session has been used as a teaching tool for select groups and project partners. Collaboration with ChildLink Guyana and the University of Guyana to share in the two-part LTS Series

Caring for Boys: Safeguarding Children from Child Sexual Abuse. A May 2022 collaboration with Cashew Gardens Community on Migrant community to market initiative- expanding audiences for the PADF/ IGDS BTS Toolkit.

Framing the Way Forward for the BTS

In November 2021, the IGDS finalized an MOU with the Bankers Association of Trinidad and Tobago for sponsorship of just under TT\$500,000.00. This enables the St. Augustine unit to enhance evidence-based advocacy and build the responsiveness of IGDS Outreach through the BTS Campaign and Associated Projects to end GBV. A work plan to operationalize this effort was developed. This work plan is guided by a Sponsorship Agreement currently under review, and an Oversight Committee, whose Terms of Reference are also under review by both parties. Following final negotiations, a full enhancement to the BTS intervention will be implemented.

PROJECT 1. Assessment and Alignment of the Health and Family Life Education (HFLE) Curricula and Teacher Training

This project aims to prevent family violence by assessing and updating the current Primary and Secondary School Health and Family Life Education (HFLE) curricula to ensure life skills around sexual and reproductive health and family violence is well integrated. Specifically, the project will assess the current primary and secondary school HFLE curricula against international standards, and the Break the Silence toolkit. Based on findings and informed by the regional formative assessment and M&E framework, amendments to the curriculum will be made accordingly, and in line with the international standards ensuring family violence is well integrated. Training will be conducted to equip over 200 teachers and principals with the necessary tools to deliver the revised HFLE curricula in the area

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of family violence. The IGDS collaborated with the School of Education at The UWI St Augustine Campus, particularly with three education/curriculum and HFLE experts. The project activities commenced in October 2020 and will end on June 30, 2022, and takes place in the 3 regions: Tunapuna/Piarco, Rio-Claro/Mayaro and Tobago. From November 2020 to January 2021, the project team focused on reviewing and assessing the current curricula to identify the gaps of family violence. Between February to May 2021, the team edited and updated the current curricula to create a revised age appropriate curricula that included family violence. Feedback from the Ministry of Education was received on December 6, 2021, and three stakeholder consultations were conducted. A total of 151 people attended. Training of HFLE master trainers will take place in June 2022.

At the end of the project, we expect to achieve the following outcomes:

- To create and disseminate a revised age appropriate HFLE curriculum for both the primary and secondary school level.
- To increase awareness of family violence and comprehensive sexuality education amongst teachers, principals, key stakeholders, and parents.
- To equip and strengthen the capacity of teachers and principals in three geographic areas (Tobago, Piarco/Tunapuna and Rio Claro/Mayaro) with the necessary tools to deliver the revised HFLE curriculum in the area of family violence.
- An increase in the number of trained HFLE teachers in the three geographic areas.
- An increase in advocacy for strengthening and mandatory implementation of the HFLE curriculum in schools to advance gender equality and empowerment.

PROJECT 2. Design and implement an outreach intervention for Male leaders and Faith- Based Leaders/ Influencers as champions of gender equality with zero tolerance for family violence

The specific purpose of this project is to build a cadre of male, and faith-based leaders in each community (in the three regions of Tunapuna/Piarco, Rio-Claro/Mayaro and Tobago) who will serve as champions of gender equality with zero tolerance for family violence. This will be done by training 120 men using two community-based interventions: the Partnership for Peace (PfP) Batterers Intervention Manual, and the UN Women Foundations Programme Methodology for preventing GBV; and designing and implementing an outreach and awareness intervention among men and boys and FBO leaders in response to family violence.

The training was organized to be conducted across two cohorts over a 6-week period (2 sessions per week). Cohort 1 had a total of 21 men (Age Range: 30 – 65) who were trained during April and May 2021 and who are currently rolling out their community outreach plans. Cohort 2 had a total of 16 men (Age Range: 23-65) who were trained from September 2021 to November 2021. They are currently rolling out their community outreach plans. Both cohorts were facilitated by four trained facilitators (facilitators for the PfP were Ms Kimberly Gilbert and Mr Shane Joseph, and for the UN Foundations Programme were Dr Safeeya Mohammed and Mr Bertrand Moses). To remedy the numbers, with the support of UNFPA and the Spotlight Initiative, we have conducted one-hour sessions which were led by graduates of the cohorts. These workshops took the project up to 70 graduates. The programme will end in June 2022 with the hope of reaching a total of 120 men.

PROJECT 3. Regional Spotlight Programme intervention to create an intersectional Caribbean Model of behavioural and cultural change

This project is developed in cooperation with CSO partners. It is a collaborative project funded by UNFPA Regional Office and UNICEF Regional Office to be executed by IGDS (implementing partner), CariMAN and the Caribbean Alliance of National Psychological Associations (partners). The objective of this programme is to develop a model specifically tailored to the Caribbean that addresses the identified gaps in prevention programming in the region. The model will serve as a foundation for the Regional Spotlight Initiative Communication for Development (C4D) interventions, but also function as a conceptual framework for the design of other Caribbean sustainable social change interventions to prevent VAWG across the region. The development of the Model will involve identifying and analysing harmful gender norms in the Caribbean and examining how these norms developed in order to identify strategies to change them, as well as identifying positive gender norms that can be strengthened in order to guide future interventions.

The model takes a lifecycle approach, so that it can be used to guide behaviour change interventions targeting men and boys at different stages of life from childhood to old age. Development of the Model will therefore require an analysis of influencers (factors and figures) that influence men and boys in the Caribbean during different stages of their lives, and the shifting levels of influence that these persons and factors have on their behaviour throughout the lifecycle. This project commenced in March 2021 and will end in June 30, 2022 with the creation of the Model and accompanying Communication Strategy.

Funding Pledged by the Digicel Foundation - TT\$100,000

This project seeks to enhance the outreach infrastructure of the IGDS, particularly in terms of facilitating access for our differently abled clientele. In November 2021, the Institute was granted, after almost 30 years, a dedicated site within the University to operationalize its full potential as a research, outreach and teaching Institute. This site, located at Gordon Street St. Augustine, previously housed the Optometry Clinic managed by the Faculty of Medical Sciences. It features two buildings, with capacity for IGDS business operations, as well as sustainable engagement with stakeholder communities for the purpose of gender mainstreaming, mentorship, and movement building. The property, however, requires renovation to redefine its purpose from a clinic environment to a space that accommodates student and stakeholder needs, that is accessible, inclusive, safe, and secure, functional and efficient. The project directly addresses the goals of accessibility, inclusivity and safety.

MOU - IGDS & The Trinidad and Tobago Defence Force (TTDF) (Currently under review by TTDF)

To establish inter-organisational cooperation and interaction, as well as educational exchanges centred around discussions with the Gender Advisor and team, this collaboration will focus on three broad areas: knowledge transfer, capacity building, and mentorship.

The objective of this MOU is to formalise cooperation between the parties which has been guided thus far by shared interests in achieving gender mainstreaming and promoting a gender-responsive work environment to optimise operational efficiency within the TTDF. This MOU will also document the

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collaboration between the parties more specifically towards curriculum development in gender for, and training of, training officers/facilitators to support TTDF work with youth; developing and implementing institutional and national policy documents; and becoming a centre of excellence for military gender training in the Caribbean region. Further, this MOU will provide the basis through which further negotiations for the provision of educational and consultancy services may proceed and be governed by ancillary or more particular Memoranda of Agreement.

Areas of Collaboration

- Formal courses, which may be accredited or certified by The UWI, and informal training programmes that may include professional and technical staff and students
- Curriculum development
- Cooperative use of materials and facilities
- Consultancy to support institutional research and development of policy documents at the level of the organization and national level, such as the Women, Peace, and Security National Action Plan for Trinidad & Tobago

Cross Faculty Collaboration,

UWI St. Augustine Campus

IGDS & Department of Electrical and Computer

Engineering

Collaborators: Working Group on Equality, Diversity and Inclusion

Focus: Anti-Discrimination Across the Curriculum,

Sessions: Four capacity building sessions, 4 for staff, 1 for students (May 2022)

IGDS & UWI School of Nursing

PAHO/WHO funded project to develop GBV training curriculum for healthcare providers and social workers: undergraduate and graduate students

- Tested curriculum with graduate students (focus group facilitation), January 10–13, 2022
- Tested curriculum with undergrad students (focus group facilitation), January 17–20, 2022
- Review and analysis of data sets coming out from curriculum testing
- Final project technical report and curriculum submitted April 2022

IGDS & Faculty of Food and Agriculture

FAO funded project: FISH4ACP Unlocking the Potential of Sustainable Fisheries and Aquaculture in Africa, the Caribbean, and the Pacific – Social Analysis Report (IGDS Social sector project lead in collaboration with Dr Talia Esnard) August 2021 - March 2022

- Primary data collection and analysis of shrimp by-catch value chain in Guyana.
- Interviews and focus group support
- Validation workshop
- Project technical report completion

Advocacy And Activism

July 30, World Day Against Trafficking in Persons

IGDS hosted a Teach-in in partnership with the InterClub of Trinidad and Tobago on thinking critically about human trafficking in the Caribbean and beyond, “Rethinking Trafficking: Getting to the source of the problem” with Kamala Kenpadoo, Professor of Social Science, York University, Canada and guest D. Alissa Trotz, Professor of Caribbean Studies at New College & the Director of Women and Gender Studies, University of Toronto, Canada. Part of the Ministry of National Security’s Human Trafficking Awareness Week 2021.

November 19, International Men's Day

IGDS St. Augustine Unit joined our colleagues at Mona Unit, Nita Barrow Unit, and IGDS Regional Coordinating Office to commemorate International Men's Day in recognition of the international theme for 2021 "Better relations between women and men" which focuses on improving gender relations and promoting gender equality between men and women. IGDS Regional Coordinating Office launched the theme "Men Leading by Example. Men Who Care". As we work toward achieving gender justice, we must challenge harmful gender norms and stereotypes in order to create peace and care for each other. IGDS SAU, in collaboration with Roots Foundation TT shared the video series "Trinbago Men Who Care". Men, what do you care about?

November 20, World Children's Day

Annually, in commemoration of World Children's Day, the BTS Campaign hosts a special presentation for BTS Network Members and the public. This event attracts a local, regional, and international audience. In 2022, Ms Nadine Lewis-Agard presented "Managing Child Sexual Abuse and Disclosure: Creating Safe Spaces for Children" on November 17, 2021.

A BTS Network including individuals and groups aims to expand the work beyond the IGDS by identifying sources of support in communities to keep the campaign alive, report on activities that have taken place, discuss the training needs of those interested in supporting and willing to participate in outreach, get updates from members on their related activities, and acquaint members with resources available to use in outreach work. Child Sexual Abuse is a child rights issue described by some as a global humanitarian crisis. In the year 2022, children were faced with an increased risk due to the COVID-19 pandemic. The BTS Campaign objectives are guided

by two overall aims. These are to keep the campaign alive and to continue to bring a gender analysis to BTS interventions; and to expand the reach of the campaign to new communities and groups.

November 25 to December 10, 16 Days of Activism to end Gender-Based Violence

November 25: International Day for the Elimination of Violence Against Women

December 1: World AIDs Day

December 10: Human Right's Day

IGDS coordinated three forums during the 16 Days of Activism Against Gender-Based Violence. In partnership with the Alliance for State Action to End Gender-Based Violence IGDS hosted the webinar "30 Years On: Reflections on the Journey of the Domestic Violence Act. Insights for Another Generation" to commemorate the 30 Anniversary of the Domestic Violence Act T&T & the 16 Days of Activism against Gender-Based Violence. The session was moderated by Dr Gabrielle Hosein, Lecturer, IGDS. Panellists included: Diana Mahabir-Wyatt, Founder, The Shelter for Battered Women & CADV; Hazel Thompson-Ahye, Independent Senator and Attorney-At-Law and Respondents: Darron James, Faculty of Social Sciences Representative UWI Guild of Students; and Ashlee Burnett, Activist & Founder, Feminitt.

In commemoration of the 16 Days of Activism, the Sexual Cultures of Justice project presented a Special Lunchtime Seminar, titled "Let's Talk Consent and CSE (Comprehensive Sex Education)". Presentation and discussion was led by Dr Krystal Nandini Ghisyawan, Director of Research, The Silver Lining Foundation, and Dr Angelique V. Nixon, IGDS Lecturer and Project Lead Researcher, A Sexual Culture of Justice. This seminar presentation offered an interactive discussion on tools

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for preventing gender-based violence through frameworks of sexual rights and sex positivity. The presenters shared knowledge and materials created through the completed human rights project “A Sexual Culture of Justice” and advocacy for social change and advancement of sexual rights. This seminar offered practical engagement in how we transform harmful gender and sexual norms, and relatedly, how we build a culture of consent and empowerment around sex and sexuality. Community based actions on GBV prevention and research findings on gender-based bullying in schools provide evidence and offer pathways for new approaches in our work to end GBV.

In partnership with The High Commission of Canada to Trinidad and Tobago, The Defense Force of Trinidad and Tobago, IGDS SAU hosted the webinar “Building Resilience: Women Peace and Security in Trinidad and Tobago” with keynote speaker Elizabeth Solomon, Judge, Industrial Court of Trinidad and Tobago. The main objective is to signal to stakeholders that all parties, and in particular the Government of Trinidad and Tobago, and the Trinidad and Tobago Defence Force, are committed to the development of the Women, Peace and Security National Action Plan, and are supported by the Government of Canada and the IGDS. This event is the first public event at which the TTDF will discuss their work on, and commitment to, the development of the Women, Peace and Security National Action Plan (WPS NAP) for Trinidad & Tobago, in compliance with the UNSCR 1325, a global call to address women and conflict. At present, no other country in the region has an established WPS NAP. Resolution 1325 urges all actors to increase the participation of women and incorporate gender perspectives in all United Nations peace and security efforts. It also calls on all parties to conflict to take special measures

to protect women and girls from gender-based violence, particularly rape and other forms of sexual abuse, in situations of armed conflict. The resolution provides a number of important operational mandates, with implications for Member States and the entities of the United Nations system (<https://www.un.org/womenwatch/osagi/wps/>).

March 8, International Women’s Day/Women’s Month

IGDS coordinated the roll out of messaging and coordinated conversations and forums on the IWD 2022 theme, “Gender equality today for a sustainable tomorrow” in various media including visual, audio visual and social media.

Wall Paintings and Community Signs | Flags and Light Installations

In collaboration with the High Commission of Canada in T&T a select wall was hand painted with IWD2022 thematic messaging at Four Roads, Diego Martin (a high density and high traffic location). Hoisting of Flags at Canadian High Commission and Australian High Commission also occurred with the same thematic messaging.

Community Signs Campaign

With the support of the High Commission of Canada to T&T, and the Digicel Group Trinidad and Tobago, IGDS coordinated a community signs campaign for IWD 2022. Fourteen signs with public education messages were hand painted, and distributed throughout Trinidad and Tobago, within the month of March. Messaging focused on the theme “Gender equality today for a sustainable tomorrow”. Individuals and groups put up these signs both inside and outside of their premises and some shared images on social media. The signs were hand painted by the artist Bruce Cayonne ‘The Sign Man’.

Digicel Brand Ambassadors

Audio Visual/Social Media Messages

IGDS SAU collaborated with Digicel Group Trinidad and Tobago for IWD 2022. Brand Ambassadors recognised International Women's Day underlining gender equity and the IWD 2022 theme "break the bias" in video messages. These messages can be viewed here: Nadia Batson <https://fb.watch/dqMLjFHkni/>, 'Voice' - Aaron St. Louis <https://fb.watch/dqMI3cEgtf/>. IGDS SAU also collaborated with Digicel towards IWD 2022 thematic messaging on in-store digital billboards.

Forums and Conversations

In commemoration of IWD Women's month, IGDS coordinated or contributed to four main forums, while staff also were invited to speak and attend various other partner activities. IGDS hosted, a webinar titled "Dollars and Cents: What Makes Sense for Gender Equity" in collaboration with the High Commission of Canada to T&T. Speakers included, Dr Asha Kambon, Public Policy Expert; Dr Marlene Attzs, Lecturer in Economics, UWI St Augustine; and Ms Tonni-Ann Brodber, Representative of the UN Women Multi-Country Office - Caribbean. Chair was Gabrielle Hosein.

IGDS also coordinated a two-part series on Working Mothers to contemplate how women were experiencing and negotiating the increasingly insecure labour market and vulnerabilities that have been exacerbated by the COVID 19 pandemic. We engaged experts on relevant and strategic responses that protect the vulnerable against livelihood risks and promote equal rights and justice.

Part 1 – "The Working Mother: Navigating Employment, Social Protection, and Parenting" Presenters included: Ms Alena Nurse, Educational Officer, National Insurance Board of Trinidad

& Tobago; Ms Simone Francois-Whittier, Attorney-At-Law, Research & Public Advocacy Director, Association of Female Executives of Trinidad & Tobago; and Ms Kathleen Sarkar, Assistant Director, National Family Services Division. Moderated by Dr Deborah McFee, IGDS Outreach & Research Officer.

Part 2 – "Social Protection for Working Women: Emerging Issues" A virtual roundtable discussion between women in leadership positions in business. Speakers included: Ms Dylis Mc Donald, Project Coordinator, Caribbean Women in Leadership (CIWiL); Ms Dixie-Ann Dickson, Communications Specialist, Bankers Association TT; Mrs Alisha Mohammed-Stephens, CEO, Transbrokerage Services Ltd.; Ms Penny Gomez, CEO, Digicel Foundation Trinidad and Tobago; and Ms Sacha Thompson, Chairman, Board of Directors, Digicel Foundation. Moderator, Ms Simone Francois-Whittier, Attorney-At-Law, Research and Public Advocacy Director Association of Female Executives of T&T.

IGDS partnered with United Nations Caribbean / UN Information Centre for the Caribbean area for a live Facebook conversation on "Breaking the Bias for an equitable and sustainable Caribbean". The discussion included Dr Leith Dunn, Honorary Research Fellow and former head of the UWI IGDS Mona Unit and Chanelle Beatrice of #Feminitt Caribbean which will also be recorded as an episode for the new season of the UNIC's podcast series. The event was recorded as an episode for the new season of the UNIC's podcast series.

Cat Calls of UWI Project

This project highlights street harassment and GBV through consciousness raising actions via our online platforms and outreach at the UWI, St. Augustine campus and Trinidad and Tobago. It provides a safe online space to share experiences.

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Strategy Review

Access

IGDS was invited by the UWI School of Nursing to partner, develop and test curricula for healthcare students to build capacity in care and support of survivors of gender-based violence. UWI School of Nursing led the Pan American Health Organization PAHO/WHO funded project which was the development of GBV training curriculum for healthcare providers and Social Workers. The IGDS also participated in the development of training in Sexual Harassment Policy, with Support for Women, Peace and Security, and a National Action Plan Development for the T&T Defense Force.

The IGDS also hosted a 10-day adolescent camp on Gender-Based Violence in collaboration with Roots Foundation, and training of male leaders from Faith-Based Organizations (FBO). Revisions were made to the Health and Family Life Education curriculum to include GBV, and a Literature review was created toward a Theory of Change for a Caribbean Model of Behavioural and Cultural Change.

Training for New Recruits for the Trinidad and Tobago Defense Force in Building Capacity was delayed, however the roll out of the BTS manual and Train the Trainers in Guyana, and Trinidad and Tobago, UWI/PADF/OAS Open Hand Initiative - Phase 2 occurred. Twelve workshops were completed, with 8 Train the Trainers sessions and 79 workshop participants. Forty facilitators were trained to use the BTS/PADF Amended manual.

The IGDS hosted several workshops during the 2021/2022 period. These include the She's Royal Workshop, Rape Card Rape Culture Series was hosted in collaboration with IGDS Ignite/ UWI Economics Department for the students at Queens Royal

College (QRC); the SHEroes Advocacy training in collaboration with the IGDS RCO and UNESCO, and the Capacity building workshop - Facilitation: Tools and Practices for Social Justice. This course was originally designed for IGDS Ignites, opened up to the public. A short course on Women, Men, Gender and Law targeted shelter managers, with a developed/amended module on migrant issues, with an emphasis on goals related to beneficiaries/ participants.

Data collection on the women's movement involvement in Child Marriage and Early Unions (CMEU), on life histories of women who were in CMEUs, and on adolescent knowledge and attitudes was completed across six countries.

Collaborations occurred throughout the period under review. These included a collaboration with IGDS/FARCP/IGDS Commonwealth Foundation for the National Bush and Forest Fire Policy & Gender & Climate Change Project and Teaching Module.

A proposal for the FACRP Bush and Forest Fire Mitigation Initiative in T&T was submitted to the Natural Infrastructure for Caribbean Resilience (NICaR) Programme, a part of the US Forest Service Division. The project is a 24-month initiative, and was successful in receiving NICaR funding paid directly to FACRP in the tune of USD\$60,000 (FACRP funds).

The IGDS continued its monthly virtual Lunchtime Seminar Series towards Consciousness Raising in Gender and Development. Seminars during the time included, *Managing Child Sexual Abuse and Disclosure: Creating Safe Spaces for Children* by Ms Nadine Lewis-Agard; *Caring for Boys: Safeguarding children from child sexual abuse* by Hassani Tinnie, Omattie Madray,

and Dr Paulette Henry; *Do international human rights norms have impact, and how do we know? Reflections on the CEDAW Convention* by Susanne Zwingel, Assoc Prof, Dept of Politics and Int'l Relations, Florida Int'l University; and *Whither Internal Self-Government for Tobago: Discourse on the draft legislation and the expectations of civil society in Tobago* by Hamid Ghany CMTT, Professor of Constitutional Affairs and Parliamentary Studies.

Strategic Plan 2022/2027

For the new strategic plan period, the IGDS plans to continue a number of projects initiated in the previous strategic plan period. Additional to those, plans for providing technical support to Fondes Amandes Community Reforestation Project (FACRP), finalizing the National Bush and Forest Fire Policy (DNBFFP), designing, and developing with partners to review and amend the DNBFFP are all in the works.

The IGDS plans to partner with the Faculty of Food and Agriculture to co-Lead the Social Impact and Gender Component - FISH4ACP Developing Sustainable Value Chains for Aquatic Products (Guyana). Additional plans for the new period include conducting interviews, a quality review and assist in data cleaning. Provision of oversight for preliminary cleaning and analysis of data sets is planned as well as a compilation of Social Analysis chapter of the FAO Project Technical Report, and social impact component of the Validation workshop.

Alignment

The IGDS was the co-facilitator of the IGDS RCO-led project to develop a Manual and Relevant Institutional Strengthening Training for Gender Affairs Division staff across five regional territories.

Agility

In the area of Agility, the IGDS plans to partner with the Dept. of Electrical and Computer Engineering to build Building Gender Responsiveness and Confront Discriminations within the field.

Institute of International Relations (IIR)

Director's Summary

The Institute of International Relations at The University of the West Indies is a regional, autonomous academic institution at the St. Augustine Campus, with associate fellows at the Mona and Cave Hill Campuses, and within other organizations. Since its founding in 1966, the Institute has been dedicated to the conduct of advanced research and teaching concerning the international challenges of the contemporary world, with special emphasis upon the Caribbean and Latin American regions. As a vital part of the infrastructure for its teaching and research, the Institute has developed a library that constitutes one of the best information resources available, regarding the international relations of the Caribbean. In addition to its Postgraduate Diploma, MSc and MPhil/PhD programmes, the Institute of International Relations, through the Diplomatic Academy of the Caribbean, meets related regional and national human resource development needs by offering short intensive modular training programmes for public and private sector and civil society personnel. The Institute also offers international policy research and advisory services and consultancies.

Academic Year 2021/2022 was a testing time for the Institute of International Relations (IIR) as indeed it was for the entire UWI. The IIR faced a challenging financial situation with a major reduction to its approved budget by 90%. Consultations and

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plans were made to adjust operations and transition towards greater economic viability. This exercise has been rendered more complex in the pandemic environment.

Despite the challenges in 2021/2022, the IIR maintained full delivery of all three academic programmes and the award of its postgraduate diploma, MSc, and PhD degrees. Notably, three PhDs were awarded in the 2021/2022 period. There were several high-quality public events, and via digital technology, the IIR continued to provide free access to all its in-course guest lectures, Diplomatic Dialogues, panel discussions and other webinars. There was an enthusiastic response from public officials, individuals, alumni, and the Institute's regional and international networks. This raised the IIR's visibility as a national and regional repository and distributor of knowledge and helped to attract new local and international students in the following year.

The IIR's participation continued in the international collaborative research project on Climate Change and Community Responses (via the work of Dr Michelle Scobie) and contributed to a UWI STACIE capacity-building project with the Ministry of National Security (via the work of Professor Jessica Byron and Dr Michal Pawinski). Also of note is its strategic partnership with the Caribbean Policy Consortium (CPC), a network of academics, policy advocates, public officials and private sector representatives from North America and the Caribbean who work to strengthen United States-Caribbean relations and raise the visibility of Caribbean development concerns in the partnership.

The Diplomatic Academy of the Caribbean (DAOC) rolled out a series of webinars which explored significant developments in

Caribbean international trade and diplomacy, and it offered a suite of new training modules on Consular Relations, Climate Change Negotiations, and Risk Management for Natural Disasters. These innovations and the continued digital delivery of its professional training modules led to a significant increase in the overall registration numbers and in the regional and international representation of participants in the DAOC programmes.

Academic staff have continued to produce high quality and relevant academic and technical publications, and to partner with international organizations and other local and regional entities in preparing technical reports, policy briefs and providing expert advice geared to address the multiple challenges facing the Caribbean and the global community. They have all contributed their expertise to a wide range of online discussions, public lectures, and academic conferences. One such instance is the participation of Dr Michal Pawinski in the subject matter experts meeting, integrated threat assessment centre, national security council, Office of the Prime Minister of Trinidad and Tobago, July 1, 2022.

In sum, the IIR is confronting the current era with determination, energy and a focus on innovation and renewal in all its activities. Having completed an implementation plan for the recommendations of the Review Report in 2020/2021, in 2021/2022, the IIR completed an extensive review, revision and updating of its academic programmes one of the key recommendations of the Quality Assurance Report.

For more on the mission, vision, and governance of the IIR, please visit <https://sta.uwi.edu/iir/>

Student Matters

Registration

The academic year 2021/2022 marked the removal of the 50% GATE fee subvention for T&T citizens pursuing graduate programmes at tertiary institutions. This is viewed as one of the possible factors influencing a slump in the registrations in graduate programmes across the STA Campus this year. Provisional data suggests for the Academic year 2022/2023, for the MPhil/PhD programmes there was a 28% decrease from the Academic year 2021/2022, while for the MSc there was an 11 % increase with no change in the Postgraduate Diploma for the same period. The impact of the GATE removal has been further compounded by the difficult socio-economic context affecting many individuals and households because of the COVID-19 pandemic and other factors which have contributed to economic downturn.

Student Feedback in the Staff/Student Liaison Committee

A meeting of the Staff/Student Liaison Committee was held in Semester Two of Academic year 2021/2022. During the discussions, students expressed the need for the IIR to continue to focus on security improvements for the upcoming academic year. They referred to the installation of a CCTV system and a security gate at the entrance to the student washroom facilities. Mention was made also of parking availability and increased lighting of the TGR South Car Park. While the latter facility does not fall under the jurisdiction of the IIR, the Institute has installed a security gate with card access to the washroom facilities. The CCTV system remains on the agenda of matters to be addressed once funding is available. Student representatives also wanted the assurance of continued access to remote/online delivery of teaching and learning resources, especially for regional and international students and those located in

distant locations in Trinidad and Tobago. They encouraged the Norman Girvan Library to continue to invest in expanding its online resources for user access. Finally, the representatives relayed the student proposal that the procedural requirements for ethical approval for research papers should be placed within the MSc Regulations Manual in the section that relates to INRL 6000: Research Paper. All these matters were fully taken into consideration as the IIR prepared for teaching and learning in 2022/2023 and beyond, using increased online instructional delivery.

Programme Marketing and IIR Visibility

The IIR academic and administrative staff are cognizant of the ever-increasing importance of marketing the IIR and DAOC programmes and events, especially in the context of falling recruitment for graduate programmes. The advertisement of public lectures and webinars is well executed by Marketing and Communications and by dissemination through the IIR and DAOC networks and mailing lists, and the Diplomatic Academy has developed some effective marketing tools for its training modules. However, there is a need to strengthen the advertising of the IIR's academic programmes, particularly for regional and global markets. This must be a priority area to be addressed in the next strategic and operational planning cycle for the IIR and DAOC. The IIR dedicated a portion of its budget to digital social media advertising between July 9 and July 31, 2021, working with a firm that had been contracted by UWI Marketing and Communications. The feedback received showed increased website traffic to the IIR website by some 1407 new users, ranging in age between 25 and 39. Fifty-three percent of the visitors were male. However, the overall results fell rather short of expectations. One conclusion reached was the urgent need to update and redesign the IIR website. This project will be embarked on in the coming academic year.

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For 2022/2023, the limited resources available for marketing are being spent primarily on advertising in Suriname and Guyana, as well as dissemination of programme information throughout the Caribbean region utilizing the IIR's institutional and alumni networks. The normal channels for promotion of the programmes in Trinidad and Tobago are being explored also, including via the IIR and NGL websites, print and radio/television media.

Progress in Curriculum Review

Much of 2021/2022 was spent completing the review and revision of the PG Diploma and MSc Programmes in International Relations and Global Studies. The programmes went through the final approval stages of the UWI Board for Graduate Studies. Tributes are due to the very hard work of Dr Michelle Scobie, Chair of the Curriculum Committee over the last three years, and Dr Dave Seerattan who took over during her study leave, also to Usha Lakhan, and Wenda Rocke. The IIR also received tremendous support from the Director and staff of the Office of Graduate Studies and Research and the CUTL Programme Coordinator Dr Justin Zephyrine of CETL. It is important to note that the revisions of the PG Diploma and MSc Programmes are closely aligned with many recommendations made in the Quality Assurance Review Report of the IIR which was delivered in March 2021.

Teaching and Learning, Curriculum Enhancement

As the UWI St. Augustine Campus has operated on a virtual basis for the last two years, curriculum enhancement activities have remained restricted and have had to be tailored to what could be accommodated virtually. The IIR succeeded in offering students the usual workshops in academic writing and in information literacy skills. Likewise, it has offered several online public events and in-course guest lectures by

practitioners and experts in various fields which have elicited favourable feedback from the students. A few students may also have enrolled in the online modules offered by the DAOC, which constitute another aspect of professional development training. Internship opportunities have been more limited in the current circumstances, but we eagerly await the possibility to relaunch such programmes in the coming year in concert with our alumni and institutional networks.

Once again there has been valuable collaboration between the University of Geneva Centre for Children's Rights and the IIR in collaboration with the Department of Behavioural Sciences in the Faculty of Social Sciences. UNIGE offered five scholarships for UWI students to participate in the Ninth Cycle of the CCR's E-Summer School "Children at the Heart of Human Rights" which took place from May 30 – June 10, 2022. One award has gone to an IIR MSc student, Kevin Liverpool, and four awards to graduate students from the Behavioural Sciences. Professor Aldrie Henry-Lee, University Director of SALISES has taught in this year's Summer School and Dr Christine Descartes of Behavioural Sciences will be moderating a Round Table on Children's Rights Issues in the Caribbean.

Quality Assurance Review Report Follow Up

The IIR has completed its Implementation plan following receipt of its Quality Assurance Review Report in 2021. The plan addresses key recommendations made by the assessment team and was tabled for the review and discussion by the Board. Some of the recommendations are already being implemented as they were closely aligned with the IIR's Curriculum revision exercise which was approved. Following the Board's approval, the Implementation plan was circulated to the UWI STA Academic Board and to FSS Faculty Board and implementation will follow.

Establishment of IIR Alumni Association and Election of Executive Committee

The Director and Secretariat of the IIR have been working assiduously on the formal establishment of an IIR Alumni Association that will be registered as a professional sub-chapter of the St. Augustine Campus UWI Alumni Association. The IIR boasts over 2000 alumni, many of whom have had or are presently developing outstanding careers in international and regional organizations, national public life, private sector bodies and civil society development and advocacy spaces. They are a tremendous asset and source of pride to the IIR. A key strategic goal between 2017-2022 has been to institutionalize their relationship with the Institute and further harness their support and collaboration in building the Institute, while especially for younger alumni, supporting their ongoing professional development interests. The formation of the Association came to fruition after a series of alumni meetings held in 2021 and in the first half of 2022. Some three years of research, consultations and planning, various meetings of locally based and international alumni resulted first in the appointment in 2021 of a Steering Committee which, with the support of the IIR Secretariat, organized elections in March – April 2022 for the Executive Committee of an Alumni Association. On April 29, 2022, it was announced that the new IIR Alumni Association Executive Committee consists of: Mrs Shauna Charles-Toussaint (President), Ms Jaya Mangar (Vice President), Ms Coreen David (Secretary), Mr Christopher Cole (Treasurer), Ms Kashika Ragoonanan (Marketing and Communications Officer), Ms Kafi Nicholas (Executive Committee Member), and Mrs Dorial Ann Beckles Lamont (Executive Committee Member).

The Executive is now embarking on the necessary registration procedures with the UWIAA Office and the Alumni Affairs Office at St. Augustine.

Registration and Throughput

Student Registration 2020/2021 and 2021/2022

Student numbers at the IIR declined by almost 11 %, from 84 to 75 during the past academic year. Contributing factors, other than the removal of GATE, include lapsed registrations and lower new enrolments due to the attrition caused by social and economic difficulties. These sobering results underscore the absolute imperative of investing more heavily in marketing campaigns, strengthening the support for our current students struggling to complete their programmes under more austere circumstances, and continuing to innovate and transform the IIR's programme offerings to increase competitiveness and tap into new markets. One encouraging detail is the increased regional and international enrolment which has been facilitated by remote access to the MSc and Postgraduate Diploma programmes. This is clearly evidenced in the 2021/2022 statistics where regional and international student registration ranged from 10 to 14 %. This fact must also inform policymaking on future programmes, their delivery modes and target markets.

Student Throughput

In 2021/2022, six PG Diplomas in International Relations were awarded. Two of the graduates received the grade of Distinction in their awards. Fifteen MSc Global Studies degrees were awarded, nine with Distinction. Four PhD awards have been made in 2021/2022 - Dr Lynelle Clarke, Dr Lisa Gordon, Dr Kobina Wilson, and Dr Anthony Gafoor.

Programmes

The Diplomatic Academy of the Caribbean

The Diplomatic Academy of the Caribbean (DAOC) has met the objectives and exceeded the targets on participant numbers and revenue set in its business plan 2021/2022. Five training

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modules were offered between October 2021 and June 2022, with one delivered in August 2022. While two of these modules were on Protocol and Diplomacy, four form part of the DAOC's new portfolio of courses on Updating Consular Practice in the Caribbean, Climate Change Negotiations, Disaster and Risk Management Diplomacy and Energy Diplomacy. Between October 2021 and June 2022, in the context of five modules, the DAOC trained 82 participants from approximately 15 countries resulting in a gross profit of USD 51 thousand and net income of USD 25.1 thousand. Dr Bardouille and Clerical Assistant Marissa Diaz are to be highly commended for their tremendous work in developing the new curriculum, sourcing excellent facilitators, and marketing the programmes locally and internationally.

UWI STA Model UN Club

Dr Georgina Chami continued her work as Faculty Advisor for the UWI STA Model UN Club in 2021/2022. While this club attracts a mainly undergraduate membership, it offers tremendous developmental benefits to the students and is one of the ways in which the IIR adds value to the St Augustine Campus by spearheading the development of UWI MUN activities here since 2018. In 2021/2022, the club hosted a discussion forum on the Russia-Ukraine War on February 24 2022; a Jeopardy-style Games Night on March 12 on themes related to International Relations and Global Development; a webinar on March 24 on the Venezuelan Migrant Crisis, featuring speakers from Georgia Southern University, the International Organization for Migration and the UNHCR which had 62 persons in attendance. On April 07, 2022, the UWI MUN Club hosted a cross-campus webinar discussion with the UWI Mona MUN Club on "Challenges to the Structure of the Global Order" with the main speaker being Professor Andy Knight, former Director of the IIR, currently at Yale University. Thirty-eight persons were in attendance. Dr Chami is to be commended for all the hard work she has put

into developing this club and nurturing the undergraduate students' development as well-rounded Caribbean citizens.

Mexican Embassy book donation

The IIR is pleased to highlight a very generous donation of books received from the Mexican Embassy in February 2022. It consists of 21 items comprising titles which offer a representative window of Mexican writing. The collection is a part of the commemoration of the 500 years since the fall of Tenochtitlan and the bicentennial of Mexico's Independence. In addition to the IIR community, these books will be shared with other parts of the Campus Library system, the Centre for Language Learning and the Faculty of Humanities and Education, based on the most appropriate repository for their content and focus. The IIR greatly appreciates the gesture of the Mexican Embassy which adds to previous donations of books from the Embassy of Mexico or its officials.

Strategy Review

The drafting of the Implementation Action plan was based on recommendations of the Quality Assurance Report of 2021. The objective of the plan was to support the sustainable transformation and institutional continuity of the IIR as a valuable Campus and regional UWI resource for research, teaching, professional training, and national/ regional/ international outreach of the UWI in matters of international relations, international public policy, and global affairs. The IIR prepared the Implementation plan to address the recommendations made by the Review Committee, although the plan was an agenda item at the June 2022 Board Meeting, the Board did not consider the plan because it was felt that its implementation would ultimately be determined by overarching decisions to be taken on the IIR's financial and institutional future.

The Lecturer/Senior Lecturer position in International Trade had to be filled by temporary appointments and this staffing gap remains up to the present time. The IIR did a curriculum review and chose to revise and secure approval of Postgraduate Diploma, MSc Global Studies, and re-introduce the MSc in International Relations Programme. These were all approved by the UWI Board of Graduate Studies in July 2022. Two core courses for the new programmes were developed by November 2022 so that revised tuition fees and other information for the 2023/2024 handbooks can be prepared and approved by F&GPC, Campus Graduate Studies Committee, and other relevant bodies. BANNER information was appropriately adjusted, and a proper marketing programme was launched.

Public engagement on IIR related matters were maintained and an alumni association to leverage the good will and extensive professional networks of the alumni was established to provide valuable support to the IIR in realizing its marketing and institutional projects, and in enhance the benefits available to the existing student body.

Seven events consisting of a combination of diplomatic dialogues, public lectures, and webinars were hosted and the UWI IIR Alumni Association (IIRAA) Executive Committee was elected in April 2022. It developed its constitution and held the inaugural Annual General Meeting in December 2022 where its plans were unveiled to support the work of the IIR. Community engagement in climate change and environmental conservation occurred through the Voices of Toco: Community Action, Climate Change and Health Project in Toco, Trinidad and Tobago, that was managed by Dr Michelle Scobie. The DAOC continued to have exploratory talks on collaboration with other diplomatic training entities and ongoing collaboration with University of Geneva is being explored.

During the 2021/2022 academic year, the IIR made plans to reform for financial viability as the annual subvention was reduced to \$1 million and \$900,000.00 in 2019/2020 and 2020/2021, respectively from \$9 million since 2016.

The Institute implemented several cost cutting measures and has come up with a number of income generating proposals. Meanwhile it also engaged in a series of consultations with key stakeholders in the Government of the Republic of Trinidad and Tobago (GoRTT), the private sector, the multilateral community, the IIR alumni, members of the IIR Board, and the Regional Headquarters, the Principal and other leading members of the STA Campus Management team.

Distinguished Visitors

Ms Jewel Ali

Head of Office-Project Coordinator,
International Organization for Migration (IOM), Trinidad and Tobago

Professor Carlos Alzugaray

Former Cuban Ambassador and Professor, Instituto Superior de Relaciones Internacionales, Havana, Cuba

H.E. Juan Anibal Barria,

Ambassador of the Republic of Chile to the Republic of Trinidad and Tobago.

His Excellency Wellington Bencosme Castellaños

Ambassador, Embassy of the Dominican Republic

Professor Anthony Bryan

Former Director, IIR, and Fellow, Caribbean Policy Consortium

Ms Roberta Clarke

Commissioner, Inter-American Commission for Human Rights (IACHR)

Dr Georges Fauriol

Fellow, Caribbean Policy Consortium

Mr Flavio González

Attaché, Economics, Trade, Promotion and International Cooperation
Embassy of Mexico

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Dr The Most Reverend Archbishop

Charles Jason Gordon

Archbishop of Port of Spain

Professor Ivelaw Griffith

Fellow, Caribbean Policy Consortium

Mrs Claudette Jessop

Instructor, The UWI Academic Literacies Programme
Department of Modern Languages & Linguistics

Mr Deodath Maharaj

Chief Executive Officer, Caribbean Export Development Company

His Excellency David Málaga

Ambassador, Embassy of the Republic of Peru

Professor Norman Munroe

Professor, Mechanical & Materials Engineering, Florida International University

Ms Alicia Nicholls

Junior Research Fellow (Trade), Shridath Ramphal Centre, The UWI, Cave Hill

Professor Katarzyna Pisarska

Chair, Warsaw Security Forum, Poland

His Excellency Elkhon Polukh Olgu Polukhov

Ambassador Extraordinary and Plenipotentiary of the
Republic of Azerbaijan to the Republic of Trinidad and Tobago

Ms Leela Ramdeen

Chair, Catholic Commission for Social Justice (CCSJ) and the
Archdiocese's Ministry for Migrants and Refugees (AMMR)

Brigadier General (ret.) Boris Saavedra

Associate Professor, Perry Center for Hemispheric Defense Studies,
Washington D.C.

Mr Sanjin Soldatić

Political Officer, European Union Delegation to Trinidad and Tobago

Ms Dawne Spicer

Director, Caribbean Financial Action Task Force (CFATF)

Ms Reita Toussaint

Permanent Secretary, Ministry of Foreign and CARICOM Affairs

Mr Victor Valtierra Pérez

Chargé d' Affaires, Embassy of Mexico

Dr Susanne Zwingel

Associate Professor, Dept. of Politics and International Relations
Florida International University (FIU)

Seismic Research Centre (SRC)

The UWI Seismic Research Centre (SRC) is the regional institution responsible for surveillance of, and fundamental research into, volcanoes and earthquakes for the English-speaking islands of the Eastern Caribbean. The SRC provides the governments of its nine contributing territories with accurate and up-to-date information about earthquake, volcanic and other geologic activity, including 19 live volcanoes, in the Eastern Caribbean. The Centre has been providing these services for over 65 years. Its work has and will continue to have direct impact on vulnerable island communities throughout the Eastern Caribbean. All aspects of the work undertaken by the SRC are of direct and immediate relevance and importance to public safety and sustainable development in the region.

The work undertaken by the SRC is focused on developing a better understanding of the geologic processes at work in the region to reduce risk and promote sustainable development. To this end, the SRC plays an active role in promoting geologic hazard awareness and collaborates with local, regional, and international agencies on research and outreach projects. The Centre operates the largest geophysical monitoring network in the Caribbean region. It provides a national seismological service for all of its contributing territories and a national volcanological service for five of them. Its mission spans the wide areas of monitoring, research, warnings, outreach and postgraduate teaching. On 16 June 2022, The

UWI Seismic Research Centre was awarded with the **2022 Award for Volcano Surveillance and Crisis Management by the International Association of Volcanology and Chemistry of the Earth's Interior (IAVCEI)**, in recognition of its management, monitoring, and response to the 2020 – 2021 eruption of the La Soufriere volcano, St. Vincent.

The seismicity in the Eastern Caribbean linked to volcanic and subduction processes persisted with more than 3000 events recorded during the reporting period. The majority is related to the subduction process, which is in close agreement with the events recorded in previous years. There were 280 earthquakes recorded above magnitude 3.8 with the largest magnitude 5.8 in the Paria peninsula occurring on 14 July 2022.

The energy liberated during these last 12 months is smaller than previous years; however, this does not imply a change in the seismic hazard in the Eastern Caribbean. High level seismic activity is observed along the whole subduction arc and Paria peninsula, except the section between 12 – 13° latitude. Besides the magnitude 5.8 event registered, we recorded 16 events in the range 5.0 – 5.9 and 149 events in the range 4.0 - 4.9.

The volcanic complexes in St Vincent, Dominica and Saint Lucia recorded seismicity at a low level. Other volcanoes in the Lesser Antilles arc remained at background levels and are continuously monitored to timely identify any escalation of activity that may arise. In January 2022, the MVO and Scientific Advisory Committee (SAC) jointly announced an observed increase in the level of volcanic unrest at the Soufrière Hills Volcano, Montserrat. This indicated that despite there being no lava extrusion from the volcano since February 2010. The magmatic system remains active and there remains a possibility for future surface activity.

The largest earthquake recorded in the Lesser Antilles area occurred more than 170 years ago, however, the arc is tectonically active and the possibility of a large event cannot be ruled out. For this reason, enhanced monitoring programmes, promotion of legislation of appropriate building codes, investing in critical education and outreach programmes to ensure an adequate detection, and the ongoing estimation of seismic hazard and risk is essential to prepare the population.

Students

Postgraduate Programme

During the reporting period the SRC's Postgraduate programme included a total of seven postgraduate students employed as Research Assistants working on projects that contribute to our key areas of research and monitoring. Of these, four were registered for postgraduate degrees in Seismology and two for postgraduate degrees in Volcanology. One other postgraduate student is part of a joint project in collaboration with the Department of Geography.

Research & Innovation

Volcanology

Development of the myHAZ citizen science system.

(Budget US\$42K)

This project was supported by the British Geological Survey NC-ODA grant NE/R000069/1: Geoscience for Sustainable Futures, with input from the following BGS Challenge Areas: Multihazards and Resilience, Digital and Global. It involves stakeholder awareness and participation in the development of the prototype citizen science 'myHAZ' platform, which consists of three components: (1) a citizen science smartphone app for gathering multihazard observations and providing users with a 'quick glance' of ongoing hazards, environmental change and

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impacts (2) a management dashboard to manage and respond to incoming observations in-country, and (3) a web portal for exploring, visualising and downloading data collected by the app.

Eruption Communications Evaluation

(Funded by University of Cambridge. Budget £10K)

SRC, in collaboration with the Centre for the Study of Existential Risk, undertook a large-scale evaluation of the crisis communications campaign during the explosive volcanic eruption of La Soufriere volcano, St Vincent in 2021. The aim was to understand how effective the crisis communication campaign had been in terms of accessibility, equality, and ease of understanding and to identify gaps in the approach to allow improvements to be made before future crisis campaigns. This project also facilitated the production of two outreach films/videos: 'Vincy Voices: Lessons from La Soufriere' and 'Volcano inna me backyard' Animation.

Changing Landscapes St Vincent and the Grenadines Project

(Funded by the UK Research and Innovation; Budget £11K)

This project is done through a collaboration between the SRC and the University of East Anglia. It is a recovery project that focuses on North Windward Communities in St. Vincent. The project aimed to engage participants in observing and documenting changes in their environment using a citizen science approach. Applying photography as a medium and sensors for measuring rainfall, the project incorporates a participatory storytelling approach to empower and support the recovery of communities returning to the Red Zone after the eruption.

Other ongoing projects/research by MVO/SRC staff:

Neutron activation analysis and gamma ray spectroscopy on a volcanic geothermal system

The MVO/SRC staff are engaged in an ongoing research project with the University of Manchester Physics Department and Adelphi Technologies. Preliminary results from this project show that some lithologies in the deep (~ 2 km) subsurface of Montserrat contain ore grade concentrations of gold.

Tracking magma storage in the Eastern Caribbean using ALOS-2/ALOS-4 data and continuous GPS networks

This project, sponsored by the Japanese Space Agency JAXA, allows access to Synthetic Aperture Radar satellite imagery, which can be used to detect ground deformation associated with magmatic systems. This type of data proved very useful during the recent eruption of La Soufrière, St. Vincent where it was used to detect precursory ground deformation and to track the growth of the lava dome.

Mountain Aglow

This project was presented by Prof J. Barclay (UEA), Dr K. Pascal (MVO) and Mr K. White (DMCA) in international conferences, and was chosen as a case study by the UK National Commission for UNESCO on heritage disaster response and relief (<https://unesco.org.uk/wp-content/uploads/2021/12/Heritage-Disaster-Response-and-Resilience-Report.pdf>)

Quantitative methods for hazard assessment at the Soufriere Hills Volcano, Montserrat.

A research project to employ quantitative methods for hazard assessment at the Soufrière Hills Volcano, Montserrat. A new hazard map is being developed in collaboration with researchers at The University of Edinburgh, scientists at UWI-

SRC, and the Government of Montserrat, with a focus on pyroclastic density currents, ballistics and lahars, to differentiate hazard levels within the existing Zone V (exclusion zone). The micro-zonation of Zone V will provide input to risk assessment for the volcano and an evidence base for decision-making regarding access management and long-term development planning on the island of Montserrat. A first presentation of the three hazard layers to the National Disaster preparedness and Advisory Committee of Montserrat was made in May 2022. Further work is ongoing.

Geophysics

The UWI SRC Geophysics team concluded the **Trinidad & Tobago Microzonation project (TTMP)**, funded by the Ministry of Planning & Development at the end of 2021. The TTMP has reached the 10th year and has covered the urban areas of Port of Spain, San Fernando, southern Tobago, Diego Martin and San Juan – Barataria. While the Ministry has expressed the desire to extend the project for another 5 years, there hasn't been further development. Two Technical Reports have been submitted to the Steering Committee, and two publications have been submitted (for Port of Spain and San Fernando, respectively). Microzonation of Port of Spain has been published in 2021, and the one for San Fernando has been accepted for publication with minor revisions.

The **PREPARE TT** project ended in November 2021. The geophysics team assisted in collecting building stock information that was reviewed by civil engineers, to calculate the exposure in Port of Spain (PoS). The results of the TTMP: PoS were also used from Miyamoto International to calculate the seismic hazard in the same area.

Connecting Communities for Climate and Disaster Risk Preparedness (CCC-DRIP) (Budget US\$50K) is a project funded by the International Development Research Centre (IDRC) to enable selected communities in Dominica to move from response to preparedness as an example for the Caribbean region. The scope of work involves the collection of geophysical and geological data on the island of Dominica and the production of hazard maps, with a special focus given to urban areas.

Economic Feasibility of Green Industrial Eco Park (Dominica) (Budget US\$93K) is a consultancy service to conduct a Magneto-telluric survey of 60 stations and geothermal resource mapping in the geothermal zone near the northern town of Portsmouth. In May 2022, the SRC embarked on this initiative funded by the Government of Dominica. The purpose of the survey is to explore the geothermal potential of the northern part of Dominica and create a three dimensional model of the subsurface.

Outreach

The Education and Outreach section of the Centre aims to bridge the gap between the science of the geological hazards monitored by the UWI-SRC and public understanding and knowledge of these phenomena in the region. The section focuses on student outreach, stakeholder sessions, special projects, and collaborations throughout the islands, along with social media posts with the aim of raising awareness to the geological hazards and helping to reduce the risk via preparedness and mitigation messages. The last quarter of 2021 saw the end of the La Soufrière, St. Vincent eruption and 2022 saw the changing of office landscapes after the COVID-19 pandemic impact which affected the section's outputs and

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deliverables. The section had to take further steps to engage our audience via our various online platforms and prepare for 'normal' procedures once more. This reporting period saw the launch of the Centre's new website and its promotion to our stakeholders and the public.

Student Outreach - SRC conducted virtual sessions with two Trinidad-based schools: Maple Leaf International and The UWI Preschool.

Science and Safety Sessions

Science and safety presentations on earthquakes, volcanoes, tsunamis or all three hazards are given to private firms, government offices, and other entities in Trinidad and Tobago upon request. During this reporting period, two earthquake science and safety sessions were conducted with the UWI Open Campus staff virtually.

Teachable Moments

The 'Teachable Moments' calendar was reinvented for the various social media platforms. These moments highlight significant occurrences of the geological hazards we monitor.

Website

After years of planning and design further impacted by the pandemic, the Centre's new website was launched with a month-long social media campaign. Posts focused on the new features and highlighted key pages of interest to the public. An introduction to the Centre, the interactive map, volcanic activity, tsunami activity, news and island profiles all feature on the home page.

Interactive Map - The highlight of the new site, the map features the latest seismic events for the region within the last three months and the status of the volcanoes monitored by the Centre. Historical tsunami information is available as a map layer and the 'Did you feel it' form is embedded for ease of access. The map allows for earthquakes to be displayed in real time, a recommendation endorsed by both stakeholders and the public.

Collaborations/Special Events

'Vincy Voices' – Film Launch

This reporting period saw the launch of the film, 'Vincy Voices: Lessons from La Soufriere'. This film was made possible by the Communications Evaluation of the La Soufriere 2020-2021 Eruption Project. The stories shared and lessons learnt during the evaluation period encouraged the team to create a film to share these stories throughout the region. It was shown in various communities in St. Vincent and then launched online on our YouTube channel.

'Volcano inna me backyard' Animation

A stop-animation (cut out style) – a first of its kind in the Centre's outreach work was done with funds from the Communications Evaluation of the La Soufriere 2020-2021 Eruption Project. This animation showcased the story of the eruption from children's perspectives. Filmed over 3 days at Fancy government school, St. Vincent, students were allowed to develop a short story on the eruption and create the props and stills used in the animation, along with narrating the story. It premiered at the Cities on Volcanoes 2022 conference and was met with great acclaim.

Film Festival Selections

Several of the animations produced under the Volcano Ready Communities Project, SVG were officially selected for prestigious film festivals. The films were showcased in St. Vincent, the United Kingdom, and Ireland.

Q&A Facebook Chat Live

The Centre hosted several live sessions on recent tectonic and volcanic activity in the region.

La Soufrière Eruption 2020-2021 communications

As research into the eruption continued, several talks and presentations were made by the Director and scientific staff. During the reporting period, various facets of research of the eruption were presented at conferences and special sessions throughout the region and within the volcanic academic community. A special virtual conference was also held by the Centre to showcase some of the initial findings, and a paper on the eruption was published in the Nature Communications journal in June 2022.

Changing Landscapes St Vincent and the Grenadines Project

Changing Landscapes SVG is a recovery project that focuses on North Windward Communities in St. Vincent. The project aimed to engage participants in observing and documenting changes in their environment using a citizen science approach. Applying photography as a medium and sensors for measuring rainfall, the project incorporates a participatory storytelling approach to empower and support the recovery of communities returning to the Red Zone after the eruption.

Workshops with local photographers were conducted from October to November 2021 to introduce a group (inclusive of communities north of the Rabacca River), to basic photography and storytelling. The group also engaged with scientists from UWI Seismic and the University of East Anglia to share motivations for the project and the value of the community's perspective in understanding lahars.

The project supported a series of activities, including the completion of the Rain Gauge network instrument siting, installation and maintenance, community workshops (to plan the exhibits, share and reflect on data gathered), Community field trips with participants (further sharing and gathering of data), and evidence-gathering interviews.

All workshop and community engagement activities facilitated with Impact Funding allowed for the curation and co-production of a community exhibition "Re-Imagining the Red Zone". The exhibition production was co-funded through the IMPACT Project and launched with a public preview including 22 photographs, hosted by the National Trust Heritage Building in Kingstown the Capital of St. Vincent from April 4th - 8th, 2022 in partnership with public sector stakeholders and the Changing Landscapes Team. The exhibit then moved to the Windward village on Sandy Bay and opened with cultural events and presentations on Saturday 9th April 2022. Through this mode of Citizen Science, we emphasize the importance of community knowledge and participation in data collection and knowledge generation. In Re-Imagining a future for themselves, the Changing Landscapes project both promote a new means of knowledge production and is a vehicle for community engagement for risk reduction and recovery.

Key Achievements

On 16 June 2022, The UWI Seismic Research Centre was awarded with the 2022 Award for Volcano Surveillance and Crisis Management by the International Association of Volcanology and Chemistry of the Earth's Interior (IAVCEI), in recognition of its work in the field of volcanology in the last 60+ years, as well as its management, monitoring, and response to the 2020 – 2021 eruption of the La Soufriere volcano, St. Vincent.

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The University of Lancaster awarded Dr Graham Ryan for Outstanding Alumni 2022. This award celebrates the achievements of alumni and recognises graduates who have developed an outstanding international or national reputation among their peers.

Challenges

The income received from our contributing territories in the Eastern Caribbean continue to be inconsistent and provide only sufficient funds (TT\$5.5-11.6M during the period 2010-2022) for routine monitoring (i.e., operation of a minimal seismic network). SRC continued to lobby vigorously during the year for payment of outstanding debts. All other work, including most research, major developments in the network and outreach, were undertaken through grant funding mainly from external sources or from applications to the SRC Departmental Consultancy Fund (DCF).

Academic staff members continue to contribute 100% of any proceeds from consultancies into the SRC Departmental Consultancy Fund (DCF). Funding obtained from grants and consultancy for the reporting is estimated to have been about TT\$1.2M/year. Our recurrent budget caters for 26 members of staff, but budgetary restrictions has resulted in three of these positions (1 academic, 1 professional & 1 technical) being frozen.

Since 2010, the percentage contributed to our operations by the DCF has risen to approximately 20% of our total annual expenditure (which has varied between TT\$8.9-12.5M since 2010). This situation should not be considered lightly, as we are increasingly having to supplement our routine operations from the Department's Consultancy Fund, which had previously been used mainly to further our postgraduate research programme (i.e., support students) and support departmental Outreach activities. It also means that we have effectively had to endure budget cuts of 10-20% over the past 5-12 years. Any further reduction will make our work impossible.

Budgetary requirements

The recurrent budget allocated by Centre to the SRC has fluctuated between TT\$9M and TT\$14M over the past 5 years. However, we have spent between TT\$6.9-9.5M due to the lack of consistent and assured contributions, and resulting restrictions placed on our expenditure by St. Augustine bursary. If SRC continues to obtain an additional amount of TT\$1-2M in grant and consultancy funding in the upcoming biennium, we would need at least to be allocated a budget of TT\$11M per financial year by Centre to achieve our mandate.

Strategy Review

In addition to routine monitoring operations, the key projects with which the Centre were engaged during the period are summarized below, with an indication of their alignment with the University's Strategic Objectives.

Management of the Montserrat Volcano Observatory. Successful execution of the management of the Montserrat Volcano Observatory continued. The contract is for a fixed sum of EC\$7 M over two years, and largely supports the employment of 8 members of staff (7 based at MVO and 1 at SRC).

Revised web site for the SRC & more effective use of social media and developing video products. Our new website was launched in October 2021. Attention will continue to be focused on enhancing the education and outreach work of the Centre to vulnerable island communities using social media, but also through the development of digital tools and products.

Risk at the Margins (RAM): a blueprint for defragmenting disaster risk reduction with populations at risk. The objective is to develop a blueprint for prospective practice that will assist communities in understanding how to monitor, characterise and mitigate extensive hazard. With focus on the perspective of those who experience these changes in producing “visual knowledge” and interpreting images with attention to how photographs and visual storytelling (re)orient discussions about change. Funded by the UKRI NERC: <https://gtr.ukri.org/projects?ref=EP%2FT024747%2F1>
Budget US\$18K.

Eruption Communications Evaluation. SRC, in collaboration with the Centre for the Study of Existential Risk, undertook a large-scale evaluation of the crisis communications campaign during the explosive volcanic eruption of La Soufriere volcano, St Vincent in 2021. The aim was to understand how effective the crisis communication campaign had been in terms of accessibility, equality, and ease of understanding and to identify gaps in the approach to allow improvements to be made before future crisis campaigns. This project also facilitated the production of two outreach films/videos: ‘Vincy Voices: Lessons from La Soufriere’ and ‘Volcano inna me backyard’ animation. Funded by University of Cambridge. Budget £10K.

Changing Landscapes St Vincent and the Grenadines Project. This project is done through a collaboration between the SRC and the University of East Anglia. It is a recovery project that focuses on North Windward Communities in St. Vincent. The project aimed to engage participants in observing and documenting changes in their environment using a citizen science approach. Applying photography as a medium and sensors for measuring rainfall, the project incorporates a

participatory storytelling approach to empower and support the recovery of communities returning to the Red Zone after the eruption. Funded by the UK Research and Innovation. Budget £11K.

Initiatives 2022-2025

Management of the Montserrat Volcano Observatory. The interim contract signed in 2021 for the management of the Montserrat Volcano Observatory ends on 30 September 2023. Negotiations have begun with the Government of Montserrat for a new 5 – 7-year contract.

Eastern and Southern Caribbean’s Policy and Regulatory Reform for Resilience (PROSE). This four-year project aims to support national governments within the Eastern and Southern Caribbean in strengthening legal frameworks for regional, national, and sectoral resilience by providing technical assistance, from a multidisciplinary UWI team, on disaster risk management (DRM); disaster risk reduction (DRR); climate change adaptation (CCA); seismic risks and other natural hazards; law and policy; agriculture; and water and blue economy. Funded by USAID. US\$1M

Disaster risk management in the Caribbean, support for the Seismic Research Centre (Phase 2). This two-year project is funded by the Government of New Zealand through its Ministry of Foreign Affairs and Trade. Phase 2 of this project will run to November 2024. The project builds on collaboration between GNS Science of New Zealand and the SRC to build institutional capacity via a) provision of technical training and support, and b) to co-create an online volcano short course prototype geared to supporting the needs of various stakeholders. Budget NZ\$500K

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CCC - DRiP Dominica. This initiative will collect, use, and integrate a range of existing and new sources of data: physical, climatological, social, and economic sources, as well as the identification of data gaps. New technologies and advances in data management will be used to develop multi-dimensional hazard and vulnerability mapping to prepare DRM programs and early warning systems. Funded by The International Development Research Centre (IDRC) Budget US\$50K

NEMO Consultancy. Through this consultancy the SRC would provide technical and scientific support to the National Emergency Management Organisation (NEMO) of St. Vincent with post eruption needs. Funded by the World Bank. Budget US\$124K

Development and creation of more effective social media and digital products for supporting outreach activities.

Attention will continue to be focused on enhancing the education and outreach work of the Centre to vulnerable island communities using social media, but also developing short videos and other digital products.

Establish a communications hub co-located with a multi-parametric monitoring station (consisting of 3-component broadband seismic station, accelerometer & continuous GPS station) at Mt. St. Benedict's. This will involve the construction of a vault, erection of a communications tower and installation of seismic monitoring equipment. This work is being entirely funded from the SRC Departmental Consultancy Fund and will be completed in 2023. Budget TT\$200K

Finalize the outfitting and occupation of the third floor of the SRC building.

This includes the provision of space for postgraduate students and the Education and Outreach section, and the provision of space for lectures. We anticipate that we can raise sufficient funds from our DCF to enable some of these activities and we will explore the availability of grant funding to contribute towards this. It should be noted that thus far the entire outfitting and modifications necessary for occupation of the new building with this planned work has been funded from SRC DCF.

Re-location of computer servers to new building and expansion of the SRC IT infrastructure.

This work is still outstanding due to the significant cost involved. The estimated cost is as follows: servers for data - US\$32K, storage for data - US\$15K, network infrastructure (racks, switches, UPS) - US\$50K. (US\$100K from SRC DCF).

Sir Arthur Lewis Institute of Social & Economic Studies (SALISES)

Director's Summary

In general, the staff of SALISES, whether ATS or Academic, performed commendably. Without a doubt, the sterling contribution of SALISES Academic and ATS staff, who collectively ensured that the Institute punched above its weight-class, with satisfactory publications output among the Academic Staff, and a constant call to duty displayed among the ATSS Unit who ensured that SALISES delivered on its mandate in an exemplary fashion.

Annual throughput at the Institute continues to be relatively noteworthy throughput as reflected in the graduation of students from the MSc Development Statistics and its MPhil/PhD Programme. SALISES continued to make its mark with regard to winning international projects and attracting research funds, all of which, have been instrumental in advancing UWI's ranking among tertiary institutions regionally and internationally. The impact of the research output of SALISES researchers is growing despite modest levels of collective citations that have grown from 103 in 2021 to 164 in 2022 and 189 in 2023.

During the Academic Year 2021/2022, SALISES hosted 10 SALISES Virtual Forums, four Spotlight Lectures by SALISES Academics, the Inaugural SALISES Sixth Formers' Webinar, and Statistical Training in R-Studio. All SALISES Academics gave papers in the Sustainable Development Conference during the Second Quarter of 2022 and meant to provide another opportunity for illustrating the relevance and wide-ranging potential of the research of SALISES, St. Augustine within a Regional SALISES profile. SALISES Academics also made contributions to scholarly activities such as organizing conferences of scholarly associations, serving on Editorial Boards, acting as resource persons for scholarly events, lending expertise to the establishment of knowledge-sharing resources and fostering Memoranda of Understanding.

SALISES Academics have generally contributed new publications to the scholarly community whether through refereed journal articles or book chapters. The disciplinary interests of such contributions are varied and do reflect the role of SALISES as a multi-disciplinary, interdisciplinary organ. Other forms of scholarly enterprise such as playing leading roles in launching publications, peer-reviewing scholarly submissions, and presenting on-going and completed research

at local, regional, and international conferences have engaged the interests of SALISES Academics. The success of SALISES and its Academic Staff has largely been due to the co-operation and tireless efforts of the ATSS members who continue to serve SALISES with distinction. The potential of the Academic Staff is evident, and it is our mission to grow the number and quality of scholarly publications that we produce annually. This would positively impact the frequency of citations linked to scholarly publications, thus being one of our principal aims.

Student Achievements

Ms Jenee Le Gendre was awarded the Annual Jack Harewood Memorial Award. Ms Le Gendre was the graduate student with the highest average for the entire programme among graduating students of the MSc In Development Statistics graduating in 2021. She specialised in Social and Demographic Statistics and was supervised by Dr Godfrey St. Bernard.

Mr Samuel Gabriel was awarded the Annual Jack Harewood Memorial Award. Mr Gabriel was the graduate student with the highest average for the entire programme among graduating students of the MSc In Development Statistics in 2021/2022, graduating in 2022. He specialised in Social and Demographic Statistics and was supervised by Dr Henry Bailey.

Dr Moriba Baker was awarded a PhD in Social Development Policy during Academic Year 2021/2022. His thesis is entitled: Bank Stability and Economic Growth: Trade-Offs of Opportunities? The thesis sought to evaluate the effectiveness and value of the Academy of Sport and Leisure Studies (ASLS) which was established in the University of Trinidad and Tobago in 2007. Focusing on the nine pillars of Sport Policy Factors Leading to International Sporting Success (SPLISS), the following pillars were found to be effective. They included

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financial, policy, participation, post-career support, training facilities, and national competitions. The remaining three pillars were found to be ineffective and included the following: talent identification and development, coaching provision and coaching development, and scientific research. The findings from the thesis fill a tremendous void in the evaluation of sport policy in the Caribbean, and globally.

Research

Development of a Comprehensive Wealth Index for Trinidad and Tobago

Lead Researcher: Dr Godfrey St. Bernard

Grant Source: International Institute for Sustainable Development (IISD)

Amount: CAD\$100,000.00

Duration of Grant: 2020-2023

Scholarly Contribution: This research introduces five capitals and their measurement as critical pillars for establishing national measures of national wealth and seeks to convince national statistical offices and other national policy entities that such measures, when comprehensively combined to account for national wealth, constitute a national measure that has advantages over traditional measures based principally in national income accounting.

Rights of Children and Youth Partnership – Strengthening Collaboration in the Americas (RCYP)

Lead Researcher: Dr. Godfrey St. Bernard

Grant Source: Social Sciences and Humanities Research Council (SSHRC), Canada

Amount: CAD \$4.2 million

Duration of Grant: 2017-2023

Scholarly Contribution: This research brings together a harmonized research project targeting Trinidad and Tobago, Jamaica, Guatemala, El Salvador, Honduras, Dominican Republic, and Canada. The research results will produce scholarly papers, build capacity among young researchers, and inform public policy promoting the rights and well-being of children and young people.

Academic Partners: Ryerson University (Lead Partner), Dalhousie University, Mc Master University, Pontificia Universidad Catolica, Madre y Maestra, The Governing Council of The University of Toronto, Universidad Lutherana Salvadorena, Universidad Nacional, Autonoma de Honduras, University of Ontario Institute of Technology, University of Prince Edward Island, University of San Carlos de Guatemala, University of Technology, The University of the West Indies, Wilfred Laurier University, York University.

Non-Academic Partners: Catholic Children's Aid Society, Toronto Centre for Development and Constructive Interaction (Dominican Republic), Commonsense Childbirth (Florida, United States), El Consejo Nacional de la Ninez y la Adolescencia (Dominican Republic), Federacion Dominicana de Municipios (Dominican Republic), Institute for Research Development on Inclusion and Society (Ontario, Canada), Office of the Provincial Advocate for Children and Youth (Ontario, Canada), Save the Children Dominicana (Dominican Republic), UNICEF El Salvador, UNICEF Nicaragua. Sites for the Studies: Canada, El Salvador, Guatemala, Nicaragua, Honduras, Dominican Republic, Trinidad and Tobago, and Jamaica.

SALISES Virtual Webinar Series

As part of its newly commissioned virtual webinar series, SALISES (St. Augustine) convened ten (10) monthly public webinars between October 2021 and July 2022. Each monthly webinar consisted of an average of 6 panellists: notably cutting-edge professionals from Trinidad and Tobago, CARICOM Member States, and the wider international arena. Altogether, there were 60 panellists and our virtual audiences usually exceeded 100 participants with at least 40 percent overseas participation.

SALISES Spotlight Initiative

SALISES (St. Augustine) embarked on this initiative as a means of permitting SALISES academics to share their valuable research with colleagues within and beyond the UWI. It also provides an opportunity for SALISES to win allies in the pursuit of consultancies and research grants, whether regional or international. SALISES convened ten (10) monthly public webinars between October 2021 and July 2022. Altogether, there were four Spotlights Presentations by SALISES academic staff between April and July 2022, and a fifth is scheduled for December 2022. These events have also benefitted from worthy audience engagement.

SALISES Sixth Formers' Webinar

SALISES (St. Augustine) continues to engage the next generation of young professionals and fulfil its mission towards ensuring that young minds become deeply engaged with the life and work of Sir Arthur Lewis, Nobel Laureate in Economics 1979. SALISES seeks to be the catalyst of a movement that would enable future generations of scholars to embrace the spirit and intellectual fervour that rendered onto Sir Arthur

Lewis, a reputation of world class scholarship. The first SALISES Sixth Formers' webinar was convened on January 28th, 2022, featuring sixth formers from six (6) schools. Bishop Anstey High School (Port of Spain), Trinity College (Maraval), Presentation College (Chaguanas) and Saraswati Girls' Hindu College (Caroni) were the four schools from Trinidad. Bishops High School represented Tobago, and the Sir Arthur Lewis Community College represented St. Lucia.

FACULTY OF ENGINEERING

Journal Publications

Department of Chemical Engineering

Adele Harrypersad-Daniel, Blake, O.O., and **Ramsook, R.** (2022). "Determining the static Young's modulus and Poisson's ratio, and compressive strength of the friable Erin Formation rocks using P-wave velocity". *Journal of Applied Geophysics*. <https://doi.org/10.1016/j.jappgeo.2022.104557>. Journal impact factor (2020): 2.121. Cited by: 0

Basant, R. A., B. Y. Lynne, **R. Ramsook**, G. A. Ryan, **O. O. Blake**, and J. E. P. Utley (2022). "Utilizing cores for characterising the temperature and permeability regimes in a litho- stratigraphic model of the Montserrat geothermal system, Montserrat (Lesser Antilles arc, West Indies)". *Geothermics*, 100, 102341. Journal impact factor (2020): 4.284.

Blake O.O, Faulkner D.R., Worden R.H., Armitage, P. J., and Espie, A. A. (2022). "Effect of thermal shock on the permeability and seismic wave velocity of the caprock and reservoir during CO2 injection." *International Journal of Greenhouse Gas Control*. Journal impact factor: 3.738. Cited by: 1

Blake, O.O., Ramsook, R., Iyare, U.C., Moonan X. R., and Gopaul R. C. (2021). "Integrating pseudo-3D electrical resistivity tomography and digital elevation model to map the near-surface structures and morphology of a mud volcano." *Journal of Applied Geophysics*. Journal impact factor (2020): 2.121. Cited by: 2

Chen, Si, Ronald J. Steel, Cornel Olariu, Hua Wang, Jinyu Zhang, Ariana Osman. (2022). "Outer-shelf conduit within growth-fault compartment Pliocene Orinoco Delta". *Marine and Petroleum Geology*, 140 (1): 105680.

Iyare U.C., **Blake O.O., Ramsook R.**, and Faulkner D.R. (2022). "Experimental study of the anisotropic behaviour of the Naparima Hill argillite." *International Journal of Rock Mechanics and Mining Science*. <https://doi.org/10.1016/j.ijrmms.2022.105083>. Journal impact factor (2020): 7.135. Cited by: 0

Iyare U.C, **Blake O.O**, and **Ramsook R.** (2021). "Modelling the Failure Behaviour of Mudstones under High Pressures." *Rock Mechanics and Rock Engineering*. Journal impact factor (2020): 6.730. Cited by: 5.

Iyare U.C, **Blake O.O**, and **Ramsook R.** (2021). "Estimating the Uniaxial Compressive Strength of Argillites using Brazilian Tensile Strength, Ultrasonic Wave Velocities, and Elastic Properties." *Rock Mechanics and Rock Engineering*." <https://doi.org/10.1007/s00603-020-02358-y>. Journal impact factor (2020): 6.730. Cited by: 5

Keeara Bhagaloo, **Anastasia Baboolal**, Rehannah Ali, Zaara Razac, Andre Lutchmansingh, Arun Mangra, Talha Muhammad, Keeran Ward. (2022) "Resource efficiency as a guide to clean and affordable energy: A case study on Trinidad and Tobago." *Chemical Engineering Research and Design*, 178: 405-420.

Keeara Bhagaloo, Rehannah Ali, **Anastasia Baboolal**, Keeran Ward. (2022) "Powering the sustainable transition with geothermal energy: A case study on Dominica." *Sustainable Energy Technologies and Journal impact factor: 7.632*.

Kerissa Narine, Johnathan Mahabir, Natalia Koylass, Nicholas Samaroo, **Shelly Singh- Gryzbon, Anastasia Baboolal**, Miao Guo, Keeran Ward. (2021) "Climate smart process design for current and future methanol production." *Journal of CO2 Utilization*, 44, (<https://www.sciencedirect.com/science/article/pii/S2212982020310295>).

Khan, S. and Vincent, H. (2021) The qualitative and quantitative classification of modern clastic marginal-marine depositional systems, Trinidad. *Journal of Sedimentary Research* 91 (7): 710–734.

Sum, L., **Wilson, B.**, and Ragoonath, C. Effects of flow disturbances on Holocene planktonic foraminiferal ecostratigraphy. *Micropaleontology* Volume 66, No. 2 pp. 127-138.

Department of Civil and Environmental Engineering

Aaron Anil Chadee, Hector Hugh Martin, **Abrahams Mwasha**, Festus Olutoge (2022) "Rationalizing Critical Cost Overrun Factors on Public Sector Housing Programmes." *Emerging Science Journal* (ISSN: 2610-9182) Vol. 6, No. 3, pp 649-666.

Banerjee K.S. and Ifill A. (2022) "Assessment of Natural Radioactivity Level before and after a Mud-volcano Eruption: A Study from Piparo Mud-volcano, Trinidad and Tobago." *Journal of Environmental Radioactivity*. V. 251–252, October 2022, 10695 (Impact Factor: 2.674).

Banerjee K.S. and Seerattan R. (2022) "The Professional Communities' Perception on the Adaptation of Digital Tools and Technology in Trinidad and Tobago's Construction Industry: Some Findings." *The Industrial Engineering and Management Journal* V. 1 (1).

Birbal, P., Azamathulla, H., **Leon, L.**, Kumar, V. and Hosein, J. (2021) "Predictive modelling of the stage-discharge relationship using Gene-Expression Programming." *Water Supply*. (<https://doi.org/10.2166/ws.2021.1111>)

Chadee, A., X. T. Chadee, C. Chadee, and **F. Olutoge**. (2022) "Violations at the Reference Point of Discontinuity: Limitations of Prospect Theory and an Alternative Model of Risk Choices." *Emerging Science Journal* 6 (1):37-52. doi: 10.28991/esj-2022-06-01-03.

Chadee, A., H. Martin, **A. Mwasha**, and **F. Olutoge** (2022) "Rationalizing Critical Cost Overrun Factors on Public Sector Housing Programmes." *Emerging Science Journal* 6 (3):647-666. doi: 10.28991/esj-2022-06-03-016.

Chadee, A., H. Martin, **A. Mwasha**, and **F. Olutoge**. (2022) "Rationalizing Critical Cost Overrun Factors on Public Sector Housing Programmes." *Emerging Science Journal* 6 (3):647-666. doi: 10.28991/esj-2022-06-03-016. Q1.

Clarke, R.P. (2021) "Performance of buildings in two Caribbean Territories: Dominica under Hurricane Maria in 2017 and Trinidad under the 2018 earthquake". *Natural Hazards*, 109, 1141-1165. <https://doi.org/10.1007/s11069-021-04872-w>. Springer. Netherlands. [SJR Rank = Q1 in Earth and Planetary Sciences (Miscellaneous)].

Clarke, R.P. (2022) "Natural Disaster Mitigation Using Advanced Ferrocement – Future Research Directions for Improved Building Resilience". *Case Studies in Construction Materials*. <https://doi.org/10.1016/j.cscm.2022.e00990>. Elsevier, Amsterdam. [SJR Rank = Q1 in Materials Science (Miscellaneous)].

Publications & Conferences

Clarke, R.P, Carey, B. (2021) "Seismic fragility functions for a pervasive unique form of construction with very high potential for social losses in Trinidad and Tobago: Two-story houses". *Earthquake Spectra*. <https://doi.org/10.1177/87552930211047258>. Earthquake Engineering Research Institute, California. [SJR Rank = Q1 in Geophysics].

Faezeh Moghaddas, Abdorreza Kabiri-Samani, Maryam Zekri, **Hazi M Azamathulla** (2021) "Combined APSO-ANN and APSO-ANFIS models for prediction of pressure loss in air-water two-phase slug flow in a horizontal pipeline." *Journal of Hydroinformatics*. (Citation: 1). IF: 2.376.

Garner, M., H. Martin, A. Manewa and **Aaron Chadee**. (2022) "Modular construction adoption barrier in the United Kingdom from the perspective of technology diffusion theory." *Built Environment Project and Asset Management*.

Geetam Singh Tomar, **Marcus Lloyd George** and Abhineet Singh Tomar. (2021) "Multi-Precision Binary Multiplier Architecture for Multi-Precision Floating-Point Multiplication". *IET Circuits, Devices & Systems* 15 (1) and Open Access paper.

Heaton, R, H. Martin, **A. Chadee**, A. Milling, S. Dunne, and F. Borthwick. (2022) "The Construction Materials Conundrum: Practical Solutions to Address Integrated Supply Chain Complexities." *Journal of Construction Engineering and Management* 148 (8):04022071. doi: doi:10.1061/(ASCE)CO.1943-7862.0002326.

Hosein, G.; Hosein, P; Bahadoorsingh, S.; Martinez, R; **Sharma, C.** (2020) "Predicting Renewable Energy Investment using Machine Learning" *Springer Journal Energies*, 13(17), 4494; doi: 10.3390/en13174494.

Imiya M. Chathuranika; Miyuru B. Gunathilake; **H. M. Azamathulla**; Upaka Rathnayake (2022) Evaluation of Future Streamflow in the Upper Part of the Nilwala River Basin (Sri Lanka) under Climate Change, *MDPI-Hydrology*.

Imiya M. Chathuranika, Miyuru B. Gunathilake, **Hazi Md. Azamathulla** and Upaka Rathnayake (2022) Evaluation of Future Streamflow in the Upper Part of the Nilwala River Basin (Sri Lanka) under Climate Change, *MDPI Hydrology*.

Jayanga T. Samarasinghe, Vindhya Basnayaka, Miyuru B. Gunathilake, **Hazi Md. Azamathulla** and Upaka Rathnayake (2022) Comparing Combined 1D/2D and 2D Hydraulic Simulations Using High-Resolution Topographic Data: Examples from Sri Lanka—Lower Kelani River Basin, *MDPI - Hydrology*.

Kiyoumars Roushangar, Aida Nouri, Saman Shahnazi, and **H. Md. Azamathulla** (2021) "Towards design of compound channels with minimum overall cost through grey wolf optimization algorithm, IWA- J." *Hydroinformatics*. 23 (5): 985–999. IF: 2.376.

Kiyoumars Roushangar, Masoumeh Chamani, Roghayeh Ghasempour, **Hazi Mohammad Azamathulla**, and Farhad Alizadeh (2021) "A comparative study of wavelet-and empirical mode decomposition-based GPR models for river discharge relationship modeling at consecutive hydrometric stations." *IWA Water Supply*. (Citation:2). IF: 1.275

Lamb Anthony and **Deborah Villarroel-Lamb** (2022) "A meshfree approach for simulating fluid flow in fractured porous media." *West Indian Journal of Engineering (WIJE)*, Volume 44, No. 2.

Lee P. Leon, Hazi Azamathulla, Portia Felix & C. Venkata Siva Rama Prasadb (2022) "Prediction of stiffness modulus of bituminous mixtures using the applications of multi-expression programming and gene expression programming." *Road Materials and Pavement Design*.

Lee P. Leon, Jovanca, Smith, Annabella Frank (2022). "Intermediate temperature fracture resistance of stone asphalt containing untreated recycled concrete aggregate". *The Baltic Journal of Road and Bridge Engineering*.

Masih Zolghadr, Seyed Mohammad Ali Zomorodian, Reza Sha'arani, **H. Md. Azamathulla** (2021) "Migration of sand mining pit in rivers: An experimental, numerical, and case study. Measurement." 172 108944. IF: 3.97.

Masih Zolghadr, Mohamad R. Rafiee, Fatemeh Esmaeilmanesh, Abazar Fathi, Ravi Prakash Tripathi, Upaka Rathnayake, Sreedhar Rao Gunakala, and **Hazi Mohammad Azamathulla** (2022) "Computation of Time of Concentration Based on Two-Dimensional Hydraulic Simulation." *Water -MDPI*.

Masoud Karbasi, Maryam Karbasi, Mehdi Jamei, Anurag Malik and **Hazi Md Azamathulla** (2022) "Development of a new wavelet-based hybrid model to forecast multi-scalar SPEI drought index (Case Study: Zanjan city, Iran)." *Theoretical and Applied Climatology*, 147, pages 499–522.

Meddage, D.P.P, I. U. Ekanayake, Udara Sachinthana Perera, **Hazi Md. Azamathulla**, Md Azlin Md Said and Upaka Rathnayake (2022) "Interpretation of Machine-Learning-Based (Black-box) Wind Pressure Predictions for Low-Rise Gable-Roofed Buildings Using Shapley Additive Explanations (SHAP)." *Buildings*, MDPI. I.F. (3.324).

Meddage, D.P.P, **A. Chadee**, M. T. R. Jayasinghe and U. Rathnayake (2022) "Exploring the applicability of expanded polystyrene (EPS) based concrete panels as roof slab insulation in the tropics." *Case Studies in Construction Materials*.

Mkpaidem, NU, Ambrose, EE, **Olutoge, FA**, Afanideh, CB (2022) "Effect of coarse aggregate size and gradation on workability and compressive strength of plain concrete." *J. Appl. Sci. Environ. Mgt. Vol.26 (4)*, 719-723, April, 2022, AJOL.

Olatokunbo M. Ofuyatan, **Festus Olutoge**, David Omole and Adewumi Babafemi (2021) "Influence of palm ash on properties of lightweight self-compacting concrete." *Cleaner Engineering and Technology*. 4(2021) 100233. www.sciencedirect.com/journal/cleaner-engineering-and-technology.

O'Brien-Delpesh, C., Nyoka Sinanan, Hector Martin and, **Aaron Chadee** (2022) "Preserving fragile ecosystems from oil spills – An environmental sensitivity assessment of the east coast of Trinidad." *Ocean & Coastal Management*, Elsevier Publishers, 230, ISSN 0964-5691

O'Brien-Delpesh, C., N. Sinan, H. Martin, and **A. Chadee** (2022) "Preserving Fragile Ecosystems from Oil Spills – an Environmental Sensitivity Assessment of the East Coast of Trinidad." *Ocean and Coastal Management*.

Pandey, M. and **H. Md Azamathulla** (2021) "Discussion of Gene-Expression Programming, Evolutionary Polynomial Regression, and Model Tree to Evaluate Local Scour Depth at Culvert Outlets" by Mohammad Najafzadeh and Ali Reza Kargar, *Journal of Pipeline Systems Engineering and Practice*. 12(2), 07021001 IF: 1.181

Publications & Conferences

Phelps Harry Orville (late), **Hazi Md. Azamathulla**, and Gyan S. Shrivastava (2021) "Hydraulic Model Study of Arena Dam Spillway Works." Trinidad West Indian Journal of Engineering 43(2), 69-.

Porya Ghasemi, Masoud Karbasi, Alireza Zamani Nouri, Mahdi Sarai Tabrizi and **Hazi Mohammad Azamathulla** (2021) "Application of Gaussian Process Regression to forecast multi-step ahead SPEI drought index." Alexandria Engineering Journal (Citation:1). IF: 3.732

Prashant Birbal, **Hazi Azamathulla**, Lee Leon, Vikram Kumar, Jerome Hosein (2021) "Predictive modelling of the stage-discharge relationship using Gene-Expression Programming." IWA Water Supply. (Citation:2) IF: 1.275

Roghayeh Ghasempour, **H. Md. Azamathulla** and Kiyoumars Roushangar (2021) "EEMD and VMD Based Hybrid GPR Models for River Streamflow Point and Interval Predictions." Water Supply, (I.F. 1.768).

Sajani Gamage, Sandini Palitha, D.P.P. Meddage, Shayani Mendis, **Hazi Md. Azamathulla**, and Upaka Rathnayake (2022) "Influence of crumb rubber and coconut coir on strength and durability characteristics of interlocking paving blocks." Buildings, MDPI. I.F. (3.324).

Shani Brathwaite and **Deborah Villarroel-Lamb**, (2022) "Measurement of Swash Infiltration Rates on Sandy Beaches." West Indian Journal of Engineering (WIJE), Volume 45, No. 1., pp. 39-49; <https://doi.org/10.47412/PPJX1408>.

Villarroel-Lamb Deborah, and Andrew H. Williams (2022) "Quantifying Wave Runup in Data-Sparse Locations for Planning." West Indian Journal of Engineering (WIJE), Volume 44, No. 2.

Department of Electrical and Computer Engineering

Geetam Singh Tomar, **Marcus Lloyd George** and Abhineet Singh Tomar (2021) "Multi-Precision Binary Multiplier Architecture for Multi-Precision Floating-Point Multiplication." IET Circuits, Devices & Systems 15 (1) and Open Access paper.

George, Marcus Lloyd and Brandon Joseph (2022) "Development of a Control path VHDL Code Generator for Hardware Development". i-manager's Journal on Software Engineering 16 (3): 1-31.

George, Marcus Lloyd and Nora Innocent-George (2022) "General Purpose First-In-First-Out (FIFO) Core". i-manager's Journal on Electronics Engineering: 16 (4): 1-15.

George, Marcus Lloyd (2022) "Novel Multi-Precision Floating Point Multiplier Architecture using Mantissa Similarity Investigation (MSI) for Path-Delay Reduction." International Journal of Electrical, Electronics and Data Communication: 10 (7): 64-73.

Manninen, H.; **C.J. Ramlal**, A. Singh, **S. Rocke**, J. Kilter, M.Landsberg (2021) "Toward Automatic Condition Assessment of High-Voltage Transmission Infrastructure Using Deep Learning Techniques." International Journal of Electrical Power and Energy Systems, Elsevier.

Manninen, H, **C.J. Ramlal**, A. Singh, J. Kilter, and M. Landsberg (2022) "Multi-stage deep learning networks for automated assessment of electricity transmission infrastructure using fly-by images." *Electric Power Systems Research* 209: 107948.

Manninen, Henri, **Craig J. Ramlal**, **Arvind Singh**, Jako Kilter, and Mart Landsberg (2022) "Multi-stage deep learning networks for automated assessment of electricity transmission infrastructure using fly-by images." *Electric Power Systems Research* 209: 107948. IF: 3.414, cites: 1

Mohammed, Amir; **Fasil Muddeen**, **Craig J. Ramlal** and Lincoln Marine (2022) "A Comprehensive Review of Fault Tolerant and Resilient Cyber-Secure strategies for Critical Infrastructure Protection." *IEMJ*, Vol.1, No.1.

Mohammed, Amir; **Fasil Muddeen**, **Craig J. Ramlal** and Lincoln Marine (2022) A Comprehensive Review of Fault Tolerant and Resilient Cyber-Secure Strategies for Critical Infrastructure Protection. *The Industrial Engineering and Management Journal*, Vol.1, No.1, pp.66-76.

Persad, Jeevan and **Rocke, Sean A.** (2022) "A Survey of 3D Printing Technologies as Applied to Printed Electronics" *IEEE Access* 10: 27289-27319.

Pooransingh, Akash and Dylan Dhoray (2021). "Similarity Analysis of Modern Genre Music Based on Billboard Hits," in *IEEE Access*, Digital Object Identifier: 10.1109/ACCESS.2021.3122386: Vol 9, Pages 144916-144926. (Impact Factor 1.579).

Roopnarine, Aaron and **Rocke, Sean A.** (2021). "Stochastic Bioimpedance-Based Channel Model of the Human Body for Galvanic Coupling." *Journal of Electrical Bioimpedance* 12, no.1: 117-124.

Department of Geomatics Engineering and Land Management

Al-Tahir, R. and Lalla, G. (2021) "Assessment of the Emerging Landscape of Unmanned Aerial Systems in Trinidad and Tobago." *The West Indian Journal of Engineering*, Vol.44, No.1, pp.18-25.

Aideen M Foley, Stefano Moncada, **Michelle Mycoo**, Patrick Nunn, Verena Tandrayen-Ragoobur, Christopher Evans. (2022) "Small Island Developing States in a post-pandemic world: Challenges and opportunities for climate action." *WIREs Climate Change*. <https://doi.org/10.1002/wcc.769>.

Cassandra Nanlal, **Keith Miller**, **Dexter Davis & Michael Sutherland** (2021) "An Assessment of Methods used for Establishing Vertical Control in Caribbean Island Territories". In *Surveying and Land Information Science*, 80 (1), 2021, pp 5-15. Academic Accelerator Impact Factor = 0.208; Scimago H-Index = 9.

Kotzebue, J. R. (2022). Integrated urban transport infrastructure development: The role of digital social geo-communication in Hamburg's TEN-T improvement. *Journal of Transport Geography*, 99, 103280. doi:<https://doi.org/10.1016/j.jtrangeo.2022.103280>.

Hilmi N, Chami R, **Sutherland MD**, Hall-Spencer JM, Lebleu L, Benitez MB and Levin LA (2021) "The Role of Blue Carbon in Climate Change Mitigation and Carbon Stock Conservation." (*Frontiers in Climate*) *Front. Clim.* 3:710546. doi: 10.3389/fclim.2021.710546. Cite Score = 2.1 [Cited by 17]

Melville, T., Wuddivira, M. & **Sutherland, M.** (2022) "Geospatial modelling of rainfall erosivity in the humid tropics using remotely sensed data." *Earth Science Informatics* <https://doi.org/10.1007/s12145-022-00773-z>. Impact Factor = 2.82. [Cited by 1].

Publications & Conferences

Sekac, Tingneyuc, Sujoy Kumar Jana, **Michael Sutherland**, and Sailesh Samanta (2021) "Spatial -Temporal Assessments of Rainfall Variability and Trends in the Highlands to Coastal Regions of Papua New Guinea". In International Journal of Geoinformatics, Vol. 17, No. 3, pp. 23-38. Academic Accelerator Impact Factor = 0.24; Scimago H-Index = 10. [Cited by 1]

Tambie, J. and **Ramlal, B.** (2021) "Comparison of GPM IMERG and PERSIANN-CDR satellite-derived precipitation estimate products over Trinidad" Caribbean Journal of Geography, Vol. 25, pp 36-57.

Journal Abstracts

Department of Mechanical and Manufacturing Engineering

Adeyanju, A., Mohammed, O. and **Manohar, K.** (2021) "The effect of Rotor Separation on the Performance of a Dual Rotor Wind Turbine." Authorea Preprints.

Adeyanju, A. A and **Manohar, K.** (2022) "The Performance of a Cross-flow Turbine as a Function of Flowrates and Guide Vane Angles." High Tech and Innovation Journal, 3 (1), pp. 56-64.

Aleong, T., and **Pun, K.F.** (2022) "The use of RFID technology in condition-based maintenance of motors and generators." The Journal of the Association of Professional Engineers of Trinidad and Tobago, Vol.50, No.1, pp.9-13 (ISSN 1010-7924)

Arjoon, M.M. and **Pun, K.F.** (2022) "Assessing the Performance of Safety and Quality Practices in Higher Educational Settings: A Case Study." Industrial Engineering and Management Journal, Vol.1, No.1, June/July 2022, pp.4-17

Bachoo, R. (2022) "Vibration analysis of laminated planar frame structures." Journal of Sound and Vibration, 526, p.116787.

Bedasie, R.S, and **Pun, K.F.** (2021). "Quality management determinants and performance of poultry feed producers in Trinidad and Tobago: Some findings." The Journal of the Association of Professional Engineers of Trinidad and Tobago, Vol.49, No.2, October/November, pp.22- 28 (ISSN 1010-7924).

Davies, G., and **Ekwue, E.I.** (2022) "Hydrus-1D Simulation of Two-Stage Cross-Flow Pre-Filtration of Turbid River Water." Water Supply Journal (UK): 22 (2): 1244 – 1254.

Ellis, R.L. and Mohammed, N. (2022) "Productivity Modelling: A Health Systems Focus in Small Island Developing States." West Indian Journal of Engineering, Vol.44, No.2, pp. 29-37.

George, N. and **Chowdary, B.V.** (2022) "Mitigation of Design Issues in Development of Anatomical Models Using Rapid Prototyping." West Indian Journal of Engineering, Vol.45, No.1, pp.13-21.

Harrison, S., **Bansee, J.** and **Chowdary, B.V.** (2022) "Optimisation of Maintenance Operations Involving Three Integrated Departments at a Local Oil Company in Trinidad." West Indian Journal of Engineering, Vol.45, No.1, pp. 4-12.

Lemessy, K.G., **Manohar, K.** and **Adeyanju, A.** (2021) "Analysis of the Caribbean wave climate for wave energy harvesting." IET Renewable Power Generation, 15(14), pp.3409-3423.

Mahabir, R. and **Pun, K.F.** (2022) "Revitalising PMO operations in an engineering-service contractor organisation: A key performance indicators-based performance management approach." *Business Process Management Journal*, Vol.28, No.4, pp.936-959 (ISSN 1463-7154) - BPMJ-10-2021-0655; <https://doi.org/10.1108/BPMJ-10-2021-0655>.

Marquez, A., Jagroop, C. and **Maharaj, C.** (2021) "Wastewater collection system failures in a Capital city: analysis and sustainable prevention." *Water Science and Technology*. 83 (8): p. 1958- 1972.

Marquez, A., Persad, C. and **Maharaj, C.** (2022) "A Sustainable Method to Grind Plastic Scraps for more Efficient End Use as Additives." *Journal of The Institution of Engineers (India): Series A.*, 103: p. 341–348.

Marquez, A., Singh, J., and **Maharaj, C.** (2021) "Corrosion under insulation examination to prevent failures in equipment at a petrochemical plant." *Journal of Failure Analysis and Prevention*. 21, 723–732.

Murray, R.J., Maharaj, K., **Birch, R.A.** and **Pemberton, C.** (2022) "Investigation into the Use of a Fourier Based Edge Detection Image Processing Approach for Assessing Cocoa Pod Stem Cut Quality." *West Indian Journal of Engineering*, Vol.44, No.2, pp .48-57.

Ojha, K. and Garg, R.K. (2022) "Surface modification in PMEDM process due to complex material transfer phenomena: a case study." *International Journal of Materials Engineering Innovation*, 13 (4), pp.273-290.

Ojha, K. and Garg, R.K. (2022) "Surface Modification for EN-19 steel in Powder Mixed Electrical Discharge Machining Process due to Complex Material Transfer Phenomena." *Journal of Engineering Science & Technology Review*, 15(4).

Rameshwar, J. and **Graham King** (2022) "Caribbean Metaverse Development: A Literature Review Perspective." *Journal of Metaverse*, 2(2), pp.83-99.

Ramkissoon, R., **Manohar, K.** and **Adeyanju, A.**, (2022) "Production of Wind Energy from Vertical Axis Wind Turbine in Trinidad." *Current Overview on Science and Technology Research Vol. 2*, pp. 38-52.

Ramsawak, N. and **Chowdary, B.V.** (2022) "Integration of Computer Aided Design and Engineering (CAD/E) Principles for Development of a Face Shield Concept to Protect Against the COVID-19 Virus." *West Indian Journal of Engineering*, Vol.45, No.1, pp.30 – 38.

Virgil, C.C-L., Nathai-Balkissoon, M., and **Pun, K.F.** (2022) "Climate change adaptation planning in selected Caribbean countries: Is enough being done?" *West Indian Journal of Engineering*, Vol.44, No.2, pp. 60-91.

Zheng, J., **Maharaj, C.**, Liu, J. Chai, H., Liu, H., Dear, J.P. (2022) "A Comparative study on the failure criteria for predicting the damage initiation in fibre-reinforced composites." *Mechanics of Composite Materials*, 58 (1): p.125–140.

Publications & Conferences

Books & Book Chapters

Department of Electrical and Computer Engineering

Addison, L., G. Hosein, S. Bahadoorsingh, and **C. Sharma** (2022). "Goodness-of-Fit Probabilistic Models for EV Charging in Caribbean Small Island States," in *Towards Sustainable Transport and Mobility, Perspectives on Travelling and Commuting in Small Island States*, J. R. Kotzebue, Ed., Hamburg University Press, pp. 47-64.

Stephan J.G. Gift and **Fasil Muddeen** (2021). "Programme Accreditation and Continuous Quality Improvement in the Department of Electrical and Computer Engineering." In *Publication Caribbean Quality Culture - Persistent Commitment to Improving Higher Education*, The University of the West Indies Press, pp 363-382.

Department of Geomatics Engineering and Land Management

Kotzebue, J. (Ed.) (2022). *Towards Sustainable Transport and Mobility: Perspectives on Travelling and Commuting in Small Island States*. Hamburg Hamburg University Press.

Kotzebue, J., & Bryan, K. (2022). Smart Public Transport in Barbados: Experiences with smartphone Applications. In *Towards Sustainable Transport and Mobility* (pp. 67-82): J. R. Kotzebue (Ed.), Hamburg University.

Kotzebue, J. R., & Townsend, T. (2022). Introduction In *Towards Sustainable Transport and Mobility* Edited by Julia R. Kotzebue (pp. 13-26). Hamburg Hamburg University Press.

Kotzebue, J. (2022). Digital Capacity in Community Transport Development: Experiences from the Man and the Biosphere Area Tobago In *Towards Sustainable Transport and Mobility: Perspectives on Travelling and Commuting in Small Island States* (pp. 83-100). J. R. Kotzebue (Ed.), Hamburg Hamburg University Press.

Mycoo, M. (2022). Caribbean Island Cities: Urban Issues, Urbanization Processes and Opportunities for Transformation. *The Routledge Handbook of Urban Studies in Latin America and the Caribbean*, 579-602, Routledge.

Mycoo, M. (2022). Safe Water and Sanitation for a Healthier Caribbean. In *Safe Water and Sanitation for a Healthier World. Sustainable Development Goals Series*. Rajapakse, J. (eds) Springer, Cham. https://doi.org/10.1007/978-3-030-94020-1_3.

Mycoo, M., M. Wairiu, D. Campbell, V. Duvat, Y. Golbuu, S. Maharaj, J. Nalau, P. Nunn, J. Pinnegar, and O. Warrick (2022). Small Islands. In *Climate Change 2022: Impacts, Adaptation and Vulnerability. Contribution of Working Group II to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change* [H.-O. Pörtner, D.C. Roberts, M. Tignor, E.S. Poloczanska, K. Mintenbeck, A. Alegría, M. Craig, S. Langsdorf, S. Löschke, V. Möller, A. Okem, B. Rama (eds.)]. Cambridge University Press, Cambridge, UK and New York, NY, USA, pp. 2043–2121, doi:10.1017/9781009325844.017.

Mycoo, M. (2021). Vulnerabilities to Climate Change and Enhancing Resilience in Caribbean Small Island Developing States: A Spatial Planning Framework. In *Small Island Developing States: Vulnerability and Resilience Under Climate Change*, by Moncada, S., Briguglio, L., Bambrick, H., Kelman, I., Iorns, C., and Nurse, L. (Eds). Part III, 259-283. *The World of Small States*: 9. Springer.

Ramoutar, S., Richardson, J., **Ramlal, B.**, Tambie, J. (2022). Using Technology to Foster Inclusion and Diversity in Higher Education: A Case study of Geospatial Tools in Engineering Education. In *Toward Inclusive Learning Design: Social Justice, Equity, and Community: Summer Research Symposium for the Association of Educational Communication and Technology*, Hokanson, B, Exeter, M., Schmidt, M., & Tawfik, A. (editors). New York: Springer-Verlag.

Department of Mechanical and Manufacturing Engineering

Nathai-Balkissoon, M. and **Pun, K.F.** (2022). "E-government of occupational safety and health: Improvement prospects for a developing nation", In *Research Anthology on Changing Dynamics of Diversity and Safety in the Workforce*, Khosrow-Pour, M. (Eds), Information Resources Management Association/ IGI Global, 2022, Chapter 105, p.2086-2110 (25p) ISBN13: 9781668424056|ISBN10: 1668424053; EISBN13: 9781668424063, DOI: 10.4018/978-1-6684-2405-6.ch105; <https://www.igi-global.com/gateway/chapter/full-text-pdf/288030?ct=-8585703749501268148>

Conference Papers & Proceedings

Department of Chemical Engineering

Chakrabarti, Dhurjati Prasad (2021). "Cr6 Adsorption on fish scale, Mendeley Data, V2", <https://dx.doi.org/10.17632/n4t8mwzh99.2>

Chakrabarti, Dhurjati Prasad (2021) "Experimental setup of Air and Oil-Water dispersed Flow through a Horizontal Cylindrical Conduit, Mendeley Data, V1", <https://dx.doi.org/10.17632/82nbcxd2t2.1>

Chakrabarti, Dhurjati Prasad (2021). "Liquid Jet – Source of Energy, Mendeley Data, V1", <https://dx.doi.org/10.17632/vd7mwdjtwg.1>

Chakrabarti, Dhurjati Prasad (2021). "The effect of impeller blade geometry/inclination on mixing/emulsion. Mendeley Data, V2", <https://dx.doi.org/10.17632/ktfndr7g9z.2>

Chakrabarti, Dhurjati Prasad (2021), "The Impact of Surfactants And Particles On The Stability Of Emulsion Systems, Mendeley Data, V3", <https://dx.doi.org/10.17632/mvn2tgwxs5.3>

Chakrabarti, Dhurjati Prasad (2022) "Dissolved Oxygen in Gasoline and Tank Corrosion, Chakrabarti, , Mendeley Data, V2", <https://dx.doi.org/10.17632/gbk39nspbc.1>

Olariu, Cornel, Ron Steel, Yang Peng, Valentina Rossi, Ariana Osman, Fernando Rey, Jana Aladullatif. (2022). "Deltas in the Stratigraphic Record: Catching up with the Marine Geologists on Understanding Compound Delta Clinoforms" International Meeting of Applied Geoscience and Energy. AAPG/ SEG.

Osman, Ariana, Xavier Moonan, **Ryan Ramsook**, and Ron J. Steel (2021). "A Review of the Tectonic Evolution and Sedimentary Fill of the Southern Basin, Trinidad, Middle Cretaceous to Pleistocene"; In *South America–Caribbean–Central Atlantic Plate Boundary: Tectonic Evolution, Basin Architecture, and Petroleum Systems* edited by C. Bartolini, 621-649. Tulsa, Oklahoma, United States of America: American Association of Petroleum Geologists Memoir 123. <https://doi.org/10.1306/13692260M1233856>

Publications & Conferences

Osman, Ariana, Ron Steel, and **Ryan Ramsook** (2022). "Net to Gross Changes Defining Compound Clinoforms in Outcrop – The Morne L'Enfer Formation, Trinidad." International Meeting of Applied Geoscience and Energy. AAPG/SEG. (Poster Presentation - Extended Abstract Published).

Osman, Ariana, Ron Steel, and **Ryan Ramsook**. (2022). "A Tectonic and Eustatic Story - Linking the Orinoco Delta's Second Clastic Wedge Topsets on Trinidad." Geological Society of Trinidad and Tobago 11th Geologic Conference. (Speaker Presentation).

Osman, Ariana. (2022). "Turbidites of the Orinoco – how big and how wide?" Geological Society of Trinidad and Tobago 11th Geologic Conference. (Invited virtual field trip).

Osman, Ariana, Ron, and **Ryan Ramsook**. (2021). "The changing topset architecture across a growth-faulted segment of the paleo-Orinoco shelf, Trinidad." International Meeting of Applied Geoscience and Energy (Poster Presentation -Abstract to be published).

Osman, Ariana, Ron Steel, **Ryan Ramsook**. (2021) "The Changing Topset Regime and Clinoform Architecture on the Orinoco delta, onshore Trinidad – A Story of Eustatic and Tectonic Interaction" Invited Talk, Seds-Online (Associated with the International Association of Sedimentologists) (Technical Talk -Recording Available).

Osman, Ariana, Ron Steel, **Ryan Ramsook**, Cornel Olariu, and Si Chen. (2021) . "The Changing Clinoform Architecture of the Paleo-Orinoco, Late Miocene Cruse Formation, Trinidad – A Story of Eustatic Sea-Level Changes and Tectonic Interaction" SEPM International Sedimentary Geosciences Congress - (Technical Talk, Shorted Abstract online, Recording Available).

Osman, Ariana, Ron Steel, **Ryan Ramsook**, Cornel Olariu, and Si Chen. (2021). Unravelling the Influence of Tectonics on Sediment Distribution and the Changing Clinoform Geometry of the Orinoco River Delta's Late Miocene deposits, the Cruse Formation, Trinidad, AAPG LAT CAR Virtual Research Symposium – (Technical Talk - Recording Available)

Department of Civil and Environmental Engineering

Banerjee K.S. and Ifill A. (2021). "Variation in Terrestrial Gamma Radiation Flux before and after a Mud-volcano Eruption – Piparo Mud-volcano in Trinidad and Tobago". Book of Abstracts, In 6th International Conference on Environmental Radioactivity, ENVIRA 2021 Fukushima Accident – 10 years of Environmental Investigations, and New Challenges in Environmental Radioactivity Studies, 6th -10th December 2021 Thessaloniki, Greece.

Clarke, R.P. (2022). "Seismic Retrofit Design Procedures for Resilient Ferrocement-Retrofitted URM Single-Story Houses", *Proceedings of the 12th National Conference on Earthquake Engineering, Salt Lake City, Utah, 27 June to 1 July 2022*. Paper 10422.

Leon L.P. (2022). "Cracking Healing Evaluation of HMA Using Indirect Tensile Stiffness Modulus Test. In Proceedings of the RILEM International Symposium on Bituminous Materials." ISBM 2020. Di Benedetto H., Baaj H., Chailleux E., Tebaldi G., Sauzéat C., Mangiafico S. (eds). RILEM Book series, vol 27. Springer, Cham. https://doi.org/10.1007/978-3-030-46455-4_64

Leon L.P., Bovell K. (2022). "Evaluation of Fracture Resistance of SMA Mixtures with Various Percentages of TLA-RAP Through the Semi-circular Bend (SCB) Test. In Proceedings of the RILEM International Symposium on Bituminous Materials." ISBM 2020. Di Benedetto H., Baaj H., Chailleux E., Tebaldi G., Sauzéat C., Mangiafico S. (eds). RILEM Book series, vol 27. Springer, Cham. https://doi.org/10.1007/978-3-030-46455-4_101

Leon L.P. (2022). "Development of Permanent Deformation Models with the Inclusion of AIMS Coarse Aggregate Angularity. In Proceedings of the RILEM International Symposium on Bituminous Materials." ISBM 2020. Di Benedetto H., Baaj H., Chailleux E., Tebaldi G., Sauzéat C., Mangiafico S. (eds). RILEM Book series, vol 27. Springer, Cham. https://doi.org/10.1007/978-3-030-46455-4_71

Department of Electrical and Computer Engineering

George, M. "Teaching Platforms, Tools & Consultation Methodologies to Avoid Student Performance Degradation in a Future with COVID-19". *International Conference on Teaching, Education and New Learning Technologies (ICTENLT)*. 2nd June 2022, New York, USA.

Mahadeo, Megan, Aaron Roopnarine, **Sean Rocke**, and **Craig Ramlal**. "Non-invasive Serum Glucose Sensing Using a Double U-slot Antenna." In 2020 IEEE MTT-S Latin America Microwave Conference (LAMC 2020), pp. 1-3. IEEE, 2021.

Mohammed, Crista, and Ruqayyah Baksh. "Communication Instruction in Select UK Electrical Engineering Undergraduate Curricula." In 2021 IEEE International Professional Communication Conference (ProComm), pp. 109-115. IEEE, 2021.

Ramnarine, V., **S. Bahadoorsingh**, and **C. Sharma**, "Modeling of Small Island Power Systems with Integrated PV and Battery Energy Storage using EMTP-RV," presented at the *IEEE PES Generation, Transmission and Distribution Conference & Exposition Virtual 2022 – Latin America*, La Paz, Bolivia, 2022.

Department of Geomatics Engineering and Land Management

Hilmi N., Allemand D., Benítez MB **Sutherland MD** (2021), Policy Brief. Fifth international workshop on the economics of Ocean acidification, Bridging the Gap between Ocean Acidification Impacts and Economic Valuation, Monaco, 12-13 October 2021.

Kotzebue, J. R. (2022). "La ville résiliente au climat et L'éducation au développement durable". Paper presented at the Teaching climate change, St Martinique.

Kotzebue, J. R. (2022). "PGIS Engagement in Integrated Transport Development: The Role of Digital Capacity". Paper presented at the 6th International Conference Urban e-Planning, University of Lisbon, Portugal.

Ramoutar, S., Richardson, J., **Ramlal, B.** (2021), "Investigating pedagogy and technology integration in higher education: a multiple case study of geospatial educators". AECT 21 International Convention: "Homecoming (Homestaying): A Return to Learning through Innovation." November 2-6, 2021

Department of Mechanical and Manufacturing Engineering

Adeyanju, A.A. (2022). "Comparisons of Cocoa Pod Husks and other Biomass Wastes for Syngas Production" In E3S Web of Conferences (Vol. 336, p. 00037). EDP Sciences.

Adeyanju, A.A. (2022). "Comparisons of Incineration and Gasification Thermal Conversion of Municipal Solid Waste in Trinidad and Tobago". *Procedia Computer Science*, 203, pp. 290-299.

Publications & Conferences

Adeyanju, A.A. (2022). "Performance Comparisons for Low Global Warming Potential Alternative Refrigerants Using CYCLE D-HX". Proceedings of 2nd World Conference on Sustainability, Energy and Environment 09 DEC - 11 DEC, BERLIN, GERMANY - In print.

Adeyanju Anthony Ademola (2022). "Comparisons of Incineration and Gasification Thermal Conversion of Municipal Solid Waste in Trinidad and Tobago". Proceedings of International Conference on Sustainable Energy Information Technology (SEIT 2022), August 9-11, 2022, Niagara Falls, Ontario, Canada.

Davies, G., **Ekwue, E.I.**, (2021). "Rapid sand filter clogging, fabric identification, river water turbidity and river particle analysis in preparation for pilot scale two-stage cross flow pre-filtration of turbid river water". Online International Conference.

Henry, J.H. and **Bridge, J.** (2022). "Comparison of the Hysteresis Response of Super-Coiled Polymer (SCP) Actuators". In International Design Engineering Technical Conferences and Computers and Information in Engineering Conference (Vol. 86304, p. V009T09A008). American Society of Mechanical Engineers.

Ragoobir, R. and **Bachoo R.** (2022). "Cumulative Fatigue Damage of Small-Bore Piping Subjected to Flow Induced Vibration". Water Efficiency Conference: Water Resources Resilience for Small Island Developing States (SIDS). Trinidad.

Sinanan, R. and **Bachoo, R.** (2022). "A Review of the Vibration Analysis Methods for Frame Structures". 2022 BUDAPEST 35th Int'l conference on "Science, Engineering, Technology & Natural Resources" (BSETN-22) Sept. 12-14, Budapest (Hungary).

Other Publications

Department of Chemical Engineering

Technical Papers/Presentations/Reports

Maharaj, R. and Darsoo, S. (2021). Improving Food Packaging Practices in CARICOM. Submitted to Food and Agricultural Organization of the United Nations, FAO, Rome. August, pp 206.

Department of Electrical and Computer Engineering

Guest Article

Mycoo, M. (2022). Building Urban Resilience in the Caribbean: Policies and Practices and Prospects, Perry World House: Climate Change, Latin America and the Caribbean, *Urbanisation*, June 29, 2022.

FACULTY OF FOOD & AGRICULTURE

Journal Publications

Persaud, R., **D. Saravanakumar**, M. Persaud and **G. Seepersad**. (2021). Biologicals and New Generation Fungicides in the Management of Blast Disease in Rice. *Frontiers in Sustainable Food System*. DOI: 10.3389/fsufs.2021.797441. Volume 5, Article 797441, <https://www.frontiersin.org/articles/10.3389/fsufs.2021.797441/full>.

Boman, M. (2022). The sample median as an estimator of population mean true willingness to pay under valuation uncertainty: A synthesis and analysis of the literature. *Applied Economics*.

Nichols, S., N. Dalrymple, **P. Prout** and **A. Ramcharitar-Bourne** (2022). Dietary intake patterns, nutrient adequacy and associated factors in a multi-ethnic Caribbean population. *Nutrition and Health*. DOI: 10.1177/02601060211070907.

Bhagtani, D., Augustus, E., Haynes, E., Iese, V., Brown, C. R., Fesaitu, J., Hambleton, I., Badir, N., Kroll, F., **Saint Ville, A.**, Samuels, T.A., Fououhi, N., Benjamin-Neelon, S., & Unwin, N. (2022). Dietary patterns, food insecurity, and their relationships with food sources and social determinants in small island developing states. *Nutrients*, 14(14), 2891.

Francis, J.R., **Wuddivira, M.N.** and **Farrick, K.K.** (2022). Exotic tropical pine forest impacts on rainfall interception: Canopy, understory, and litter. *Journal of Hydrology*. 609: 127765

Guell, C., Brown, C.R., Navunicagi, O.W., Iese, V., **Badrie, N.**, Wairiu, M., **Saint Ville, A.**, Unwin, N. et al. (2022). Perspectives on strengthening local food systems in Small Island Developing States. *Food Security*. <https://doi.org/10.1007/s12571-022-01281-0>.

Mandal A, Stephenson T, Campbell J, Taylor M, Watson S, Clarke L, Smith D, **Darsan J**, Wilson M. (2022). An assessment of the impact of 1.5 versus 2 and 2.5°C global temperature increase on flooding in Jamaica: a case study from the Hope watershed. *Phil.Trans.R.Soc.A380*: 20210141. <https://doi.org/10.1098/rsta.2021.014>.

Pourghaderi, M., Omidvar, N., Takian, A., **Saint Ville, A.**, Kangarani, H. M., & Eini-Zinab, H. (2022). Who really counts in Iran's National Food Assistance Program? Lessons from multi-stakeholder processes in the wicked policy area of food security. *Cadernos de Saúde Pública*, 38, e00341820.

Saint Ville, A., Hickey, G. M., Rouwette, E., Samuels, A., Guariguata, L., Unwin, N., & Phillip, L. (2022). A combined theory of change-group model building approach to evaluating Farm to Fork models for school feeding in the Caribbean. *Frontiers in Sustainable Food Systems*, 118. <https://doi.org/10.3389/fsufs.2022.801731>

Melville T., **Wuddivira, M.**, Sutherland, M. (2022). Geospatial modelling of rainfall erosivity in the humid tropics using remotely sensed data. *Earth Science Informatics* (Springer). <https://doi.org/10.1007/s12145-022-00773-z>. IF 2.878.

Publications & Conferences

De Caires, S.A., **Wuddivira, M.N.**, St Martin, C., **Roopnarine, R.**, Gordon, A. and Zearth, B.J., (2022). Multivariate geospatial analysis for predicting soil variability along a toposequence of a watershed in the humid tropics. *CATENA* (Elsevier), 210: 105919. <https://doi.org/10.1016/j.catena.2021.105919>. IF 6.367.

Wuddivira, M.N., Stone, R.J. and **Ekwue, E.I.** (2021). Soil texture, mineralogy and organic matter effects on structural stability and soil loss of selected Trinidad soils after rainfall. *Trop. Agric.* (Trinidad), 98 No.3, 302-311. Special issue in commemoration of agricultural legacy through teaching, research and innovation. Extracted from Volume 83, Number 3, 2006. IF 0.276.

Francis, R., **Wuddivira, M.N.**, Gouveia, G.A., Bramble, D.E. (2021). Structural and Hydraulic Responses of Humid Tropical Soils to Lime and Organic Residue Amendments. *Soil Research (CSIRO publishing)*. <https://doi.org/10.1071/SR20305>. IF 1.987.

Roopnarine, R., Eudoxie, G., **Wuddivira, M.N.**, Saunders, S., Lewis, S., Spencer, R., Jeffers, C., Haynes-Bobb, T., Roberts, C. (2021). Integrating the Participatory Approach in Hydro-Climatic Disaster Risk Management (Droughts and Floods) in the Caribbean. *International Journal of Disaster Risk Reduction* (Elsevier), Vol. 66. <https://doi.org/10.1016/j.ijdr.2021.102592>. IF 4.842.

De Caires, S., **Wuddivira, M.N.**, Bramble, D.E., Atwell, M., Roopnarine, R., and Farrick, K.K. (2021). Soil sampling strategies for the characterization of spatial variability under two distinct land uses. *Communications in Soil Science and Plant Analysis* (Taylor & Francis). <https://doi.org/10.1080/00103624.2021.1921190>. VOL. 52, NO. 19, 2217–2240 IF 1.327.

Books & Book Chapters

Crispim, S.P., **I. Granderson**, L. Matthew-Duncan, U.R. Charrondière, F. Jean and **S. Hutchinson**. (2021). Manual of Food Portion Quantification – Saint Kitts and Nevis. Bridgetown, FAO. <http://www.fao.org/documents/card/en/c/cb4844en>.

Marshall, T., **Saint Ville, A.**, **Fletcher-Paul, L.**, **Isaac, WA.** (2021). COVID-19: The Impact of a Complex Disaster on Household Food Security in Caribbean SIDS. In: Campbell, Y., Connell, J. (eds) COVID in the Islands: A comparative perspective on the Caribbean and the Pacific. Palgrave Macmillan, Singapore. https://doi.org/10.1007/978-981-16-5285-1_23

Patterson-Andrews, H. and A. Seepersad. (2021). “The Study” in FAO and University of West Indies. A review of school feeding programmes in the Caribbean Community. pp. 2 – 6. Saint Augustine. Food and Agricultural Organization <https://doi.org/10.4060/cb4650en>.

Patterson-Andrews, H. (2021). “General Findings” in FAO and University of West Indies. A review of school feeding programmes in the Caribbean Community. pp. 12 – 14. Saint Augustine. Food and Agricultural Organization <https://doi.org/10.4060/cb4650en>.

Patterson-Andrews, H. (2021). “Other General Recommendations” in FAO and University of West Indies. A review of school feeding programmes in the Caribbean Community. pp. 19-21. Saint Augustine. Food and Agricultural Organization <https://doi.org/10.4060/cb4650en>.

Patterson-Andrews, H. (2021). "Case Study: Dominica" in FAO and University of West Indies. A review of school feeding programmes in the Caribbean Community. pp. 51- 59. Saint Augustine. Food and Agricultural Organization <https://doi.org/10.4060/cb4650en>.

Patterson-Andrews, H. (2021). "Case Study: Guyana" in FAO and University of West Indies. A review of school feeding programmes in the Caribbean Community. pp. 67 - 79. Saint Augustine. Food and Agricultural Organization <https://doi.org/10.4060/cb4650en>.

Patterson-Andrews, H. and C. Pemberton. (2021). "Case Study: Haiti" in FAO and University of West Indies. A review of school feeding programmes in the Caribbean Community. pp. 80 - 89. Saint Augustine. Food and Agricultural Organization <https://doi.org/10.4060/cb4650en>.

Patterson-Andrews, H. and **I. Granderson.** (2021). "Case Study: Jamaica" in FAO and University of West Indies. A review of school feeding programmes in the Caribbean Community. pp. 90 - 102. Saint Augustine. Food and Agricultural Organization <https://doi.org/10.4060/cb4650en>.

Patterson-Andrews, H. (2021). "Case Study: St Lucia" in FAO and University of West Indies. A review of school feeding programmes in the Caribbean Community. pp. 114 – 121. Saint Augustine. Food and Agricultural Organization <https://doi.org/10.4060/cb4650en>.

Pemberton, C. and **H. Patterson-Andrews.** (2021). "Case Study: Suriname" in FAO and University of West Indies. *A review of school feeding programmes in the Caribbean Community.* pp. 130 - 137. Saint Augustine. Food and Agricultural Organization <https://doi.org/10.4060/cb4650en>.

Patterson-Andrews, H. and C. Pemberton. (2021). "Case Study: Trinidad and Tobago" in FAO and University of West Indies. *A review of school feeding programmes in the Caribbean Community.* pp. 138 -151. Saint Augustine. Food and Agricultural Organization <https://doi.org/10.4060/cb4650en>.

Daley, O., W.P. Isaac, A. John, and R. Roopnarine. (2022). Home gardeners' knowledge and perception of fruit species growing practices and diversity in Trinidad and Tobago. *ISHS Acta Horticulturae* 1345:105-113

Daley, O., W. P. Isaac, A. John, R. Roopnarine, and K. Forde. (2022). An Assessment of the Impact of COVID-19 on the Agri-Food Systems in Caribbean Small Island Developing States (SIDS). *Frontiers in Sustainable Food Systems*, Volume 6.

Wang, J., J. Liu, **A. John,** Y. Jiang, H. Zhu, B. Yang, and L. Wen. (2022). Structure identification of walnut peptides and evaluation of cellular antioxidant activity. *Food Chemistry*, Volume 388.

Goordeen A. and Majeed Mohammed (2021) Growth, development, maturation indices, proximate and mineral composition of moringa (*Moringa oleifera*), *Journal of Horticulture and Postharvest*

Hughes, M., Mlambo, V., & Lallo, C. (2021). Interactive effects of growth stage and nitrogenfertilization on herbage characteristics and nutritive value of *Paspalum atratum*. *Grassland Science*, 1–10. <https://doi.org/10.1111/grs.1234810> Hughes et al.

Publications & Conferences

Keyanna C. Peters, **Martin P. Hughes** and **Oral Daley**. (2022). Field-scale calibration of the PAR Ceptometer and Field Scout CM for real-time estimation of herbage mass and nutritive value of rotationally grazed tropical pasture. *Smart Agricultural Technology*, 2 DOI 10.1016/j.atech.2022.100037

Smith, J. and **Saravanakumar, D.**, (2022). Development of resistance in tomato plants grafted onto *Solanum torvum* against bacterial wilt disease. *Journal of Plant Diseases and Protection*, 129(6), pp.1389-1399.

Bekele, F.L., Bidaisee, G.G., Allegre, M., Argout, X., Fouet, O., Boccara, M., **Saravanakumar, D.**, Bekele, I. and Lanaud, C., (2022). Genome-wide association studies and genomic selection assays made in a large sample of cacao (*Theobroma cacao* L.) germplasm reveal significant marker-trait associations and good predictive value for improving yield potential. *PLoS one*, 17(10), p.e0260907.

Rigobelo, E.C., Kandasamy, S. and **Saravanakumar, D.** eds., (2022). Plant Growth-Promoting Microorganisms for Sustainable Agricultural Production. *Frontiers in Sustainable Food Systems*.

Persaud, R., **Saravanakumar, D.**, Persaud, M. and **Seepersad, G.**, (2021). Biologicals and New Generation Fungicides in the Management of Blast Disease in Rice. *Frontiers in Sustainable Food Systems*, 5, p.797441.

Lakhan, C., **N. Badrie, A. Ramsubhag**, and L. Indar, (2022). Detection of foodborne pathogens in acute gastroenteritis patient's stool samples using the BioFire® FilmArray® Gastrointestinal PCR Panel in the Republic of Trinidad and Tobago, West Indies. *Microorganisms*. 2022, 10, 1601. <https://doi.org/10.3390/microorganisms10081601>. <https://www.mdpi.com/2076-2607/10/8/1601>

Bhagtani, D., E. Augustus, E. Haynes, V. Iese, C.R. Brown, J. Fesaitu, I. Hambleton, **N. Badrie**, F. Kroll, A. Saint Ville, T.A. Samuels, N.G. Fourouhi, S. Benajamin-Neelon, and N. Unwin. (2022). Dietary patterns, food insecurity, and their relationships with food sources and social determinants in two small island developing states. *Nutrients* 14(14), 2891; https://www.mdpi.com/2072-6643/14/14/2891/review_report.

Guell, C., C.R. Brown, O.W. Navunicagi, V. Iese, **N. Badrie**, M. Wairu, **A. Saint Ville**. and N. Unwin, N on behalf of the Community Food and Health (CFaH) team (2022) Perspectives on strengthening local food systems in small island developing states. *Food Security*. *Food Security- to Food Security: The Science, Sociology and Economics of Food Production and Access to Food*. Food Security 2022 May 4: 1–14. [http://doi: 10.1007/s12571-022-01281-0](http://doi:10.1007/s12571-022-01281-0) <https://link.springer.com/content/pdf/10.1007/s12571-022-01281-0.pdf>

Conference Presentations

Fiedler, Sabine; Atwell, Melissa; **Wuddivira, Mark**; Glasner, Björn; Vetter, Vanessa; Herrmann, Ludger; Jungkunst, Hermann F. (2022). Can the vegetation patterns in Trinidad's White Sands Ecosystems (WSE's) be explained by soil? Poster presentation at the Annual Conference of the German Soil Science Society (DBG) held in Trier, Germany. September 4 - 9, 2022.

Wuddivira, M.N., De Caires, S., and **Roopnarine, R.** (2021). Electromagnetic Geophysical Techniques for Ground Water Monitoring and Management. IWRCs 2021, Integrated Water Resources and Coastal Symposium: Island Life Water from Ridge to Reef. Radisson, Port of Spain, Trinidad and Tobago. March 17-19, 2021.

Wuddivira, M.N. (2021). Food Security in Trinidad and Tobago and the Impact of COVID 19: New developments and key challenges. Let's talk Thursday hosted by the Institute for Critical Thinking in Collaboration with the Pan American Development Foundation. Institute of Critical Thinking, The University of the West Indies, St. Augustine. February 18, 2021.

Conference Papers & Proceedings

Webb, M. C. and A. Lai. (2022). A perfect storm: Risk of eating disorder and psychological stress among university students during the COVID-19 pandemic lockdown. *Caribbean Medical Journal*, 2022 National Health Research Conference Supplement, pp. 47.

Bhagtani, D., Augustus, E., Haynes, E., **Saint Ville, A.**, Iese, V., Fesaitu, J., **Badrie N.**, Kroll, F., Foley, L., & Hambleton, I. (2021). P22 Prevalence of food insecurity and its associations with socio-demographic factors, food sources and dietary diversity, in small island developing states. Poster presentation at the SSM Annual Scientific Meeting, September 15-17, 2021.

Fair, O., Hickey, G.M., **Saint Ville, A.** and Phillip, L. (2021). Improving food and nutrition in the CARICOM: Enhancing Nevis's School Meals Program through a local and sustainable food procurement system. Poster presentation at the North American Regional Social Networks Conference of the International Network for Social Network Analysis (INASN). January 25-28, 2021.

Marshall, T., **Fletcher-Paul, L.**, **Isaac, W.A.**, and **Saint Ville, A.** (2021) The policy gap: Evidence from household food security coping strategies in the COVID-19 pandemic. Paper presented at the 65th CARPHA Health Research Virtual Conference, June 16-19.

Saint Ville, A. and Hickey, G.M. (2021) Photovoice data collection method, building community-based nutrition sensitive value chains and healthy moms in Nevis. Presentation at the Celebrating a Hundred Years of Agricultural Research and Innovation: Perspectives on Tropical Food and Agriculture Systems, Virtual Conference, November 10-11.

Saint Ville, A. Po, J.Y.T. and Sanatan, A., (2021) Daughters "Dawtas" within Rastafarl movement: Critical lessons on bridging social movements and feminist influences in food sovereignty. Presentation at the Cultivating Equality: Advancing Gender Research in Agriculture and Food Systems Virtual Conference, October 12-15.

Saint Ville, A. (2021) The Faculty of Food and Agriculture post Covid-19 use of ICT technologies. Presentation at the IICA Caribbean Digital Technology Symposium (virtual), July 15.

Farrick, K.K. (2022) What lies ahead (and beneath): Advancing Hydrological Knowledge in Trinidad and the Caribbean. Adopt A River Conference (Oral presentation) – Feature Address.

Farrick, K.K. and Francis, J. (2022) How do Exotic Pines affect water availability in a Caribbean Island? An example from Trinidad and Tobago. *Frontiers in Hydrology*, San Juan, Puerto Rico (Online poster presentation).

Publications & Conferences

Other Publications

Media Interviews

UWI wants partnership to provide alternative flour. **Dr Mark Wuddivira**, Dean, Faculty of Food & Agriculture (FFA) interview with Radhica De Silva. Trinidad Guardian, July 27, 2022. <https://www.guardian.co.tt/news/uwi-wants-partnership-to-provide-alternative-flour-6.2.1511825.112c23ee96>

UWI Dean wants minister to tackle food shortage, prices. **Dr Mark Wuddivira**, Dean, Faculty of Food & Agriculture (FFA) interview with Radhica De Silva. Trinidad Guardian, June 27, 2022. https://edition.pagesuite.com/popovers/dynamic_article_popover.aspx?artguid=c9fbfed1-aa07-45f7-9802-0364af6c0efb

More implementation of budget promises needed for agriculture. **Dr Mark Wuddivira**, Dean, Faculty of Food & Agriculture (FFA) interview with Geisha Kowlessar-Alonzo. Trinidad Guardian. May 14, 2022. <https://guardian.co.tt/news/more-implementation-of-budget-promises-needed-for-agriculture-6.2.1492940.fdc97197>

Minister: Rabies outbreak closely monitored. **Dr Mark Wuddivira**, Dean, Faculty of Food & Agriculture (FFA) interview with Radhica De Silva. Trinidad Guardian, April 13, 2022. <https://guardian.co.tt/news/minister-rabies-outbreak-closely-monitored-6.2.1479659.f068b4b6bb>

Farmers go back to basics to combat fertilizer, chemical shortages. **Dr Mark Wuddivira**, Dean, Faculty of Food & Agriculture (FFA) interview with Radhica De Silva. Trinidad Guardian, Apr 03, 2022. <https://guardian.co.tt/news/farmers-go-back-to-basics-6.2.1474943.4ffd6f2336>

So much potential, but how to grow agriculture in 2022? **Dr. Mark Wuddivira**, Dean, Faculty of Food & Agriculture (FFA) interview with Geisha Kowlessar-Alonzo. Thursday Guardian December 23, 2021.

Tobago agriculture needs help to grow. **Dr. Mark Wuddivira**, Dean, Faculty of Food & Agriculture (FFA) interview with Geisha Kowlessar-Alonzo. Thursday Guardian November 18, 2021.

University marks 100 Years in Agriculture. UWI seeks partnership with stakeholders in sector. Dr. Mark Wuddivira, Dean, Faculty of Food & Agriculture (FFA) interview with Geisha Kowlessar-Alonzo. Sunday Guardian August 8, 2021.

Wuddivira, M.N. 2021. Propelling the FFA into a future of possibilities. In: The Centennial Legacy Celebration of Agriculture at The University of the West Indies, St. Augustine. Celebrating 100 years of Agricultural Legacy through Teaching, Research and Innovation. Trinidad Express Newspaper Sunday Supplement, August 29, 2021. <https://sta.uwi.edu/ffa/sites/default/files/ffa/UWI%20Agriculture%20Celebrating%20100%20Yrs%20final.pdf>

Monographs

Marshall T., **Saint Ville A., Fletcher-Paul L., Isaac WA.** (2021) COVID-19: The Impact of a Complex Disaster on Household Food Security in Caribbean SIDS. In: Campbell Y., Connell J. (eds) COVID in the Islands: A comparative perspective on the Caribbean and the Pacific. Palgrave Macmillan, Singapore. https://doi.org/10.1007/978-981-16-5285-1_23

Roopnarine, C., Ramlal, B., & Roopnarine, R. (2022). A Comparative Analysis of Weighting Methods in Geospatial Flood Risk Assessment: A Trinidad Case Study. *Land*, 11(10), 1649.

Roopnarine R., Simone Lewis, Akil Crichlow, Adrian Cashman and Valentin Aich (2021). Water-Related Disasters and COVID-19: Exploring the relevance of the HELP Principles in Caribbean Small Island Developing States. *HELP, Global Report on Water and Disasters*.

Roopnarine, R., Gaius Eudoxie, Mark N. Wuddivira, Sharmayne Saunders, Simone Lewis, Ruth Spencer, Cheryl Jeffers, Tasheka Haynes-Bobb, Charlene Roberts (2021). Capacity building in participatory approaches for hydro-climatic Disaster Risk Management in the Caribbean, *International Journal of Disaster Risk Reduction*, Volume 66 <https://doi.org/10.1016/j.ijdr.2021.102592>.

Daley, Oral, Wendy-Ann Isaac, Afiya John, and Ronald Roopnarine (2022). Home gardeners' knowledge and perception of fruit species growing practices and diversity in Trinidad and Tobago. *Acta Horticulturae*.

Daley, Oral, Wendy-Ann P. Isaac, Afiya John, Ronald Roopnarine, and Keon Forde. (2022). "An Assessment of the Impact of COVID-19 on the Agri-Food Systems in Caribbean Small Island Developing States (SIDS)." *Frontiers in Sustainable Food Systems*: 224. *Frontiers*. Citations-0, IF-5.005, DOI:<https://doi.org/10.3389/fsufs.2022.861570>

De Caires, S. A., Wuddivira, M. N., St Martin, C., Roopnarine, R., Gordon, A., & Zebarth, B. J. (2022). Multivariate geospatial analysis for predicting soil variability along a toposequence of a watershed in the humid tropics. *CATENA*, 210, 105919. Elsevier. Citations-0, IF-6.367, DOI:<https://doi.org/10.1016/j.catena.2021.105919>

UNEnvironment/GWP/UNEP-DHI and CapNet UNDP : Training Manual : Integrating data to improve the protection and restoration of freshwater ecosystems https://www.gwp.org/globalassets/global/activities/act-on-sdg6/microsite/661-page/2021_capnet_gwp_training-manual_freshwater_ecosystems_compiled-1.pdf

Sunshine A. De Caires, Mark N. Wuddivira, De Shorn E. Bramble, Melissa Atwell, Ronald Roopnarine & Kegan K. Farrick (2021). Soil Sampling Strategies for the Characterization of Spatial Variability Under Two Distinct Land Uses, *Communications in Soil Science and Plant Analysis*, DOI: 10.1080/00103624.2021.1921190

Ronald Roopnarine and Gaius Eudoxie, Assessment study for development of reuse standards in Trinidad and Tobago 2021. (Ministry of Public Utilities and GIZ) 3. Ronald Roopnarine and Gaius Eudoxie, Conceptual Framework – Regional IWRM policy (CARPHA and IWeco), 2021

Technical Reports

Barreto, G.C., M.A. Leite Lima, A.R. Carvalho, V.R. Cañete, F.H. Souza Lobato, Q.H. Pantoja Lobo, M.T. Cabrera, F. Escobar-Toledo, M. Rueda, A. Hernández Flores, A. Toro Ramírez, J.L. Cruz Sánchez, S. Mormon, S. Hutchinson, C. Carmichael, R. Cozier, D. McFee, W. Archer, K. Slinger, K. Oddone, N. Flores and A. Stavrinaky. (2022). "Cadenas de valor en las pesquerías de arrastre de América Latina y el Caribe - Integración y análisis de estudios nacionales (Value chains in Latin American and Caribbean Trawl Fisheries - Integration and Analysis of National Studies)". *FAO Documento Técnico de Pesca y Acuicultura*. No. 679. Rome, FAO. <https://doi.org/10.4060/cb7922es> <https://www.fao.org/documents/card/es/c/cb7922es>.

FACULTY OF HUMANITIES & EDUCATION

Journal Publications

Ali T. (2022) Birthing and Burying a Dragon: Shaping Afro-Caribbean Sexual and Masculine Identities in Earl Lovelace's *The Dragon Can't Dance*. *Postcolonial Text*. 17 (1), 2022.

Brunton, D. W. (2022) The digital Creole. *International Journal of Cultural Studies*, 25(5), 492–499. <https://doi.org/10.1177/13678779221102516>

De Las, K. (2022) The Major Shadow of the Minor: Winston "Shadow" Bailey, Music Modes and Trinbagonian Attitudes toward Prevalent Social Issues paper accepted for publication in special edition of *Tout Moun Caribbean Journal of Cultural Studies*, ISSUE 7, No. 2: DREADNESS: The Mystic Power, Philosophy and Performance of Shadow 1941-2021

Dedovets, Z., (2021). Scaffolding as an interactive method in teaching mathematics. *Modern Education: Scientific Approaches, Experience, Problems, Prospects*, V.G. Belinsky Penza State Pedagogical University Russia (PSPU). 23-30.

Granger, C. (2021) Speaking of Rivers: Spirituals, Poetry, and *The Langston Hughes Review*, 27 (2) 188-214.

Jackson, E. (2021) Cosmopolitan Attitudes and Cosmopolitan Identities in Amitav Ghosh's *The Shadow Lines*. *South Asian Review*. 43 (3-4) 171-182. <https://doi.org/10.1080/02759527.2021.1878799>

Jackson, E. (2022) Problematizing National /Cultural Affiliations in Postcolonial Literature: Inclusions and Exclusions in the Reception of Doris Lessing and V.S. Naipaul. *Journal of Commonwealth Literature*, 57 (1) 32-46.

Jones, B. (2022). Appropriateness versus Naturalness in the Jamaican Creole Bible Translation Project. *The Bible Translator* vol. 73, no. 1, pp. 39-52.

Jones, B. (2022). Quality Assurance and Control in Jamaican Dancehall Music. *Interviewing the Caribbean*. Vol. 7, no. 2, pp. 132-139.

Maharaj-Sharma, R. (2022). The journeys of two novice educational leaders. In I. Marshall, G-A. Jackson & D.E. Armstrong (Eds.), *The Early Years of Leadership: The Journey Begins* (pp. 35-50). Charlotte, NC: Information Age Publishing Inc.

Maharaj-Sharma, R., (2021). A WIHIC exploration of secondary school science classrooms – A case study from Trinidad & Tobago. *Research in Pedagogy*, 11(1), 165-179.

Maharaj-Sharma, R., (2022). Using Storytelling to Teach a Topic in Physics. *Education Inquiry* (Taylor & Francis Online). Published online on 22 June 2022. <https://doi.org/10.1080/20004508.2022.2092977>

Mideros, D. (2022). Teacher roles in promoting out-of-class learning: Lessons from a Spanish for specific purposes course. *Studies in Self-Access Learning Journal*, 13(2), 248–261. <https://doi.org/10.37237/130205>

Ramsay, A. (2021) "The Crop Over Festival: Re/Inventing Tradition in Post-Independence Barbados," *Journal of Barbados Museum and Historical Society* 67, 1-21.

Ramsay, A. (2022) "Barbados Breaks Free," *NACLA Report on the Americas*, 54.2, 137-141 Routledge Taylor and Francis Group. <https://www.tandfonline.com/doi/full/10.1080/10714839.2022.2084974>.

Regis, H. (2021) Freedom Undefined: Breaking (Neo)colonial Stereotypes through Voice and Performance in the Poetry of Grace Nichols. *Tout Moun: Caribbean Journal of Cultural Studies*, vol. 6 (1) np.

Regis, H. (2022) Trajectories of Resilience: Indigenous Healing Folkways in the Selected Short Stories of Wilson Harris. *American Studies Journal*, special issue, "Our Shared Planet", 60 (3/4) np.

Skeete, G. (2022) "Wave Yuh Flag." Short Story. *Moko: Caribbean Arts and Letters*, Theme: "Growing Pains," September, Issue 2. Np

Adam, R., & **Braithwaite, B.** (2022). Geographies and circulations: Sign language contact at the peripheries. *Journal of Sociolinguistics*, 26(1), 99-104.

Ali, K., **Braithwaite, B.**, Dhanooolal, I., & Snoddon, K. (2021). Sign language-medium education in the global South. *Deafness & Education International*, 23(3), 169-178.

Carter, B., Daly, A., & Parey, B. (2022). Conducting a language audit in the absence of linguistic census data. Inaugural Issue of the *Journal of the Caribbean Association of Professional Statisticians*, 1(1) 12-27.

Dedovets, Z. & Rodionov, M. (2021). A Task-based Paradigm for Promoting an Alternative Thinking Style in Teaching Mathematics. *Advances in Science, Technology and Engineering Systems Journal (ASTESJ)*, 6(5), 249-259.

Dofs, K., & **Mideros, D.** (2022). Introduction. *Studies in Self-Access Learning Journal*, 13(2), 177-181. <https://doi.org/10.37237/130201>

Figuera, R & Babulal, S. Doing Qualitative Research Online as Metadiscourse: Investigating Racialized Language in the Context of Politics and the National Elections, In *Sage Research Methods- Doing Research Online*, SAGE Publications, Ltd.

Francio, G. & **Granger, C.** (2021) Trans-Caribbean thought: A manifesto for the renewal of Dutch Caribbean Studies in the age of the Anthropocene. *Esferas* 12, 157-164.

Ibrahim-Ali, A. & Guedez-Fernandez, R. (2021). Monitoring Lesson-Planning Dynamics in Pre-Service Teacher Teams: A Retrospective Study. *Caribbean Curriculum*, vol 28. <https://journals.sta.uwi.edu/cc/index.asp?action=viewArticle&articleId=7779&galleyId=6986>

Mideros, D., & Dofs, K. (2022). Grongingen 2021. *Studies in Self-Access Learning Journal*, 13(2), 305-306. <https://doi.org/10.37237/130208>

Regis, H., Lundberg, A., Agbonifo, J. (2022) Tropical Landscapes and Nature-Culture Entanglements: Reading Tropicality Via Avatar. *eTropic: Electronic Journal of Studies in the Tropics*, 21(1), 1-27.

Publications & Conferences

Books & Book Chapters

Jackson, E. (2022) *Global Childhoods and Cosmopolitan Identities in Literature*, Brill.

Maharaj, V. (2022) *The Mystic Masseur's Wife*. Peepal Tree Press.

Mideros, D. (2021) *Am I an autonomous language learner? Self-perceived autonomy in Trinidad and Tobago: Sociocultural Perspectives*. Hong Kong: Candlin & Mynard.

Steele, G. (2022) *Human Communication Studies Caribbean Scholarship: Research Knowledge and Stories*. Kendall Hunt Publishers.

Ali, T. (2022) *False Identity and Failed Existence: Unveiling Afro-Saxon Masculinity in Paule Marshall's 'Barbados' and Olive Senior's 'The View from the Terrace'*. In *Gender Visibility and Erasure: Advances in Gender Research*. Eds. Marcia Texler Segal and Vasilikie Demos. Emerald Publishing, pp.71– 87.

Granger, C. (2022) *To refuse Being a Problem: Practicing Conviviality to Elude Ethnocentrism*. In Abdali, Dastan et al Book Forum: *Francio Guadeloupe, Black Man in the Netherlands: An Afro-Antillean Anthropology* (University of Mississippi Press). *Conflict and Society* 8 (1) 278-280.

Granger, C. (2022) *We Come Out to Free Up*. In *Equaliberty in the Dutch Caribbean: Ways of Being Non-Sovereign*. Rutgers University Press. Np.

Pearce, M. (2022) *History and Story Space: Narrating Patricia Ismond's Role in the Origins of the UWI Department of Creative and Festival Arts*. In *Living Histories: Global Conversations in Art Education*. Eds. Dustin Garnet and Anita Sinner. Bristol: Intellect Ltd. pp. 292-300.

Pearce, M. (2022) *Picturing Theory: Nicole Awai's Black Ooze as Post-diaspora Expression*. In *African-Caribbean Women Interrogating Diaspora/Post-Diaspora*. Eds. Suzanne Scafe and Leith Dunn. London: Routledge. pp. 21-34.

Ramsay, A. (2022) *Crop Over and Carnival in the Archives of Barbados and Trinidad and Tobago*. In *Archiving Caribbean Identity: Records, Community, Memory*. Eds. John Aarons, Jeanette A. Bastian, Stanley Griffin. New York: Routledge.

Tull, J. (2021). *Event evaluation*. In *Event management: an international approach*. Eds. Nicole Ferdinand and Paul Kitchen. London: SAGE Publications.

Walcott-Hackshaw, E. (2021) *Graduate Studies: Research Innovation and Entrepreneurship*, In *Caribbean Quality Culture – Persistent Commitment to Improving Higher Education*, Ed. Sandra Gift. Kingston, Jamaica: The University of the West Indies Press. Pp 171-185.

Walcott-Hackshaw, E. (2021) *The Good Daughter: Danticat's Migrating Memories*. In *The Bloomsbury Handbook to Edwidge Danticat*. Eds. Jana Evans Brazier and Nadège T. Clitandre. London, New York: Bloomsbury. Pp. 177- 188.

Ali, K., Braithwaite, B., Durgasingh, R., Jackson, S., & Selvon-Ramkissoon, N. (2022). Affirming an Endonormative Approach in Language Research Design in the Caribbean. In *Affirming Methodologies*. Routledge. Pp. 90–114.

Ali, T. and Babwah, M. (2021) Examining the Use of Specific Reading Comprehension Strategies among Struggling Caribbean Readers: A Mixed Methods Inquiry. In *Masking as Quintessential Authenticity: Healing, Intersectionality and Interstices in the Languages, Literatures and Cultures of the Dutch Caribbean and Beyond*. Eds. Faraclas, N., R. Severing, C. Weijer, E. Echteld, W. Rutgers and S. Delgado. Willemstad, Curaçao: University of Curaçao.

Cole, K. & Lalla, B. (2022) Approaches to Language in Caribbean Children’s Literature: The Multi-vocal Caribbean. In Vol 1: History, Pedagogy and Publishing. Eds. Betsy Nies and Melissa Garcia Vega. *Anthology of Caribbean Children’s Literature*: University of Mississippi Press.

Ibrahim-Ali, A. & Ali, N. (2022) Escape to Safety: Seeking Shelter from Domestic Violence—The Case of Madinah House (1999–2019). In *Domestic Violence in the Anglophone Caribbean*. Palgrave Macmillan. PP. 193-216.

Mohammed, P.S., Coy, A., **Skerrit, P.** Lewis-Fokum, Y. Mohammed, A. & Hosein, A. (2022). The importance of culturally situated design on children’s interaction with speech-enabled features in an online spelling tutor. In *Culture and Computing. Design Thinking and Cultural Computing*. HCII 2022. Lecture Notes in Computer Science (LNCS). Ed. M. Rauterberg. Vol 13324. Springer, Cham. https://doi.org/10.1007/978-3-031-05434-1_7, 2020

Pearce, M. (2022) An Aesthetic of Survival: Denyse Thomasos, from Middle Passage to Colossal Endurance. In *Denyse Thomasos: Just Beyond*. Eds. Renée van der Avoird, Sally Frater and Michelle Jacques. New York: DelMonico Books. pp.34-45.

Pearce, M. (2022) Reimagining History as Narrative in Contemporary Art. In *Fragments of Epic Memory*. Ed. Julie Crooks. New York: DelMonico Books. pp 158-163.

Conference Presentations

Department of Creative and Festival Arts

K. De Las

“Music Modes and Trinbagonian Attitudes toward Prevalent Social Issues” at Dreadness-- The Mystical Power, Philosophy and Performance of Shadow, virtual symposium, March 4th 2022

K. De Las

“The Major Shadow of the Minor: Winston “Shadow” Bailey, Music Modes and Trinbagonian Attitudes toward Prevalent Social Issues” at the Caribbean Studies Association 46th annual conference, May 31st, 2022.

M. Pearce

“No Words: On the (Un)Making of Black Meanings.” Presented as part of the *Conventions* Syracuse University Symposium, March 22nd, 2022.

M. Pearce

“Spatial Rhetorics and Multimodal Curation,” Syracuse University, March 23rd. 2022

Publications & Conferences

J. Remy

Guest Artist and clinician for the University of Wisconsin-Madison Day of Percussion. October. 2021

J. Tull

"The Future of Caribbean Tourism – Redefining the 3S's", Tourism and Orange Economy Opportunities - The Future of the Festivals & Events Industry. Conference for World Tourism Day 2021 September 27, Port of Spain.

J. Tull

"Resilience and what it means for the Creative Industry moving forward". Virtual Summit under The Fashion Arch for Global Entrepreneurship Week, The Caribbean Creative Virtual Summit – Reinforcing Resilience, Nov 12-13, 2021

J. Tull

"The Covid-19 Pandemic, Economics and the TT Carnival Experience" Panel Presentation for Fifth Virtual SALISES Forum, Hosting and Managing the Carnival Experience in Trinidad and Tobago in 2022 and Beyond, hosted by The Sir Arthur Lewis Institute of Social and Economic Studies (SALISES) UWI St. Augustine. Campus, February 18, 2022, Trinidad and Tobago.

J. Tull

"The Economics of 'a Taste of Carnival", Feature Presentation for "National Conversations", hosted by the Trade and Economic Unit, Dept. of Economics UWI St. Augustine Campus, March 4, 2022, Trinidad and Tobago.

Department of History

A. Ramsay

Conference of the Islands, Commonwealth Heritage Forum, Wildey House, St. Michael, Barbados, February 2022.

A. Ramsay

Remarks on research on Crop Over at the launch of the 2021 Journal of the Barbados Museum and Historical Society, January 2022.

A. Ramsay

Chair, Barbados Museum and Historical Society Lecture Series, Lecture by Pedro Welch on Tracking the historical development of a Barbados Republican Constitution, June 2022.

A. Ramsay

Panellist on Panel Discussion-UWI Museum @10: Museums and Memory Making at the UWI June 2022.

S-A. Singh

"Indian Indentureship in the Caribbean" December 2021.

G. Matthews

"Herbert Ratcliffe and Farrell Chapman: Pioneers of Caribbean Nazarene College" presented at Caribbean Nazarene College 70th Anniversary Inaugural Lecture Series Sunday August 14, 2021.

G. Matthews

"Freedom from Milner" paper presented at 53rd Annual Conference of the Association of Caribbean Historians June 6 – 10 2022.

M. Toussaint

Let's Talk History: "Contemplating Emancipation August 1, 2022".

M. Toussaint

Let's talk history: "Movement Towards Independence and Regional Integration" 2022.

*Department of Literary, Cultural
and Communication Studies*

M. Amaye

"Writing Self, Writing Other" paper delivered for the National Association of Writers in Education conference Renewal & Resilience: Creative Writing in Education and Communities in 2022 and Beyond, March 2022.

D-W. Brunton

'The Digital Creole'. Paper presented at the annual meeting of The Caribbean Studies Association, held virtually in June 2022.

D-W. Brunton

'A Culture of Fear'. Paper presented at the annual meeting of The Caribbean Studies Association, held virtually in June 2022.

S. Burke

Opening Remarks: for "AnBatalya: Disrupting conventional thought of Carib/be/in". Virtual one day symposium, The UWI, St. Augustine, May 7, 2022.

S. Burke

"Music Policy in the Caribbean". Panel presentation on The Business of Music. Music TT forum. Port of Spain, Trinidad and Tobago, October 2021.

S. Burke

"*Gih dem bois*: Devising holistic pedagogical approaches to train Cultural Entrepreneurs." Paper presented at the Rex Nettleford Arts Conference. Kingston, Jamaica. October 2021.

C. Granger

Invited guest lecture "Methodologies of love. In the course "Black Music and Social Transformation". Netherlands, June 2022.

C. Granger

"The possibilities of art in climate change research." Dutch Caribbean Research Panel on climate change. St. Marteen, June 2022.

C. Granger

"Sounding out Politics of Love in Steelband Performance Practice." Pluriversal thinking from/on Latin America and the Caribbean dialogues between western and non- western (Afrocentric, indigenous) critical thinking traditions. Radboud University, Nijmegen, June 2022.

C. Granger

"Attending to Apparitions." The Royal Institute for Southeast Asian and Caribbean Studies. Guadeloup Francio Guadeloupe, University of Amsterdam. June 2022.

E. Jackson

"Borders and boundaries in Amitav Ghosh's *The Shadow Lines* and Michael Ondaatje's *The English Patient*." ACLALS conference, Ryerson University, Canada, July 2022.

Publications & Conferences

E. Jackson

"Patriarchy and queer affiliations in the contemporary Caribbean domestic novel: A study of Shani Mootoo's *Valmiki's Daughter* and Ingrid Persaud's *Love After Love*," West Indian Literature conference, The University of the West Indies, Cave Hill (Barbados), October 2021.

H. Regis

"The Ties that Bind: Threadwork, Spiritual Continents and Memory in Erna Brodber's *Nothing's Mat*." Migration, Adaptation and Memory 5th International Interdisciplinary Conference, Poland. Virtual Presentation and Workshop, 2nd-3rd June 2022.

H. Regis

"Aesthetic Passages: Re-conceptualizing Loss, Belonging and Resistance in Dionne Brand's *A Map the Door of No Return*." Breaking Boundaries: Reimagining Borders in Postcolonial and Migrant Studies, Manchester Metropolitan University, September 3rd 2021.

G. Skeete

"The Ruptures of Illness and Food as Metaphor for Healing in Caribbean Short Fiction", 19th Triennial Association of Commonwealth Literature and Language Studies (ACLALS) Conference, Theme: "The Ruptured Commons", Toronto, Ontario, Canada, 15th July 2022.

G. Skeete

"Aesthetic Passages: Re-conceptualizing Loss, Belonging and Resistance in Dionne Brand's *A Map the Door of No Return*." Breaking Boundaries: Reimagining Borders in Postcolonial and Migrant Studies, Manchester Metropolitan University, September 3rd, 2021.

Department of Modern Languages and Linguistics

T. Ali

"Using Current Feminist Qualitative Enquiry to Debunk (Mask) culinity in Canonical Works of Caribbean Literature." 4th International Conference on Gender & Sexuality Conference, Sri Lanka (online).

Ali, Kristian, **Braithwaite, Benjamin**, Dhanoolal, Ian & Johannah-Rae Reyes "Documenting an Indigenous Sign Language in Guyana." Workshop on American Indigenous Languages". University of California, Santa Barbara. 8-9 April 2022.

Ali, Fahimah, Kristian Ali, **Ben Braithwaite**

"Intralinguistic and crosslinguistic variation in the turn-taking organization between deaf-blind signers: New evidence from Bay Islands Sign Language". NWAV. 20 October.

S. Chinien

"Beyond the coloniality of power" Panel at the H-Empire Symposium "Race, Class and Nationalism after Empire: The Fundamentals of the Caribbean Situation, University of Georgia, USA, online. July 14th, 2022.

S. Chinien

"Patrick Chamoiseau, thinking beyond the coloniality of power" DMLL/LCCS Staff-Student Seminars, The University of the West Indies, St Augustine. Online. Jan. 28th, 2022.

S. Chinien

Moderator, "Language and Social Justice in the Caribbean", Department of Modern Languages and Linguistics Research Week, St Augustine, Online April 20th, 2022.

K. S. Cole

"Publicly Private: Negotiating the Personal through Narrative Rupture in Glynne Manley: Truth be Told: Michael Manley in Conversation". 19th Association Commonwealth Literature and Language Studies (ACLAS) Triennial Conference Toronto, Canada, July 11-15 2022.

J-A. S. Ferreira

"Luso-Caribbean Diasporas: The Cases of St Vincent & the Grenadines and Trinidad & Tobago" History, Ancestry and Heritage: The Vincentian Identity and Heritage: From Whence We Came. UWI Open Campus, St. Vincent and the Grenadines Country Conference. 19–20 July 2022.

J-A. S. Ferreira

(Day 1—Language Policies in Trinidad & Tobago, and Day 2—Intercultural Bilingual Education in Trinidad & Tobago Encuentro Centroamericano y del Caribe sobre Política Lingüística y Educación Intercultural Bilingüe (EIB), Universidad Nacional de Costa Rica, Heredia (Zoom), 1–2 December 2021.

R. Guédez

"Enacting CLIL in the Caribbean: Implications for praxis at migrant centers and at primary schools in Trinidad and Tobago" World CLIL 2022 Conference. Online. July 8, 2022.

R. Guédez

"Introducing the CLIL approach to primary school teachers in Trinidad and Tobago". Schools of Education Biennial Online Conference: Reimagining Education for Global Sustainability. Online June 16, 2022.

P. Palma and Diego Mideros

"Out-of-class learning in a Spanish for Specific purposes course: A case study in the aviation industry in Trinidad and Tobago", paper presented in the symposium: "ReNLA: Autonomy in the time of complexity in a changing world". World Congress of Applied Linguistics - AILA 2021: The dynamics of language, communication, and culture in a changing world. Groningen, Netherlands. August 15-20, 2021.

P. Palma and Diego Mideros

"Autonomous Learners of Spanish in the English-Speaking Caribbean: A Phenomenological Study in Trinidad and Tobago", paper presented in the symposium: "Navigating Learner Autonomy in a Multicultural and Multilingual World — A Reactive Dialogical Approach" World Congress of Applied Linguistics - AILA 2021: The dynamics of language, communication, and culture in a changing world. Groningen, Netherlands. August 15-20 2021.

N. Roberts

"Adapting to the Aftermath: Vulnerability and Survival in Mayra Santos Febres' Antes que Llegue la Luz" Caribbean Studies Association Conference: Reframing Caribbean Influences on Global Spaces: Critically Engaging Perspectives on Human Geography and Risks, Political Economy, and Technology. Kingston, Jamaica (delivered online. May 30th to June 3rd, 2022.

E. Walcott-Hackshaw

"Black or black?" Duke Kunshan University, China (Collaborative -Duke University, USA. Online. December 5th.

E. Walcott-Hackshaw

"The Politics of Voice or How to Create Dangerously" Language and Social Justice in the Caribbean, Department of Modern Languages and Linguistics Research Week, St Augustine. Online. April 19th, 2022.

Publications & Conferences

School of Education

Carrington-Blaides, E.V.

"Social and Emotional: Safeguarding vulnerability" Paper presented at the Caribbean Visionary Educators (CVE) in partnership with the International Forums of Inclusive Practitioners (IFIP) International Conference on Inclusive Educational Practices in the Caribbean, (August 2022) Virtual Presentation.

Carrington-Blaides, E. V.

"Collaborative consultation: A pathway for inclusive education in Trinidad and Tobago schools" Paper presented at The University of the West Indies, SOE Biennial Conference, June 2022, Cave Hill, Barbados.

De-Lisle, J., Ramnarine-Sinanan, N., and Sambucharan-Mohammed, M.

"Applying Validity Theory to Evaluate Adaptations to Public Examinations during the COVID-19 Pandemic". The International Association for Educational Assessment Conference: Contributions of Assessment to Quality Education, Mexico, October 2022.

James, F.

"Leading innovation and entrepreneurship in higher education: A partnership between Finland and Trinidad and Tobago". Presented at the CANQATE Conference titled A Quality culture in the Caribbean: Are we there yet? November 2 - 4, 2022 in Curaçao.

James, F.

"Resurgence: Leading Transformation 2022 and Beyond", presented at the Association for Secondary School Principals Conference, October 20 2022.

James, F.

"Educate for Human Development Innovation and Impact" Keynote presentation at the University of Guyana School of Graduate Studies and Research Symposium October 7, 2022.

St Bernard, G., Jameson-Charles, M., **Lee-Piggott, R.**, Chankar, S. & King, S.

"Accounting for the Dynamics of Bullying on social media among Secondary School Students: Preliminary Insights from Sample Survey Data from Schools in Trinidad". Paper presented at The University of the West Indies-Toronto Metropolitan University Rights for Children and Youth Partnership (UWI-TMU RCYP) Virtual Conference. 19th – 21st October 2022

St Bernard, G., Jameson-Charles, M., **Lee-Piggott, R.**, Chankar, S. & King, S.

"Accounting for the Dynamics of Bullying on social media among Secondary School Students: Preliminary Insights from Sample Survey Data from Schools in Trinidad". Paper presented at the Caribbean Studies Association (CSA) Virtual Conference 2022. 30th May – 3rd June 2022.

St Bernard, G., Jameson-Charles, M., **Lee-Piggott, R.**, Chankar, S. & King, S.

"Accounting for the Dynamics of Bullying on social media among Secondary School Students: Preliminary Insights from Sample Survey Data from Schools in Trinidad". Paper presented at the Trinidad and Tobago Association of Teacher Educators (TTATE) Virtual Conference 2021. 17th – 18th Nov 2021.

St Bernard, G., Jameson-Charles, M., **Lee-Piggott, R.**, Chankar, S. & King, S.

"Secondary schools' efforts to mediate violence experienced by students". Paper presented at The University of the West Indies-Toronto Metropolitan University Rights for Children and Youth Partnership (UWI-TMU RCYP) Virtual Conference. 19th – 21st October 2022.

St Bernard, G., Jameson-Charles, M., **Lee-Piggott, R.**, Chankar, S. & King, S.

"Secondary schools' efforts to mediate violence experienced by students". the Caribbean Studies Association (CSA) Virtual Conference 2022. 30th May – 3rd June 2022.

St Bernard, G., Jameson-Charles, M., **Lee-Piggott, R.**, Chankar, S. & King, S.

"Secondary schools' efforts to mediate violence experienced by students". the Trinidad and Tobago Association of Teacher Educators (TTATE) Virtual Conference 2021 17th – 18th Nov 2021.

St Bernard, G., Jameson-Charles, M., **Lee-Piggott, R.**, Chankar, S. & King, S.

"Violence in the Lives of Secondary School Students in Trinidad and Tobago". Paper presented at The University of the West Indies-Toronto Metropolitan University Rights for Children and Youth Partnership (UWI-TMU RCYP) Virtual Conference. 19th – 21st October 2022.

St Bernard, G., Jameson-Charles, M., **Lee-Piggott, R.**, Chankar, S. & King, S.

"Violence in the Lives of Secondary School Students in Trinidad and Tobago". Paper presented at the Caribbean Studies Association (CSA) Virtual Conference 2022. 30th May – 3rd June 2022.

St Bernard, G., Jameson-Charles, M., **Lee-Piggott, R.**, Chankar, S. & King, S.

"Violence in the Lives of Secondary School Students in Trinidad and Tobago". Paper presented at the Trinidad and Tobago Association of Teacher Educators (TTATE) Virtual Conference 2021. 17th – 18th Nov 2021.

Khan-Ventour, Z., Sambucharan-Mohammed, M. & **Lee-Piggott, R.**

"Transformations: Understanding Teachers' Pedagogical Shifts in Response to the COVID-19 Pandemic". [Poster presentation] The UWI School of Education Virtual Research Day. 5th – 6th April 2022.

Sambucharan-Mohammed, Khan-Ventour, Z. & **Lee-Piggott, R.**

"Shifting Role of Parents during Pandemic Schooling to Facilitate at-home Teaching and Learning". Paper presented at The UWI School of Education Virtual Research Day. 5th – 6th April 2022.

Lee-Piggott, R., Khan-Ventour, Z. & **Sambucharan-Mohammed, M.**

"Sensemaking: Private School Leadership during the COVID-19 Pandemic". Paper presented at (i) The UWI School of Education Virtual Research Day. 5th – 6th April and (ii) the Annual British Educational Research Association (BERA) Virtual Conference. 13th – 16th Sept 2022.

De Lisle, J. Lucas, T., **Sambucharan, M.**, **Kronberg, C** and Mark-Worrell, N.,

"Postcolonial Perspective on Performing Students' Assessment Systems of Nation States Moving to Equity-Oriented Schemes". Peer reviewed Paper Presented at The International Association for Educational Assessment Conference: Contributions of Assessment to Quality Education, Mexico, October 2022.

Publications & Conferences

S. Figaro Henry

UWI Early Childhood Caravan Hyflex Teaching and Learning Workshop 8th October 2022.

S. Figaro Henry

"Using Technology to promote healthy habits at the St. Terese of Lisieux Nursery/Pre-School at Mc Bean Couva" Wednesday 21st September 2022.

Dedovets, Z., Rodionov, M

"Developing an Alternative Thinking Style in the Context of a Problem-Based Approach". Proceeding of the BEMHSS-21: 35th BARCELONA International Conference on "Economics, Management, Humanities and Social Sciences" Spain, 2021.

Dedovets, Z., Rodionov, M

"Motivative role of diagnostics of the quality of mathematical preparation of students". The ICME 2021: 9th International Conference on Mathematical Education and Technology. Yerevan, Armenia, October 2021.

Ferguson, T., Bramwell-Lalor, S., Ison, M., Nazir, J., Kanada, M., & Williams-McBean, C.

"ESE in the English-Speaking Caribbean: From Research to Practice". Presented at the annual research symposium of the North American Association for Environmental Education, Tucson, AZ. October 2022.

Daniel, C., Langaine, N. Pope J., John, C., & **Jameson-Charles, M.**, "New and emerging skills as a result of COVID-19, future trends". Fifth International Conference on TVET in the Caribbean (Virtual). May 12 – 14, 2021.

Jameson-Charles, M.

"Using innovative learning strategies in the emergency remote teaching environment during COVID-19: Transition experiences of Inservice TVET teachers enrolled in the Post Graduate Diploma in Education in Competency-Based Instruction for TVET Educators". Fifth International Conference on TVET in the Caribbean (Virtual). May 12 – 14, 2021.

Rosales, K., Gilkes, T., Richards, N., Moses, J., Mitchell, C. & **Jameson-Charles, M**

"Using Concerns Based Adoption Model to investigate TVET teachers' concerns on the introduction of emergency remote learning during the COVID-19 pandemic". Fifth International Conference on TVET in the Caribbean (Virtual). May 12 – 14, 2021.

Abdul-Majied, S.

"The impact of COVID-19, important lessons learned and implication for the future of education services delivery from the standpoint of early childhood care and education in Trinidad and Tobago". Panel Discussion. UWI SALISES. The UWI, St. Augustine 2021.

Kinthead-Clark, Z. & Abdul-Majied, S.

"Preventing the violation of children's rights. Ensuring children's right to early childhood education during the Covid-19 pandemic". UWI SALISES *16th Annual Caribbean child research Conference* – The UWI 2021.

Conference Papers & Proceedings

Dallier, M. (2021) Enhancing the French Language Learning Experience with the WhatsApp application. In Proceedings of the fourth edition of the International Conference “MOOCs, language learning and mobility: design, integration, reuse ». Organized by the Universities of Grenoble Alpes (FR), Alicante (ES) and the Open University (UK) together with Federazione Nazionale Insegnanti Centro di iniziativa per l'Europa (IT). European Erasmus and project MOOC2MOVE (hal-03216063) Retrieved from <http://hal.univ-grenoble-alpes.fr/M2M/>

De-Lisle, J., Ramnarine-Sinanan, N., and **Sambucharan-Mohammed, M.** (2022). Applying Validity Theory to Evaluate Adaptations to Public Examinations during the COVID-19 Pandemic. Peer reviewed paper for The International Association for Educational Assessment.

Ferreira, J. & Heitmeier, K. (2022). “A Description of Trinidadian English Pronunciation”, Society for Caribbean Linguistics (SCL) Occasional Paper, June 2022.

Louison, K., Maharaj, S., Garcia, J.L. and **Sambucharan-Mohammed, M.** (2022). Development of a Mindfulness-Based Intervention for Preschoolers. Peer reviewed poster and paper for The European Conference on Education's International Academic Forum.

Exhibitions & Performances

Performances

J. Murray, Chief Keyboard Accompanist inclusive of Baroque continuo for ‘The Pursuit of Greatness’, Michael Hudlin, Conductor, including the local premiere of Handel's *Dixit Dominus*, Queen's Hall, March 2022.

J. Murray, Chief Keyboard Accompanist and Orchestra lead for the Chandelier Production of ‘Theatre Night’ Southern Academy for the Performing Arts, July 2022.

J. Murray, Co-Music Director/Conductor of the UWI Arts Steel at the 51st Festival of Culture of Fort-de-France, Martinique inclusive of a commissioned concert of classical works, calypso/soca, and French Music. July 2022.

J. Murray, Co-Music Director of the UWI Arts Steel and *Lead Conductor* of the combined choral and instrumental ensembles at the choral festival: Iere X Tabago, National Academy for the Performing Arts, North. July 2022.

Scripts/Film Productions

Antonopoulos, A. Rhythms of Trinidad

Parks, L. Documentary film commemorating the 100th Anniversary of the study of agriculture in Trinidad and Tobago.

Musical Compositions

Remy, J. Compositions for steelpan, Weathering the Storm.

Remy, J. Compositions for steelpan, 0 Degrees Celsius

Publications & Conferences

Other Publications

Research Paper

Braithwaite, B. (2022). "Research, collaboration and recognising the value of indigenous sign languages: a Caribbean perspective." State of the art of indigenous languages in research: A collection of selected research papers. UNESCO.

Ibrahim-Ali, A. (2022) Preparing for the 'Next Normal' (How Ready Is the Remote Synchronous Classroom?); Preparing for the 'Next Normal'; The University of the West Indies, St. Augustine Campus, Trinidad and Tobago.

Ibrahim-Ali, A. and Guedez, R. (2021) MONITORING LESSON-PLANNING DYNAMICS IN PRE-SERVICE TEACHER TEAMS: A Retrospective Study. Caribbean Curriculum 28.

James, F. & Pierre, L. (2022). A Multi-Tiered Professional Learning Approach to Build Middle Leaders' Capacities to Lead During Times of Crisis and Beyond. In Handbook of Research on Activating Middle Executives' Agency to Lead and Manage During Times of Crisis (pp. 250-273). IGI Global.

James, F., Massiah, A., Pierre, L. A., Richardson, C., & Williams, J. (2022). Leading classroom instruction during the COVID-19 Pandemic and preparation for face-to-face reopening: Caribbean teachers' experiences. School Leadership & Management, 1-22.

Short Stories

Bazán, O. (2022) "Las líneas de la memoria". *Windumanoth* 15: 69-80.

Bazán, O. (2022) "Lucas y el nombre del mar". *En sentido figurado* 15.3: 57-60.

Afterword

Karen Sanderson Cole in Winston Dookeran. The Caribbean on the Edge: Political Stress of Stability, Equality and Diplomacy. University of Toronto Press, 2022.

Newspaper Articles

Cole, K. (2021) "A Call Within A Call" All Politics is Local. Parasram (Paras) Ramoutar; Winston Dookeran (foreword); independently published.

Cole, K. (2022) "A Compelling Story from Trinidad and Tobago". South Asia Monitor. <https://www.southasisanmonitor.org/books/compelling-story-trinidad-and-tobago> and Trinidad and Tobago Daily Express.

Blog Articles

Courtney, S. & Lee-Piggott, R. (2022). Time to turn the tide: Privatization in education in the Caribbean. Research Report and summary. Research sponsored by Education International Available at: <https://www.ei-ie.org/en/item/26266:time-to-turn-the-tide-privatisation-trends-in-education-in-the-caribbean> [82 pages]

FACULTY OF LAW

Journal Publications

Perot, E. (2021) 'The Conflict between the Copyright of Paparazzi and the Right of Publicity of Celebrities' (2021) Texas Intellectual Property Law Journal 29:121

Perot, E. (2021) 'NFTs: Copyright Friend or Foe?' European Intellectual Property Review 43(12): 793

Affonso, T. "Accountability in Representation: Membership Holding Trade Unions Responsible" Caribbean Social Justice Forum, Volume 2, Issue 2

Affonso, T. "Widening the Divide: A Human Rights' Critique of the Impact of COVID-19 On Informal Workers in Trinidad and Tobago," Caribbean Social Justice Forum, Volume 2, Issue 1, (Jan-April 2022) found at: <https://cclcs.edu.tt/wp-content/uploads/2022/06/z-Vol2.-No1.pdf>

Affonso, T. "Vaccine Distribution and Access Undermining the Human Right to Health," Caribbean Social Justice Forum, Vol. 1 Issue 1, (Sept-Dec 2021) found at: <https://cclcs.edu.tt/wp-content/uploads/2022/01/Caribbean-Social-Justice-Forum-Journal.pdf>

Reviews

J. Koo, 'Review of the Copyright Act of Saint Christopher and Nevis' (WIPO 2022) [confidential]

J. Koo, 'Review of the Copyright Act of Saint Lucia' (WIPO 2022) [confidential]

Conference Presentations

Affonso, T. (2022) Panel Discussion: "Discipline or Abuse: An Interdisciplinary Examination of Corporal Punishment", Faculty of Law, UWI, St. Augustine, Trinidad. Organised and Moderated Panel Discussion 5 May.

Affonso, T. (2022) 4th Biennial Postgraduate Research Conference: *Deconstructing the "New Normal": Prospects and Challenges for Caribbean Societies*, UWI, St. Augustine, Trinidad. Presented paper entitled, "Is Mandatory Vaccination the Way Forward?" 7-8 April.

Affonso, T. (2022) Institute for Ethics in Public Life, State University of New York (SUNY) Plattsburgh Colloquy Series, New York Presented paper entitled, "Undermining Legitimacy: Abuse of COVID-19 Measures by States to Target the LGBTQI Community". 9 March.

Affonso, T. (2021) Caribbean Centre for Human Rights, "Human Rights and Banking: a Dialogue on Economic and Social Rights", Trinidad Presented Paper in Panel Discussion on Banking and Human Rights 9 December.

Publications & Conferences

Affonso, T. (2021) Caribbean Children Research Conference – UWI, UNICEF, Jamaica. Presented paper entitled, “Voiceless Objects of Health and Education Policies: An Intersectional approach to the right to health and the right to education for children in Trinidad and Tobago” 24 November.

Affonso, T. (2021) Caribbean IDRL Workshop – International Federation of the Red Cross, European Union, PIRAC, Caribbean Disaster Emergency Management Agency, Interreg, AFD, Trinidad Presented Technical Report entitled, “Regional Cooperation and Coordination Framework in Times of Disasters in the OECS”. 19 November.

Affonso, T. (2021) Blanquerna – Universitat Ramon Llull, Barcelona, Spain. Presented paper entitled “The Hidden Victims – COVID-19 seen through the eyes of the law and the vulnerable in Society”. 7 October.

Affonso, T. (2021) Biennial Caribbean Worker’s Forum: Reimagining the New Normal: Elma Francois Institute of Research, Trinidad Presented paper entitled “Equitable Distribution and Access of Vaccines: Undermining the Right to Health” 18 September.

FACULTY OF MEDICAL SCIENCES

Journal Publications

School of Medicine

Department of Pre-Clinical Sciences

Ali, R., J. Jayaraj, A. Mohammed, C. Chinnaraja, C. V. F. Carrington, D. W. Severson, **A. Ramsubhag.** (2021) Characterization of the virome associated with Haemagogus mosquitoes in Trinidad, West Indies. *Scientific Reports* Aug 16;11(1):16584.

Brown-Joseph, T., C. A. L. Oura, C. V. F. Carrington, L. E. Harrup. (2022) Comparison of surveillance trapping methods to monitor Culicoides biting midge activity in Trinidad, West Indies. *Medical and Veterinary Entomology* May 6; 1- 6.

Badal, K., R. Ali, W. A. Warner, A. Maniam, A. Carrington, **J. E. Foster, R. Haraksingh.** (2021) Factors predicting breast cancer recurrence and survival and Sangre Grande Hospital, Trinidad. *Cancer Causes and Control* 2021 Jul;32(7):763-772.

Youssef, F. F., J. Mohan, E. M. Davis, M. John. (2021) Home-based physiology labs in the time of COVID-19 prove popular with medical students. *Advances in Physiology Education.* 2021 Dec 1;45(4):709-714. doi: 10.1152/advan.00048.2021.

Hemasankar, C., **S. R. Rao,** K. Balaji, SaiSushmaYeturu, M. P. Raghavendra. (2022) Significance of fingerprint pattern in bipolar disorder among south Indian population: a case-control study. *NeuroQuantology* 2022 Nov; 20 (17): 208-217. doi: 10.48047/NQ.2022.20.17.NQ88028.

Pujari, G. R., V. Subramanian, **S. R. Rao:** (2022) Neuroprotective role of *Celastrus paniculatus* Willd and *Sida cordifolia* Linn on kainic acid-induced neuronal damage in neurodegenerative diseases. *Pharmaceutical Sciences Asia* 2022; 49 (3): 291-300. doi:10.29090/psa.2022.03.21.254.

Bolleddula, J., **D. Simeon,** S. G. Anderson, L. Shields, J. Mullings, P. Ossorio, **A. Bethelmy** , A. K. Perkins. (2022) No person left behind-Mapping the health policy landscape for genomics research in the Caribbean. *The Lancet Regional Health - Americas* 2022 November 15; doi:https://doi.org/10.1016/j.lana.2022.100367.

Department of Para-Clinical Science

Akpaka PE, Gladstone RA, Siira L, Brynildsrud OB, Vestrheim DF, Turner P, Clarke SC, Srifuengfung S, Ford R, Lehmann D, Egorova E, Voropaeva E, Haraldsson G, Kristinsson KG, McGee L, Breiman RF, Bentley SD, Sheppard CL, Fry NK, Corander J, Toropainen M, Steens A; (2022) Global Pneumococcal Sequencing Consortium. International links between *Streptococcus pneumoniae* vaccine serotype 4 sequence type (ST) 801 in Northern European shipyard outbreaks of invasive pneumococcal disease. *Vaccine.* 2022 Feb 11;40(7):1054-1060. doi: 10.1016/j.vaccine.2021.10.046. Epub 2022 Jan 5. PMID: 34996643; PMCID: PMC8820377

Akpaka PE, Ashraph K, **Ivey M, Unakal C, Kurhade A.** (2022) Epidemiological evaluation of risk factors associated with vaginal candidiasis in a cross section of pregnant women in Trinidad and Tobago. *African Journal of reproductive Health* 2022; 26(3): 46-52

Publications & Conferences

Akpaka PE, Henry K, **Thompson R**, **Unakal C**. (2022) Colonization of *Streptococcus agalactiae* among pregnant patients in Trinidad and Tobago. *Int J Infect Dis Regions* 2022, 3:96-100; <https://doi.org/10.1016/j.ijregi.2022.03.010>.

Maharaj L, **Clement Y**, **Gadad AK**, **Gupta MM**. (2021) Formulation and Evaluation of Diclofenac Sodium Loaded Poly-ε- Caprolactone Microspheres. *Latin American Journal of Pharmacy* (formerly Acta Farmacéutica Bonaerense) 40 (11): 2592-6.

Clement Y, Ming Hon AM, Mitcham A, Mohammed A, Mohammed A, Mohammed I, Mohammed R, Mohammed S, Mohammed S (2021). Factors affecting marijuana use among cancer patients attending at an oncology specialty centre in Trinidad. *West Indian Medical Journal* 69 (Suppl 2): 33.

Edwards RJ, Mohammed A, Lavia LO, Edwards J, Verma S, Reddy S, Boyce G. (2022) Correlates of prevalent syphilis infection among men who have sex with men (MSM) living with HIV attending the HIV clinic in Trinidad. *PLoS ONE* 2022; 17(3): e0265909. <https://doi.org/10.1371/journal.pone.0265909>. Impact Factor 3.240, 0 Citations

Edwards RJ, Lavia LO, Edwards J, Boyce G. (2022) Psoriasis in Patients Attending a Large HIV Clinic in Trinidad. *Med Sci (Basel)*. 2022 Jan 29;10(1):9. doi: 10.3390/medsci10010009.

Edwards RJ, Dolly N, Musa D, Edwards J, Boyce G. (2022) Clinical presentation of herpes simplex virus infection mimicking neoplasia on the face of persons living with HIV. *Int J STD AIDS*. 2022 Feb;33(2):212-214. doi: 10.1177/09564624211055298. Impact Factor 1.359,

Edwards RJ, Boyce G, Alastruey-Izquierdo A, Denning DW. (2021) Updated estimated incidence and prevalence of serious fungal infections in Trinidad and Tobago. *IJID Regions* 2021;1:34-40. doi.org/10.1016/j.ijregi.2021.09.007.

Edwards RJ, John I, Todd S, Lavia LO, Musa D, Edwards J, Boyce G. (2021) Syphilis among men who have sex with men attending a large HIV clinic in Trinidad. *Int J STD AIDS*. 2021 Aug;32(9):830-836. doi: 10.1177/0956462421997193. Impact Factor 1.359, 1 Citations

Khan R, David S. (2021) A perspective on Intimate Partner Violence since COVID-19. *Front. Glob. Womens Health*, 08 December 2021 | <https://doi.org/10.3389/fgwh.2021.788061>

Khan R, Gangar M, Gangar M, **Motilal S**. (2021) Eight years of antibiotic consumption at a primary care outpatient facility in Trinidad and Tobago 2011–18: a synopsis of consumption trends, *JAC-Antimicrobial Resistance*, Volume 3, Issue 4, December 2021, dlab162. <https://doi.org/10.1093/jacamr/dlab162>

Motilal S, Paul-Charles J, Asnani M, **Khan R**, Ricketts-Roomes T, Pinder-Butler S, Herbert J, Farquharson C, Conliffe C, Standard-Goldson A, Smith K, Morris E, Maharaj RG. (2021) 2020 family medicine postgraduate examinations at The University of the West Indies: successes and challenges in the time of COVID-19 pandemic. *Postgrad Med J*. 2021 May 26;postgradmedj-2021-140242. doi: 10.1136/postgradmedj-2021-140242. Epub ahead of print. PMID: 34039692.

Welch T, Rampersad F, **Motilal S**, Seecheran NA. (2022) Comparison of cardiac CT angiography coronary artery dimensions and ethnicity in Trinidad: the CADET pilot study. *Open Heart*. 2022 Mar;9(1):e001922.

Seecheran N, Grimaldos K, Ali K, Grimaldos G, Richard S, Ishmael A, Gomes C, Karan A, Seecheran R, Seecheran V, Persad S, Abdullah H, Peram L, Dookeeram D, Giddings S, **Motilal S**, Raza S, Tello-Montoliu A, Schneider D. (2021) The Effect of Dapagliflozin on Platelet Function Testing Profiles in Diabetic Patients: The EDGE Pilot Study. *Cardiol Ther*. 2021 Oct 13. doi: 10.1007/s40119-021-00242-6. Epub ahead of print. PMID: 34643895.

Motilal S, Dawar A, Mankee A, Goberdhan N, Goberdhan V, Greene A, Greenslade N, Guerra T, Hassam N, Hassett B, Hillhouse A, Hosein T. (2022) Arthritis and Health Related Quality of life in Adult Trinidadian outpatients. [Internet]. *Carib Med J* [Internet]. [accessed 2022 May 13].

Motilal S, Taylor J, Sookram K, Sooknandan S, Sookoo J, Stroude S, Sudama C, Tatiparthi T, Thompson H. (2021) Quality of life in medical students during the COVID-19 pandemic. *J Contemp Clin Pract*. 2021;7(1):21-30. doi: 10.18683/jccp.2021.1068

Department of Clinical Medical Sciences

Davis G, **Baboolal N**, Tripathi V, Stewart R. (2021) Health status risk factors and quality of life in 75-84-year-old individuals assessed for dementia using the short 10/66 dementia diagnostic schedule. *PeerJ*. Aug 19;9:e12040. doi: 10.7717/peerj.12040

Seecheran N, Grimaldos K, Ali K, Grimaldos G, Richard S, Ishmael A, Gomes C, Karan A, Seecheran R, Seecheran V, Persad S, Abdullah H, Peram L, Dookeeram D, **Giddings S**, Motilal S, Raza S, Tello-Montoliu A, Schneider D. (2021) The Effect of Dapagliflozin on Platelet Function Testing Profiles in Diabetic Patients: The EDGE Pilot Study. *Cardiol Ther*. 2021 Dec;10(2):561-568. doi: 10.1007/s40119-021-00242-6. Epub 2021 Oct 13. PMID: 34643895; PMCID: PMC8555038.

Dalip D, Scott BJ, **Giddings S**, Rampersad FS, Jaggernauth S. (2021) Allergic Bronchopulmonary Aspergillosis in Trinidad: A Case Report. *Cureus*. 2021 Nov 13;13(11):e19527. doi: 10.7759/cureus.19527. PMID: 34804747; PMCID: PMC8592292.

Seetahal-Maraj P, **Giddings S**, Ramcharan K, Ramnarine N. (2021) Obstructive Hydrocephalus Secondary to Cryptococcal Meningitis in an Immunocompetent Adult. *Cureus*. 2021 Oct 22;13(10):e18975. doi: 10.7759/cureus.18975. PMID: 34820230; PMCID: PMC8606177.

Rafeek, R., Sa, B., Harnarayan, P., Farnon, N., Singh, S., **Giddings, S.** and Reid, S. (2021) Effectiveness of Rapid Transition to Online Teaching during COVID 19: An Online Cross-Sectional Survey of Students' and Teachers' Perceptions in a West Indian Dental School. *Creative Education*, 12, 1222-1234. doi: 10.4236/ce.2021.126092.

Mencia MM, Skeete R, Pablo Hernandez Cruz P, **Cawich SO**. (2022) Preoperative echocardiography for patients with hip fractures undergoing surgery in a low-resource setting: Asset or obstacle? *J Perioper Pract*. Jul 29;17504589221110332. doi: 10.1177/17504589221110332. Epub ahead of print. PMID: 35904049.

Publications & Conferences

Harnarayan P, Budhoom S, **Harnanan D**, **Ramdass MJ**, Islam S, Naraynsingh V. (2022) Gender Influence on Abdominal Aortic Aneurysm Surgery in a Caribbean Population. *Int J Angiol*. Jul 19. DOI: 10.1055/s-0042-1750017. ISSN 1061-1711.

Cawich SO, Narayansingh G, **Ramdass MJ**, **Mencia M**, Thomas DA, Barrow S, Naraynsingh V. (2022) Responses to disrupted operative care during the coronavirus pandemic at a Caribbean hospital. *World Journal of Meta-Analysis*. Jun 28;10(3):74-80.

Mencia MM, Moonsie R. (2022) Extensor mechanism reconstruction and joint preservation surgery following a tibial tuberosity fracture in giant cell tumor of bone: A case report. *Int J Surg Case Rep*. Jun 20;96:107326. doi: 10.1016/j.ijscr.2022.107326. Epub ahead of print. PMID: 35751967; PMCID: PMC9234607.

Maharaj R, Haralsingh A, Mohammed J, Ramnarace K, Lee-Cazabon H. (2022) Modified Puestow Procedure for Chronic Pancreatitis in an Adolescent Female. *Cureus*. May 30;14(5):e25503. doi: 10.7759/cureus.25503. PMID: 35800836; PMCID: PMC9246471.

Ramlakhan SL, Saatchi R, Sabir L, **Ventour D**, Shobayo O, Hughes R, **Singh Y**. (2022) Building artificial intelligence and machine learning models: a primer for emergency physicians. *Emerg Med J*. May;39(5):e1. doi: 10.1136/emered-2022-212379. Epub 2022 Mar 3. PMID: 35241439.

Harnarayan P, **Ramdass M**, Islam S, Naraynsingh V. (2022) Comment on 'Achenbach syndrome in an older man'. *Clin Exp Dermatol*. 2022 May;47(5):981-982. doi: 10.1111/ced.15092. Epub 2022 Feb 3. PMID: 34994981.

Ramlakhan S, Saatchi R, Sabir L, **Singh Y**, Hughes R, Shobayo O, **Ventour D**. (2022) Understanding and interpreting artificial intelligence, machine learning and deep learning in Emergency Medicine. *Emerg Med J*. May;39(5):380-385. doi: 10.1136/emered-2021-212068. Epub 2022 Mar 3. PMID: 35241440.

Cawich SO, Phillips E, Moore S, Ramkissoon S, Padmore G, Griffith S. (2022) Colorectal cancer in an Eastern Caribbean nation: are we missing an opportunity for secondary prevention? *Rev Panam Salud Publica*. 2022 Apr 12;46:e18. doi: 10.26633/RPSP.2022.18. PMID: 35432501; PMCID: PMC9004695.

Cawich SO, **Harnanan D**, Pran L. (2022) Laparoscopic Release for Median Arcuate Ligament Compression Syndrome Associated with a Celiac-Mesenteric Trunk. *Case Rep Vasc Med*. 2022 Apr 22;2022:3595603. doi: 10.1155/2022/3595603. PMID: 35494098; PMCID: PMC9054496.

Harnarayan P, **Harnanan D**. (2022) The Klippel-Trénaunay Syndrome in 2022: Unravelling Its Genetic and Molecular Profile and Its Link to the Limb Overgrowth Syndromes. *Vasc Health Risk Manag*. 2022 Apr 2;18:201-209. doi: 10.2147/VHRM.S358849. PMID: 35401004; PMCID: PMC8985909.Lap

Mencia M.M., Goalan R, White K. (2022) Magnification assessment of radiographs for knee replacement (MARKeR) - A pilot study in a low-resource setting. *Acta Radiol Open*. 2022 Apr 19;11(4):20584601221096297. doi: 10.1177/20584601221096297. PMID: 35464295; PMCID: PMC9024081.

Gopaul CD, **Ventour D**, Thomas D. (2022) ChAdOx1 nCoV-19 Vaccine Side Effects among Healthcare Workers in Trinidad and Tobago. *Vaccines* (Basel). 2022 Mar 18;10(3):466. doi: 10.3390/vaccines10030466. PMID: 35335098; PMCID: PMC8953927.

Bahall V, De Barry L, **Singh K**, Singh N. (2022) A Case Report of the Largest Submucosal Uterine Leiomyoma Removed by Single-Session Hysteroscopic Myomectomy in the Caribbean. *Cureus*. 2022 Mar 9;14(3):e22985. doi: 10.7759/cureus.22985. PMID: 35464500; PMCID: PMC9001943.

Nicholas R, Mohammed S, Bascombe N, **Dan D**. (2022) Discordant intestinal malrotation in adult monozygotic twins discovered incidentally during laparoscopic gastric bypass: A case report and review of the literature. *Int J Surg Case Rep*. 2022 Mar;92:106819. doi: 10.1016/j.ijscr.2022.106819. Epub 2022 Feb 8. PMID: 35183006; PMCID: PMC8857504.

Cawich SO, Mohanty SK, Felix O, Dapri G. (2022) Single Incision Cholecystectomies for Acute Cholecystitis: A Single Surgeon Series from the Caribbean. *Minim Invasive Surg*. 2022 Feb 16;2022:6781544. doi: 10.1155/2022/6781544. PMID: 35223097; PMCID: PMC8865982.

Rampersad B, Dubay C, Doodnath R. (2022) Penile hair tourniquet to base of penis resulting in circumferential separation of shaft skin without vascular compromise: An unusual case report. *Urol Case Rep*. 2022 Feb 7;42:102030. doi: 10.1016/j.eucr.2022.102030. PMID: 35530546; PMCID: PMC9073258.

Rampersad FS, Chan A, Persaud S, Maharaj P, **Maharaj R**. (2022) Choledocholithiasis in Pregnancy: A Case Report. *Cureus*. 2022 Feb 25;14(2):e22610. doi: 10.7759/cureus.22610. PMID: 35371811; PMCID: PMC8958046.

Cawich SO, Mencia M, Thomas D, Spence R, Milne D, Naraynsingh V, Barrow S. (2022) Trauma surgery via distance mentoring: A model inspired by the 2020 pandemic. *Trop Doct*. 2022 Jan;52(1):101-103. doi: 10.1177/00494755211038790. Epub 2021 Sep 2. PMID: 34474625; PMCID: PMC8891899.

Ventour D, Sieunarine R, Gopaul C. (2022) A Short Course of Prednisolone in Patients With Moderate Covid 19 Respiratory Failure- Stop the Progression a Case Series. *J Investig Med High Impact Case Rep*. 2022 Jan-Dec;10:23247096221090843. doi: 10.1177/23247096221090843. PMID: 35426322; PMCID: PMC9016590.

Cawich SO, Mahabir AH, Arthurs M. (2021) Clinical yield of screening colonoscopies in Jamaica. *Trop Doct*. 2022 Jan;52(1):104-106. doi: 10.1177/00494755211039591. Epub 2021 Aug 24. PMID: 34427133.

Umakanthan S, Bukelo M, Chattu VK, **Maharaj R**, Khan NN, Keane K, Khadoo N, Khan A, Khan A, Kong R, Korkmaz S, Kovoor A. (2021) Breast cancer in Trinidad and Tobago: Etiopathogenesis, histopathology and receptor study. *J Family Med Prim Care*. 2021 Dec;10(12):4438-4445. doi: 10.4103/jfmpc.jfmpc_627_21. Epub 2021 Dec 27. PMID: 35280639; PMCID: PMC8884328.

Harnarayan P, Ramdass MJ, Islam S, Naraynsingh V. (2021) Achenbach's Syndrome Revisited: The Paroxysmal Finger Hematoma May Have a Genetic Link. *Vasc Health Risk Manag*. 2021 Dec 14;17:809-816. doi: 10.2147/VHRM.S342847. PMID: 34934323; PMCID: PMC8684606.

Publications & Conferences

Singh K, Carvalho R. (2021) Perioperative Venous Excess Ultrasound Score (VEXUS) to Guide Decongestion in a Dilated Cardiomyopathy Patient Presenting for Urgent Surgery. *Cureus*. 2021 Dec 20;13(12):e20545. doi: 10.7759/cureus.20545. PMID: 35103125; PMCID: PMC8769771.

Naraynsingh V, Jarvis JK, Milne DM, **Cawich SO**, **Harnanan D**, **Singh Y**, Islam S. (2021) The Pushing Sign for Early Skin Tethering in Breast Cancer. *Cureus*. 2021 Dec 16;13(12):e20471. doi: 10.7759/cureus.20471. PMID: 34976543; PMCID: PMC8682950.

Haranarayan P, Lalla R, **Seepaul T**, Alexander A, Naraynsingh V, Islam S. (2021) Successful Hand Replantation Augmented by Delayed Pedicled Fascio-Cutaneous Groin Flap in an Adult Laborer: A Case Report and Literature Review. *Am J Case Rep*. 2021 Dec 28;22:e933754. doi: 10.12659/AJCR.933754. PMID: 34961759; PMCID: PMC8721962.

Dapri G, Bascombe NA, **Cawich SO**, Fichera A. (2021) Laparoscopic Right Hemicolectomy With Complete Mesocolic Excision by Suprapubic Single-Incision With Different Intracorporeal Anastomoses. *Dis Colon Rectum*. 2021 Dec 1;64(12):e727. doi: 10.1097/DCR.0000000000002243. PMID: 34413277.

Greenidge C, **Cawich SO**, Burt R, Francis T. (2021) Major Hospital Fire in Saint Lucia. *Prehosp Disaster Med*. 2021 Dec;36(6):797-802. doi: 10.1017/S1049023X21000947. Epub 2021 Sep 24. PMID: 34556194.

Cawich SO, Simpson L, Josephs A. (2021) Laparoscopic Hepatectomy via Remote Mentoring From Jamaica to Trinidad. *Cureus*. 2021 Dec 5;13(12):e20177. doi: 10.7759/cureus.20177. PMID: 35004002; PMCID: PMC8723783.

Persad S, Dowlath N, Prasad M, **Harry V**. (2021) A rare lung disease diagnosed by CT in a young pregnant woman. *Clin Case Rep*. 2021 Nov 10;9(11):e05071. doi: 10.1002/ccr3.5071. PMID: 34795900; PMCID: PMC8579906.

Figaro N, Ramoutar R, Arozarena R, Meyers D, **Juman S**. (2021) ALK-Positive Anaplastic Large Cell Lymphoma: A Diagnostic Dilemma for the Otolaryngologist in a Resource Poor Setting. *Case Rep Otolaryngol*. 2021 Nov 1;2021:3756742. doi: 10.1155/2021/3756742. PMID: 34760325; PMCID: PMC8575600.

Islam S, Aziz I, Shah J, Naraynsingh V, **Harnarayan P**. (2021) Necrotizing Fasciitis of the Breast Requiring a Life-Saving Mastectomy: A Case Report and Literature Review. *Cureus*. 2021 Nov 25;13(11):e19886. doi: 10.7759/cureus.19886. PMID: 34966604; PMCID: PMC8710037.

Calderon C, Ramsingh A, Patron R, Umakanthan S, **Ramnarine D**. (2021) Multiple intracranial juvenile xanthogranuloma not a straightforward diagnosis (a case report). *Int J Surg Case Rep*. 2021 Aug 3;85:106265. doi: 10.1016/j.ijscr.2021.106265. Epub ahead of print. PMID: 34388899; PMCID: PMC8353501.

Atiba K, **Ramdass M**, Oladiran A, Rahman M. (2021) Extrahepatic biliary obstruction secondary to metastatic esophageal squamous cell carcinoma: An unusual presentation of Courvoisier's law. *Clin Case Rep*. 2021 Oct 28;9(10):e05022. doi: 10.1002/ccr3.5022. PMID: 34745625; PMCID: PMC8552081.

Joshi MR, Persad V, **Farnon N**. (2021) A retrospective study of causes of visual impairment and use of low vision devices in the low vision clinic in Trinidad and Tobago. *Journal of Optometry*. 2021 Oct 1;14(4):335-41.

Calderon C, Ramsingh A, **Ramnarine D.** (2021) An Unsuspected Intraventricular Schwannoma. *Cureus.* 2021 Oct 11;13(10):e18683. doi: 10.7759/cureus.18683. PMID: 34790450; PMCID: PMC8584270.

Cawich SO, Sinanan A, Gosein M, Pearce N, Deshpande R, Mohammed F, Naraynsingh V, Fortune M, Rampersad F. (2021) An Investigative Study of Hepatic Arterial Anomalies in a West Indian Population. *Radiol Res Pract.* 2021 Oct 15;2021:9201162. doi: 10.1155/2021/9201162. PMID: 34691781; PMCID: PMC8536413.

Harry VN, Persad S, Bassaw B, Parkin D. (2021) Diffusion-weighted MRI to detect early response to chemoradiation in cervical cancer: A systematic review and meta-analysis. *Gynecol Oncol Rep.* 2021 Oct 18;38:100883. doi: 10.1016/j.gore.2021.100883. PMID: 34926764; PMCID: PMC8651768.

Cawich SO, Kluger MD, Francis W, Deshpande RR, Mohammed F, Bonadie KO, Thomas DA, Pearce NW, Schrope BA. (2021) Review of minimally invasive pancreas surgery and opinion on its incorporation into low volume and resource poor centres. *World J Gastrointest Surg.* 2021 Oct 27;13(10):1122-1135. doi: 10.4240/wjgs.v13.i10.1122. PMID: 34754382; PMCID: PMC8554718.

Griffith S, Padmore G, Moore S, Walkes K, Gohar AA, **Cawich SO.** (2021) Epidemiology of colorectal cancer in Barbados: A short report. *Trop Doct.* 2021 Oct;51(4):532-534. doi: 10.1177/00494755211020573. Epub 2021 Jun 3. PMID: 34080910.

Cawich SO, Arulampalam T, Senasi R, Naraynsingh V. (2021) Robot-Assisted Minimally Invasive Surgery: First Report from the Caribbean. *Cureus.* 2021 Oct 13;13(10):e18739. doi: 10.7759/cureus.18739. PMID: 34790488; PMCID: PMC8587522.

Ramdass MJ, Rambocas N, Hosein Y, Thomas D, Barrow M. (2021) Parasitic Uterine Leiomyoma with Arteriovenous Malformation, Portal Hypertension, and Cardiac Failure. *J Obstet Gynaecol Can.* 2021 Sep 26;S1701-2163(21)00696-4. doi: 10.1016/j.jogc.2021.08.012. Epub ahead of print. PMID: 34587538.

Sirjuesingh D, Sandy RA, **Persaud SA.** (2021) Clinicopathological Profile of Renal Cancer in a Caribbean Hospital: Analysis of a Surgical Case Series. *Cureus.* 2021 Aug 27;13(8):e17482. doi: 10.7759/cureus.17482. PMID: 34603869; PMCID: PMC8476114.

Harnarayan P, Islam S, **Harnanan D,** Bheem V, Budhooram S. (2021) Acute Upper Limb Ischemia: Prompt Surgery and Long-Term Anticoagulation Prevent Limb Loss and Debilitation. *Vasc Health Risk Manag.* 2021 Aug 16;17:489-495. doi: 10.2147/VHRM.S321953. PMID: 34429609; PMCID: PMC8379708.

Pran L, Bajjoo S, **Harnanan D,** Slim H, **Maharaj R,** Naraynsingh V. (2021) Quality of Life Experienced by Major Lower Extremity Amputees. *Cureus.* 2021 Aug 25;13(8):e17440. doi: 10.7759/cureus.17440. PMID: 34589346; PMCID: PMC8462540.

Pran L, **Harnanan D,** Bajjoo S, Short A, Cave C, **Maharaj R, Cawich SO,** Naraynsingh V. (2021) Major Lower Limb Amputations: Recognizing Pitfalls. *Cureus.* 2021 Aug 7;13(8):e16972. doi: 10.7759/cureus.16972. PMID: 34540383; PMCID: PMC8423325.

Publications & Conferences

School of Nursing

Cathala, X., **Ocho, O. N.**, Mcintosh, N., Watts, P. N., & Moorley, C. (2022). An exploration of social participation in Caribbean student nurses' use of social media in their learning journey. *Journal of Advanced Nursing*, 00, 1–11. <https://doi.org/10.1111/jan.15499>

O.N. Ocho, Moorley, C., **Richardson-Sheppard, C.**, **Caesar Greasley, L.** and Hardy, S. (2022) Cultural influences on mental health provision in the Caribbean: How do contemporary perceptions and beliefs about persons with mental illness inform workforce transformation? *Journal of Transcultural Nursing*. doi:10.1177/10436596221121329. IF: 1.278

Cathala, X., **O.N. Ocho**, Moorley, C. and Watts P.N. (2021) Demographic profiling of student nurses use of social media for professional learning and development across three countries. *Journal of Professional Nursing*. Online publication August 2021. <https://doi.org/10.1016/j.profnurs.2021.08.013>. IF:2.104, Citations: 2

Xabi Cathala, **Oscar Noel Ocho**, Paul Nicholas Watts, Calvin Moorley. (2021) International student nurses' use of social media for learning: A cross sectional survey. *Nurse Education Today*, 107, 2021. 105160, ISSN 0260-6917. <https://doi.org/10.1016/j.nedt.2021.105160>. Citations: 3

O.N. Ocho, Wheeler, E., Tomblin Murphy, G. and Rigby J. (2021). Core competencies and challenges among Nurses transitioning into positions of leadership - A Caribbean perspective. *Leadership in Health Services*. 2021, 32(5) 493–500. IF:0.51

O.N. Ocho and Archer Gift, C. (2021) Perceptions of 'male sensitive' health services among men in Trinidad and Tobago. *Journal of Transcultural Nursing*. 2021, 32(5), 493–500. <https://doi.org/10.1177/1043659620968616> IF: 1.278

School of Pharmacy

Dahiya R, Dahiya S, Chennupati SV, Davis V, Sahadeo V, Patel JK. (2022) Synthetic and biological activity studies on a heterocyclic analogue of natural cyclooligopeptide with improved bioproperties. *Current Organic Synthesis*. Mar; 19(2): 267-278. doi :10.2174/1570179418666211005141811 (Impact Factor = 1.975) [PubMed, *Bentham Science*] [Best quartile: Q3-Organic Chemistry]

Dahiya S, **Dahiya R**, Fuloria NK, Mourya R, Dahiya S, Fuloria S et al. (2022) Natural bridged bicyclic peptide macrobiomolecules from *Celosia argentea* and *Amanita phalloides*. Mini-Reviews in Medicinal Chemistry. 2022 Feb; 22(13): 1772-1788. doi:10.2174/1389557522666220113122117 (Impact Factor = 3.737) [PubMed, *Bentham Science*] [Best quartile: Q2-Drug Discovery]

Sahu P, Kashaw SK, Kashaw V, Shabaaz JP, **Dahiya R**. (2021) Synthesis and *ex-vivo* evaluation of PLGA chitosan surface modulated double walled transdermal Pluronic nanogel for the controlled delivery of temozolomide. *International Journal of Biological Macromolecules*. 2021 Sep; 187: 742-754. doi:10.1016/j.ijbiomac.2021.07.129 (Impact Factor= 6.953) [PubMed, Elsevier] [Best quartile: Q1-Medicine (miscellaneous)]

Dahiya S, **Dahiya R**, Hernández, E. (2021) Nanocarriers for anticancer drug targeting: Recent trends and challenges. *Critical Reviews™ in Therapeutic Drug Carrier Systems*. Aug; 38(6): 49-103. doi:10.1615/CritRevTherDrugCarrierSyst.2021035650. (Impact Factor = 4.889; Citations: Google Scholar=3) [PubMed] [Best quartile: Q2-Pharmaceutical Science]

Dahiya R, Dahiya S, Kumar P, Kumar RV, Dahiya S, Kumar S, et al. (2021) Structural and biological aspects of natural bridged macrobicyclic peptides from marine resources. *Archiv der Pharmazie*. 2021 Aug; 354(8): e2100034. doi:10.1002/ardp.202100034. (Impact Factor = 3.751; Citations: Google Scholar=2) [PubMed] [Best quartile: Q2-Pharmaceutical Science]

Kumar P, Yadav N, Chaudhary B, Jain V, Balaramnavar VM, Alharbi KS, Alenezi SK, Al-Malki WH, Ghoneim MM, Alshehri S, Imam SS, **Gupta MM**. (2022) Promises of phytochemical based nano drug delivery systems in the management of cancer. *Chemical Biological Interactions*. 2022 Jan 5;351:109745. doi: 10.1016/j.cbi.2021.109745.

Shaw P, Lokhotiya K, Kumarasamy C, Sunil K, Suresh D, Shetty S, Muthukaliannan GK, Baxi S, Mani RR, Sivanandy P, Chandramoorthy HC, **Gupta MM**, Samiappan S, Jayaraj R. (2022) Mapping Research on miRNAs in Cancer: A Global Data Analysis and Bibliometric Profiling Analysis. *Pathophysiology*. 2022; 29(1):66-80. <https://doi.org/10.3390/pathophysiology29010007>.

Shaw P, Senthilnathan R, Sankar S, Ilangovan I, Kodiveri Muthukaliannan G, Baxi S, Mani RR, Rajagopal M, Chinnappan S, Balaraman AK, Suresh D, Krishnan S, **Gupta MM**, Muthusamy T, Paranjothy C, Jayaraj R. (2022) A Clinical Investigation on the Theragnostic Effect of MicroRNA Biomarkers for Survival Outcome in Cervical Cancer: A PRISMA-P Compliant Protocol for Systematic Review and Comprehensive Meta-Analysis. *Genes*. 2022; 13(3):463. <https://doi.org/10.3390/genes13030463>.

Sahu PK, Dalcik H, Dalcik C, **Gupta MM**, Chattu VK, Umakanthan S. (2022) Best practices for effective implementation of online teaching and learning in medical and health professions education: during COVID-19 and beyond. *AIMS Public Health*. 2022 Jan 27;9(2):278-292. doi: 10.3934/publichealth.2022019. PMID: 35634030; PMCID: PMC9114788.

Thotakura N, **Gupta MM**, Rajawat JS, Raza K. (2021) Promises of Lipid-based Drug Delivery Systems in the Management of Breast Cancer. *Current Pharmaceutical Design*. 2021;27(45):4568-4577. doi: 10.2174/1381612827666210728104318.

Iqbal MK, Iqbal A, Anjum H, **Gupta MM**, Ali J, Baboota S. (2021) Determination of in vivo virtue of dermal targeted combinatorial lipid nanocolloidal based formulation of 5-fluorouracil and resveratrol against skin cancer. *International Journal of Pharmaceutics*. 2021 Dec 15;610:121179. doi: 10.1016/j.ijpharm.2021.121179.

Shaw P, Senthilnathan R, Krishnan S, Suresh D, Shetty S, Muthukaliannan GK, Mani RR, Sivanandy P, Chandramoorthy HCK, **Gupta MM**, Baxi S, Jayaraj R. (2021) A Clinical Update on the Prognostic Effect of microRNA Biomarkers for Survival Outcome in Nasopharyngeal Carcinoma: A Systematic Review and Meta-Analysis. *Cancers*. 2021; 13(17):4369. <https://doi.org/10.3390/cancers13174369>

Iqbal, A, Imtiyaz K, Rizvi MMA, **Gupta MM**, Ali J, Baboota S. (2021) Combinatorial lipid-nanosystem for dermal delivery of 5-fluorouracil and resveratrol against skin cancer: Delineation of improved dermatokinetics and epidermal drug deposition enhancement analysis. *European Journal of Pharmaceutics and Biopharmaceutics*. 2021;163: 223-39.

Iqbal MK, Chaudhuri A, Iqbal A, Saleem S, **Gupta MM**, Ahuja A, et al. (2021) Targeted delivery of natural bioactives and lipid-nanocargos against signaling pathways involved in skin cancer. *Current Medicinal Chemistry*. 2021; 28: 1-33.

L Maharaj, Y Clement, AK Gadad, **MM Gupta**. (2021) Formulation and Evaluation of Diclofenac Sodium Loaded Poly-epsilon-Caprolactone Microsphere. *Latin American Journal of Pharmacy*. 2021; 40(11); 2592-2596.

Publications & Conferences

Jain V, Pareek A, Bhardwaj YR, Sinha SK, **Gupta MM**, Singh N. (2021) Punicalagin and ellagic acid containing Punica granatum L. fruit rind extract prevents vincristine-induced neuropathic pain in rats: an in silico and in vivo evidence of GABAergic action and cytokine inhibition. *Nutritional Neurosciences*. 2021 Aug 9:1-18.

Mathpal D, Masand M, Thomas A, Ahmad I, Saeed M, Zaman GS, Kamal M, Jawaid T, Sharma PK, **Gupta MM**, Kumar S, Srivastava SP, Balaramnavar VM. (2021) Pharmacophore modeling, docking and the integrated use of a ligand- and structure-based virtual screening approach for novel DNA gyrase inhibitors: synthetic and biological evaluation studies. *RSC Advances*. 2021 Oct 25;11(55):34462-34478.

Gupta M M. (2021) Impact of coronavirus disease 2019 pandemic on classroom teaching: challenges of online classes and solutions. *Journal of Education and Health Promotion*. 2021; 10:155. (Impact Factor 1.599)

Talukdar D, Jankie S, Pancholi SS, Chatterjee A, Kumar P, **Gupta MM**. (2021) Strategic role and challenges of community pharmacists in SARS-CoV-2 outbreak. *Journal of Research in Pharmacy Practice*. 2021; 10(1): 1-9.

Prem Kumar S. R., Ibrahim Ahmed Shaikh, Mater Mahnashi, Mohammed Abdulrahman Alshahrani , Sheshagiri R. Dixit, Venkatarao H. Kulkarni, Christian L. Herbet, **Andanappa K. Gadad**, Tejraj M Aminabhavi, Shrinivas D. Joshi (2022). Design, synthesis and computational approach to study novel pyrrole scaffolds as active inhibitors of enoyl ACP reductase (InhA) and Mycobacterium tuberculosis antagonists. *Journal of the Indian Chemical Society*, 99: 100674

Talukdar D, **Ignacio D**, Gupta MM. (2021) Immunosuppressant Drugs and Covid-19: Associated Risks, Drug-Drug Interactions & Contraindications. *Coronaviruses 2021*; 10.2174/2666796702666210601125131 e010621193747. (Impact Factor=N/A; Citations: Google Scholar = 0, Web of Science=0). Date of publication: August, 2021.

Sakhamuri SM, **Jankie S**, Pinto Pereira LM. (2022) Calling on Latin America and the Caribbean countries to recognise the disability from long COVID. *Lancet Reg Health Am*. 2022;15:100362. doi:10.1016/j.lana.2022.100362

Jankie S, Barsatee N, Dookhan V, Sookdeo K, Hernandez S, Villarroel Stuart A. (2022) Patients' knowledge, attitudes and concerns regarding the disposal of expired/unused medication. *Int J Pharm Pract*. 2022;30(3):247-252. doi:10.1093/ijpp/riac006

Pooransingh S, Yoosuf AA, Moosa S, Ahmed N, **Jankie S**, Pinto Pereira L. (2022) Early COVID-19 response in two small island developing states: Maldives and Trinidad and Tobago. *Western Pac Surveill Response J*. 2022 Mar 31;13(1):1-7. doi: 10.5365/wpsar.2022.13.1.885. PMID: 35402062; PMCID: PMC8989632.

Jankie S, Villarroel Stuart AR, Mohammed SR, Sewdass K, Sakhamuri S, Pinto Pereira LM. (2022) How do community pharmacists in Trinidad perceive knowledge and practice of asthma care?, *Journal of Pharmaceutical Health Services Research*, Volume 13, Issue 1, March 2022, Pages 48–50, <https://doi.org/10.1093/jphsr/rmac001>

Maharaj S, Moonilal M, **Jankie S**, Dookeram D. Pharmacist Rethink through a Planetary Health Lens. *Inquiry*. 2021;58:469580211020885. doi:10.1177/00469580211020885

Maharaj SB, Ramsewak SS, Dookeram D, Franco D. (2021) Did vaccine inequity lead to the second wave of COVID-19 infections in Trinidad and Tobago? *BMJ Glob Health*. 2021 Aug;6(8):e007096. doi: 10.1136/bmjgh-2021-007096. PMID: 34433544; PMCID: PMC8390141.

Maharaj S, Moonilal M, Jankie S, Dookeram D. (2021) Pharmacist Rethink through a Planetary Health Lens. *Inquiry*. 2021 Jan-Dec;58:469580211020885. doi: 10.1177/00469580211020885. PMID: 34088229; PMCID: PMC8182178.

Maharaj SB, Dookeram D, Franco DY. (2021) The Nikki Minaj Effect: The impact of social media disinformation on vaccine hesitancy in the Caribbean. *J Glob Health*. 2021 Nov 13;11:03121. doi: 10.7189/jogh.11.03121. PMID: 34804512; PMCID: PMC8590827.

Maharaj SB, Ramsewak S, Franco DY, Ramdass A. (2022) Guyana's budget 2022: Potential for a boost to planetary health in the Caribbean region. *J Glob Health*. 2022 Jun 4;12:03022. doi: 10.7189/jogh.12.03022. PMID: 35661051; PMCID: PMC9166527.

Dookeram D, Bidaisee S, Hatcher C, Nguyen N, **Maharaj S**. (2022) Assessment of risk factors, prehospital measures and clinical needs of patients admitted with snake envenomation at a rural hospital in Trinidad and Tobago. *Cureus*. 2022 Sep 26;14(9).

School of Veterinary Medicine

Bally, A., S. Francis, T. Ackbar, Y. Beharrylal, **R. Charles, R. Suepaul**. (2021) The Prevalence of Gastrointestinal Parasites and Seroprevalence of *Toxoplasma gondii* in Captive Ocelots (*Leopardus pardalis*) in Trinidad, West Indies. *Veterinary Medicine International* 2021 3:1-5.

Brown-Joseph, T., **C.A.L. Oura, C. Carrington**, L.Harrup. (2022) Comparison of surveillance trapping methods to monitor *Culicoides* biting midge activity in Trinidad, West Indies. *Medical and Veterinary Entomology* 2022 36(4):456-468.

Charles, R.A., S. Bermúdez, P. Banović, D. Obregón Alvarez, A.A. Díaz-Sánchez, B. Corona-González, E.M.C. Etter, I. Rodríguez González, A. Ghafar, A. Jabbar, S. Moutailler, A. Cabezas-Cruz. (2021) Ticks and tick-borne diseases in Central America and the Caribbean: A one health perspective. *Pathogens* 2021 10 (10): 1273.

Charles,R.A., A.K. Basu. (2021) A review of the Afrotropical sand tampan, *Ornithodoros savignyi*: a complex species. *CAB Reviews* 2021 16:1-13.

Corradini, I., K. Georges, and E. Jose-Cunilleras. (2021) CO-oximetry measurements and antioxidant effects of ascorbic acid and methylene blue in equine methemoglobinemic blood. *Journal of Veterinary Emergency and Critical Care*, 2021. 31(6): p. 773-778

Drewry, J., **C.A.L. Oura**, S.Adams, L.Bayley, J.Kotcher, M.Ivey. (2022) Public understanding of climate change and health in the Caribbean: Results and recommendations from a 10-country perceptions survey. *The Journal of Climate Change and Health* 2022 6: 100155.

Publications & Conferences

Drewry, J., **C.A.L.Oura**. Strengthening climate resilient health systems in the Caribbean. *The Journal of Climate Change and Health*, 2022 6:100135.

Georges, K. C.Ezeokoli, G. Isitor, A.Mutani, O.Sparagano, C.A. Sant. (2021) Comparison of Peripheral Blood Smears, Autologous Cell Cultures, and Reverse Line Blot Hybridisation in Screening for Anaplasma/Ehrlichia in Roaming Dogs and Symptomatic Dogs in Trinidad. *Pathogens* 2021, 10:1431.

Iliyasu, U., H.Ibrahim, U.A.Katsayal, **S.M.Ismaila, S. Shehu, W.N.Setzer, J.Sharifi-Rad, A.F.A.Razis.** (2021) Phytochemical constituents and pharmacological activities of Breonadia salicina (Vahl) Hepper and JRI Wood (Rubiaceae). *Bulletin of the National Research Centre*. 2022 46(1):1-10.

Ismaila, M.S., A.Thomas-Rhoden, A. Neptune, K.Sookram, S. Gopaul, T.Padarath, A.Persad, K.Georges, V.Sundaram. (2022) A Survey on the Rationale Usage of Antimicrobial Agents in Small Animal Clinics and Farms in Trinidad and Jamaica. *Antibiotics* 2022, 11, 885.

Ismaila, M.S., B.Bande, I.Aminu, A.Aminatu, K.L.Georges. (2021) Therapeutic options for COVID-19: a quick review, *Journal of Chemotherapy* 33(2) :67-84.

Jones, K.R. (2021) Trichuriasis in Selected Deer (Cervidae) Species: A Geographical Perspective. *Ruminants*. 2021; 1(2):178-190.

Jones, K.R. (2021) *Trichuris* spp. in Animals, with Specific Reference to Neo-Tropical Rodents. *Veterinary Sciences* 2021 8: 15.

Jones, K.R. (2022) Update of Cestodes Parasitizing Neotropical Hystricomorphic Rodent. *Frontiers in Veterinary Science* 2022 9:885678.

Jones, K.R., C. Kistow, D.James, G.W.Garcia. (2021) Nutritive value of agouti (*Dasyprocta leporina*) meat in comparison to selected domesticated animals. *Tropical Agriculture*. 2021, 98, 4, 395-405

Jones, K.R., G.W.Garcia. (2021) Anthelmintic usage on the performance of the Agouti (*Dasyprocta leporina*) reared intensively in Trinidad and Tobago, West Indies. *Braz J Biol*. 2021 Aug 9;83:e246780.

Jones, K.R., G.W.Garcia. (2021) Teaching of Veterinary Parasitology to University students in Trinidad, West Indies; are our local wildlife species neglected? *Brazilian Journal of Biology* 2021 6;83:e248493.

Jones, K.R., L. Tardieu. (2021) *Giardia* and *Cryptosporidium* in Neo-Tropical Rodents and Marsupials: Is There Any Zoonotic Potential? *Life* 2021 11 :256.

Jones, K.R., K. R. Lall, R. Suepaul, G.W. Garcia. (2022) Systemic Bacterial Infection in a Captive Agouti (*Dasyprocta leporina* Linnaeus, 1758). *The Scientific World Journal* 2022, 1-5.

Jones, K.R., K.R.Lall, G.W.Garcia. (2022) Reproductive diseases in captive reared agoutis (*Dasyprocta leporina*). *Brazilian Journal of Biology* 2022.82: e237869

Khan, A.S., K. Georges, S. Rahaman, W. Abebe, and **A.A. Adesiyun,** (2021) Characterization of Salmonella isolates recovered from stages of the processing lines at four broiler processing plants in Trinidad and Tobago. *Microorganisms*, 2021. 9(5): p. 1048.

Khan, A.S., K. Georges, S. Rahaman, W. Abebe, and **A.A. Adesiyun,** (2022) Occurrence, risk factors, serotypes, and antimicrobial resistance of Salmonella strains isolated from imported fertile hatching eggs, hatcheries, and broiler farms in Trinidad and Tobago. *Journal of Food Protection*, 2022. 85(2): p. 266-277.

Khan, A.S., R.E. Pierneef, N. Gonzalez-Escalona, M. Maguire, **K. Georges,** W. Abebe, and **A.A. Adesiyun,** (2022) Phylogenetic analyses of Salmonella detected along the broiler production chain in Trinidad and Tobago. *Poultry Science*, 2022: p. 102322.

Khan, A.S., R.E. Pierneef, N. Gonzalez-Escalona, M. Maguire, C. Li, G.H. Tyson, S. Ayers, **K. Georges,** W. Abebe, and **A.A. Adesiyun,** (2022) Molecular characterization of Salmonella detected along the broiler production chain in Trinidad and Tobago. *Microorganisms*, 2022. 10(3): p. 570.

Kirejczyk, S.G., C.Goodwin, Z.S.Gyimesi,T.T.Zachariah,G.L. Sturgeon, A.R.Armwood, **K.Frontera-Acevedo,** A. Kokosinka, M.Seguel, S.B.Fogelson, A.L.Burnum. (2021) A Retrospective Study of Pathology in Bats Submitted to an Exotic and Zoo Animal Diagnostic Service in Georgia, USA (2008–2019). *Journal of Comparative Pathology* 2021 185:96-107.

Lall, K.R., K.R.Jones, G.W.Garcia. (2022) Reproductive Technologies Used in Male Neo-Tropical Hystricomorphic Rodents. *Animals*. 2022; 12(1):34.

Lall,K.R., K.R.Jones, Garcia, G.W. (2022) Reproductive Technologies Used in Female Neo-Tropical Hystricomorphic Rodents. *Animals* 2022, 12(3):618.

Lawal, A., M.J. Ladan, **M.S. Isma'ila,** J.H.Sifawa. (2022) The Anti-Inflammatory and Antioxidant Effects of Methanol Seed Extracts of Sunflower (*Helianthus annuus*) and Level of Uric Acid in Gout Induced Albino Rats. *Journal of Natural Science Research* 2022 13(6):21-28.

Maguire, M., **A.S. Khan, A.A. Adesiyun, K. Georges,** and N. Gonzalez-Escalona, (2021) Closed genome sequence of a Salmonella enterica serotype Senftenberg strain carrying the mcr-9 gene isolated from broken chicken eggshells in Trinidad and Tobago. *Microbiology Resource Announcements*, 2021. 10(21): p. e01465-20.

Maguire, M., **A.S. Khan, A.A. Adesiyun, K. Georges,** and N. Gonzalez-Escalona, (2022) Genomic Comparison of Eight Closed Genomes of Multidrug-Resistant Salmonella enterica Strains Isolated From Broiler Farms and Processing Plants in Trinidad and Tobago. *Frontiers in Microbiology*, 2022. 13.

Maguire, M., **A.S. Khan, A.A. Adesiyun, K. Georges,** and N. Gonzalez-Escalona, (2021) Closed genome sequence of a Salmonella enterica serotype Senftenberg strain carrying the mcr-9 gene isolated from broken chicken eggshells in Trinidad and Tobago. *Microbiology Resource Announcements*, 2021. 10(21): p. e01465-20.

Maguire, M., **A.S. Khan, A.A. Adesiyun, K. Georges,** and N. Gonzalez-Escalona, (2022) Genomic Comparison of Eight Closed Genomes of Multidrug-Resistant Salmonella enterica Strains Isolated From Broiler Farms and Processing Plants in Trinidad and Tobago. *Frontiers in Microbiology*, 2022. 13.

Publications & Conferences

Mills, M.G., E.Bruce, L.Huang, J.W.Crothers, O.Hyrien, **C.A.L.Oura**, **L.Blake**, A. B. Jordan, S. Hester, L.Wehtmas, B. Mari, P. Barby, C. Lacoux, J.Fassy, P.Vial, C.Vial, R.W. Martinez, O.O.Oladipo, B.Inuwa, K.R.Jerome. (2022) An international, interlaboratory ring trial confirms the feasibility of an extraction-less "direct" RT-qPCR method for reliable detection of SARS-CoV-2 RNA in clinical samples. *PLOS ONE*, 2022. 17(1):e0261853.

Mohamed, R. (2022) Vertebral anatomic variations in thoroughbred racehorses in Trinidad. *Agrobiological Records* 2022 7: 57-58.

Mohamed, R., A.K.Persad. (2021) Diaphyseal nutrient foramina in the humerus, radius, femur, and tibia bones of mixed breed dogs. *Journal of Advanced Veterinary Animal Research*. 2021 8(2):203-209.

Mohamed, R., C.Modeste, K.Beharry, J.Kheju, D.Labadie, **R.Suepaul R.** (2022) The effects of prenatal exposure of rabbit to valproic acid. *International Journal of Veterinary Science* 2022. 11(1): 1-6.

Mohammed, S., V.Sundaram, A.V.C. Rao, N.Zyuzikov. (2021) Polycystic ovary rat model exposure to 150 kHz intermediate frequency: hypothalamic-pituitary-ovarian axis at the receptor, cellular, tissue, and hormone levels. *Journal of Ovarian Research* 2021; 14:173-83.

Phillips Savage A, K.Frontera-Acevedo. (2022) Gular Cutaneous Fibrosarcoma and Anatomophysiological Considerations for Anaesthesia in a Saddled Bichir, *Polypterus endlicheri endlicheri*. *Case Reports in Veterinary Medicine*. 2022;2022:1-7.

Phillips Savage, A.C.N, L.Blake, R.Suepaul, O.McHugh, R.Rodgers, C.Thomas, **C.Oura**, E.Soto. (2022) Piscine mycobacteriosis in the ornamental fish trade in Trinidad and Tobago. *Journal of fish diseases* 2022 45(4):547-560.

Rise, N., **C.Oura**, J.Drewry. (2022) Climate change and health in the Caribbean: A review highlighting research gaps and priorities. *The Journal of Climate Change and Health*, 2022,8:100126,

Sameroff, S., R.Tokarz, K.Jain, A.Oleynik, **C.Carrington,** W.I. Lipkin, **C.A.L.Oura.** (2021) Novel Quaranjavirus and other viral sequences Identified from Ticks Parasitizing Hunted Wildlife in Trinidad and Tobago, Ticks and Tick-borne Diseases, 2021, 101730.

Sameroff, S.; R.Tokarz, M.Vucelja, K.Jain, A.Oleynik, M.Boljefetić, L. Bjedov, R.A. Yates, J.Margaletić, **C.A.L. Oura**, W.I.Lipkin, L.Cvetko Krajinović, A.Markotić, A. Virome of *Ixodes ricinus*, *Dermacentor reticulatus*, and *Haemaphysalis concinna* Ticks from Croatia. *Viruses* 2022, 14, 929.

Sant, C., D.Seunarine, N. Holder, K.Maharaj, M.Vaughan, S.Harrus, R.Gutierrez, Y.Nachum-Biala, G.Baneth, **R. Charles, P. Pow-Brown, R.Suepaul, K. Georges.** (2022) Tick-borne pathogens in neotropical animals in Trinidad, West Indies. *Parasites Vectors* 2022 15: 62.

Singh, S.M., **K.R. Jones.** Postweaning Performance of the Agouti (*Dasyprocta leporina*): A Neotropical Rodent with Potential for Domestication. *Veterinary Medicine International* 2021: 6664656.

Singh,S.M., W.C.Huggins, **L.Benjamin**, D.D.Mahadeo, J.Singh, **K.L. Georges**. (2021) An exploratory investigation of Newcastle disease virus serum antibodies in backyard chickens of Trinidad with geographical considerations. *Tropical Agriculture* 2021 97(4): 271-280.

Stephen,C., **C.Oura**. (2021) Reflections on One Health leadership training needs for the 21st century, *One Health* 2021 13:100356.

Suepaul, S., K. Georges, C. Unakal, F. Boyen, J. Sookhoo, K. Ashraph, A. Yusuf, and P. Butaye, (2021) Determination of the frequency, species distribution and antimicrobial resistance of staphylococci isolated from dogs and their owners in Trinidad. *Plos one*, 2021. 16(7): p. e0254048.

Sundaram V, K.R.Jones , N.Mootoo, M.PS.Tomar. (2021) Anatomy of the vertebral column, ribs and sternum in orange rumped agouti (*Dasyprocta leporina* Linnaeus, 1758): Structural and Functional perspectives. *Anatomia Histologia Embryologia* 2021 50(6):985-95.

Sundaram, V., Mohammed S, Srinivasan M.R., **Johnson J, Suepaul R, Pargass I**, Daniel E, Lallack S, Ramdhanie D and John C. (2021) Acute and subacute toxicity evaluation of hydroalcoholic extract from the stem bark of Bois Bande (*Parinari campestris* Aubl.1772) in rats. *BMC Pharmacology and Toxicology* 2021 22:51

Williams, M., CHO Lallo, D.W.Palmer, **V. Sundaram**. (2021) The Response of Mule Ducks and Economic Implications when Fed at Different Times of Post Hatch. *International Journal of Poultry Science* 2021 20 (6); 270-277.

S.C. Hill, N. Sahadeo, L. Gyan, V. Ramkissoon, **R. Suepaul**, G. Gonzalez-Escobar, S. Rahaman, **C. Oura, C. Carrington**. (2021) Genomic characterisation of sylvatic yellow fever virus epizootic in Trinidad. (2021) <https://virological.org/t/genomic-characterisation-of-sylvatic-yellow-fever-virus-epizootic-in-trinidad/670>

Caribbean Centre for Health Systems Research and Development (CCHSRD)

Becerra-Posada F, Dos Santos Boeira L, García-Godoy B, Lloyd E, Martínez-Sánchez HX, O'Donnell C, de Barros Panisset U, **Simeon DT**, Salazar-Barragán D, Villa-Maldonado P, Bustamante-García M (2021) Politics and political determinants of health policy and systems research funding in Latin America and the Caribbean. *Public Health Research and Practice* 31 (4): 3142120. doi: 10.17061/phrp3142120. Impact Factor = 1.40; Citations = 3.

Journal Abstracts

School of Medicine

Department of Clinical Medical Sciences

V Shukla, P Maharaj, VA Singh, L Akan, DM Bird, S Soman, R Ramroop, N Solomon, S Latchman, G Pierre, C Ranghell, A Mahabir, N St Louis, S Cadan, N Cooke, A Moona, S Devarashetty, E Persad, K Khan Kernnhan, P Robertson, V Ramcharitar-Maharaj, VRS Singh, **M Fernandes**. (2022) Unusual Neurological Manifestations during the COVID-19 pandemic in Trinidad and Tobago. *Developmental Medicine & Child Neurology Journal* January 2022 Volume 64, Issue S1.

Publications & Conferences

Vanita Shukla, Virendra Singh, Vindra A Singh, Avidesh Panday, Leonardo Akan, Sandhya Cadan, Nicole St Louis, Paula Robertson, **Maritza Fernandes**. (2021) Facio-Brachial Dystonic Seizures and Autoimmune Encephalitis – A Post Covid-19 Neurological Presentation? Eric Williams Medical Sciences Complex, NCRHA Trinidad and Tobago; University of the West Indies; Eric Williams Medical Sciences Complex. Abstract 564 *Archives of Disease in childhood* September 2021.

Shukla V, Singh VA, Singh V, **Fernandes M**, Panday A, Ramroop R, Cadan S, Cooke N, David S, Maharaj P (2021) Seronegative Neuromyelitis Optica Spectrum Disorder -Post SARS-COV2 neurological complication with Paediatric Multisystem Inflammatory Syndrome (PIMS). *Archives of Disease in Childhood* - 542 September 2021

Evans-Gilbert T, Lashley PM, Sin Quee C, Lerebours E, Singh-Minott I, **Fernandes M**, Walter Thomas J, Singh V, Nelson B. (2022) Caribbean Children and the COVID 19 pandemic: A call for data-driven planning. *Pan American Journal of Public Health* in May 2022. Manuscript ID 2021-01083.

School of Veterinary Medicine

Frontera-Acevedo, K., L.Gyan, R.Suepaul, S.Rajh, D.Supersad, A.Bally, I.**Pargass**. (2021) Pythiosis: An emerging disease of dogs in Trinidad and Tobago. Poster presentation at The American College of Veterinary Pathologists Conference Virtual Conference (USA); October 29- November 2 2021

Caribbean Centre for Health Systems Research and Development (CCHSRD)

Evidence Brief for Policy Strengthening human resources for health in Trinidad and Tobago, to achieve universal health coverage, with emphasis on the primary healthcare workforce (67 pages)

Evidence Brief for Policy Providing Targeted Access to Sexual and Reproductive Health Services for Adolescents in Trinidad and Tobago (36 pages)

Books & Book Chapters

School of Pharmacy

Dahiya S, **Dahiya R**. Liposomes in drug targeting brain tumors. In: Kumar L, Pathak Y, editors. Nanocarriers for drug-targeting brain tumors. Micro & Nano Technologies Series. Netherlands: Elsevier; 2022 Jun. p. 299-327. Chapter 11. Available from: <https://doi.org/10.1016/B978-0-323-90773-6.00006-3> [ISBN: 978-0-323-90773-6]

DahiyaR,DahiyaS.Gastrointestinaltractanddigestionchallenges in aging and nutraceuticals. In: Pathak YV, Islam N, editors. Nutraceuticals for aging and anti-aging: Basic understanding and clinical evidence. 1st ed. Boca Raton, FL, United States: CRC Press, Taylor & Francis Group; 2022 Jan. p. 429-469. Chapter 16. Available from: <https://www.taylorfrancis.com/chapters/edit/10.1201/9781003110866-16> [ISBN: 9781003110866]

Dahiya R, Dahiya S. Recent approaches in dendrimer-based pulmonary drug delivery. In: Pathak Y, Islam N, editors. Handbook of lung targeted drug delivery systems: Recent trends and clinical evidences. 1st ed. Boca Raton, FL, USA: CRC Press, Taylor & Francis Group; 2021 Oct. p. 273-286. Chapter 19. Available from: <https://www.taylorfrancis.com/chapters/edit/10.1201/9781003046547-19> [ISBN: 9781003046547]

Sharma D., **Gupta MM**, Sharma AK, Kesharvani, RK, Kesharwant RK. Chapter 8: Role of Nutraceuticals in Prevention and Management of Bursitis. In Nutraceuticals and Bone Health" by Apple Academic Press Co publishing with CRC Press, Taylor and Francis Group USA. 2022

Sharma D., **Gupta MM**, Sharma AK, Kesharvani, RK, Kesharwant RK. Nutraceuticals and Bone Health by Apple Academic Press Co publishing with CRC Press, Taylor and Francis Group USA. 2022

Conference Presentations

School of Medicine

Department of Pre-Clinical Sciences

C. V. F. Carrington

"Lessons from SARS-CoV-2 genomic surveillance in the Caribbean: What now? What next?"

2nd Annual Trinidad and Tobago National Health Research Conference. Online, November 18 - 19, 2021

T. Ramnanansingh, S. Singh, J. Johnson, C. Carrington, J. Addae.

"Non-invasive measurement of microvascular function to determine age-related differences"

2nd Annual Trinidad and Tobago National Health Research Conference.

Online, November 18 - 19, 2021

N. S. D. Sahadeo, J. T. McCrone, S. C. Hill, V. **Ramkissoon**, **A. Ramjag**, **A. Brown-Jordan**, **N. Mohammed**, R. Singh, S. Nathaniel-Girdharrie, A. Hinds, N. Ramkissoon, N. Nandram, R. Parasram, L. Edghill, L. Indar, **J. E. Foster**, **C. Oura**, O. G. Pybus, J. St. John, G. Gonzalez-Escobar, N. R. Faria, **C. V. F. Carrington**.

"Genomic Surveillance in SARS-CoV-2 in the Caribbean and Investigation of Lineages in Trinidad and Tobago.

Virus Genomics and Evolution Conference.

Online, September 13 – 15, 2021

N. S. D. Sahadeo, **V. Ramkissoon**, S. Hill, **A. Brown-Jordan**, **A. Ramjag**, **N. Mohammed**, R. Singh, S. Nathaniel, A. Hinds, N. Nandram, R. Parasram, A. Andrewin, R. Sealey-Thomas, P. McMillan, A. Oyinloye, K. George, I. Potter, J. Lee, D. Johnson, S. Charles, N. Singh, J. Bisor-McKenzie, H. Laws, S. Belmar-George, S. Keizer-Beache, S. Greenaway-Duberry, N. Ashwood, L. Edgehill, L. Indar, **J. E. Foster**, **C. Oura**, O. G. Pybus, J. St. John, G. Gonzalez-Escobar, N. R. Faria, **C. V. F. Carrington**

"Genomic Surveillance in SARS-CoV-2 in the Caribbean".

2nd Annual Trinidad and Tobago National Health Research Conference. Online, November 18 - 19, 2021.

Publications & Conferences

N. S. D. Sahadeo.

"Nanopore Sequencing and the SARS-CoV-2 testing protocols".
Client and Referral Network SARS-CoV-2 Whole Genome Sequencing Sensitisation (Online) Workshop held on 24th Nov 2021.

G. Kurhade

"Peer Review Process in Higher Education"
Annual Scientific Meeting of the Medical Education Technology Department for Medical Teachers. AIIMS, Nagpur, India, 08 July 2022.

A. Ali, A. Nabbie, A. Mohammed, A. Paul, A. Trim, A. Dosumu, A. Manduru, A. Governor, K. Rocke, J. Mohan.

"An Investigative Study on the Perception and Acceptability of a COVID-19 Vaccine of the Public in Trinidad and Tobago".
2nd Annual Trinidad and Tobago National Health Research Conference, Port of Spain, Trinidad, November 18 - 19 2021

Department of Para-Clinical Science

W Arneaud, PE Akpaka, CG Unakal, A Kurhade, RThompson, K Ashraph, S Lalman.

Bacteriophage therapy for Polybacterial wound infections in Trinidad and Tobago.
Oral Presentation at the 18th Annual Caribbean Association of Clinical Microbiologists (CACM) Symposium and General Meeting (Online | Virtual)
Kingston Jamaica, October 28 – 29 2022.

J Peters, PE Akpaka, CG Unakal, A Kurhade.

Candida species infections among hospital patients in Georgetown Public Hospital Corporation, Guyana.
Oral Presentation at the 18th Annual Caribbean Association of Clinical Microbiologists (CACM)
Symposium and General Meeting (Online | Virtual)
Kingston Jamaica, October 28 – 29 2022.

M Reina-Smith, PE Akpaka, CG Unakal, K Asralph.

Clonal complexes distribution in Staphylococcus aureus isolates from clinical samples in Trinidad and Tobago.
Oral Presentation at The 18th Annual Caribbean Association of Clinical Microbiologists (CACM)
Symposium and General Meeting (Online | Virtual)
Kingston Jamaica, October 28 – 29 2022.

FR Ali, PE Akpaka, SG Sankar, CG Unakal, R Thompson, K Ashralp, RJ Edwards, AK Divakauni, D Jones, DM Lee.

Prevalence and risk factors of sexually transmitted Chlamydia trachomatis infections in North Trinidad.
Oral Presentation at The 18th Annual Caribbean Association of Clinical Microbiologists (CACM) Symposium and General Meeting (Online | Virtual)
28-29 October 2022, Kingston Jamaica

SG Sankar, PE Akpaka, FR Ali, CG Unakal, R Thompson, K Ashralp, RJ Edwards, AK Divakauni, D Jones, DM Lee.

Prevalence and risk factors of Trichomoniasis in North Trinidad
Poster Presentation at the 18th Annual Caribbean Association of Clinical Microbiologists (CACM) Symposium and General Meeting (Online | Virtual)
Kingston Jamaica, October 28 – 29 2022.

D Anderson, PE Akpaka, CG Unakal, A Khurade, R Thompson, K Ashraph, S Lalman.

Prevalence of Candida species in clinical specimens in Trinidad.
Poster Presentation.
The 18th Annual Caribbean Association of Clinical Microbiologists (CACM) Symposium and General Meeting (Online | Virtual)
Kingston Jamaica, October 28 – 29 2022.

Clement Y, Singh S, Motilal S, Francis M, Forde A.

Glycemic Control, Insulin Resistance and Beta Cell Function in Patients with Type 2 Diabetes Adherent to Metformin Monotherapy
National Health Research Conference, The University of the West Indies, St Augustine
Trinidad, November 2021. (Online | Virtual)

John I, Lavia O, Edwards RJ.

Telehealth: Acceptability and Feasibility amongst PLHIV's in an HIV Clinic. Poster 32.
National Health Research Conference, The University of the West Indies, St Augustine Trinidad, November 19, 2021. (Online Virtual)

John I, Lavia O, Galindo T, Edwards RJ.

Assessment of the Immunization Program at the Medical Research Foundation, Major HIV Treatment Site. Poster 24.
National Health Research Conference, The University of the West Indies, St Augustine
November 19, 2021. (Online | Virtual)

Soyer-La Bastide S, Parboo M, Lyons, N, Edwards J.

Sexually Transmitted Infections in HIV Infected Women at Medical Research Foundation of Trinidad and Tobago. Oral Presentation 14.
Proceedings of the National Health Research Conference, The University of the West Indies, St Augustine
Trinidad, November 19, 2021. (Online | Virtual)

Boyce GG, Lavia Lo, Edwards RJ.

Disseminated histoplasmosis among patients attending an HIV Treatment Centre in Trinidad. Oral Presentation 13.
National Health Research Conference, The University of the West Indies, St Augustine
Trinidad, November 19, 2021. (Online | Virtual)

Ivey MA, Karan M, Ramdhanie M, Soogrim M, Daniel-Abdool M, Baboolal M, Sinanan M, Marbella M, Sheik M, Oura CAL.

Knowledge, Awareness, Perceptions and Behaviour (KAPB) of Students at a Caribbean University Towards Climate Change and Its Impact on Human Health. Health Systems Performance in the Political Agenda: Sharing lessons for current and future global challenges
III HSG Pre-Conference in The Americas
January 2022. (Online | Virtual)

Publications & Conferences

Hunte S, Ivey M, Maharaj S, Surtherland M, Simeon D.

An Assessment of the Preparedness of Primary Health Care Facilities in Trinidad and Tobago for COVID-19: Preliminary Findings. Health Systems Performance in the Political Agenda: Sharing lessons for current and future global challenges (Oral)

III HSG Pre-Conference in The Americas (Virtual)

January 2022. (Online | Virtual)

Dwarica D, Sa B, Leotaud T, Hunte S, Ivey MA, Victor V, Majumder A, Simeon DT, Seemungal T.

Acceptance and Attitudes towards COVID-19 Vaccines among the Adult Population in Trinidad and Tobago. (Oral)

National Health Research Conference: Building Research through Resilience in a Pandemic in Trinidad and Tobago, Port of Spain, Trinidad. November 2021. (Online | Virtual)

Hosein E, Bissoon D, Weekes D, Boodram D, Gracen D, Ramkissoon D, Jennings E, Belfon E, Bailey H, Ivey MA.

Using EQ-5D to Compare the Health-Related Quality of Life (HRQoL) of UWI Students: PreCOVID-19 Pandemic vs During COVID-19 Pandemic. (Oral)

National Health Research Conference: Building Research through Resilience in a Pandemic in Trinidad and Tobago, Port of Spain, November 2021. (Online | Virtual)

Hosein E, Bissoon D, Weekes D, Boodram D, Gracen D, Ramkissoon D, Jennings E, Belfon E, Bailey H, Ivey MA.

Lifestyle and Academic Changes of UWI Students in Response to COVID-19: Implications for Health.

National Health Research Conference: Building Research through Resilience in a Pandemic in Trinidad and Tobago, Port of Spain, November 2021. (Online | Virtual)

Motilal S, Kumar S, Muhammad S, Sooknanan S, Rampersad S, Ramkissoon S, Sarker S, Mann S, Ivey MA.

Coping Mechanisms and Knowledge of their Health Impact: A Cross-sectional Study of University Students. (Oral)

National Health Research Conference: Building Research through Resilience in a Pandemic in Trinidad and Tobago, Port of Spain, November 2021. (Online | Virtual)

Kumar S, Motilal S, Sooknanan S, Muhammad S, Rampersad S, Ramkissoon S, Sarker S, Mann S, Ivey MA.

Stressors, Psychological States and Health-Related Quality of Life of University Students: Impact of the COVID-19 Pandemic. (Poster)

National Health Research Conference: Building Research through Resilience in Pandemic in Trinidad and Tobago, Port of Spain, November 2021. (Online | Virtual)

Karan M, Ramdhanie M, Soogrim M, Daniel-Abdool M, Baboolal M, Sinanan M, Marbella M, Sheik M, Ivey MA, Oura CAL.

Knowledge, Awareness, Perceptions and Behaviour (KAPB) of Students of the University of the West Indies Towards Climate Change and Its Impact on Human Health. (Oral)

National Health Research Conference: Building Research through Resilience in a Pandemic in Trinidad and Tobago, Port of Spain, November 2021. (Online | Virtual)

Alexander C, Ivey MA.

The Elderly's Experience with Health Promotion in the Public Health System: Preliminary Results. (Oral)

National Health Research Conference: Building Research through Resilience in a Pandemic in Trinidad and Tobago, Port of Spain, November 2021. (Online | Virtual)

Motilal S, Khan R, St. Bernard G, Ivey MA, Reid SD.

Positive Influences of the COVID-19 Pandemic on Community-Dwelling Adults in Trinidad and Tobago: A Cross Sectional Study. (Oral)

National Health Research Conference: Building Research through Resilience in a Pandemic in Trinidad and Tobago, Port of Spain, November 2021. (Online | Virtual)

Marchan S, Bascombe K, Rajhbeharrysingh A, Ivey M.

Quantitative Assessment of Tooth-Brushing Abrasion using Scanning Electron Microscopy.

Journal of Dental Restoration. 100 (Sp Iss A):0903, 2021. (Oral)

National Health Research Conference: Building Research through Resilience in a Pandemic in Trinidad and Tobago, Port of Spain, November 2021. (Online | Virtual)

Gobin N, Gopaul D, Gopaulsingh A, Graham A, Greenidge TM, Guy Z, Hajarysingh C, Williams J, Unakal C, Akpaka PE, Ivey M.

An investigation on the knowledge, attitudes and practice towards vaginal candidiasis amongst women of reproductive age attending the University of the West Indies, St Augustine.

National Health Research Conference: Building Research through Resilience in a Pandemic in Trinidad and Tobago, Port of Spain, November 2021. (Online | Virtual)

Khan, R.

Adapting Participatory Group Model Building to a Virtual Space to solve Complex Public Health Issues. (Poster Presentation)

14th Annual Dissemination and Implementation Science Conference. Academy Health. December 14, 2021. (Online | Virtual)

Khan, R.

A descriptive retrospective study of Prostate Specific Antigen (PSA) and International Prostate Symptoms Scores (IPSS) from participants at a men's health initiative.

National Health Research Conference 2021- Building Resilience through Research in a Pandemic. November 2021. (Online | Virtual)

School of Nursing

O.N. Ocho.

Teaching the child with NCDs (Juvenile Diabetes, Asthma, Medical seizures and Sickle Cell disease

TTUTA's Second Annual Virtual Special Education Symposium, Trinidad and Tobago, July 11, 2022.

O.N. Ocho.

Wholistic Health: A Prerequisite for Fostering High Impact Leadership in a Fast-Paced World

Graduate Education and Leadership Virtual Leadership Conference, North Caribbean University, July 6, 2022.

O.N. Ocho, E. Wheeler, G. Tomblin Murphy and J. Rigby.

Core competencies and challenges among Nurses transitioning into positions of leadership - A Caribbean perspective

Global Network for Nursing and Midwifery WHO Collaborating centres (GNWHONM) 14th Biennial Conference, University of Botswana. June 14, and 15, 2022.

Publications & Conferences

O.N. Ocho

'Psychosocial Aspects of Dealing with the COVID-19 Pandemic in Trinidad and Tobago: Experiences and Implications.'

The Department of Behavioural Sciences 4th Biennial Department of Behavioural Sciences Conference: An Interdisciplinary Conference for Faculty and Staff, St Augustine campus, April 7, 2022.

School of Veterinary Medicine

Maraj, V., K.Maharaj, K.Maharaj, S.Maharaj, V.Maharaj, J.Maingot, L.Mangalsingh, N.R.Manchikanti L. Benjamin.

A survey of the perspectives of MBBS students' perspectives on the switch to online teaching during the COVID-19 pandemic.

The Caribbean Academy of Sciences Virtual 22nd Biennial conference and General Meeting (online) Guyana, August 2021.

L. Benjamin and Jacob, L.

A Survey of Potential Stakeholders for a Community of Practice for Antimicrobial Resistance in CARICOM States.

The Caribbean Academy of Sciences Virtual 22nd Biennial conference and General Meeting (Online). Guyana, August 2021.

Ramnarace K, K.Lokai-Singh, K.Maharaj, K.Rampersad, K.Nandlal, K.Jaggasar, K.Ramcharan, K.Singh, A.Dhanoo, **L. Benjamin.**

An Investigation into the ethnic distribution of diabetes and awareness of Diabetic Retinopathy among members of the Diabetes Association of Trinidad and Tobago (DATT) for the period 2020 – 2021 and determination of how COVID-19 impact their treatment.

National Health Research conference: Building Resilience through Research in a Pandemic(online) UWI, St. Augustine, Trinidad and Tobago, Nov 2021.

Uwaisu Iliyasua,U., I.Hajara, K.U.Adamu, **S.M.Ismaila**, A.Razis, A. Faizald.

Cytotoxicity Studies of the Leaf, Stem-Bark And Root of Breonadia salicina Hepper and J. R. I. Wood (Rubiaceae)

5th International Conference on Molecular Biology and Biotechnology 2022 (online) Kuala Lumpur, Malaysia, June 2022.

C. Oura

Developing Networks of Caribbean Leaders / Agents of Change in Climate Change and Health.

Conference on Climate Change and Health in Small Island Developing States: Focus on the Caribbean (online)

Pan American Health Organization (PAHO) and UWI, Trinidad and Tobago. October 2021.

C. Oura

Confirming the Feasibility of an Open Source, "Direct" RT-qPCR Method for Reliable Detection of SARS-CoV-2 RNA in Clinical Samples, National Health Research Conference: Building Resilience through Research in a Pandemic (online)

UWI, St. Augustine, Trinidad and Tobago, Nov 2021.

C. Oura

Developing Networks of Caribbean Leaders / Agents of Change in Climate Change and Health. Voices from the Caribbean SIDS.

COP-26 Health Pavilion

Glasgow, UK, November 2021.

C. Oura

Report on Biological Standards Commission meeting to World Organisation of Animals Health (OIE) members from the Americas.

World Organisation for Animal Health (OIE) Terrestrial Manual Chapters (online)

Paris, France, November 2021.

C. Oura

Developing networks of Caribbean Leaders / Agents of Change in Climate Change and Health,

St Lucia National Health Symposium(online)

St. Lucia, December 2021.

C. Oura

The utility of the climate change and health fellowship and general climate change leadership for CARICOM youth.

5Cs Regional Climate Change and Health Symposium (Online), December 2021.

C. Oura

COVID-19 and Other Pandemics.

UWI Faculty of Medical Sciences Health Conference, One Health: What is it and why is it so relevant to today's health challenges? January 2022.

K. Georges, C. Ezeokoli, G. Isitor, A. Mutani, O. Sparagano, C. Sant.

A Comparison of Peripheral Blood Smears, Autologous Cell Cultures, and Reverse Line Blot Hybridisation in Screening for Anaplasma/Ehrlichia in Roaming Dogs and Symptomatic Dogs in Trinidad.

3rd International Conference on Infectious Diseases and Nanomedicine – 2021 (ICIDN – 2021) (Online).

Kathmandu, Nepal December 2021.

C. Sant, C. Oura, K. Georges.

A Review of the Epidemiological Analysis of the Malaria Burden in Latin America and the Caribbean from 2010 to 2020.

2nd National Health Research Conference - "Building Resilience through Research in a Pandemic".

UWI, St. Augustine, Trinidad and Tobago, Nov 2021.

Caribbean Centre for Health Systems Research and Development (CCHSRD)

S Hunte

An Early Assessment of the Preparedness of Primary Health Care Facilities in Trinidad and Tobago for COVID-19: Preliminary Findings.

Health Systems Global, Caribbean Pre-Conference, January 18, 2022

Conference Papers & Proceedings

School of Medicine

Department of Clinical Medical Sciences

P. Bahadursingh

Descriptive analysis of a Community Paediatrics Hybrid Telemedicine/Face to Face service during implementation of community mitigation strategies in response to the COVID-19 pandemic.

Presented at TTMA conference 2021

T Evans-Gilbert , Hambleton , C Taylor-Bryan , C Sin-Quee , S. Young-Pearl , P M Lashley, B Gilbert,1 R-A Brown, M Fernandes, V Singh

Nutritional status and COVID-19 in children: a Caribbean inpatient survey

Poster and virtual presentation at the European Society for Paediatric Infectious Diseases in Athens & Online, 9-13 May 2022

Publications & Conferences

Evans-Gilbert T, Lashley M, Young Peart S, Sin Quee C, Fernandes M, Singh V, Gilbert B, Hambleton I, Knight -Madden J
Vulnerable subpopulations in Caribbean children and adolescents hospitalized with COVID-19
Submitted to CARPHA Feb 2022 for a supplement of the West Indian Medical Journal

V Shukla, P Maharaj, VA Singh, L Akan, DM Bird, S Soman, R Ramroop, N Solomon, S Latchman, G Pierre, C Ranghell, A Mahabir, N St Louis, S Cadan, N Cooke, A Moona, S Devarashetty, E Persad, K Khan Kernnhan, P Robertson, V Ramcharitar-Maharaj, VRS Singh, M Fernandes
Unusual Neurological Manifestations during the COVID-19 pandemic in Trinidad and Tobago
(Poster 030) British Paediatric Neurology Association, Abstracts of the Annual Meeting, 19-21 January 2022, Virtual (hosted by Dublin)

K. Khan,

Psychological impact of COVID-19 pandemic in health care workers,
4th Biennial Department of Behavioural Sciences Conference, April 7, 2022

K. Khan,

Interaction of culture and cognition: Case studies from the Caribbean,
University of Brunel, London, April 6, 2022

K. Khan,

Aligning MHPSS Interventions to mental health priorities in disasters.
Pan African Psychology Union Congress, March 28 – 30, 2022

Lashley P, Harrison A, Garbutt A, Melbourne-Chambers R, Koury S, Sin Quee C, and Pierre R. Paediatric postgraduate examinations at the University of the West Indies during COVID-19: blessing or curse? Accepted to the Paediatric Educators' Special Interest Group Royal College of Paediatrics and Child Health June 2022 Conference.

School of Pharmacy

Forbes T, Guerra T, Kanhai T, McGregor T, McIntosh T, Seales T, Rattan T.
The Ability of Family Physicians in the Caribbean to Promote Planetary Health Concepts and the Challenges of Implementing Changes in Practice.

Other Publications

School of Medicine

Department of Pre-Clinical Sciences

Badal, K. "Machine Learning for the prediction of breast cancer patient outcomes using genomic and clinical data". PhD Thesis (Molecular Genetics). The University of the West Indies 2021

Seetahal, J. "Viruses in Caribbean Bat Populations: The Role of Main-island Bat Movement in Viral Dissemination" PhD Thesis (Molecular Genetics). The University of the West Indies 2021

Non-refereed Publications

Department of Pre-Clinical Sciences

Bethelmy, A. The Case for Mandatory Vaccination (Internet) Trinidad Express; December 2021. Available from https://trinidadexpress.com/dr-averell-bethelmy/image_41c702ca-5884-11ec-a9a3-0f765a62a9ec.html

O'Toole, A., V. Hill, B. Jackson, R. Dewar, **N. Sahadeo**, R. Colquhoun, S. Rooke, J. T. McCrone, M. P. McHugh, S. M. Nicholls, R. Poplawski, The COVID-19 Genomics UK (COG-UK) Consortium, COVID-19 Impact Project (Trinidad & Tobago Group), D. Aanensen, M. Holden, T. Connor, N. Loman, I. Goodfellow, **C. V. F. Carrington**, K. Templeton, A. Rambaut. Genomics-informed outbreak investigations of SARS-CoV-2 using civet. *medRxiv* 2021.12.13.21267267; doi: <https://doi.org/10.1101/2021.12.13.21267267>

Brito, A. F., E. Semenova, G. Dudas, G. W. Hassler, C. C. Kalinich, M. U. G. Kraemer, J. Ho, H. Tegally, G. Githinji, C. N. Agoti, L. E. Matkin, C. Whittaker, Danish Covid-19 Genome Consortium, COVID-19 Impact Project, Network for Genomic Surveillance in South Africa (NGS-SA), GISAID core curation team, B. P. Howden, V. Sintchenko, N. S. Zuckerman, O. Mor, H. M. Blankenship; T. de Oliveira, R.T.P.Lin, M.M. Siqueira; P.C. Resende, A.T.R. Vasconcelos, F. R. Spilki, R. S. Aguiar, I. Alexiev, I. N. Ivanov, I. Philipova, **C. V. F. Carrington**, **N. S. D. Sahadeo**, C. Gurry, S. Maurer-Stroh, D. Naidoo, K. J. von Eije, M. D. Perkins, M. van Kerkhove, S. C. Hill, E. C. Sabino, O. G. Pybus, C. Dye, S. Bhatt, S. Flaxman, M. A. Suchard, N. D. Grubaugh, G. Baele, N. R. Global disparities in SARS-CoV-2 genomic surveillance. *medRxiv* 2021.08.21.21262393; doi: <https://doi.org/10.1101/2021.08.21.21262393>

School of Medicine

Department of Clinical Medical Sciences

Rampersad F, Harrinarine S, Diljohn J. Calcified Inferior Vena Cava Thrombosis [Internet]. cases.rsna.org. 2021. Available from: <https://cases.rsna.org/case/42048d38-48d6-4399-a62b-ee823b2fcd1f>

Diljohn J, **Rampersad F**. Vertex epidural hematoma [Internet]. cases.rsna.org. 2021. Available from: <https://cases.rsna.org/case/317d21ac-0e8a-4f4e-b6b7-3face218df61>

Cassim N, **Rampersad F**, Diljohn J, Chan A. Pituitary microadenoma [Internet]. cases.rsna.org. 2021. Available from: <https://cases.rsna.org/case/49a3c851-6c17-4f3c-b342-929a1819d24f>

Diljohn J, **Rampersad F**, Chan A. Pancreatic laceration [Internet]. cases.rsna.org. 2021. Available from: <https://cases.rsna.org/case/0635f7a4-f0b6-43f6-93a1-c82b58272cfc>

Milne D, Ramadhin D, Seecheran R, Seecheran V, Henry R, **Seecheran NA**. The Curious Case of Pseudo-Wellens' Syndrome and Myocardial Bridging. *J Investig Med High Impact Case Rep.* 2022 Jan-Dec;10:23247096211073255. doi: 10.1177/23247096211073255. PMID: 35038933.

Publications & Conferences

Seecheran N, Grimaldos K, Ali K, Grimaldos G, Richard S, Ishmael A, Gomes C, Karan A, Seecheran R, Seecheran V, Persad S, Abdullah H, Peram L, Dookeeram D, Giddings S, Motilal S, Raza S, Tello-Montoliu A, Schneider D. The Effect of Dapagliflozin on Platelet Function Testing Profiles in Diabetic Patients: The EDGE Pilot Study. *Cardiol Ther*. 2021 Dec;10(2):561-568. doi: 10.1007/s40119-021-00242-6. Epub 2021 Oct 13. PMID: 34643895; PMCID: PMC8555038.

Shukla V, Singh VA, St Louis N, Akan L, Solomon N, Greene C, **Singh VRS**, Fernandes M, Hallai, N, Maharaj P, Kernanhan-Khan K, Devarashetty S, Persad E. Recurrent Cerebro-Venous Sinus Thrombosis and Livedo Reticularis Rash: a case of Sneddon Syndrome in a child. *Clinical Practice* 2022 19(4). 1966-1969.

Maharajh S, Teelucksingh S. Hyperpigmentation in Vitamin B12 Deficiency. *New England Journal of Medicine*. 2022 Jan 13;386(2):172-.

Mohammed SR, Tripathi M, Mack N, Teelucksingh S. Relapse of Graves' disease following SARSCoV2 infection: A case report and brief literature review. *Medicine International*. 2021 Nov 1;1(5):1-6.

Karan A, Solomon S, Ali K, Sakhamuri S, Teelucksingh S. S2173 An Unusual Case of Dysphagia: Tuberculous Bronchoesophageal Fistula. *Official Journal of the American College of Gastroenterology* | ACG. 2021 Oct 1;116:S932.

Ali K, Mohammed SR, Deonarine R, Teelucksingh S. Sodium-Glucose Co-transporter-2 Inhibitor-Induced Pruritus: Itching for Answers. *Cureus*. 2021 Aug 30;13(8).

Mohammed SR, Sakhamuri T, Sakhamuri S, Teelucksingh S. Letter from Trinidad and Tobago: No final battles in the weary war on COVID-19?. *Respirology* (Carlton, Vic.). 2021 Nov;26(11):1082.

Talukdar D, Tripathi M, Tripathi V, Teelucksingh S. Prevalence and associated factors of undiagnosed hypertension among women aged 15–49 years in India: an analysis of National Family Health Survey-4 data. *Journal of Human Hypertension*. 2021 Aug;35(8):726-40.

Mohammed SA, Mohammed SR, Teelucksingh S. Vitamin B12 Deficiency: In the Palm of One's Hands. *The American Journal of Medicine*. 2021 Dec 1;134(12):e567-8.

Balkaran R, Teelucksingh S, Lutchmansingh F, Naidu R, Rafeek R, Balkaran R. Gestational diabetes and periodontal disease in Trinidad—A pilot study. *Caribbean Med J*. 2021 Sep 1.

Sanchez S, Teelucksingh S, Ali R, Bailey H, Legall G. Quality of Life and Health Status Among Patients Receiving Renal Replacement Therapy in Trinidad and Tobago, West Indies. *International Journal of Nephrology and Renovascular Disease*. 2021;14:173.

Other Presentations

School of Pharmacy

Oration

Mullings W, **Dahiya R**, Dahiya S. 'Type 2 Diabetes: Herbal Treatment Options for Worldwide Serious Metabolic Disorder', 4th Indo-Swiss Virtual International Conference on "Current Scenario and Challenges in Pharmacy Practice and Pharmaceutical Sciences" at Vijaya Institute of Pharmaceutical Sciences for Women, Enikepadu, Vijayawada, Krishna, Andhra Pradesh, India, 20th-21st May 2022, Section # Pharmacognosy & Phytochemistry, Oral # 002.

Bedassie Z, Davis V, Langford Z, Mullings W, Radhay V, Ramsubhag Y, Sahadeo V, **Dahiya R**. 'Natural Bioactive Polypeptides: Clinical Applications in The Bahamas and Trinidad and Tobago', 23rd Annual Virtual Student Research Day 2021 at Faculty of Medical Sciences, The University of the West Indies, St. Augustine, Trinidad & Tobago, 14th Oct 2021 (11.30 am), Section # Clinical Studies, Group # G33, Oral # O18, p 33-34.

Ignacio DN. *Pathway to Discovery of Anticancer Bioactives from a tropical Plant: Novel Treatments for Prostate Cancer*. Biocultural Education and Research Programme, The 2nd Biennial Botanical Symposium: Plants and Planting for the Future 2021 symposium. Bridgetown Barbados. April 21-24, 2021

Y Clement, **S Singh**, S Motilal, M Francis, A Forde. *Glycemic Control, Insulin Resistance and Beta Cell Function in Patients with Type 2 Diabetes Adherent to Metformin Monotherapy in Trinidad*. Caribbean Center for Health Systems Research and Development (CCHSRD), UWI, St. Augustine, National Health Research Conference. Virtual conference, November 18-19, 2021

Presenters: J Phillips, J Dassyne, J Marjadsingh, J Maturasingh, K Hanna, K Narinesingh, K Narine, K Deonarine, J Phillips, J Dassyne, J Marjadsingh, J Maturasingh, K Hanna, K Narinesingh, K Narine, K Deonarine, S Jankie, **S Singh**. *Knowledge, Attitudes and Practices towards the Flu (Influenza) Vaccine and COVID-19 Vaccines amongst University Staff and Students in Trinidad and Tobago*. Caribbean Center for Health Systems Research and Development (CCHSRD), UWI, St. Augustine, National Health Research Conference. Virtual conference, November 18-19, 2021

Posters

Bedassie Z, Davis V, Langford Z, Mullings W, Radhay V, Ramsubhag Y, Sahadeo V, **Dahiya R**. 'Natural Bioactive Polypeptides: A Study Toward the Clinical Potential in Trinidad and Tobago and The Bahamas', 2021 National Health Research Conference on 'Building Resilience through Research in a Pandemic' at Faculty of Medical Sciences, The University of the West Indies, St. Augustine, Trinidad & Tobago, 18th-19th Nov 2021, Poster No. – P29, Proceedings published in supplement of Caribbean Medical Journal.

Sian Ramdass, **Diane Ignacio**, Milena Mechkarska, Sonia Peter, Trevor Alleyne. *Phytochemical Screening and in vitro Assessment of the Cytotoxic Potential from a Commercially Prepared Fruit using PC-3 Prostate Cancer Cells*. [Poster Prize Winner: Health and Wellbeing] Virtual Commonwealth Chemistry Conference. 30 September - 1 October (Winning Poster)

Buckland A, Forbes T, Guerra T, Henry P, Kanhai T, McGregor T, McIntosh T, Seales T, Rattan T, Reid M, **Maharaj, S**. *The Ability of Family Physicians in the Caribbean to Promote Planetary Health Concepts and the Challenges of Implementing Changes in Practice*. In 23rd Annual Student Research Day 2021

Publications & Conferences

John M, **Singh S**, and Mohammed N. *Analysis of the immune response of breast cancers reveals greater significance of an adaptive response over an innate response*. The 46th Federation of European Biochemical Societies (FEBS) Congress [a joint event with the International Union of Biochemistry and Molecular Biology (IUBMB) and The Pan-American Association for Biochemistry and Molecular Biology (PABMB)] Lisbon Portugal. July 9-14, 2022

T Ramnanansingh, **S Singh**, J Johnson, C Carrington, J Addae. *Age-related changes in the control mechanisms for vasomotion in the microcirculation*. Experimental Biology 2022
Pennsylvania Convention Center, 1101 Arch St., Philadelphia, Pennsylvania. April 2-5, 2022
DOI: <https://doi.org/10.1096/fasebj.2022.36.S1.L7679>

Presenter: D Bhola, D Bridgelal, D Kalicharan, D Khan, C, Littlejohn, D Marcellin, D Toofan, C Vietti, D Bhola, D Bridgelal, D Kalicharan, D Khan, C, Littlejohn, D Marcellin, D Toofan, C Vietti, S Jankie, S Singh. *Effects of Polycystic Ovary Syndrome (PCOS) on the Quality of Life of Women Ages 18-45: A Systematic Review*. Caribbean Center for Health Systems Research and Development (CCHSRD), National Health Research Conference. Virtual conference, November 18-19, 2021.

School of Veterinary Medicine

R. Charles

Expanding the detection and surveillance of ticks and tick-borne diseases in the Caribbean region.

The Association of Institutions for Tropical Veterinary Medicine (AITVM), the Society for Tropical Veterinary Medicine (STVM)
Virtual Event: The impact of COVID-19 pandemic on tropical veterinary medicine education and research (online)
Utrecht, Netherlands, May 2022

M. Driscoll

Pregnancy management in small ruminants
FMS Virtual Health Fair,
Online, Trinidad, 14th January 2022

K. Georges, C Sant L Benjamin

Emergency Response: Trinidad and Tobago Experience
17th CaribVET Steering Committee Meeting
Online 13 – 15 June 2022

K. Georges

Report on Vector and Vector Borne Transmitted Disease Working Group
17th CaribVET Steering Committee Meeting
Online 13 – 15 June 2022

K. Georges, L. Benjamin T. Noel

Food Safety and Meat Hygiene in the Cottage Poultry Industry Workshop for Pluck Shop Operators
Online 23 August 2021

K. Georges, L. Benjamin T. Noel

Food Safety and Meat Hygiene in the Cottage Poultry Industry Workshop for Public Health Inspectors
Online 9 November 2021

K. Georges, L. Benjamin T. Noel

Food Safety and Meat Hygiene in the Cottage Poultry Industry Workshop for Veterinary Public Health Inspectors
Online 23 October 2021

A. Hosein

Common diseases affecting companion animals and how to prevent them

FMS Virtual Health Fair,
Online, Trinidad, 14th January 2022

J. Johnson

The Veterinary Pandemic: Identification and Management of Burnout in Veterinary Medicine.

Teaching Assistant Webinar Series,
Online, Trinidad, 24th March 2022.

J. Johnson

All about Bunnies,
FMS Virtual Health Fair,
Online, Trinidad, 14th January 2022

J. Johnson

Guinea Pigs vs Hamsters- which pet is best for you

FMS Virtual Health Fair,
Online, Trinidad, 14th January 2022

J. Johnson

A Review of the Endocannabinoid System and its Clinical Applications,

Teaching Assistant Webinar Series,
Online, Trinidad, 10th March 2022

N. Mootoo

Orthopaedic radiographic diseases in companion animals, principles, interpretation, and report writing.

International Virtual Veterinary Orthopaedic Camp for veterinary clinical students (IVOC). Online 4th December 2021

L. Maharaj

Caring for Pet Birds,
FMS Virtual Health Fair,
Online, Trinidad, 14th January 2022

M. Morris.

The role of the dairy cattle vet
FMS Virtual Health Fair,
Online, Trinidad, 14th January 2022

A. Nanan

Obstructive urolithiasis in ruminants
FMS Virtual Health Fair,
Online, Trinidad, 14th January 2022

G.T. Narasimhalu

Clinical examination of the orthopaedic patient,
International Virtual Veterinary Orthopaedic Camp (IVOC) for veterinary clinical students, Online, 4th December 2021

G.T. Narasimhalu

External Fixation
International Virtual Veterinary Orthopaedic Camp (IVOC) for veterinary clinical students, Online, 5th December 2021

R. Oakley

Possible Holistic and Alternative Dewormers for Ruminants,
Teaching Assistant Webinar Series,
Online, Trinidad, 24th February 2022

R. Oakley

Tips for Feeding Ruminants
FMS Virtual Health Fair,
Online, Trinidad, 14th January 2022

Publications & Conferences

C. Oura

One Health: What is it and why is it so relevant to today's health challenges?

Lecture Series: Building One Health Capacity for Effective Response to Global Health Challenges. Jamaica, January, 2022.

C. Oura

The One Health Approach: What is it and why is it so relevant to today's health challenges?

Environmental Monitoring and Public Health Surveillance Webinar Series. March 2022.

C. Oura

Climate Change - Vector-borne and Zoonotic Disease.

Caribbean Climate and Health Responders Course, Columbia University USA, May, 2022.

C. Oura

Climate Change – Infectious Diseases and One Health.

Standing Committee of Public Health (SCOPH), the Trinidad and Tobago Medical Students Association (TTMSA), Trinidad and Tobago, May 2022.

C. Oura

Avian Influenza – a real and current threat to Trinidad and Tobago in 2022.

Symposium for raising awareness of the Avian Influenza risks targeted at the T&T Poultry Industry, Trinidad and Tobago, March 2022.

C. Oura

African Swine fever – What's new that we should be worried about?
CaribVET Annual meeting, 14th June 2022.

A. Persad

Antimicrobial Resistance: what is it and what is the future?

The University of Trinidad and Tobago - Invited lecture, Trinidad, 28th February 2022

A. Persad

Caring for your new-born livestock

FMS Virtual Health Fair,
Online, Trinidad, 14th January 2022

R. Pierre

Basic Fish Care for Pet Owners,

FMS Virtual Health Fair,
Online, Trinidad, 14th January 2022

R. Pierre

Fecal Microbiota Transplantation in Veterinary Medicine,

Teaching Assistant Webinar Series
Online, Trinidad, 14th April 2022

C. Phillips-Savage

Effects of Pollution of Aquatic/Marine Life,

32nd Caribbean Veterinary Medical Conference,
St Georges University, Grenada, December 2021

C. Phillips-Savage

Sea Turtle Health and Management,

International Veterinary Students' Association – Trinidad and Tobago Chapter (Invited Guest Presentation),
Trinidad, January 29, 2022

C. Phillips-Savage

Gator Down (In) De Islands, Tales of the Clinical Impact of a UF-CVM Grad in the Caribbean,

University of Florida, College of Veterinary Medicine Veterinary Scholar Lecture Series, Gainesville, Florida, USA, October 15, 2021

C. Phillips-Savage

AquaMed Down (In) De Islands,

The Ohio State University - Invited Guest Presentation, Columbus, Ohio, USA, September 29, 2021

C. Phillips-Savage

Effects of Pollution of Aquatic/Marine Life,

Marine Mondays Lecture Series, Mississippi State University, College of Veterinary Medicine Online, USA, January 10, 2022

D. Seunarine

10 things you need to know as a pet parent,

FMS Virtual Health Fair, Online, Trinidad, 14th January 2022

D. Seunarine

A Review of Common Loco-regional Anaesthetic Techniques for the Small Animal Practitioner,

Teaching Assistant Webinar Series, Trinidad, 10th February 2022

J. White

Equine Imaging and Surgery

International Virtual Veterinary Orthopedic Camp for veterinary clinical students (IWOC), Online, 5th December 2021

G Williams

Canine Cataract removal in Trinidad and Tobago, the Challenges and Solutions.

The Ophthalmology Society of the West Indies, Trinidad, July 2022

**Caribbean Centre for Health Systems
Research and Development (CCHSRD)**

D. Simeon

Linking Research to Policy.

Caribbean Association of Medical Technologists (CASMET) BGM and Scientific Meeting, Virtual Meeting, October 12, 2021.

D. Simeon

The Critical Role of the Researcher in addressing COVID-driven challenges to Human Dimensionalities and Disparities.

University of the Southern Caribbean Research Day 2022. Virtual Meeting, March 10, 2022.

FACULTY OF SCIENCE & TECHNOLOGY

Journal Publications

Department of Chemistry

Doornkamp, J. L.; James, N. A.; Ori, S.; **Bent, G.-A.** Ambient air levels and bus occupants' exposure to benzene, toluene, ethylbenzene, and xylenes (BTEX) while commuting in Paramaribo, Suriname – A pilot study. *Case Studies in Chemical and Environmental Engineering*, 2021, 100112. <https://doi.org/10.1016/j.cscee.2021.100112>.

Augustine, D.A.; **Bent, G.-A.**; Nelson, P.N. Mechanistic evidence for the effect of sulphur-based additive: methionine, on acrylamide reduction. *Food Additives & Contaminants: Part A*. 2021. <https://doi.org/10.1080/19440049.2021.1925166>.

Stephenson, N.S.; **Facey P.C.**; Sadler-McKnight, N.P. *Scientific Practices in Lab Curricula: Examining the Evidence* Biennial Conference on Chemical Education Purdue University, Indiana, USA July 31-August 4, 2022.

Clarke, K.; Porter, R.; **Facey, P.**; Thoms-Rodriguez, C. "Chemical composition and biological activities of *Pimenta richardii*." *Flavour Fragr. J.* 2021, 36, 272-279.

Kumar, A.; Kurbah, S. D.; Syiemlieh, I.; Dhanpat, S.A.; Borthakur, R.; Lal R. A. (2021) Synthesis, Characterization, Reactivity and Catalytic Studies of Heterobimetallic Vanadium(V) Complexes Containing Hydrazone Ligands, *Inorganica Chimica Acta*, 515, 120068 (Elsevier) (Impact factor: 2.433). [Citations:] <https://doi.org/10.1016/j.ica.2020.120068>

Mohammed, C., **L.J. Lalgee***, M. Kistow, N.K. Jalsa, K. Ward. (2022) On the Binding Affinity and Thermodynamics of Sodium Alginate-Heavy Metal Ion Interactions for Efficient Adsorption. *Carbohydrate Polymer Technologies and Applications* 3: 100203.

Subratti, A., **L. J. Lalgee***, **N. K. Jalsa**. (2021) Synthesis and interfacial properties of glyco-lipophosphoramidates. *Colloids and Surfaces A: Physicochemical and Engineering Aspects*. 611: 125867

Subratti, A., A. Ramkissoon, **L. J. Lalgee**, **N.K. Jalsa** (2021) Synthesis and evaluation of the antibiotic-adjuvant activity of carbohydrate-based phosphoramidate derivatives. *Carbohydrate Research*. 500: 108216.

Subratti, A., J.L.Vidal, **L. J. Lalgee**, F.M. Kerton, **N.K. Jalsa** (2021) Preparation and characterization of biochar derived from the fruit seed of *Cedrela odorata* L and evaluation of its adsorption capacity with methylene blue. *Sustainable Chemistry and Pharmacy*. 21: 100421.

K Hundang, **T Mohammed**, **A Mohammed**. (2022). A Baseline study on heavy metal in agricultural soils from selected small-scale farms in Trinidad. *International Journal of Scientific & Engineering Research* 13 (6), 1034-1041. IF=4.9.

Maharaj, D., Mohammed, T., Mohammed, A., & Addison, L. (2021). Enhanced digestion of complex cosmetic matrices for analysis of As, Hg, Cd, Cr, Ni, and Pb using triton X-100. *MethodsX*, 8, 101241. IF 2021 = 2.338 (Role in study: Co-Author, Supervisor). 2 Citations.

Powder-George, Yomica L., and Rajiv D. Deonarine. "Antidiabetic Potential of Selected Ethnomedicines Utilized for the Management of Diabetes Mellitus in Trinidad and Tobago: A Review." *Current Diabetes Reviews* 2022, July 21. doi: 10.2174/1573399818666220519163350. Epub ahead of print.

Ming, S.-A., ***Taylor, R.A.**, McNaughter, P.D., Lewis, D.J., Leontiadou, M.A., O'Brien, P., *Tunable structural and optical properties of CuInS₂ colloidal quantum dots as photovoltaic absorbers*, RSC Advances, (2021), 11, 21351.

Taylor, R.A., Book Chapter: *Nanotechnology: Building and Observing at the Nanometer Scale*, Pharmcognosy, Elsevier; 2022.

Department of Computing & Information Technology

Khan K., W. Goodridge (2022). A Review of Blockchain Technologies. *International Journal Of Engineering Research & Technology* (IJERT), Vol. 11, Issue 01, pg. 113-118.

Khan K., M. Ramdass, A. Santo, R. Superville (2022). A Convolutional Neural Network (CNN) Application for Identifying E-Waste in A Small Island Developing Country (Trinidad and Tobago). *International Journal Of Engineering Research & Technology* (IJERT), Vol. 11, Issue 01, pg. 359-366.

Khan K., C. Mondesir, K. Ambris, J. Stapleton (2022). A Deep Learning-based Stock Footage Platform for the Caribbean Content. *International Journal Of Engineering Research & Technology* (IJERT), Vol. 11, Issue 01, pg. 415-425.

Khan K., S. Reyes, A. Maraj, A. Persad (2022). A QuaggaJS Computer Vision Authentication Scheme for Electronic Payments. *International Journal Of Engineering Research & Technology* (IJERT), Vol. 11, Issue 02, pg. 133-138.

Khan K., (2022). A Review of OpenStack Cloud Projects. *International Journal Of Engineering Research & Technology* (IJERT), Vol. 11, Issue 04, pg. 09-16.

Khan K., W. Goodridge (2022). Artificial Intelligence (AI) versus Machine Learning (ML) versus Deep Learning (DL). *International Journal of Multidisciplinary Research and Publications* (IJMRAP), Vol. 5, Issue 3, pp. 117-123.

Ramkissoon, A. N., S. Mohammed, and W. Goodridge. (2021) "Determining an Optimal Data Classification Model for Credibility-Based Fake News Detection." *The Review of Socionetwork Strategies* 15, no. 2 347-380. <https://doi.org/10.1007/s12626-021-00093-6>

Ramkissoon, A. N., and W. Goodridge. "Enhancing the Predictive Performance of Credibility-Based Fake News Detection Using Ensemble Learning." *The Review of Socionetwork Strategies* 16 no. 2 (2022): 259-289. <https://doi.org/10.1007/s12626-022-00127-7>

Sooknanan, A. and P. **Hosein** (2022). "Estimating The Carbon Content of Oceans Using Satellite Sensor Data". *Springer Journal of Big Data*

Ramjattan, R., N. Hosein, **P. Hosein** and A. Knoesen (2022). "Dynamic Group Formation in an Online Social Network". *Elsevier International Journal on Technological Forecasting and Social Change*.

Publications & Conferences

Ramsook, D., **P. Hosein** and N. Hosein (2022). "Instant message summarization with Emoji unicode characterset support". *Springer Journal on Multimedia Tools and Applications*.

K. Manohar, **T.D. Kieu**, "A Strategy for the Linear Time Implementation of the SMVQ Algorithm," *IETE Technical Review*, Vol. 39, No. 2, Jun. 2022, pp. 270-275.

Department of Life Sciences

Joseph, L., Mohammed, R.S., Bhukal, R and Deacon, A.E. (2022) An Assessment of Fish Assemblages in Peripheral Lotic Habitats of the Caroni Swamp, Trinidad. *Caribbean Naturalist* 85

Vallès, H., Labaude, S., Bezault, E. Browne, D., Deacon, A.E., Guppy, R., Pujadas Clavel, A. and Cézilly, F. (2021) Low contribution of Caribbean-based researchers to academic publications on biodiversity conservation in the insular Caribbean. *Perspectives in Ecology and Conservation* 19(4), pp.443-453

Santi, F; Vella, E; Jeffress, K; Deacon, A.E., Riesch, R (2021) Phenotypic responses to oil pollution in a poeciliid fish. *Environmental Pollution* 118023

Ali, K., W. Elibox, P. Umaharan, and R. Brathwaite. (2021) Evaluation of yield and other agronomic traits in pepper (*Capsicum chinense* Jacq.) under greenhouse conditions in the humid tropics. *Tropical Agriculture (Trinidad)* 98(4): 337-346.

H. Harden-Davies, D.J. Amon, T.Chung, J. Gobin, Q. Hanich, K. Hassanali, M. Jaspars, A. Pouponneau, K. Soapi, S. Talma and M. Vierros (2022). How can a new UN ocean treaty change the course of capacitybuilding? *Aquatic Conserv: Mar. Freshw. Ecosyst.* 32 : 907–912. <https://doi.org/10.1002/aqc.3796>

D. Amon, R.D.Rotjan, B. R.C. Kennedy, G. Alleng, R. Anta, E, Aram, T. Edwards, M. Creary-Ford, K.M.Gjerde, J.Gobin, L. Henederson, A.Hope, R. Khan-Ali, S. Lanser, K. Lewis, H. Lochan, S. MacLean, N. Mwemwenikarawa, B. Phillips, B. Rimon, S. Sarjusingh, T, Temari. A. Tekiau, A. Turchik. H. Valles, K. Waysang, aNd K.L.C Bell. (2022). My Deep Sea, My Backyard: a pilot study to build capacity for global deep-ocean exploration and research. *Phil. Trans. R. Soc. B* 377: 20210121. <https://doi.org/10.1098/rstb.20210121>

L. Kanhai, H. Asmath, JF Gobin (2022). The status of marine debris/litter and plastic pollution in the Caribbean Large Marine Ecosystem (CLME): 1980–2020. *Environ. Pollut.* <https://doi.org/j.envpol.2022118919>

AD Rogers, A Baco, E Escobar-Briones, D Currie, K.Gjerde, J.Gobin, M.Jaspars, L.Levin, K. Linse, M. Rabone, E. Ramirez-Llodra, J. Sellanes, T. Shank, K.Sink, P.VR Snelgrove, M. L. Taylor, D. Wagner, H. Harden-Davies (2021). Marine genetic resources in areas beyond national jurisdiction: Promoting marine scientific research and enabling equitable benefit sharing <https://doi.org/10.3389/fmars.2021667274> Citation increase of 241: 2026 (in 2021) to 2267 (in 2022).

Sanderson, F.J., .Donald, F.J., Schofield, A., Dauda, P. , Bannah,D., Senesie, A. Konneh, M.S., Swinfield, T.W., Hulme, M.F. (2022) Forest-dependent bird communities of West African cocoa agroforests are influenced by landscape context and local habitat management. *Agriculture, Ecosystems & Environment* Volume 328 DOI: 10.1016/j.agee.(2021)107848 IMPACT FACTOR in 2021: 6.576

- Chinnaraja, C*, Kollam, M., Ramsubhag, A., Jayaraj, J*. (2021). Diversity of Begomoviruses infecting crops and weeds in the Caribbean and Latin America. Geminivirus: Detection, Diagnosis and Management” In: Editors: R.K. Gaur, Pradeep Sharma and Henryk Hanokh Czosnek. Elsevier. DOI: 10.1016/B978-0-323-90587-9.00035-3.
- Ali, O., Ramsubhag, A., Farrell, A.D., Jayaraj, J. (2022). Foliar application of seaweed extracts influence the phytomicrobiome dynamics in tomato and sweet pepper plants. *Journal of Applied Phycology*. DOI:10.1007/s10811-022-02823-x. (Springer).
- Pustam, A., Jayaraj, J., Ramsubhag, A. (2022). Characterization of Beta-Lactam Resistance Genes and Virulence Factors Associated with Multidrug-Resistant *Klebsiella pneumoniae* Isolated from Patients at Major Hospitals in Trinidad, West Indies. *Current Microbiology*, DOI: 10.1007/s00284-022-02972-9. (Springer).
- Ali, O., Ramsubhag, A., Benn Jr, D., Ramnarine, S., Jayaraj, J. (2022). Transcriptomic changes induced by applications of a commercial extract of *Ascophyllum nodosum* on tomato plants. *Scientific Reports*, DOI: 10.1038/s41598-022-11263-z. (Springer).
- Feyten, L.E.A., Crane, A.L., **Ramnarine, I.W.**, and Brown, G.E. (2021) Predation risk shapes the use of conflicting personal risk and social safety information in guppies. *Behavioural Ecology* 32 (6): 1296-1305
- Yong L., Croft D.P., Troscianko, J., **Ramnarine, I.W.**, and Wilson, A.J. (2022) Sensory-based quantification of male colour patterns in Trinidadian guppies reveals no support for parallel phenotypic evolution in multivariate trait space. *Molecular Ecology*: 31 (5):1337-1357
- Crane, A.L., Demers, E.E., Feyten, L.E.A., **Ramnarine, I.W.**, and Brown, G.E. (2022) Exploratory decisions of Trinidadian guppies when uncertain about predation risk, *Animal Cognition*: 25 (3) : 581-587
- Dimitriadou, S., Santos, E.M., Croft, D.P., van Aerie, R., Ramnarine, I.W., Filby, A.L., and Darden, S.K. (2022) Social partner cooperativeness influences brain oxytocin transcription in Trinidadian guppies (*Poecilia reticulata*). *Behavioural Brain Research* 423
- Stewart. A. Seepersad C., Hosein A., Tripathi V., Mohammed A., Agard J., Cashman A., Chadee D., Ramsubhag A. (2022). Water Poverty Indices of three rural communities in the southern Caribbean. *Water Supply* 22 (3), 3158–3177 (Impact Factor 1.768)
- D Singh, M Alkins-Koo, L Rostant, A Mohammed (2022). Behavioural repertory of juveniles of the freshwater crab *Poppiana dentata* (Randall 1840) under laboratory conditions. *Ethology Ecology & Evolution*, 34 (1), 82-96 1 (Impact Factor 1.1)
- A Mohammed, V Tripathi, D Singh, L Ali, R Mohan, S Sankar, N Nandram (2021). Knowledge, attitude, and practice toward COVID-19 in Trinidad and Tobago. *Journal of Social Behavior and Community Health* 5 (2), 760-772
- Hapairai, L., Mysore, K., James, L., Scheel, N., Realey, J., Sun, L., Gerber, L., Feng, R, Romero-Severson, E., Mohammed, A., Duman-Scheel, M., Severson, D., (2021). Evaluation of large volume yeast interfering RNA lure-and-kill ovitraps for attraction and control of *Aedes* mosquitoes. *Medical and Veterinary Entomology* 35(3): 661-670. (Impact Factor 2.55)

Publications & Conferences

Ali, R., Jayaraman, J., Mohammed, A., Chinnaraja, C., Carrington, C., Severson, S., Ramsubhag, A., (2021). Characterization of the virome associated with Haemagogus mosquitoes in Trinidad, West Indies. *Scientific Reports* 11: 16584 (Impact Factor 4.996)

Winter, N., Stewart, A., Igiede, J., Wiltshire, R.M., Hapairai, L.K., James, L.D., Mohammed, A., Severson, D.W., Duman-Scheel, M., (2021). Assessment of Trinidad community stakeholder perspectives on the use of yeast interfering RNA-baited ovitraps for biorational control of Aedes mosquitoes. *PLOS ONE* 16 (6), e0252997 (Impact Factor 3.752)

Singh, D., Alkins-Koo, M., Rostant, L., Mohammed, A., (2021) Sublethal effects of malathion insecticide on growth of the freshwater crab Poppiana dentata (Randall, 1840) (Decapoda: Trichodactylidae). *Nauplius* 29 (Impact Factor 0.61)

Ramnarine, SDBJ, Jayaraj, J., Ramsubhag, A. (2022) Comparative genomics of the black rot pathogen *Xanthomonas campestris* pv. *campestris* and non-pathogenic co-inhabitant *Xanthomonas melonis* from Trinidad reveal unique pathogenicity determinants and secretion system profiles. *Peer J.* 9:e12632 <https://doi.org/10.7717/peerj.12632>. (PeerJ).

Ramjegathesh, R., Jagmohan, S., Pragadish, J., Ali, O., Ramsubhag, A., Jayaraj, J. (2021) Effects of *Ascophyllum nodosum* extract on sweet pepper plants as an organic biostimulant in grow box home garden conditions. *Journal of Applied Phycology*, DOI: 10.1007/s10811-021-02611. (Springer).

Ali, R., Jayaraman, J., Mohammed, A., Chinnaraja, C., Carrington, C. V., Severson, D. W., & Ramsubhag, A. (2021) Characterization of the Virome Associated with Haemagogus Mosquitoes in Trinidad, West Indies. *Nature Scientific Reports*. DOI:10.1038/s41598-021-95842-6. (Springer).

Chinnadurai, C., Kollam, M., Ramsubhag, A., Jayaraj, J*. (2021) Genome characterization of Zucchini yellow mosaic virus infecting cucurbits reveals the presence of a new genotype in Trinidad & Tobago in the Caribbean region. *Archives of Virology*, DOI:10.1007/s00705-021-05048-4. (Springer).

Ali, O., Ramsubhag, A., Jayaraj, J*. (2021) Biostimulant properties of seaweed extracts in plants: implications towards sustainable crop production. *MDPI-Plants*, DOI:10.3390/plants10030531. (MDPI).

A Ramkissoon, A Ramsubhag, A Maxwell, J Jayaraj. (2021) Compounds and uses thereof. US Patent App. 17/294,819.

Persaud, R., Payman, G., Singh, N., Persaud, D.A., Khan, A. and Subramanian, G. (2022). Management of rice grain discoloration complex with the use of medicinal plant extracts and new generation fungicides under Guyana agricultural settings. *Current Investigations in Agriculture and Current Research* 10 (1): 1341-1354.

Persaud, M., Persaud, R., Gobind, N., Khan, A., Subramanian, G. and Corredor, E. (2022). Genotype by environment interactions of grain yield performance and lodging incidence in advance breeding lines of rice across environments in Guyana. *International Journal of Agricultural Policy and Research* 10 (3): 70-81.

Shah, F. and Khan, A. (2022). Spray deposition within Capsicum chinense Jacq. plant canopy affects mortality in adult Bemisia tabaci (Gennadius) (Hemiptera:Aleyrodidae). *Trends in Entomology* 18: 29-35.

Khan, A. (2022). Bemisia tabaci: Effects of Chemicals and Entomopathogens on Behaviour. *Advances in Animal Science and Zoology* 19: 1 – 50.

Dipchansingh, D. and Khan, A. (2021). Relative humidity affects life table parameters of Callosobruchus maculatus (Fabricius) (Coleoptera: Bruchidae). *Archives of Phytopathology and Plant Protection* 54 (19-20): 1797-1806.

Khan, A. and Isaac, W.A. (2021). Control biológico en Trinidad y Tobago. In J.C. van Lenteren, J.C., V.H.P. Bueno, M.G. Luna and Y.C. Colmenarez (Eds.) Control biológico en América Latina y el Caribe: Su rica historia y futuro brillante. *Editorial Acribia*, Espana. ISBN 978-84-200-1265-0. Pp. 437-446.

Khan, A. (2021). Biopesticides: Alternatives for management of Callosobruchus maculatus. *Journal of Biopesticides* 14 (1): 59 – 78.

Osorio-Guarin JA, Gopaulchan D, Quackenbush C, Lennon AM, Umaharan P and Cornejo O. (2021) Comparative transcriptomic analysis reveals key components controlling spathe colour in Anthurium andreaum (Hort.) *PLOS One* 16: e0261364. Impact factor 3.24

Ramdass, A. C., and Rampersad, S. N. (2022). Detection and diversity of the mannosylerythritol lipid (MEL) gene cluster and lipase A and B genes of Moesziomyces antarcticus isolated from terrestrial sites chronically contaminated with crude oil in Trinidad. *BMC microbiology*, 22(1), 1-27. IMPACT FACTOR in 2021: 4.465

Ramdass, A. C., and Rampersad, S. N. (2022). Naturally-occurring microbial consortia for the potential bioremediation of hydrocarbon-polluted sites in Trinidad. *Bioremediation Journal*, 1-10. IMPACT FACTOR in 2021: 2.140

Ramdass, A. C., and Rampersad, S. N. (2021). Biodiversity and biocatalyst activity of culturable hydrocarbonoclastic fungi isolated from Marac–Moruga mud volcano in South Trinidad. *Scientific reports*, 11(1), 1-18. IMPACT FACTOR in 2021: 4.996

Ramdass, A. C., and Rampersad, S. N. (2021). Molecular signatures of Janthinobacterium lividum from Trinidad support high potential for crude oil metabolism. *BMC microbiology*, 21(1), 1-16. IMPACT FACTOR in 2021: 4.465

Ramdass, A.C. and Rampersad, S.N. (2021). Diversity and oil degradation potential of culturable microbes isolated from chronically contaminated soils in Trinidad. *Microorganisms* 9(6), 1167 IMPACT FACTOR in 2021: 4.926

Rampersad, S. N. (2021) Spatial pattern of genetic diversity in field populations of Fusarium incarnatum-equiseti species complex. *Ecology and Evolution*, 11(13), 9010-9020 IMPACT FACTOR in 2021: 3.17.

Chinnaraja, C*, Kollam, M., Ramsubhag, A., Jayaraj. J*. (2021). Diversity of Begomoviruses infecting crops and weeds in the Caribbean and Latin America. Geminivirus: Detection, Diagnosis and Management” In: Editors: R.K. Gaur, Pradeep Sharma and Henryk Hanokh Czosnek. *Elsevier*. DOI: 10.1016/B978-0-323-90587-9.00035-3.

Publications & Conferences

Ramjegathesh, R., Jagmohan, S., Pragadish, J., Ali, O., Ramsubhag, A., Jayaraj, J. (2021) Effects of *Ascophyllum nodosum* extract on sweet pepper plants as an organic biostimulant in grow box home garden conditions. *Journal of Applied Phycology*, DOI: 10.1007/s10811-021-02611. (Springer).

Ali, R., Jayaraman, J., Mohammed, A., Chinnaraja, C., Carrington, C. V., Severson, D. W., & Ramsubhag, A. (2021) Characterization of the Virome Associated with Haemagogus Mosquitoes in Trinidad, West Indies. *Nature Scientific Reports*. DOI:10.1038/s41598-021-95842-6. (Springer).

Chinnadurai, C., Kollam, M., Ramsubhag, A., Jayaraj, J*. (2021) Genome characterization of Zucchini yellow mosaic virus infecting cucurbits reveals the presence of a new genotype in Trinidad & Tobago in the Caribbean region. *Archives of Virology*, DOI:10.1007/s00705-021-05048-4. (Springer).

Ali, O., Ramsubhag, A., Jayaraj, J*. (2021) Biostimulant properties of seaweed extracts in plants: implications towards sustainable crop production. *MDPI-Plants*, DOI:10.3390/plants10030531. (MDPI).

A Ramkissoon, A Ramsubhag, A Maxwell, J Jayaraj. (2021) Compounds and uses thereof. US Patent App. 17/294,819.

Akilah Stewart, Catherine Seepersad, Aliya Hosein, Vrijesh Tripathi, Azad Mohammed, John Agard, Adrian Cashman, Dave Chadee, Adesh Ramsubhag. (2022) Water Poverty Indices of three rural communities in the southern Caribbean. *Water Supply* 22 (3), 3158-3177.

Ali, O., Ramsubhag, A., Farrell, A.D., Jayaraj, J. (2022) Foliar application of seaweed extracts influence the phytomicrobiome dynamics in tomato and sweet pepper plants. *Journal of Applied Phycology*. DOI:10.1007/s10811-022-02823-x. (Springer).

Pustam, A., Jayaraj, J., Ramsubhag, A. (2022) Characterization of Beta-Lactam Resistance Genes and Virulence Factors Associated with Multidrug-Resistant *Klebsiella pneumoniae* Isolated from Patients at Major Hospitals in Trinidad, West Indies. *Current Microbiology*, DOI: 10.1007/s00284-022-02972-9. (Springer).

Ali, O., Ramsubhag, A., Benn Jr, D., Ramnarine, S., Jayaraj, J. (2022) Transcriptomic changes induced by applications of a commercial extract of *Ascophyllum nodosum* on tomato plants. *Scientific Reports*, DOI: 10.1038/s41598-022-11263-z. (Springer).

Sahadeo, N. S., Nicholls, S., Moreira, F. R., O'Toole, Á., Ramkissoon, V., Whittaker, C., ... & Carrington, C. V. (2022) Implementation of Genomic Surveillance of SARS-CoV-2 in the Caribbean: Lessons Learned for Sustainability in Resource-Limited Settings. *SSRN Electronic Journal*, DOI: 10.2139/ssrn.4184797. (Elsevier).

Ramnarine, SDBJ., Jayaraj, J., Ramsubhag, A. (2022) Comparative genomics of the black rot pathogen *Xanthomonas campestris* pv. *campestris* and non-pathogenic co-inhabitant *Xanthomonas melonis* from Trinidad reveal unique pathogenicity determinants and secretion system profiles. *Peer J*. 9:e12632 <https://doi.org/10.7717/peerj.12632>. (PeerJ).

Juárez, P. & J. F. Morales. (2021) *Pleurothyrium amissum* (lauraceae), a new endemic tree from the Talamanca montane forest in Costa Rica. *Novon* 29: 78-84.

Morais, I.L., Espirito Santo, F.da, & Morales, J. F. (2021) A new critically endangered *Ruehssia* (Apocynaceae) from Goiás, Brazil. *Rodriguésia* 72: e00702020.

Cascante-Marin, A. & J. F. Morales. (2021) A new species of *Werauhia* (Bromeliaceae, Tillandsioideae) from the highlands of Southern Central America. *Phytotaxa* 523: 254–258.

Morales, J.F. & A. Idarraga. (2022) Nightmare on *Dendropanax* street: what is *Dendropanax arboreus* (Araliaceae)? *Phytotaxa* 536: 134–164.

Morales, J. F. (2022) Two new remarkable *Dendropanax* (Araliaceae) from Costa Rica. *Darwiniana, nueva series* 10: 417-428.

Department of Mathematics & Statistics

Alexander, R., K. Rahaman, D.M.G. Comissiong. (2022) Creeping Micropolar Flow past a Porous Oblate Spheroid. *Journal of Fluid Dynamics* 3 (1), 26-32.

Dass,T. D., S.R Gunakala, D.M.G Comissiong. (2022) Combined effect of variable-viscosity and surface roughness on the squeeze film characteristics of infinitely wide rectangular plate with couple stress fluid, velocity-slip and *Materials Today: Proceedings* 56, 1717-1725.

Job,V., A.Sankar, **S. R. Gunakala***, P. Selavam, N. B. Reddy. (2022) Numerical Study of Two-Phase Peristaltic MHD Nanofluid Flows in a Flexible Tube with a Porous Peripheral Layer and Thermal Radiation. *International Journal of Applied and Computational Mathematics*. (2022)8:76 (1-28 pages), <https://doi.org/10.1007/s40819-022-01282-9>

(Publisher- Springer, ISSN: Impact Factor = 1.65, Citations = 0, Publishing Date- 17/03/2022)

Gunakala, S. R., V. Job, P.V.S.N Murthy, S. Sakhamuri. (2022) Influence of Alternating Magnetic Field on Non-Newtonian Blood Perfusion and Nanoparticle Transport in Tissues with Embedded Blood Vessel during Hyperthermia". *Ain Shams Engineering Journal*, <https://doi.org/10.1016/j.asej.2022.101831> (Publisher- Elsevier, ISSN: Impact Factor = 3.180, Citations = 0, Publishing Date- 02/06/2022)

Job, V. M., S. R. Gunakala*, A. J. Chamkha. (2022) "Numerical Investigation of Unsteady MHD Mixed Convective Two-Phase Flow of Hybrid Nanofluid in a Corrugated Trapezoidal Cavity with Internal Rotating Heat-Generating Solid Cylinder". *The European Physical Journal Special Topics*, Volume 231:2661–2668 (2022). <https://doi.org/10.1140/epjs/s11734-022-00604-8> (Publisher Springer Berlin Heidelberg, ISSN:, Impact Factor = 2.707, Citations = 1, Publishing Date-15/05/2022).

Thameem Basha, H., K. Rajagopal, N. Ameer Ahammad, S. Subramanian, S. R. Gunakala. (2022) "Finite difference computation of Au-Cu/Magneto- Bio-Hybrid Nanofluid Flow in an Inclined Uneven Stenosis Artery". *Complexity Journal* (Special Issue: Chaos in Applied Sciences and Engineering 2021), Volume-2022, 18 pages <https://doi.org/10.1155/2022/2078372>. (Publishing Collaboration by Wiley and Hindawi, ISSN: 1076-2787 (Print), 109-0526 (Online), Impact Factor = 2.833, Citations = 4, Publishing Date-12/04/2022).

Publications & Conferences

Reddy, S.R.R., C.S.K. Raju, S. R. Gunakala, H. Thameem Basha, S.Yook. (2022) "Bio-magnetic Pulsatile CuO-Fe₃O₄ Hybrid Nanofluid Flow in Vertical Irregular Channel in a Suspension of Body Acceleration". *International Communications in Heat and Mass Transfer*, Volume-135 (106-151) (Elsevier Publisher ISSN: 7351933, Impact Factor = 5.683, Citations=1, Publishing Date-01/06/2022).

Job, V., S. R. Gunakala. (2022) "Two-phase Model of Intravenous Magnetic Nanoparticle Hyperthermia in Muscle and Prostate Tumours". *Materials Today: Proceedings*, ISSN: 2214-7853, Vol: 57, Page: 781-785, Publication Year 2022 <https://doi.org/10.1016/j.matpr.2022.02.313>

Davis, G., N. Baboolal, V. Tripathi, R. Stewart. (2021) Health status risk factors and quality of life in 75-84-year-old individuals assessed for dementia using the short 10/66 dementia diagnostic schedule, *PeerJ* 9:e12040 : pp 1-21. DOI: 10.7717/peerj.12040.

Forde, I., V. Tripathi. (2022) An analysis of determinants of neonatal, post-neonatal and child mortality in Haiti including breastfeeding as a time-dependent variable. *Journal of Paediatrics and Child Health*, DOI: 10.1111/jpc.16142

Forde, I., Tripathi, V. (2022) Determinants of neonatal, post-neonatal and child mortality in Afghanistan using frailty models. *Paediatric Research* 91: 991–1000 <https://doi.org/10.1038/s41390-021-01527-1>

Rajballie, A., V. Tripathi, V., A. Chinchamee. (2022) Water consumption forecasting models – a case study in Trinidad (Trinidad and Tobago), *Water Supply* 22(5): 5434 -5447, doi: 10.2166/ws.2022.147.

Shah, H., D.M.G Comissiong. (2021) Computer Virus Model with Stealth Viruses and Antivirus Renewal in a Network with Fast Infectors. *SN Computer Science* 2 (407).

Stewart, A., C. Seepersad, A. Hosein, V. Tripathi, A. Mohammed, A. Agard, A. Cashman, D. Chadee, and A. Ramsubhag. (2022) Water Poverty Indices of three rural communities in the southern Caribbean, *Water Supply*, 22(3): 3158-3177, doi:10.2166/ws.2021.409.

Department of Physics

Thakur, N., Thakur, N., Kumar, P., Kumar, K., Jeet, K., Kumar, A., **Sharma, D.P.** (2022) Futuristic Role of Nanoparticles for Treatment of COVID-19, *Biomaterials and Polymers Horizon*, 1 (2), 1-22. <https://doi.org/10.37819/bph.001.02.0166>

Thakur, N., Thakur, N., Bhullar, V., Sharma, S., Mahajan, A., Kumar, K., **Sharma, D.P., Pathak, D.** (2021) TiO₂ nanofibers fabricated by electrospinning technique and degradation of MO dye under UV light, *Zeitschrift für Kristallographie - Crystalline Materials*, 236 (8-10), 239-250. <https://doi.org/10.1515/zkri-2021-2025>

Sharma, S., **Pathak, D.**, Dhiman, N., Kumar, R., Kumar, K. (2022) Conductivity Study on Proton-conducting Nanocomposite Plasticized Polymer Electrolytes: A Review", *Current Materials Science* 15 (3)

Chitan, A. S., Mylläri, A., & **Haque, S.** (2022). Relativistic effects on triple black holes: Burrau's problem revisited. *Monthly Notices of the Royal Astronomical Society*, 509(2), 1919-1928. IF 5.4 cit. 1

Voskuhl, Lisa, Akbari, A., Müller, H., Pannekens, M., Brusilova, D., Dykma, S., **Haque, S.** Indigenous microbial communities in heavy oil show a threshold response to salinity (2021) *FEMS Microbiology Ecology* 97, No. 12 : fiab157. IF. 4.2 cit. 3

Ali, A and **Haque, S** (2022). Application of Benford's law to COVID-19 cases in selected countries of the Caribbean and globally. *Caribbean Medical Journal*. ISSN/ISBN:2664-5599.

Randy, R.S., **Clarke, R.M.** and **Chadee, X.T.** (2022). Transitioning from 100 percent natural gas power to include renewable energy in a hydrocarbon economy." *Smart Energy* 5. <https://doi.org/10.1016/j.segy.2021.100060>

Hunte, S.O., Clark, C.H., **Zyuzikov, N.**, Nisbet, A. (2022) Volumetric modulated arc therapy (VMAT): a review of clinical outcomes—what is the clinical evidence for the most effective implementation? *The British Journal of Radiology*. Published online:
<https://www.birpublications.org/doi/pdf/10.1259/bjr.20201289>

Mohammed S., Sundaram V., Adidam Venkata C.R. and **Zyuzikov N.** (2021) Polycystic ovary rat model exposure to 150kHz intermediate frequency: hypothalamic-pituitary-ovarian axis at the receptor, cellular, tissue, and hormone levels, *Journal of Ovarian Research* 14(1), p.1-14

Books & Book Chapters

Department of Computing & Information Technology

Khan, Koffka, (2022). Distributed Big Data, Event Streams and Analytics, Kindle Direct Publishing, 131 pages.

Khan, Koffka, (2022). Database Administration. Kindle Direct Publishing, 119 pages.

Khan, Koffka, (2022). Cloud Computing Fundamentals, Kindle Direct Publishing, 374 pages.

Khan, Koffka, (2022). Blockchain Essentials, Kindle Direct Publishing, 201 pages.

Khan, Koffka, (2022). Data Mining Methods, Kindle Direct Publishing, 213 pages.

Khan, Koffka, (2022). Distributed NoSQL Database Concepts, Kindle Direct Publishing, 136 pages.

Khan, Koffka, (2022). Practical Network Security, Kindle Direct Publishing, 202 pages.

Khan, Koffka, Goodridge, Wayne, Ramsahai, Emilie, (2021). Practical Databases and SQL Applications Revealed, Kindle Direct Publishing, 470 pages.

Mohammed, P.S., A. Coy, P. Skerrit, Y. Lewis-Fokum, A. Mohammed, and A. Hosein. (2022). The Importance of Culturally Situated Design on Children's Interaction with Speech-Enabled Features in an Online Spelling Tutor. 24th International Conference on Human-Computer Interaction, 26 June- 01 July 2022. In: Rauterberg, M. (eds) Culture and Computing. Design Thinking and Cultural Computing. HCII 2022. Lecture Notes in Computer Science (LNCS), vol 13324. Springer, Cham. https://doi.org/10.1007/978-3-031-05434-1_7 [Impact Factor: 1.36, h-Index: 400]

Publications & Conferences

Mungal, J., Daniel, A., Mohammed, A., **Mohammed, P.S.** (2022). An Annotated Caribbean Hot Pepper Image Dataset. In: Arai, K. (eds) Proceedings of the Future Technologies Conference (FTC) 2022, Volume 1. FTC 2022 2022. Lecture Notes in Networks and Systems, vol 559. Springer, Cham. https://doi.org/10.1007/978-3-031-18461-1_49

Conference Presentations

Department of Chemistry

T. Mohammed, T., Thongs, J.

The Evaluation of Arsenic (Total and Inorganic) In Poultry And Poultry Processed Products Both Imported And Locally Sourced.

National Health Research Conference, October 18-19, 2021, USC Trinidad and Tobago

Department of Mathematics & Statistics

D. Comissiong

Cracking Down on Criminals: A Mathematical Model Exploring Strategies for Curbing Criminal Behaviour.

ENOC 2022: 10th European Nonlinear Dynamics Conference
Lyon France, July 17-22, 2022.

D. Comissiong

An Analysis of Passing Networks in Football.

ATINER -18th Annual International Conference on Sport & Exercise Science

Athens Greece 25-28 July 2022

Conference Papers & Proceedings

Department of Chemistry

D.A. Augustine, G-A. Bent and P.N. Nelson

Novel insight into the reaction between the amino acid methionine and food toxin acrylamide.

4th Food Structure and Functionality Forum Symposium August 2021 (online)

Taylor, R.A., *From Solid State Chemistry to Metal Chalcogenide Optoelectronic Materials*, Graduate Student Appreciation Week, Joint School of Nanoscience and Nanoengineering, North Carolina A&T State University and University of North Carolina Greensboro, April 7, 2022. (Keynote talk)

Min, Z., Singh-Wilmot, M.A., **Taylor, R.A.**, Lancashire, R., *X-Ray Powder Diffraction Peak Predictor for Characterization of Isorecticular Metal-Organic Frameworks: An Online Resource to the topic Energy and Materials*. 2nd Commonwealth Chemistry Posters – Building Networks to Address the Goals Virtual Symposium, September 2021. (Poster)

Benjamin, L., **Taylor, R.A.**, *Mesomorphic and Optoelectronic Properties of Salen-type Biphenyl Salicylaldimine Complexes Towards Functional Stimulus Response Soft Materials*, 2nd Commonwealth Chemistry Posters – Building Networks to Address the Goals Virtual Symposium, September 2021. (Poster)

Ghany, S.G., **Taylor, R.A.**, *Utilizing environmentally-friendly copper-based chalcogenide colloidal quantum dots for more spectrally adapted efficient greenhouses for improved crop yield*, 2nd Commonwealth Chemistry Posters – Building Networks to Address the Goals Virtual Symposium, September 2021. (Poster)

Chandoo, S., **Taylor, R.A.**, *Tuneable structural and optoelectronic properties of doped and undoped Ternary 2D Transition Metal Dichalcogenides for Photovoltaic applications*, 2nd Commonwealth Chemistry Posters – Building Networks to Address the Goals Virtual Symposium, September 2021. (Poster)

Department of Computing & Information Technology

N. Ramkissoon and **W. Goodridge.**

Legitimacy: An Ensemble Learning Model for Credibility Based Fake News Detection

2021 International Conference on Data Mining Workshops ~ICDMW 2021~December 7 – 10, 2021, Auckland, New Zealand.

N. Ramkissoon and **W. Goodridge.**

Veracity: A Fake News Detection Architecture for MANET Messaging
2021 International Conference on Information, Cybernetics, and Computational Social Systems (ICCSS) ~ICCSS 2021~December 10 – 12, 2021, Beijing, China.

N. Ramkissoon and **W. Goodridge.**

Detecting Fake News in MANET Messaging Using an Ensemble Based Computational Social System

2021 21st International Conference on IMAGE ANALYSIS AND PROCESSING ~ICIAP 2021~May 23 – 27, 2022, Lecce, Italy.

S. Ramoudith, **P.Hosein** and I. Rahaman

The Optimal Stopping Criteria for a Customer Contact Strategy in Targeted Marketing

9th International Conference on Operations Research and Enterprise Systems,
Virtual Event, July, 2022

N. Dookeram, Z. Hosein and **P. Hosein**

A Recommender System for the Upselling of Telecommunications Products

24th International Conference on Advanced Communications Technology Feb, 2022

M. Rivas, R. Roach and **P. Hosein**

Premium Rate Services Fraud Detection

24th International Conference on Advanced Communications Technology Feb, 2022

R. Ramjattan, **P. Hosein** and N. Henry

Using Chatbot Technologies to help Individuals make Sound Personalized Financial Decisions

IEEE International Humanitarian Technology Conference (Virtual Event), Dec, 2021

P. Hosein

On the Prediction of Automobile Insurance Claims: The Personalization versus Confidence Trade-Off

IEEE International Conference on Technology Management, Operations and Decisions,
(Virtual Event), Nov, 2021

G. Ollivierre, I. Rahaman and **P. Hosein**

Anomaly Detection of Marine Seismic Airgun Signatures using Semi-Supervised Learning

IEEE International Conference on Technology Management, Operations and Decisions,
(Virtual Event), Nov, 2021

Publications & Conferences

K. Baboolal and **P. Hosein**

Material and Cost Estimation of a Customized Product based on the Customer's Description

International Conference on Intelligent Data Science Technologies and Applications, (Virtual Event), Nov, 2021

Mohammed, K. Ramlal, **P. Hosein** and N. Henry

Marketing Channel Recommendations in Banking

International Conference on Intelligent Data Science Technologies and Applications, (Virtual Event), Nov, 2021

R. Guerrero, N. Dookeram and **P. Hosein**

A Decision Tree Approach to Customer Surveys

International Conference on Intelligent Data Science Technologies and Applications, (Virtual Event), Nov, 2021

K. Nichols and **P. Hosein**

Estimating Deforestation using Machine Learning Algorithms

International Conference on Intelligent Data Science Technologies and Applications, (Virtual Event), Nov, 2021

Hosang, N. Hosein and P. Hosein

Using Recurrent Neural Networks to approximate orientation with Accelerometers and Magnetometers

International Conference on Intelligent Data Science Technologies and Applications, (Virtual Event), Nov, 2021

Rahaman and **P. Hosein**

A Model for Optimizing Article Recommendation for Reducing Polarization

IEEE/ACM International Conference on Advances in Social Network Analysis and Mining, Nov, 2021

D. Ramsook, D. Mahatoo and **P. Hosein**

Figure of Merit for a Multi-Generation Network

17th International Conference on Network and Service Management, Izmir, Turkey, Oct, 2021

P. Hosein, G. Sewdhan and A. Jalal

Soft Churn: Optimal Switching between Prepaid Data Subscriptions on E-SIM supported Smartphones

The 8th IEEE International Conference on Data Science and Advanced Analytics, Porto, Portugal, Oct, 2021

K. Ramlal and **P. Hosein**

A Personalized Overdraft Protection Framework

The 8th IEEE International Conference on Data Science and Advanced Analytics, Porto, Portugal, Oct, 2021

Daniel, A., and **P. S. Mohammed**.

A Dual-Attentive Approach to Style-Based Image Captioning Using a CNN-Transformer Model.

CVPR 2022 Workshop on Transformers for Vision.

Department of Life Sciences

Ramdass, A. C., and Rampersad, S. N. (2022) *Can Internal Transcribed Spacer (ITS) phylogeny resolve hydrocarbonoclastic yeast strains?* (Abstract and poster) American Microbiological Society (ASM) Annual Meeting ASM Microbe 2022; Jun 09 - 13, 2022 in Washington, Dist of Col, USA.

Ramdass, A. C., and Rampersad, S. N. (2022) *Novel use of Alamar Blue redox indicator to assess crude oil degradation potential of indigenous filamentous fungi isolated from an asphaltic mud volcano in Trinidad.* (Abstract and poster) American Microbiological Society (ASM) Annual Meeting ASM Microbe 2022; Jun 09 - 13, (2022) in Washington, Dist of Col, USA.

Ramdass AC and Rampersad SN. *Poster and abstract presentation Winner of the 'Audience Choice' poster competition for the poster: Molecular Signatures of Janthinobacterium lividum in Contaminated Soil from Trinidad Support High Potential for Crude Oil Metabolism (Part 2).* Poster presented at: Annual Genomics of Energy & Environment Meeting; 2021 Aug 30-Sept 1; Berkeley, CA, USA.

Jayaraj, J. *Seaweed extracts as plant biostimulants, bioelicitors and stress alleviators.* NABS-International Conference on "Life Sciences: Contemporary approaches in Biological Science for Food, Health, Nutrition Security and Conservation of Biodiversity" August 26 to 28, 2021, Annamalai University, India.

Jayaraj, J. *Developing Integrated disease management systems for sustainable vegetable production in the tropics.* Indian Phytopathological Society - National Conference on Plant Health and Food Security: Challenges and Opportunities, March 25-27, 2021, ICAR-IARI, New Delhi, India.

Jayaraj, J. *Sargassum- Agricultural uses – Seaweed extracts as plant biostimulants.* Sargassum risks across the Atlantic: building capacity for Transformational Adaptation in the Caribbean and West Africa (SARTRAC) Workshop, July 18, 2022, Mona, Jamaica.

Hulme, M.F. *CBD and the Pawi: What's being done, and what should be done, to ensure the resilience of the critically endangered Trinidad Piping-guan.* American Ornithological Society & BirdsCaribbean Ornithological Conference, 27th June-2nd July, San Juan, Puerto Rico

Department of Physics

N Zyuzikov,

Modern problems of genetics, radiobiology, radioecology and evolution (GRRE2021), V International conference Nor Amberd, Armenia. 5-9 October 2021.

A. Aiyejina, E. Wyke, and **R. Andrews**

Near-Perfect Noisy NOON State Transfer in a Chain of Coupled Three-Level Atoms

Frontiers in Optics + Laser Science 2021, C. Mazzali, T. (T.-C.) Poon, R. Averitt, and R. Kaindl, eds., Technical Digest Series (Optica Publishing Group, 2021), paper JTU1A.86.

E. Wyke, A. Aiyejina, and **R. Andrews**

Suppression of the Transfer Efficiency for a Noisy Path-Entangled Single Photon in the LHI-RC Unit

Frontiers in Optics + Laser Science 2021, C. Mazzali, T. (T.-C.) Poon, R. Averitt, and R. Kaindl, eds., Technical Digest Series (Optica Publishing Group, 2021), paper JW7A.6.

Publications & Conferences

Other Publications

Internet Publications

N. Ramkissoon, and **W. Goodridge**.

"An Ensemble Based Computational Social System for Fake News Detection in MANET Messaging." (2022).

Abstracts

Wayne Goodridge, **Koffka Khan**, Kumar Sookram, Kwasi Edwards, (2022). A token-based smart contract management (TSM) DApp for vehicle loans, Frontiers of Research in Caribbean Science and Technology (FORECAST) Conference, pp. 50.

CARiLIT Team (A. Coy, **P.S. Mohammed**, Y. Lewis-Fokum, P. Skerrit, A. Mohammed, and A. Hosein), (2022). Bright Start- The Culturally Responsive Reading E-Tutor Intervention. Presented at the School of Education Research Days, April 06, 2022, The University of the West Indies, St. Augustine.

Mohammed, P.S., A. Coy, A. Hosein, P. Skerrit, A. Mohammed, and Y- Lewis-Fokum. (2021). Toward Recovery of Learning Loss Due to COVID-19: The Use of an Intelligent Spelling Tutor. Presented at the 6th Annual Child Research Conference, SALISES, November 24-25, 2021, The University of the West Indies, Mona, Jamaica.

Vijayanandh Rajamanickam, Jayaraj Jayaraman and Adesh Ramsubhag, (2022). Foliar disease detection and quantification using Image Analysis tools, Frontiers of Research in Caribbean Science and Technology (FORECAST) Conference, pp. 83.

FACULTY OF SOCIAL SCIENCES

Journal Publications

Balwant, P.T. (2021) Teaching flexible leadership via an experiential learning exercise: A simulation and self-reflection. *Journal of Education for Business* 97(8): 562-574.

Balwant, P. T., R. Doon. (2021) Alternatives to the conventional 'Oxford' tutorial model: A scoping review. *International Journal of Educational Technology in Higher Education* 18(1), Article 29.

Camacho, Luis J., **M. Rambocas**, M. Bank. (2022) When do consumers perceive supermarket chains as good corporate citizens? Evidence from the Dominican Republic during Covid-19. *Journal of the Academy of Business and Emerging Markets (ABEM)* 2(1): 45-58.

Douchty, Crystal, **M. Rambocas**. (2022) Exploring how social media marketing influences small business performance amidst the COVID-19 pandemic in Trinidad and Tobago. *Journal of the Academy of Business and Emerging Markets (ABEM)* 2(1): 45-58.

Esnard, T., F. Alladin, K. Samlal. (2021) Statistical anxiety, competency, and expectations for performance in Introductory Statistics: A survey of social science students in a Caribbean Institution of Higher Education. *Statistics Research Journal* 20(1): 1-21.

Foo, C.E., E. Avleeva, G.R. Schaefer, **S. Cabralis.** (2021) Role Modelling as a Motivating Factor on International Students Athletes Recruitment. *Journal of Contemporary Athletics* 15(2): 117-127.

Pacheco, B.G., S. Akhter. (2021) Overcoming Economic Liminality: Internationalization of B2B SME's From a Small Emerging Economy. *Critical Perspectives on International Business* 18(5): 617-639.

Ramdeo, S., P. Balwant, S.H. Fraser. (2022) Not another team assignment! Student perceptions towards teamwork at university management programs. *Higher Education, Skills and Work-Based Learning* 12(6): 1122-1137.

Ramkissoon-Babwah, N., S.P. Astuti. (2021) Company perspectives from Trinidad and Tobago on renewable energy management systems and energy efficiencies. *Sustinere: Journal of Environment and Sustainability* 5(3): 166-183.

Roach, C.M.L, M. Sabharwal, R. Abraham, W. Charles-Soverall. (2022) Does the Public Service Motivation Model Hold in the Caribbean? *Review of Public Personnel Administration* 42(3): 514-536.

Singh, R. (2022). "Predictors of Organizational Embeddedness: An Investigation into Perceived Organizational Support and Organizational Trust". *The International Journal of Human Resources Development and Management* 21(4): 252- 266.

Syed, S., F. Sh. Ahmad, S.R.H. **Shah.** (2022) The influence of attitude on consumers' autonomy to make halal food purchase intention: An overview of self-determination in a collectivist culture. *International Business Research* 15(3): 75-84.

Syed, S., F.S. Ahmad, S.R. **Shah.** (2021) Tapping into food industry: A comparative dual-model study of religion and culture on food products' purchase intention. *Journal of Mediterranean Tourism Research* 1(1): 1-11.

Publications & Conferences

Syed, S., **S.R. Shah**, F.S. Ahmad. (2021) The Influence of Intrinsic Motivational Forces on Consumers' Product Purchase Intentions. *Journal of Mediterranean Tourism Research* 1(2): 70-80.

Virgil, C.C-L., **M. Nathai-Balkissoon**, K. F. Pun. (2022) Climate change adaptation planning in selected Caribbean countries: Is enough being done? *West Indian Journal of Engineering* 44(2): 80-91.

Wallace, W. C. (2021) Exploring recruits' motivations to enter policing in Small Island Developing States: The case of the Trinidad and Tobago Police Service. *International Journal of Police Science & Management* 23(4): 345-357.

Wallace, W. C., A. Harry, R. Ramdass, S. Salina. (2021) Transitioning to Online Teaching, Learning, and Assessment in the COVID-19 Era: Understanding Student and Faculty Perspectives. *UWI Quality Education Forum* 25: 51-77.

Wilson, M., S. Mitchell, P. Northover, **T. Esnard**, N. Plummer. (2021) Revaluating Afrodescendant Seeds in the Age of the Plantationocene: Bridging climate and reparatory justice. Reflections on COP26 from the Geographies of Social Justice Research Group, University of Edinburgh. 12-15.

Wilson, S. (2022) Student Perception of Learning versus Performance in Project Management Education. *Journal of Management and Business Education* 5(1): 48-62.

Books

Bissessar, A., C.A.S. Boodram, and D. Bobb (2021) *Marginalized Groups in the Caribbean: Gender, Policy, and Society*. Lexington Books. p204.

Bissessar, A. and **Huggins, C.** (2022) *Domestic Violence in the Anglophone Caribbean: Consequences and Practices*. Switzerland: Palgrave Macmillan. p255.

Bissessar, A. and **Huggins, C.** (2021) *Gender and Domestic Violence in the Caribbean*. Switzerland: Palgrave Macmillan. p345.

Gomes, S. (2021) *Cosmopolitanism from the Global South: Caribbean Spiritual Repatriation to Ethiopia*. Cham: Palgrave Macmillan. p222.

Knight J., Noboa F. and **Pacheco B.G** (2022). *Marketing in Latin America and the Caribbean: Contemporary Cases*, London: Routledge, UK. p.228

Lewis-Cameron, A., Jordan, LA. and Roberts, S. (eds). (2021) *Managing Crises in Tourism: Resilience Strategies from the Caribbean*. Palgrave Macmillan. p.334

Tudoroiu, T. (2022) *China's Globalization from Below: Chinese Entrepreneurial Migrants and the Belt and Road Initiative*, Abingdon, Oxon: Routledge. p340.

Tudoroiu, T. and A. Kuteleva (2022) Ed. *China in the Global South: Impact and Perceptions*. Singapore: Springer. p.512.

Wallace, W.C. (2021) *Guns, Gun Violence and Gun Homicides: Perspectives from the Caribbean, Global South and Beyond*. Palgrave Macmillan, Cham. p360.

Trends in the Judiciary: Interviews with Judges Across the Globe, Volume Four. Eds. **Wallace, W. C.**, Berlin, M. M., & Das, D. K. (2022). Routledge: New York. p422.

Chapters in Books

Cabralis, S. (2022) "Trinidad & Tobago National Sport Facilities: Build Them and They will Come... They Say?" in *Case Studies in Sport Marketing 4th Edition*. Ed. Brenda G Pitts. FIT Publishing, USA. ISBN 978-1-885-69347-1

Cameron, A., Jordan, L., Brown, T., Frontin, B. (2022) "A Critical Analysis of the Impact of Airbnb on the Traditional Accommodation Sector: A Case Study of Trinidad and Tobago." In *The Sharing Economy and the Tourism Industry: Perspectives, Opportunities and Challenges*. Eds. Roya Rahimi, Babak Taheri, and Dimitrios Buhalis. Goodfellow Publishers. ISBN 978-1-915-09706-4

Esnard, T. (2021) The Education system of Trinidad and Tobago. In *The Education system of the Americas. Global Education Systems*. Eds. Sieglinde Jornitz and Marcelo Parreira do Amaral. Cham: Springer. ISBN 978-3-030-41650-8.

Gomes, S. and **Sanatan, A.** (2021) Symbolic Violence in the Postcolonial Anglo-Caribbean. In *Gender and Domestic Violence in the Caribbean*. Eds. Ann Marie Bissessar and Camille Huggins. New York: Palgrave. ISBN 978-3-030-73471-8.

Jordan, LA., T. Jack (2021) From Face to Face to Meeting in Space: The Impact of COVID-19 on the Events Industry in Trinidad and Tobago. In *COVID in the Islands: A comparative perspective on the Caribbean and the Pacific*. Eds. Yonique Campbell and John Connell. Palgrave Macmillan, Singapore. ISBN 978-981-16-5285-1

Kuteleva, A. and **Tudoroiu, T.** (2022) Not the Relationship You Would Expect: China, Sub-National Actors, and Structural Factors. In *China in the Global South: Impact and Perceptions*. Eds. Theodor Tudoroiu and Anna Kuteleva. Singapore: Springer. ISBN 978-9-811-91343-3.

Moses-Wothke, J., Wothke A., **Jordan, LA.** (2021) An Integrated Path Towards a Resilient Tourism Sector in North-East Tobago. In *Managing Crises in Tourism*. Eds. Acolle Lewis-Cameron, Leslie-Ann Jordan and Sherma Roberts. Palgrave Macmillan, Cham. ISBN 978-3-030-80237-0

Pacheco B. G. and J. Paniculangara. (2021) "Leveraging Malicious Joy to Influence Consumer Word-Of-Mouth Transmittal in Social Networks" in *Advances in Digital Marketing and eCommerce*. Ed. Francisco J. Martínez-López and David López López. Springer Proceedings in Business and Economics, Springer International Publishing. ISBN 978-3-030-76519-4.

Ramdeo, S., R. Singh. (2022) "Cyberbullying in the Workplace". In *Research Anthology on Combating Cyber Aggression and Online Negativity*. United States: IGI Global. ISBN 978-1-668-45594-4

Ramdeo, S., R. Singh. (2022) Book Chapter, "Leave me Alone! Sexual Bullying at Work", In *Handbook of Research on Bullying in Media and Beyond*. Ed. Gulsah Sari. United States: IGI Global. ISBN 978-1-668-45426-8

Publications & Conferences

Singh, R., S. Ramdeo. (2021) 'I am not okay! Employee Mental Health and the COVID-19 pandemic: The Role of Human Resource Management (HRM)'. In *The Impact of COVID-19 on Human Resource Management*. Ed. Bhavna Mehta. ISBN 978-1-8381524-4-4

Ramdeo, S., R. Singh. (2021). 'Out with the Old, In with the New: Innovative Work Practices for Navigating the Unknown'. In, *The Impact of COVID-19 on Human Resource Management*. Ed. Bhavna Mehta. ISBN 978-1-8381524-4-4

Roach, C.M.L., S.S. Upoma, M. Sabharwal, H. Renderos. (2021) Human Resource Reforms in South Asia, the Caribbean, Latin America, and the United States. In *Handbook of Public Administration* 4th Edition. Eds. W.B Hildreth, G.J. Miller and E.A. Lindquist. Routledge: Taylor and Francis Group. ISBN 978-1-498-75003-5.

Smith S., **Jordan, LA.** (2021) Collaborative Tourism Entrepreneurship as a Community Resilience Strategy: A Case Study of Castara, Tobago. In *Managing Crises in Tourism*. Eds. Acolla Lewis-Cameron, Leslie-Ann Jordan and Sherma Roberts. Palgrave Macmillan, Cham. ISBN 978-3-030-80237-0

Tudoroiu, T. (2022) Normative Power China, Subnational Agency, and Structural Factors in the Global South. In *China in the Global South: Impact and Perceptions*. Eds. Theodor Tudoroiu and Anna Kuteleva. Singapore: Springer. ISBN 978-9-811-91343-3.

Tudoroiu, T., A.R. Ramlogan. (2022) China's Tied Aid to Trinidad and Tobago: Impact and Perceptions. In *China in the Global South: Impact and Perceptions*. Eds. Theodor Tudoroiu and Anna Kuteleva. Singapore: Springer. ISBN 978-9-811-91343-3.

Wallace, W.C. (2022) Introduction. In *Guns, Gun Violence and Gun Homicides: Perspectives from the Caribbean, Global South and Beyond*. Ed. Wendell C. Wallace. Palgrave Macmillan, Cham. ISBN 978-3-030-84517-9.

Wallace, W.C. (2022) Conclusion. In *Guns, Gun Violence and Gun Homicides: Perspectives from the Caribbean, Global South and Beyond*. Ed. Wendell C. Wallace. Palgrave Macmillan, Cham. ISBN 978-3-030-84517-9.

Wallace, W.C., A.N. Nurse-Carrington, A. Harry. (2022) An Evaluation of Guns, Gun Violence and Gun Homicides in Trinidad and Tobago. In *Guns, Gun Violence and Gun Homicides: Perspectives from the Caribbean, Global South and Beyond*. Ed. Wendell C. Wallace. Palgrave Macmillan, Cham. ISBN 978-3-030-84517-9.

Book Reviews

Gomes, S.

Book Review of *Departing Black Britons: Portraits of Deportation to Jamaica*.

Manchester University Press, Manchester, 2020. p307.

In *The Sociological Review* [online], August 3, 2022

Conference Papers & Proceedings

B. Ragoonath

"From State-Building to Nation-Building"

History Fest 2022.

April 20-22, 2022.

C.M.L. Roach

"Pathways to NASPAA Accreditation: Challenges and Opportunities from South Asian and Caribbean Public Administration Programmes"; NASPAA South Asia Conference, Preparing Public Leaders in South Asia for a Post-Pandemic World. *Virtual*, Dhaka, Bangladesh. November 2021.

C.M.L. Roach

"Reframing Global Competencies in Public Administration Programmes across Cultural Boundaries" Caribbean Studies Association Annual Conference. Reframing Caribbean Influences on Global Spaces: Critically Engaging Perspectives on Human Geography and Risks, Political Economy and Technology. *Virtual*, Jamaica. May 2022

Geneve Phillip-Durham

AML in a Digital World
Caribbean Anti-Money Laundering Virtual Conference 2022, March 16th-17th, 2022

I. Rampersad

The Impact of Politics, Ethnicity and Class on the Caribbean Court of Justice
The International Political Science Association 26th World Congress of Political Science. USA, Online, July, 2021.

I. Rampersad

Challenging the Doctrine of Separation of Powers in the Commonwealth Caribbean.
The International Political Science Association 26th World Congress of Political Science. USA, Online, July, 2021.

L. Francis-Blackman

Migrants, the Informal Sector and Prostitution in Trinidad and Tobago.
Migrant Virtual Conference, Online Conference, Rabat Morocco. June 17th 2022

S. Cabralis

Cabralis, S., Foo, C. & Schaefer, G. (June 2022): "Sports Facility Governance" North American Society for Sports Management 2022 Conference (Peer reviewed)

Guerra, K., Russell, A., Foo, C., Schaefer, G., Reily, E., & Cabralis, S.: "Participant Perspectives on The Inclusion of Transgender Athletes in Elite Sport" 2022 EASS & ISSA World Congress of Sociology of Sport (Peer reviewed)

T. Tudoroiu

'The Belt and Road Initiative, Populism, and Democracy in Europe: A Case Study,'
28th International Conference of Europeanists, Lisbon, Portugal, June 29-July 1, 2022.

T. Tudoroiu

'Ant Traders, Transnational Activists, and Cosmopolitans: Four Globalizations from Below,' International Studies Association 63rd Annual Convention, Nashville, Tennessee (held online), March 30-April 2, 2022.

T. Tudoroiu

'The Russian Invasion: Causes, Warfare, and Consequences,' Vice-Chancellor's SALISES Forum The Russian-Ukraine War. Geo-Strategic Perspectives: Interests and Implications, UWI, St. Augustine, June 10, 2022.

Publications & Conferences

V. Agosto, T. Esnard, D. Cobb-Roberts, and Z. Karanxha
Troubling the ideal mentor within indigenous and heritage knowledge
The American Educational Research Association (AERA) 2022
Conference
Virtual Conference Presentation, 2022

F. Alladin

Understanding Food Consumption Before and During the
COVID-19 Pandemic: Preliminary Findings From A Trinbagonian
Sample.
Eleventh International Conference on Food Studies
Danish School of Education, Aarhus University, Copenhagen,
Denmark
Virtual Conference Presentation, October 28-30, 2021

C.A.S. Boodram, S. Williams-Goddard, J. De Coteau
Social Innovation in Constructing Caribbean Practice in
Communities during COVID-19: Lessons learnt from Selected
Cases in Trinidad and Tobago.
4th Department of Behavioural Sciences' Conference, The UWI,
St. Augustine Campus
Virtual Conference Presentation, April 8, 2022

L. Bristol, T. Esnard, J. De Four Babb, T. Coye, M. Dickerson, L.
Perez, and L. Ibrahim-Joseph
Culturally affirming mentoring relationships: Practices of
resilience and recovery for women scholars
The 2022 American Educational Research Association (AERA)
Virtual Meeting
Virtual Presentation, April 21-26, 2022

T. Esnard

Vaccine Uptake: Structural, Cultural and Psycho-social
considerations
"Deconstructing the New Normal: Prospects and Challenges"
Department of Behavioural Sciences' Conference, The UWI, St
Augustine Campus
Virtual Conference Presentation, April 7, 2022

S. Gomes

Competing Nationalisms: Venezuelans and Spanish-speakers in
Postcolonial Trinidad and Tobago
Brown University Sawyer Seminar and Watson Institute for
Public Policy, Histories of Migration and Violence in Latin
America and the Caribbean
Virtual Conference Presentation, March 18, 2022

M. Neptune-Figaro

Migration to the Middle East explained: Motivations for
Trinbagonians travels to the Islamic State
American Criminology Association 2021
Chicago, USA, November 20, 2021

R. Seepersad

Social Solidarity and Crime The COVID-19 Effect in Jamaica and
Trinidad and Tobago
4th Biennial Conference, Department of Behavioural Sciences,
The University of the West Indies
St. Augustine, Trinidad, April 7-8, 2022

R. Seepersad

Monitor of the Use of Lethal Force in Latin America and the
Caribbean: A Comparative Study of Brazil, Chile, Colombia, El
Salvador, Jamaica, Mexico, Trinidad and Tobago and Venezuela.
Presentation of the results for Trinidad and Tobago.

Laboratório de Análise da Violência (LAV-UERJ) Brazil / CIDE México / UNAM México. Open Society Foundations
Virtual Conference Presentation, January 26, 2022

W.C. Wallace

A Historical Analysis of Crime in Trinidad and Tobago from Independence to Present.

Roundtable 3, History Fest 2022 - Department of History, Faculty of Humanities and Education, The University of the West Indies
St. Augustine, Trinidad, April 22, 2022

W.C. Wallace

Creating a Domestic Violence Safety Plan for Individuals in the Caribbean.

The Department of Behavioural Sciences, 4th Biennial Conference: An Interdisciplinary Conference, The University of the West Indies
St. Augustine Campus, Trinidad, April 7-8, 2022

W. C. Wallace and K. County

Policing the Pandemic: Public Views of the Police Approach to Enforcement of Covid-19 Public Health Regulations in Trinidad and Tobago.

2021 International Criminology Conference
Virtual Conference Presentation, November 5, 2021

W. C. Wallace

Policing the Pandemic: Public Views of the Police Approach to Enforcement of Covid-19 Public Health Regulations in Trinidad and Tobago

2021 International Criminology Conference
Virtual Conference Presentation, November 5, 2021

M. Wilson, S. Mitchell, P. Northover, T. Esnard, R. Segal, A. Richards and H. Johnson

Afro descendant Seed infrastructures: Decolonizing the Conversation, Use, and Value of Caribbean Plant Genetic Resources.

Paper presented at the Anthropology and Conservation Virtual Conference

Virtual Conference Presentation, October 25-29 2021.

M. Ramesar, C. Descartes, H. Pulwarty, F. Frederick-Davis, S. Dwarika

What do we know? Knowledge, Attitudes and Practice about COVID-19 among Tertiary Students.

4th Biennial Conference, Department of Behavioural Sciences, The University of the West Indies
St. Augustine, Trinidad, April 7-8, 2022.

Other Publications

Seminars, Webinars, Workshops

C. Ali, N. Chapman, A. Mungal, and S. Gomes

Postcolonial Nationalism and the Boundaries of Belonging in Trinidad and Tobago

Institute of Historical Research and School of Advanced Study, University of London

Webinar, March 14, 2022

C.A.S. Boodram

Participant in the UNESCO/UWI Dialogue Session 2 on Equitable Recovery in Caribbean SIDS - "What a Way to Make a Living:

(Re)-Imagining Work-Life Systems"

Workshop, September 9, 2021

Publications & Conferences

Wendell C. Wallace

An Evaluation of the Impact of the COVID-19 Pandemic on Crime Trends using Criminological Theory and Data (Not Conjecture) Police Research Group, Lecture Series. First Annual Lecture. The University of the West Indies, St. Augustine, Trinidad, August 20, 2021

Internet Publications

Bunwaree, S. and Slatter, C., Routledge. **Francis-Blackman, L.**, and Andrew, A. (2022) *The Informal Sector, the Transgender Worker and External Constraints in Trinidad and Tobago*. *Caribbean Justice Forum*. <https://cclcs.edu.tt/wp-content/uploads/2022/06/z-Vol2.-No1.pdf>

Modeste-James, A. & **Huggins, C.** (2022) Barriers to healthcare for Venezuelan migrants: physician's perspective. *International Journal of Health Governance*. *Online First*. <https://www.emerald.com/insight/2059-4631.htm>

Singh, R. (2021), "Reluctant stayers do not get what they want": the relationship between procedural injustice and workplace incivility", *International Journal of Emerging Markets*. <https://doi.org/10.1108/IJOEM-04-2020-0391>

Wallace, W.C. (2021) Exploring recruits' motivations to enter policing in Small Island Developing States: The case of the Trinidad and Tobago Police Service. *International Journal of Police Science & Management*. <https://doi.org/10.1177/14613557211021862>.

Wallace, W.C. (2021) Students' Perspectives of Group Work: The case of Trinidad and Tobago. *Journal of Further and Higher Education*. DOI: [10.1080/0309877X.2021.1985978](https://doi.org/10.1080/0309877X.2021.1985978)

Wallace, W.C., Neptune-Figaro, M. (2021). A Comparison of Women's Motivations to Enter the Police Profession in the Caribbean. *Feminist Criminology*. *Online First*. <https://doi.org/10.1177/15570851211058789>

Wallace, W.C. (2021) Students' Perspectives of Group Work: The case of Trinidad and Tobago. *Journal of Further and Higher Education*. *Online First*. <https://doi.org/10.1080/0309877X.2021.1985978>

Wallace, W.C., K. County, K. Lancaster-Ellis. (2022) Policing the pandemic: Public views of the police approach to enforcement of Covid-19 public health regulations in Trinidad and Tobago. *Journal of Crime and Justice*. *Online First*. <https://www.tandfonline.com/doi/abs/10.1080/0735648X.2021.2002178>

Journalism/Public Commentary

Gomes, S. and Elahie, E. (2021) Ernesto's Story: A Venezuelan Migrant's Tale of Survival and Community in Trinidad & Tobago. *UWI Today*, October 2021.

Technical Reports

Seepersad, Randy. (2022). *Factors which can lead to the prisons becoming an unmanageable space*. Unpublished Technical Report Prepared for the Integrated Threat Assessment Center (ITAC), Office of the Prime Minister.

Seepersad, Randy. (2022). *Monitor of the Use of Lethal Force in Latin America and the Caribbean: Trinidad and Tobago*. Unpublished Technical Report Prepared for Laboratório de Análise da Violência (LAV-UERJ) Brazil; CIDE México; UNAM México.

Mohor, Alejandra, Alex Camilo Duran Montaña, **Randy Seepersad**, et al. (2022). Monitor of Use of Lethal Force in Latin America and the Caribbean: A Comparative Study of Brazil, Chile, Colombia, El Salvador, Jamaica, Mexico, Trinidad and Tobago and Venezuela. [Monitor Fuerza Letal]. doi:10.13140/RG.2.2.14207.48802.

CENTRES & UNITS

ANSA McAL Psychological Research Centre

Books & Book Chapters

Chadee, D. (2022). Theories in Social Psychology. In D. Chadee (Ed.), *Theories in Social Psychology*. (2nd ed.). CA: Wiley-Blackwell.

Chadee, D. & Chadee, M. (2022). Towards an affect arousal reactance theory: Reactance theory revisited. In D. Chadee (Ed.), *Theories in Social Psychology* (2nd ed.). CA: Wiley-Blackwell.

Kostic, A., Pejičić, M. & **Chadee D.** (2022). Negative emotions, facial cues and relationships: Facing the end. In R.J. Sternberg and A.Kostic (Eds), *Nonverbal Communication in Close Relationships: What words don't tell us*, London: Palgrave.

Centre for Health Economics (HEU)

Conference Presentations

A. La Foucade, C. Laptiste, K. Theodore, A. Cumberbatch, **K. Gittens-Baynes**, V. Beharry, S. Gabriel, C. Metivier, P. Edwards-

Wescott, M. Ash, A. Dhanoo, D. Bethelmie

An Estimation of the Disease and Economic Burden Associated with Sugar Sweetened Beverage Consumption in Trinidad and Tobago.

Caribbean Healthy Food Policy Research Symposium, CAIHR and HCC, April 2022.

Publications & Conferences

K. Gittens-Baynes, A. La Foucade, C. Laptiste, A. Alcaraz, K. Theodore, A. Cumberbatch, V. Beharry, S. Gabriel, C. Metivier, P. Edwards-Wescott and D. Bethelmie.

Estimating the Disease Burden and the Economic Cost associated with Sugar Sweetened Beverage Consumption in Trinidad and Tobago.

The Bitter Side of Sugar Sweetened Beverages: Utilizing Fiscal Policy to address Sugar Sweetened Beverage Consumption in the Caribbean Webinar
Virtual, September 2021

S. Gabriel

Identifying and Assessing the Determining Factors of Unhealthy Dietary Habits among

a Sample of Survey Participants in Jamaica.

Latin America & Caribbean eSymposium
Virtual, June 2022.

R. Mc Lean

Effective Advocacy for NCD-Free TT: Are we there yet?

Trinidad and Tobago NCD Alliance (TTNCDA)
Virtual, January 2022.

R. Mc Lean

The Regional HIV and Human Rights Response
Caribbean Vulnerable Communities (CVC) Board of Directors Meeting.

Jamaica Pegasus Hotel, July 2022

Technical Presentations

K. Gittens-Baynes

*Findings of Barbados Financing Study- Burden of Disease Report Barbados.*2021.

Ministry of Health, Government of Barbados,
Virtual Presentation, October 2021

Centre for Language Learning (CLL)

Journal Publications

Carter, B., Daly, A., & Parey, B. (2022). Conducting a language audit in the absence of linguistic census data. *Inaugural Issue of the Journal of the Caribbean Association of Professional Statisticians*, 1(1) 12-27.

Dallier, M. (2021) Enhancing the French Language Learning Experience with the WhatsApp application. In Proceedings of the fourth edition of the International Conference “MOOCs, language learning and mobility: design, integration, reuse ». Organized by the Universities of Grenoble Alpes (FR), Alicante (ES) and the Open University (UK) together with Federazione Nazionale Insegnanti Centro di iniziativa per l'Europa (IT). European Erasmus and project MOOC2MOVE (hal-03216063) Retrieved from <http://hal.univ-grenoble-alpes.fr/M2M/>

Mideros, D. (2022). Teacher roles in promoting out-of-class learning: Lessons from a Spanish for specific purposes course. *Studies in Self-Access Learning Journal*, 13(2), 248–261. <https://doi.org/10.37237/130205>

Dofs, K., & **Mideros, D.** (2022). Introduction. *Studies in Self-Access Learning Journal*, 13(2), 177–181. <https://doi.org/10.37237/130201>

Mideros, D., & Dofs, K. (2022). Grongingen 2021. *Studies in Self-Access Learning Journal*, 13(2), 305–306. <https://doi.org/10.37237/130208>

Mideros, D. (2021) Am I an autonomous language learner? Self-perceived autonomy in Trinidad and Tobago: Sociocultural Perspectives. Hong Kong, Hong Kong: Candlin & Mynard. <https://www.candlinandmynard.com/mideros.html>

Mideros, D. (2021) A convener's afterword. AILA RenLA Newsletter.

<https://renautonomy.files.wordpress.com/2021/12/aila-renla-newsletter-2021.pdf>

Conference Papers & Proceedings

B. Carter

Online Seminar for Local Directors of the Confucius Institute, Chinese International Education Foundation & East China Normal University, September 06-17, 2021, East China Normal University, Shanghai, China.

B. Carter

EAQUALS 30th Anniversary Conference (hybrid), October 22-23, 2021, Belfast, UK.

MLA 2022 Convention: Multilingual US. The Modern Language Association Annual Convention, January 06-09, 2022, Washington DC.

B. Carter

Congrès Mondial de Linguistique Française (World Congress of French Linguistics), July 04-08, 2022, Université d'Orléans, Orléans, France.

M. Dallier

AFLS2022- Association of French Language Studies (AFLS) conference, University of Exeter, UK, 18-20 July 2022. Influence de l'héritage historique, linguistique et culturel de Trinité-et-Tobago sur les apprenants de français. (Influence of the historical, linguistic and cultural heritage of Trinidad and Tobago on French learners.)

M. Dallier

UWI Postgraduate Certificate in University Teaching and Learning (CUTL) candidate- CETL, The University of the West Indies, St. Augustine Campus. 2021-2022

M. Dallier

Monthly Doctoral workshop- Agence Universitaire de la Francophonie (AUF Caribbean) Oct. 2021-June 2022

M. Dallier

Webinaire IFprofs #25 - La classe inversée dans un contexte de développement du distanciel- (The flipped classroom in an online teaching environment) Organized by Institut français, Paris. April 29 2022.

D. Mideros

Mideros, D. (2021). *Sociocultural agency: A vehicle to enhance our understanding of learner autonomy*". Paper presented at the 7th LAB Sessions Autonomy in Research and Practice, December 3, 2021, Research Institute for Learner Autonomy Education (RILAE), Kanda University of International Studies, Chiba, Japan <https://youtu.be/xrmuFsuKua8>

Publications & Conferences

Mideros, D. & Palma, P. (2021). *Autonomous learners of Spanish in an Anglophone Caribbean context: A phenomenological study in Trinidad & Tobago*. Paper presented at the symposium "Navigating learner autonomy in a multicultural and multilingual world – A reflective dialogical approach" at the World Congress of Applied Linguistics (AILA 2021) University Groningen, The Netherlands, August 15 – 20.

Palma, P. & **Mideros, D.** (2021) *Out-of-class learning in a Spanish for specific purposes course: A case study in the aviation industry in Trinidad and Tobago*. Paper presented at the symposium "Autonomy in the time of complexity in a changing world" at the World Congress of Applied Linguistics (AILA 2021) University of Groningen, The Netherlands, August 15 – 20.

Institute for Gender & Development Studies (IGDS)

Books & Book Chapters

Nixon, Angeliq and Rosamond S. King. 2021. "Embodied Theories: Local Knowledge(s), Community Organizing, and Feminist Methodologies in Caribbean Sexuality Studies" in Kempadoo, Kamala and Halimah De Shong, Eds. *Methodologies in Caribbean Research on Gender and Sexuality*. Kingston, Jamaica: Ian Randle. **(Reprint)**

Barratt, Sue Ann. 2021. "Contending with Binaries: Rethinking Mixedness Through the Caribbean Dougl'a Body". in Encarnacion Guitierrez-Rodriguez, Rhoda Reddock. Eds. *Decolonial Perspectives on Entangled Inequalities: Europe and The Caribbean*. Anthem Press.

Barratt, Sue Ann. 2021. "Are We There Yet? Contemporary Struggles for Gender Justice and the Legacy of Caribbean Feminisms". in Josephine Beoku-Betts and Akosua Adomako Ampofo. Eds. *Producing Inclusive Feminist Knowledge: Positionalities and Discourses in the Global South Vol 31*, Emerald Publishing Company UK, Advances in Gender Series.

Conference Presentations

Tyrone Ali and Sue Ann Barratt

Indigenous peoples, business, autonomy and the human rights principles of due diligence including free, prior and informed consent".

21st Session of the United Nations Permanent Forum on Indigenous Issues 2022 (UNPFII21) IGDS in collaboration with Akilah Jaramogi, Fondes Amandes Community Reforestation Project. Theme: "United Nations Headquarters, New York. 25 April-6 May 2022.

G. Hosein

"Adolescent Sexualities in Trinidad and Tobago: Vulnerabilities and Violence, Desire and Denial". "Arts Activism to Address GBV: Youth Voices and Experiences from Trinidad and Tobago. Co-presenter: Kelsi Delaney. May 31 2022.

46th Annual CSA Conference 2022, 30 May – 3 June, 2022, Jamaica

G. Hosein

Keynote Speaker. 4th International Conference on Gender and Sexuality: Constructs and Narratives of Gender and Sexuality. Keynote Title: Vulnerabilities and Violence, Desire and Denial: Constructs and Narratives of Adolescent Sexualities in the Caribbean - October 15, 2021

G. Hosein

Canadian Association for Social Work Education Conference (Online). Paper presented: Men Engaged in Gender Justice in the Caribbean, Pakistan, Nepal and Canada: Documenting Personal Transformation through Digital Stories (Project partners: Liza Lorenzetti, Aamir Jamal, Gabrielle Hosein, Muhammed Ibrar, Rita Dhungel, Jeff Halvorsen, Janelle Lee Pong, Kamal Sehgal, Sarah Thomas. Co- authors: Peter Weller, Abbas Mancey) -June 3 2021

A.Nixon

"Caribbean Migration and Sexual Politics: Challenging Heteropatriarchy, Racism and 'Trafficking'" - Paper co-authored with Kamala Kempadoo. Brown University - Mellon Sawyer Seminar, "Histories of Migration and Violence in Latin America and the Caribbean. 18 March 2022.

A.Nixon

Invited Speaker. "Restorative, Transformative, and Community Justice." The Reykjavik Dialogue and Conference – Renewing Activism to End Gender Based Violence. In Person and Virtual Gathering. Online via Zoom and YouTube. 16 August 2021.

Other Publications

Invited Plenaries

A.Nixon Invited Speaker. "At the Vanguard: Honouring Caribbean Climate and Environmental Activists and Researchers." Caribbean Feminisms – Environmental and Climate Justice Series.

Presented by Black Women Radicals. Webinar Live via Zoom and Facebook. 28 September 2021.

A.Nixon. Plenary Speaker. "The Era of People and the Planet: Ecofeminism and Intersectional Environmentalism." Global South Women's Forum on Sustainable Development. International Women's Rights Action Watch Asia Pacific. Online via Zoom and YouTube. 12 September 2021.

Newspaper Articles

A.Nixon. "The Crisis of Now, GBV and, State Accountability." *Stabroek News*. Co-authored with Renuka Anandjit. 6 December 2021

Factsheets

A.Nixon. "Sexual Rights and Justice" Factsheets – prepared with Psyche Gonzales. December 2021. https://issuu.com/igdssau/docs/sexual_rights_factsheet_2021

Institute of International Relations (IIR)

Journal Publications

Bardouille, Nand C. (2022). Turning to Rabat: Explaining the Elevation of Moroccan Relations with Caribbean Countries, *The International Spectator*, DOI:10.1080/03932729.2022.2058274

Bishop M., **Byron J.**, Corbett J., Veenendaal W. (2021). "Secession, Territorial Integrity and (Non)-Sovereignty: Why do some separatist movements in the Caribbean succeed and others fail?" *Ethnopolitics*, October 01, <https://doi.org/10.1080/17449057.2021.1975414>.

Publications & Conferences

Montoute A., (2021) A reply to 'The Dragon in the Caribbean: the future of CARICOM–China trade relations' by Baksh et al, *Global Discourse: An interdisciplinary journal of current affairs*, Special Issue: Exploring Contemporary Caribbean Global Political Economic Relations: China in the Caribbean, Volume 11, no.4, pp. 607-611.

Jessica, J., J. Laguardia Martinez, A. Montoute and **Keron N.**, (2021). Impacts of COVID-19 in the Commonwealth Caribbean: key lessons, *The Round Table*, 110:1, 99-119.

Johnson, E.J., **Chami, G.**, and Aleisha Udit. "A Study on How Domestic Violence Impacts on Physical, Psychological and Financial Conditions of Women and Children." *Journal of Human Rights and Social Work* 7: 72-83. September 2021. <https://doi.org/10.1007s41134-021-00192-y>

Biermann, F., Oomen, J., Gupta, A., Ali, S. H., Conca, K., Hajer, M. A., Kashwan, P., Kotzé, L. J., Leach, M., Messner, D., Okereke, C., Persson, Å., Potočnik, J., Schlosberg, D., **Scobie, M.**, & VanDeveer, S. D. (2022). Solar geoengineering: The case for an international non-use agreement. *Wiley Interdisciplinary Reviews: Climate Change*, e754. <https://doi.org/10.1002/wcc.754>

Karlsson-Vinkhuyzen, S., Rietig, K. and **Scobie, M.** (2022). Agency dynamics of International Environmental Agreements: actors, contexts, and drivers. *Int Environ Agreements* <https://doi.org/10.1007/s10784-022-09571-w>

Scobie M., Sustainable development Goals and sustainability governance: Norms, implementation pathways and Caribbean small Island developing states. *Glob Policy*. 2021 - 00:1–16. <https://doi.org/10.1111/1758-5899.13050>

Scobie, M., (2021). Treaty Preambles and The Environmental Justice Gap. *Global Policy* 12 (3):273-285. doi: <https://doi.org/10.1111/1758-5899.12948>.

Chan, Sander, Idil Boran, Harro van Asselt, Paula Ellinger, Miriam Garcia, Thomas Hale, Lukas Hermwille, Kennedy Liti Mbeva, Ayşem Mert, Charles B. Roger, Amy Weinfurter, Oscar Widerberg, Paulette Bynoe, Victoria Chengo, Ayman Cherkaoui, Todd Edwards, Malin Gütschow, Angel Hsu, Nathan Hultman, David Levaï, Saffran Mihnar, Sara Posa, Mark Roelfsema, Bryce Rudyk, **M. Scobie**, and Manish Kumar Shrivastava. (2021). "Climate Ambition and Sustainable Development for a New Decade: A Catalytic Framework." *Global Policy* n/a (n/a). doi: <https://doi.org/10.1111/1758-5899.12932>.

Pihl, E., E. Alfredsson, M. Bengtsson, K. Bowen, V. Broto, K. Chou, H. Cleugh, K. Ebi, C. Edwards, E. Fisher, **M. Scobie**, (2021), "Ten New Insights in Climate Science 2020-a Horizon Scan." *Global Sustainability* 4: 1-65.

Books & Book Chapters

Byron J. 2022. "The Evolving Contours of Citizenship and Sovereignty in the Contemporary Caribbean" in Henke H., Reno F. eds. *New Political Culture in the Caribbean*. Kingston Jamaica: The University of the West Indies Press, pp. 59 - 97.

Lewis P., Gilbert-Roberts T., **Byron J.** eds. 2022. *Caribbean Regional Integration: Uncertainty in a Time of Global Fragmentation*. Kingston Jamaica: UWI Press.

Chami, G. 2021. "Civil resistance (non-violent action) as an avenue for building peace within societies, in Nalanda Roy, ed., *Nonviolent Resistance in the Contemporary World*, Oxon and New York: Routledge, pp. 6 – 30.

Dookeran, W. 2022. *The Caribbean on the Edge: The Political Stress of Stability, Equality and Diplomacy*, Toronto: University of Toronto Press.

Laguardia-Martinez, J. 2022. 'La presencia china en Trinidad y Tobago (1950-2020)' in *La presencia china en el Gran Caribe: Ayer y hoy*, Mukien Adriana Sang Ben, eds, Santo Domingo: Centro de Estudios Caribeños, pp. 681–746.

Laguardia-Martinez, J. 2022. 'La presencia china en Trinidad y Tobago (1805-1950)' in Mukien Adriana Sang Ben, eds, *La presencia china en el Gran Caribe: Ayer y hoy*, pp. 245–308, Santo Domingo: Centro de Estudios Caribenos.

Laguardia-Martinez, J. 2022. 'The Political Economy of Contemporary Cuba' in Hans Burchardt and Johanna Leinius, eds, (Post-)colonial Archipelagos. Comparing the Legacies of Spanish Colonialism in Cuba, Puerto Rico and the Philippines, pp. 76–95, Ann Arbor: University of Michigan Press.

Laguardia-Martinez, J. and Milagros Martinez Reinoso, 2021. 'The Foreign Policy of the Cuban Revolution: Half a Century of Cuba-Caribbean Relations' in Raymond Mark Kirton and Marlon Anatol, eds, *Contemporary Issues in Caribbean and Latin American Relations*, pp. 69-104, Penn: Lexington Books,

Andrea Ordoñez, Ez Llanos, Rob Raven, Magdalena Bexell, Brianna Botchwey, Basil Bornemann, Jecel Censoro, Marius Christen, Liliana Di'Az, Thomas Hickmann, Kristina Jo'Nsson, Imme Scholz, **Michelle Scobie**, Yixian Sun, John Thompson, John Thwaites and Abbie Yunita (2022), in Biermann, Frank, Thomas Hickmann, and Carole-Anne Sénit, eds, *Implementation at Multiple Levels. The Political Impact of the Sustainable Development Goals: Transforming Governance Through Global Goals?* pp. 59-91. Cambridge: Cambridge University Press.

Ma'Ns Nilsson And Marjanneke J. Vijge, With Ivonne Lobos Alva, Basil Bornemann, Karin Fernando, Thomas Hickmann, **Michelle Scobie** and Sabine Weiland (2022). *Interlinkages, Integration and Coherence. The Political Impact of the Sustainable Development Goals: Transforming Governance Through Global Goals?* Biermann, Frank, Thomas Hickmann, and Carole-Anne Sénit, eds, pp. 92-115. Cambridge: Cambridge University Press.

Conference Papers & Proceedings

J. Byron-Reid, Main Presenter, "La Guerre en Ukraine: Quels Defis pour la Caraïbe?" Université Antilles CAGI/CORECA Webinar, March 22, 2022.

J. Byron-Reid, Panellist, "The Russian Invasion: Geopolitical and Geo-economic Implications for the Caribbean" CPC/IIR Webinar, June 23, 2022

G. Chami and Christopher Brown. "Nobody Wants to be Here and Nobody Wants to Leave: Venezuelan Migration on in the Age of Covid, the limits of State Capacity, and the Deepening of Social Unrest in Trinidad and Tobago", Panel on Perspectives on Migration, International Studies Association March 30, 2022.

J. Laguardia Martinez, "Caribe insular ante la COVID-19: la crisis como oportunidad de transformación", paper presented at 9^a Conferencia Latinoamericana de Ciencias Sociales organized by CLACSO, Mexico June 2022.

J. Laguardia Martinez, "Assessing CELAC's contribution to regional integration", paper presented at 46th Annual Conference, Caribbean Studies Association (CSA), May 30-June 3, 2022.

Publications & Conferences

J. Laguardia Martinez, “Actualidad y retos de la CARICOM a 50 años de su creación”, paper presented at the International LASA Virtual Congress, May 5-8, 2022.

J. Laguardia Martinez, “Migraciones intrarregionales y violencia en el Caribe insular del siglo XXI” paper presented at the Coloquio Internacional Crisis societal y pandemia en el Gran Caribe, organized by the CELA-FCPyS, Universidad Autónoma de México (UNAM), December 6-7, 2021.

J. Laguardia Martinez, “El turismo y el Caribe en tiempos de pandemia”, paper presented at the XV International Conference of Caribbean Studies El Caribe y los impactos de la pandemia de COVID-19, Cátedra de Estudios del Caribe ‘Norman Girvan’, University of Havana, December 6, 2021.

J. Laguardia Martinez, “Impactos de la COVID-19 en las industrias culturales en el Caribe”, paper presented at the VI Taller Regional Virtual Raíces, Cultura e Identidad organized by the Universidad de Guantánamo, October 12– 15, 2021.

J. Laguardia Martinez, “Cuba y sus relaciones con el Caribe de la CARICOM”, paper presented at the XXIV Annual Conference of the Cuba Research Forum, Centre for Research on Cuba & Cuba Research Forum, University of Nottingham, September 7-10, 2021.

A. Montoute, “Assisting the Police: The Role of Private Security Organizations in the Caribbean”, One-Day Virtual Policing Symposium: Insights into Policing Caribbean Communities in the 21st Century, The University of the West Indies St Augustine Campus, Police Research Group, April 27, 2022

A. Montoute and Gonzales-Vincent Ruben, “A Caribbean Perspective on China - Caribbean Relations”. Presentation, 44th Annual Conference of the Society for Caribbean Studies (UK), July 5 - 10, 2021.

R. Gonzales-Vincent and **A. Montoute**, “Global before Global IR: Critical Caribbean Thought and the view from the margins”. Conference of the European Consortium for Political Research, August 30 - September 3, 2021.

K. Niles, “The COVID Pandemic Internationalisation of TT Carnival Brand and Prospective Implications for Trinidad and Tobago”. Hosting and managing the Carnival Experience in Trinidad and Tobago in 2022 and Beyond, Sir Arthur Lewis Institute of Social and Economic Studies (SALISES), The University of the West Indies, St. Augustine, 18 February 2022.

M. Pawinski, Sherian Bachan, Michal Pawinski. “Response Assessment of the CARPHA and MoH of T&T: A Case Study of ZIKA and COVID-19 Outbreaks.” Paper presented at 3rd Jagiellonian Interdisciplinary Security Conference, Innovative Security Governance: Interdisciplinary Perspectives. 28-29 September 2021 (Online event).

D. Seerattan, Optimal Foreign Exchange Reserves in Small Open Economies: The Case of the Caribbean at the 52nd Annual Monetary Studies Conference, November 1-3, 2021.

D. Seerattan, “Hurricane Clauses in Debt Contracts in the Context of Unsustainable Debt in Barbados and Grenada”, joint UNCTAD/ECLAC workshop on the role of innovative financing instruments to build forward better in Latin America and the Caribbean, May 19-20, 2022.

Other Publications

Technical Reports

Byron J., Laguardia-Martinez J. 2021. "Experience with South-South Cooperation: The Case of Barbados" in Oviedo E. (Coordinator) *Evaluating South-South Cooperation in six Latin American and Caribbean Countries: Shared Challenges for Implementation of the 2030 Agenda for Sustainable Development*, (LC/TS.2021/121), Santiago, Economic Commission for Latin America and the Caribbean (ECLAC), pp. 23 – 54.

Byron J., Laguardia-Martinez J. 2021. "South-South Cooperation: The Case of Jamaica" in Oviedo E. (Coordinator) *Evaluating South-South Cooperation in six Latin American and Caribbean Countries: Shared Challenges for Implementation of the 2030 Agenda for Sustainable Development*, (LC/TS.2021/121), Santiago, Economic Commission for Latin America and the Caribbean (ECLAC), pp. 109 – 138.

Seerattan, D., S. McLean, P. Cousins, R. Reid, J. Cork, J. Jhinkoo-Ramdass, J.Pratt, L. Edwards, C. Walkes, A. Juan, R. Prince S. El Hage, E. Werson, S. Branch and K. Finch. 2022. Caribbean Regional Financial Stability Report 2020. CARICOM Group of Central Bank Governors.

Matthew Bishop, Cristina Argudin, Rachid Bouhia, George Carter, Jack Corbett, Courtney Lindsay, **Michelle Scobie**, Emily Wilkinson, Just Transitions in Small Island Developing States (SIDS), The British Academy, London doi.org/10.5871/just-transitions /9780856726750.001.

Scobie, M. 2022. Contributing Author- Intergovernmental Panel on Climate Change- Sixth Assessment Report, Working Group II- Chapter 3- Oceans and Coastal Ecosystems and their Services.

Blog

Nand C. Bardouille (20 "Caribbean Small States' Foreign Policy Roles Spotlighthed," blog post on the Journal of the Istituto Affari Internazionali blog, April 6, 2022.

Commentary/Analysis

Nand C. Bardouille, "CARICOM-AU Relations: Summitry in the Making," *AfronomicsLaw Symposium: Prospects for Deepening Africa-Caribbean Economic Relations* blog, September 6, 2021.

Jacqueline Laguardia Martinez, Dave Seerattan and Annita Montoute. 'The Russia-Ukraine War: Global and Regional Impact', opinión piece in UWI Today, Trinidad and Tobago, March 27, 2022, p.14.

Seismic Research Centre (SRC)

Journal Publications

Thompson, James O., **Contreras-Arratia, Rodrigo,** Befus, Kenneth S., Ramsey, Michael S. (August 2022). Thermal and seismic precursors to the explosive eruption at La Soufrière Volcano, St. Vincent in April 2021. *Earth and Planetary Science Letters*, Volume 592. <https://doi.org/10.1016/j.epsl.2022.117621>

Delgado, Francisco., **Contreras-Arratia, Rodrigo,** Samsonov, Sergey. (July 2022) Magma buoyancy drives rhyolitic eruptions: A tale from the VEI 5 2008-2009 Chaitén eruption (Chile) from seismological and geodetic data. *Earth and Planetary Science Letters*, Volume 590. <https://doi.org/10.1016/j.epsl.2022.117564>

Publications & Conferences

Novoa C., Gerbault M., Remy D., Cembrano J., Lara L.E., Ruz Ginouves J., Tassara A., Baez J.C., Hassani R., Bonvalot S., **Contreras-Arratia, R.** (2022) Activation of margin-parallel shear zones favors explosive eruptions: could the Liquiñe-Ofqui Fault System promote the 2011 Cordón Caulle eruption? *Earth and Planetary Science Letters*. <https://doi.org/10.1016/j.epsl.2022.117386>

E.P. Joseph, M. Camejo-Harry, T. Christopher, R. Contreras-Arratia, S. Edwards, O. Graham, M. Johnson, A. Juman, J.L. Latchman, L. Lynch, V.L. Miller, I. Papadopoulos, K. Pascal, R. Robertson, G. A. Ryan, A. Stinton, R. Grandin, I. Hamling, M-J. Jo, J. Barclay, P. Cole, B.V. Davies, and R.S.J. Sparks (2021). Responding to eruptive transitions during the 2020–2021 eruption of La Soufrière volcano, St. Vincent. *Nature Communications*. July 2022. DOI: 10.1038/s41467-022-31901-4

EM van Rijnsingen, E Calais, R Jolivet, JB de Chabaliere, **R Robertson, GA Ryan,** S Smithe (2022): Ongoing tectonic subsidence in the Lesser Antilles subduction zone. *Geophysical Journal International*, ggac192, <https://doi.org/10.1093/gji/ggac192>

Graham, Omari., Edwards, Stacey., Robertson, Richard. (July 2022). More than a warning: Expanding the role of communication in Eastern Caribbean volcano science. *Frontiers in Earth Science*. <https://doi.org/10.3389/feart.2022.907559>

Melekhova, Elena., **Camejo-Harry, Michal.**, Blundy, Jon., Wallis, Simon R., Annen, Catherine., Kunz, Barbara E., Jenner, Frances E., Thirlwall, Matthew. (May 2022). Arc Crust Formation of Lesser Antilles Revealed by Crustal Xenoliths from Petit St. Vincent. *Journal of Petrology* Volume 63, Issue 5. <https://doi.org/10.1093/ptetrology/egac033>

Neuberg, J.W., Taisne, B., Burton, M., **Ryan, G.A.**, Calder, E., Fournier, N., Collinson, A.S.D. (May 2022). A review of tectonic, elastic and visco-elastic models exploring the deformation patterns throughout the eruption of Soufrière Hills volcano on Montserrat, West Indies. *Journal of Volcanology and Geothermal Research*. Volume 425. <https://doi.org/10.1016/j.jvolgeores.2022.107518>

Barclay, Jenni., **Robertson, Richard.**, Scarlett, Jazmin P., Pyle, David M., Armijos, Maria Teresa (April 2022) Disaster aid? Mapping historical responses to volcanic eruptions from 1800–2000 in the English-speaking Eastern Caribbean: their role in creating vulnerabilities. *Disasters*, Volume 46. <https://doi.org/10.1111/disa.12537>

Basant, Racine A., Lynne, Bridget Y., Ramsook, Ryan., **Ryan, Graham A.**, Blake, Oshaine O., Utley, James E.P. (March 2022) Utilizing cores for characterising the temperature and permeability regimes in a litho-stratigraphic model of the Montserrat geothermal system, Montserrat (Lesser Antilles arc, West Indies). *Geothermics*. <https://doi.org/10.1016/j.geothermics.2021.102341>

Graham, Omari., Edwards, Stacey., Robertson, Richard. (January 2022). Managing stakeholder relationships for improved situation awareness during volcanic emergencies: an Eastern Caribbean case study. *International Journal of Disaster Risk Reduction*. Volume 67. doi: <https://doi.org/10.1016/j.ijdrr.2021.102656>.

Lorenzo Fedele, Paul D Cole, Claudio Scarpati, **Richard EA Robertson** (2021): [Petrological insights on the last 1000 years of explosive activity at La Soufrière volcano, St. Vincent \(Lesser Antilles\)](https://doi.org/10.1016/j.lithos.2021.106150). *Lithos*, 392-393, <https://doi.org/10.1016/j.lithos.2021.106150>

Conference Papers & Proceedings

H. Frey, M. Manon, **T. Christopher, and E. Joseph**. 2022. Degassing and crystallization during magma ascent in the initial explosive phases of the 2021 eruption of La Soufriere, St. Vincent. Goldschmidt 2022, Honolulu, Hawaii, USA. July 10 – 15, 2022. Oral Presentation.

Erouscilla P. Joseph, Michelle V. Forbes, **Stacey Edwards**, and Elizabeth Riley. Management of the crisis response to the 2020 – 2021 eruption of La Soufrière volcano, St. Vincent. Cities on Volcanoes 11, 13-17 June 2022, Heraklion, Greece. Oral Presentation.

K Pascal, J Hickey, A. Johnson, S. Hreinsdottir, N. Fournier, J. Gottsmann, B. J. Williamson, R. Syers, J. Seyedi. Volcano-deformation monitoring and modelling during prolonged periods of low surface activity: twelve years of slow inflation at Soufrière Hills volcano, Montserrat. Cities on Volcanoes 11, 13-17 June 2022, Heraklion, Greece. Poster.

Pascal K., Barclay J., Christie J., Armijos Burneo, T., McMahon, W. Mangler M., Hogg J., D’Cruz A., Dupeyron A., Rostant D., **Robertson R.** ‘The Electric Volcano’: a place to explore effective knowledge for managing future disaster risk. Cities on Volcanoes 11, 13-17 June 2022, Heraklion, Greece. Oral Presentation.

O. Graham and S. Edwards. VALS In Caribbean Volcanic Crises: St. Vincent 2020 – 2021. Volcano Alert Level Systems: Exploring Standardisation, Networks, And Resources Pre-Conference Workshop. Cities on Volcanoes 11, 13-17 June 2022, Heraklion, Greece. Oral Presentation.

Johnson, M., R. Robertson, J. Barclay, T. Armijos, R. Few, J. Phillips, 2022. Changing Landscapes SVG – experiences in post disaster community engagement and monitoring extensive hazards. PS4 Special Session on Lessons from Social Sciences and related disciplines. Cities on Volcanoes 11, Heraklion, Crete, Greece, 13-17 June 2022. Oral Presentation.

Robertson, R., M. Johnson, 2022. An Insight into the Volcano Ready Communities Project in St. Vincent and the Grenadines. S3.15 Creating “Volcano-Ready” Communities: Communicating for Resilience and Response. Cities on Volcanoes 11, Heraklion, Crete, Greece, 13-17 June 2022. Oral Presentation.

Miller, V., S. Jenkins, M. Johnson, C. Magill, T. Wilson, 2022. Impact and damage to Societal Assets of the 2020-21 La Soufriere Volcanic Eruption. PS1 Special Session on Recent eruptions: hazards, impacts and consequences. Cities on Volcanoes 11, Heraklion, Crete, Greece, 13-17 June 2022. Oral Presentation.

Lara Mani, **Stacey Edwards, Alia Juman, Thalia Thomas** and **Erouscilla Joseph**. Lessons from the 2020-2021 eruption of La Soufriere St. Vincent on ‘what works’ for volcanic crisis communications. Cities on Volcanoes 11, Heraklion, Crete, Greece, 13-17 June 2022. Oral Presentation.

Gezahegn Yirgu , Supriyati Andreastuti , Maria-Antonia Bornas Gezahegn Yirgu , Eslina Garaebiti, **Omari Graham, Victoria Miller**, Adalbert Syavulisembo Muhindo, José Luis Palma, Natalia Pardo, Claudia Inés Rivera, Amdemichael Zafu Tadesse, Blas Ureña. INVOLC: The IAVCEI International Network for the Advancement of Global Volcanology in Resource-Constrained Settings. Cities on Volcanoes 11, Heraklion, Crete, Greece, 13-17 June 2022. Oral Presentation.

Publications & Conferences

Jenni Barclay, **Richard Robertson**, Jazmin Scarlett, David Pyle, Teresa Armijos. Disaster Aid? Mapping historical responses to volcanic eruptions from 1800-2000 in the English-speaking Eastern Caribbean: their role in creating vulnerabilities. Cities on Volcanoes 11, Heraklion, Crete, Greece, 13-17 June 2022. Oral Presentation

Jenni Barclay, Roger Few Roger, M. Teresa Armijos, Jerry Phillips, **Richard Robertson**, David Pyle, Anna Hick, Sarah Brown. Livelihoods, wellbeing and their role in evacuation behaviour: a global analysis. Cities on Volcanoes 11, Heraklion, Crete, Greece, 12-17 June 2022. Poster Presentation

Eleanor Tennant, Susanna, F Jenkins, **Victoria Miller**, Bihan Wen, Thomas Wilson. Towards a rapid tephra fallout building impact assessment using unmanned aerial vehicles and computer vision. Cities on Volcanoes 11, Heraklion, Crete, Greece, 12-17 June 2022. Poster Presentation

Lara Mani, **Stacey Edwards**, **Alia Juman**, **Thalia Thomas** and **Erouscilla Joseph**. Evaluating the crisis communications campaign during the 2020-2021 eruption of La Soufriere, St Vincent. The EGU General Assembly 23-27 May 2022, Vienna, Austria. Geophysical Research Abstracts, Session EOS1.7. Oral Presentation.

Ryan, G.A., **Stinton, A.**, Bass, V., **Christopher, T.**, Fergus, M., **Miller, V.**, **Pascal, K.**, Retourné, K., **Stewart, R.**, Syers, R. and Williams, P., (2022). OVSM-IPGP-PREST Scientific Meeting "Volcanism and Seismicity of the Antilles", May 13 - 19, 2022 in Saint-Pierre, Martinique. The Never-Ending Eruption of the Soufriere Hills Volcano, Montserrat, W.I. Oral Presentation

Erouscilla Joseph. 2022. Management, Monitoring & Impact of the 2021-21 La Soufrière, St. Vincent eruption. 12 April 2022. University of Puerto Rico – Mayaguez Campus (Webinar).

Erouscilla Joseph. 2022. Management, Monitoring & Impact of the 2021-21 La Soufrière, St. Vincent eruption. 10 March 2022. Columbia University. Webinar.

Horwell, C.J., Damby, D.E, Stewart, C., Barclay, J., Baxter, P.J., Davies, B.V, **Joseph, E.P**, Mangler, M., Marvin, L., Najorka, J., Peek, S., Tunstall, N. Respiratory health hazard assessment of volcanic ash (and associated dome rock) from the 2020-2021 eruption of La Soufrière, St Vincent. Annual Aerosol Science Conference 2022: 4 – 5 November, 2021. Bristol. UK. Poster Presentation.

Frey, **Christopher**, Manon, Walters, Wright, Levins and **Joseph**. 2021 explosive eruption at La Soufriere, St. Vincent: constraints on eruptions triggers from monitoring and petrology. Geological Society of America (GSA) 2021, Portland, Oregon, USA. October 10 – 13, 2021. Oral Presentation.

Basant, R.A. and **Ryan, G.A.**, (2021). Interpreting the Structural features of the Montserrat Geothermal System Using Machine Learning. World Geothermal Congress. Reykjavik, Iceland (virtual), October 2021.

Special Presentations and Invited Lectures

E. Joseph 2022.OVSM-IPGP-PREST Scientific Meeting "Volcanism and Seismicity of the Antilles", May 13 - 19, 2022 in Saint-Pierre, Martinique. Public lecture: The Saint-Vincent Soufrière eruption (2020-2021): Chronology, impacts and lessons for the prevention of volcanic risks in the Antilles. *Oral Presentation.*

E. Joseph. 2022. Management, Monitoring & Impact of the 2021-21 La Soufrière, St. Vincent eruption. 12 April 2022. University of Puerto Rico – Mayaguez Campus (Webinar).

E. Joseph. 2022. Management, Monitoring & Impact of the 2021-21 La Soufrière, St. Vincent eruption. 10 March 2022. Columbia University (Webinar).

R. Robertson 2021 Feature Address at the Closing Ceremony of the RSS Training Institute Crisis Emergency Management for Executive Leadership Course. Regional Security System Headquarters, Barbados, 22 September 2021.

R. Robertson 2021 Navigating the Disaster Risk Landscape in an Independent St. Vincent and the Grenadines. The UWI Open Campus Annual Independence Lecture, Kingstown, St. Vincent & the Grenadines, 25th October 2021.

R. Robertson 2021 Navigating the Disaster Risk Landscape in an Independent St. Vincent and the Grenadines. The UWI Open Campus Annual Independence Lecture, Kingstown, St. Vincent & the Grenadines, 25th October 2021.

Other Publications

Technical Reports

E. Joseph, R. Robertson, R. Stewart - 2020/12/29 – 2021/07/31 La Soufrière volcano, St. Vincent Scientific Advisories 202011_SVG_04 - 202111_SVG_117. IVHNN Briefing note on interpreting volcanic gas measurements. Tamar Elias (US Geological Survey), Claire J. Horwell (Durham University, UK). Reviewed by **Erouscilla Joseph (UWI SRC), Victoria Miller (Montserrat Volcano Observatory), Sally Edwards (PAHO), Carol Stewart (Massey University, NZ), and Evgenia Ilyinskaya (University of Leeds, UK).** Version 1.5. https://www.ivhnn.org/uploads/IVHNN_briefing_note_interpreting_gas_measurements_FINAL.pdf

Press Releases and Non-refereed Articles

UWI Today article: “The UWI Seismic Research Centre receives global award for La Soufriere response” published 10th July 2022.

Sir Arthur Lewis Institute of Social & Economic Studies (SALISES)

Journal Publications

McCree, R. (2021). Advancing Caribbean sport scholarship: the Mandles revisited, Sport in Society. DOI: [10.1080/17430437.2021.1973435](https://doi.org/10.1080/17430437.2021.1973435).

McCree, R. (2021). Netball Nationalism in Trinidad and Tobago: Content Analysis of Press Coverage Related to the 1979 World Netball Tournament, *The International Journal of the History of Sport*. DOI: [10.1080/09523367.2021.1996353](https://doi.org/10.1080/09523367.2021.1996353)

Mohan, P. (2022). Climate finance to support Caribbean Small Island Developing States efforts in achieving their Nationally Determined Contributions in the energy sector. *Energy Policy* 169: 113208.

Mohan, P. (2022). Implementing nationally determined contributions under the Paris agreement: an assessment of climate finance in Caribbean small island developing states. *Climate Policy*. DOI: [10.1080/14693062.2022.2101978](https://doi.org/10.1080/14693062.2022.2101978)

Mohan, P. (2022). National REDD+ initiatives in Caribbean SIDS to enhance NDC implementation. *Forest Policy and Economics* 144: 102844.

Publications & Conferences

Mohan, P. (2021). Sustainable tourism and the Sustainable Development Goals in sub-national island jurisdictions: The case of Tobago. *Island Studies Journal* 17(2). DOI: 10.24043/isj.183

Kutscher, E and **Parey, B.** (2022). A scoping review of mixed methods rigour in inclusive education: application of the Rigorous Mixed Methods Framework. *International Journal of Inclusive Education*. <https://doi.org/10.1080/13603116.2022.2100491>.

Carter, BA, Daly, A and **Parey B.** (2022). Conducting a language audit in the absence of linguistic census data. *Caribbean Association of Professional Statisticians*, 1(1): 12-27.

Parey, B. (2022). Measurement, associated factors, and gender implications of care views toward older persons with disabilities: The case of Trinidad. *Ageing International*, <https://link.springer.com/article/10.1007/s12126-022-09490-w>.

Parey, B and Sinanan, L. (2022). Healthcare barriers among working-age persons with disabilities in Trinidad. *Qualitative Health Research*, 32(3): 479-490.

Motilal, S, R. Khan, **G. St. Bernard**, M. A. Ivey & S. D. Reid (2022) Positive influences of the COVID-19 pandemic on community dwelling adults in Trinidad and Tobago: a cross sectional study, *Journal of Mental Health*, DOI: [10.1080/09638237.2022.2118690](https://doi.org/10.1080/09638237.2022.2118690)

Books & Book Chapters

Mohan, P. (2022). Islands and the Sustainable Development Goals (SDGs): A holistic perspective. Annual Report on Global Islands 2021, Publisher: Institute of Island Studies at the University of Prince Edward Island, Canada

Parey, B. (2021). Promoting inclusive education through national assessments: Required Caribbean efforts. In F. Morris (Ed.). *Inclusive Education. The Key to Social Transformation* (pp. 143-157). Jamaica: Ian Randle Publishers.

St. Bernard, G; S. Chankar and S. King (2022) Restoring the Lives of Boys on the Margins in Trinidad and Tobago: Lessons from State-Led and Civil Society Interventions in *Ramona Biholar and Dacia L. Leslie (eds)*, *Critical Caribbean Perspectives on Preventing Gender-Based Violence*, pp. 170-187. Routledge

St. Bernard, G. (2022) Understanding the Demographic Imperative – Implications and Projected Population Dynamics for Youth Policy in Terri-Ann Gilbert-Roberts (eds), *Youth Participation in the Caribbean – Politics and Development*, pp. 31-60. Routledge

St. Bernard, G. (2021) Trends and Patterns for Gun Homicide in Trinidad and Tobago During the Early Years of the Twenty-First Century: A Data-Driven Analysis in *Wendell C. Wallace (ed)*, *Guns, Gun Violence and gun Homicide – Perspectives from the Caribbean, Global South, and Beyond*, pp. 55-90, Palgrave Macmillan

Conference Presentations

R. Mc Cree

Soccer, Civil Rights and Race in America, 1967-1984: A Caribbean Perspective

Paper delivered at Annual Conference of the North American Society for Sociology of Sport. Las Vegas, Nevada, USA
November 2022

P. Mohan

The impact of tropical storms on international trade: evidence from Eastern Caribbean SIDS Paper presented at IDB Research Network Project: Implications of Climate Change and Natural Disasters for Latin America and the Caribbean First Seminar
June 2022 (virtual)

P. Mohan

The macroeconomic impact of natural disasters: Evidence from hurricanes in Caribbean SIDS Paper presented at Social Vulnerabilities and Climate Change Adaptation: Gender inequality, poverty and exclusion
Nottingham Trent University
April 2022

P. Mohan

Public Financing for Sustainable Development in the COVID-19 and War era and Beyond: The Case of Trinidad and Tobago
Presented at SALISES Forum Public Financing for Sustainable Development in the COVID-19 and War era and Beyond
April 2022 (virtual).

Mohan, P and E. Strobl.

Tourism and Tax Revenue: Evidence from Stay-over Tourists in the Eastern Caribbean.

Paper presented at the 53rd Annual Monetary Studies Conference
Trinidad and Tobago Central Bank, Port of Spain, Trinidad and Tobago.
November 2021

P. Mohan and R. Ramsawak.

Coping with Lockdowns during COVID-19: The Caribbean Experience-based on Google Trends Searches

Sir Arthur Lewis Institute of Social and Economic Studies, SALISES 22nd Annual Conference, Re-imagining Development for Small Island Developing States (SIDS): Post Pandemic Transformation
Hilton Barbados Resort, Barbados
September 2021

P. Mohan

Labor market dynamics, economic diversification and innovation
Presented at SALISES Forum Budgeting for Development in a Global Pandemic
October 2021 (virtual).

B. Parey

Accessibility of Houses in Trinidad: Implications for Older Persons With Disabilities.

European Conference on Aging & Gerontology
United Kingdom. 14-17 July 2022.

Publications & Conferences

B. Parey

Disability and Poverty in Trinidad.

Invited virtual presentation.

International Centre for Evidence in Disability, London School of Hygiene and Tropical Medicine
Virtual Presentation. 28 June 2022.

B. Parey

Disability and Poverty in Trinidad

SALISES Spotlight Series

Virtual Presentation. 24 June 2022.

B. Parey

Technology in the Classroom in Trinidad & Tobago: Experiences of Primary and Secondary School Teachers Before and During the COVID-19 Pandemic.

SALISES Annual Conference.

Virtual Presentation. 3-4 May 2022.

B. Parey

Accessible Healthcare and Persons with Disabilities: The Case of Trinidad.

UWI-Mona Regional Disability Studies Conference.

Virtual Presentation. 19-20 April 2022.

B. Parey

Quality Healthcare and Persons with Disabilities in Trinidad and Tobago.

Trinidad and Tobago Chapter of Disabled People's International.

Virtual Presentation.

12th February 2022.

B. Parey

Work and Persons with Disabilities: The Case of Trinidad and Tobago.

SALISES Research for Development Forum.

Virtual Presentation. 31st January 2022

I. Rampersad

Budgeting in the Westminster Political System

SALISES Spotlight Series

Virtual Presentation. 22nd July 2022

I. Rampersad

COVID-19 and Tertiary Education – The Educator's Perspective

SALISES Spotlight Series

Virtual Presentation. 3rd December 2021

G. St. Bernard

Science, Human Population Dynamics, and Development Policy Agendas in Caribbean SIDS

SALISES Spotlight Series

Virtual Presentation. 27th July 2022.

G. St. Bernard

Femicide Trends and Patterns in Trinidad and Tobago

SALISES Spotlight Series

Virtual Presentation. 22nd July 2022

G. St. Bernard, S. Chankar, and S. King

Restoring the Lives of Boys on the Margins in Trinidad and Tobago – Lessons from State-Led and Civil Society Interventions

46th Annual Conference of the Caribbean Studies Association (Virtual),

30 May – June 3, 2022 (Virtual)

H. Hosein Shah and G. St. Bernard

Unravelling Challenges, Heeding Lessons from the Public Assistance Grant in Trinidad and Tobago: Social Workers' Perspectives
23rd Annual SALISES Conference
3-4 May, 2022 (Virtual)

G. St. Bernard

Countering the Devaluation of Statistics for Development and Promoting a Modern Statistics Culture through Institutional Strengthening
SALISES Spotlight Series
Virtual Presentation. 25th March 2022

M. Jameson Charles, G. St. Bernard, S. Chankar, and S. King

Researching Experiences of Violence and Social Media Practices Among Secondary School Populations in Trinidad and Tobago and Jamaica – Did COVID-19 Upset the Apple Cart
16th Annual Caribbean Child Research Conference
24-25 November, 2021 (Virtual)

G. St. Bernard, S. Chankar, and S. King

Overcoming COVID-19 Challenges in the Delivery of Education in Trinidad and Tobago - A Case Study of a Local Home Care Establishment
16th Annual Caribbean Child Research Conference
24-25 November, 2021 (Virtual)

G. St. Bernard

Demographic, Science and Ignorance: Implications for Pro-Choice COVID-19 Vaccination Agendas in the Anglophone Caribbean
SALISES 22nd SALISES Annual Conference – Re-Imagining Development for Small Island Development States (SIDS): Post-Pandemic Transformations
28-30 September, 2021 (Virtual)

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