



GOLDA LEE BRUCE

- sharing her
Caribbean experience

"This book is my hope that I'm contributing something that will outlive me," says author and former journalist Golda Lee Bruce. She's being modest. Her years as a trusted face of news at one of Trinidad and Tobago's leading networks have already created a legacy in her home country. Now, based in the US, she has written and published a new book, *Born on an Island: Stories from a Trinidadian Girlhood*, on her life as a Caribbean person. As a UWI graduate from a "UWI family", the university is very much part of that life.

"What UWI gave me," she says, "is more than anything else a Caribbean education. It made me more aware of myself as a Caribbean person. It made me more confident, more sure, more aware of myself, and more able to share that self with the world." PHOTO: RON CHARLES





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FROM THE PRINCIPAL

Black Power *and the* Dividends of Revolution

As the academic year 2022-2023 at the St Augustine campus comes to an end, we continue to commemorate the 75th anniversary of The University of the West Indies. Yet, other special anniversaries are part of this year. One such is the remembrance of a crucial – and timely – historical event that took place in Trinidad and Tobago, but reverberated across the Caribbean. On April 20 and 21, The UWI's Sir Arthur Lewis Institute of Social and Economic Studies (SALISES) in partnership with The National Joint Action Committee (NJAC), held the "Conference on the 50th Anniversary of the Black Power Revolution".

In 1970, over a period of 55 days, the youth of Trinidad and Tobago, led by students of The UWI St Augustine campus, engaged in revolutionary action to fight for racial, social, and economic justice. It was part of a diaspora awakening of black pride. That incredible moment, described by some as the most transformative period in our history, seems rarely mentioned or acknowledged, even as our society has enjoyed the enormous benefits it brought us, in what, with hindsight, we identify as a social revolution.

As eminent historian Professor Brinsley Samaroo describes, "... the youth of the nation were of the firm view that the black and brown people, the majority of the nation, were in government, but not in control. Power was being exercised by a cartel.... Accompanying this economic control was a well-calibrated system of training which socialised the subjects into an affection for things European and not Caribbean."

It was a time when race discrimination influenced where people could live, work, and recreate. Race concerns intersected with economic disenfranchisement in the young nation-state. At the time, economic and social mobility were severely underdeveloped for black and brown peoples. Perhaps, most perniciously, social norms were heavily impacted by inegalitarian notions of race and cultural superiority. The Black Power Movement was to strongly challenge these notions.

This brought about not just changes to the psyche of the nation, but important structural reforms. These improvements reached into the financial and economic sectors and the government of the day was propelled into establishing cooperatives and other financial structures that were more inclusive.

The Black Power Revolution confronted society and forced it to improve in many ways. East Indian and African people were able to take their equal place in sectors such as banking and tourism, as the government increased state involvement in the economy and the financial sector. Senior positions in state and religious institutions were made available to qualified black and brown people.

Significantly, it was one of the few times in our history that there was a successful thrust toward unity between East Indian and African people. This was displayed in the March to Caroni on March 12, 1970. The energy for transformation was enormous and effective, and that transformation impacted the internalised effects of colonialism on our people.



The Black Power Revolution demonstrated that by embracing equality and justice, giving people the opportunity to excel, and combatting ideas and culture that breed feelings of inferiority and subservience, the society can grow.

More than Remembrance

As the Caribbean's premier institution of learning, and one committed to genuine development, The UWI must celebrate these crucial moments of our region's history. The Black Power Conference brought together scholars from throughout the region, as well as members of NJAC – including some of the revolutionaries themselves – for the two-day event.

We celebrate the role that this institution, through its students, played in the Black Power Revolution. NJAC was formed by members of The UWI St Augustine Student's Guild, and its founding president, Makandal Daaga, is regarded as a figure of great national importance. The Faculty of Law

established the Makandal Daaga Law Scholarship to give students with a demonstrable record of advocacy for social justice the opportunity to study at this competitive faculty and become lawyers, once they met basic matriculation requirements. In this way, we encourage the continuation of that revolutionary spirit and provide activists important tools to create social change.

Even as we commemorate the gains of the 1970 revolution, we acknowledge that our country is faced with several persistent challenges that must be addressed, and that the goals and aspirations of the Black Power Revolution have not been fully realised. While many have achieved success due to their hard work and excellence, there are many others who fell by the wayside, unable to emerge from a society that is still not as egalitarian, or as meritocratic as we need in order to attain genuine development. The remains and strains of our post-colonial societies are still evident.

The Black Power Revolution demonstrated that by embracing equality and justice, giving people the opportunity to excel, and combatting ideas and culture that breed feelings of inferiority and subservience, the society can grow. It benefits through new economic activity, greater human capital, and more confident and engaged citizens with a stronger sense of national and regional identity.

We celebrate our revolutionaries, young people who put their freedom, and indeed their lives at risk, for the betterment of Trinidad and Tobago. We look to this new generation of young people to emulate their revolutionary ideals of justice, freedom, and equality to meet the challenges of our society today and bring about the renewal that is so sorely needed.

Rose-Marie Antoine

Professor Rose-Marie Belle Antoine

Campus Principal

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Visit **The UWI's 75th Anniversary** website
<https://uwi.edu/75/>

CLIMATE CHANGE



The World Meteorological Organisation in May 2023 stated there is a 98 percent chance that at least one of the next five years will be the hottest ever recorded, and a 66 percent chance that at least one year will exceed the 1.5 °C threshold. Human activity continues

to intensify greenhouse gas levels, pushing temperatures to never recorded highs. Global records are already being broken. The Intergovernmental Panel on Climate Change (2021) reported global surface temperature has increased faster since 1970 than in any other 50-year period over at least the last 2000 years, and greenhouse gas concentrations, already at their highest levels in 2 million years, have continued to rise.

Such changes will have significant repercussions for Small Island Developing States (SIDS). The UWI Global Institute for Climate Smart and Resilient Development, and the Caribbean Institute for Meteorology and Hydrology, in May 2023, cautioned that El Niño will contribute to very hot days and nights, more heat waves, and dry to very dry conditions. Moreover, the very warm Caribbean Sea could provide ideal conditions for a very strong hurricane to develop in the Caribbean. Is the Caribbean population ready to cope with hotter temperatures?

If global warming rises above 1.5°C, and the projected record-breaking temperatures by 2028 occur, the Caribbean will experience loss of lives and livelihoods, decreased food and water security, and degradation of human health and well-being. Climate sensitive sectors, for example agriculture, tourism, and fisheries dependent on coral reefs, will be affected by record high temperatures. If global temperatures overshoot 1.5°C, as much as 70–90 percent of reef-building corals will be lost, fisheries will be disrupted, and crop wilting due to hotter temperatures will result in declining yields.

Getting Caribbean people ready to cope with a record hot year by 2028 calls for exploring innovative solutions. A multi-disciplinary approach incorporating urban planning,



BY PROFESSOR MICHELLE MYCOO

Caribbean SIDS need to urgently embrace a blending of policies, fiscal incentives, and new digital technologies as an adaptation response to hotter temperatures.

urban design and architecture can contribute to reducing urban heat stress on the population. Measures may include designing cooler buildings using traditional architecture, working with nature to enhance shade in urban areas through greening/landscaping, and building green roofs which shade building surfaces, deflect radiation from the sun, and release moisture into the atmosphere. Tax credits can be offered to construct green roofs.

Caribbean islands enjoy land and sea breezes which temper heat. Urban planning and design can facilitate

the cooling effects of land and sea breezes by opening-up waterfronts, riverways and rehabilitating urban parks. Digital transformation also provides opportunities for persons to transact business using mobile devices instead of leaving their residence or workplace to access some public and private services. Less physical mobility can lower heat stress. Caribbean SIDS need to urgently embrace a blending of policies, fiscal incentives, and new digital technologies as an adaptation response to hotter temperatures.

At the 16th Ordinary Session of the Intergovernmental Council of the Management of Social Transformations (MOST) meeting held at UNESCO, Paris in April 2023, Professor Michelle Mycoo, in her capacity as Vice President of the Scientific Advisory Committee of MOST, presented in the panel “The Bridges Coalition”. The Coalition convenes leading experts for cutting-edge intellectual debates on the biggest social development challenges and opportunities, and gathers academic institutions advancing sustainability science.

Professor Michelle Mycoo is a Professor of Urban and Regional Planning, Coordinating Lead Author of the Small Islands chapter of the Intergovernmental Panel on Climate Change Working Group II Sixth Assessment Report on Impacts, Vulnerability and Adaptation, and Deputy Executive Director of The UWI Global Institute for Climate Smart and Resilient Development.

FOUNDATION LAID AT UWI CHOCOLATE FACTORY

UWI St Augustine has staged the symbolic foundation laying for The UWI Chocolate Factory. The event took place on April 24 at the International Fine Cocoa Innovation Centre (IFCIC) of the Cocoa Research Centre (CRC), at the University Field Station in Mt Hope.

CRC has received partial funding from the Government of Trinidad and Tobago, through the public sector investment programme, to establish a chocolate factory on a 10-acre parcel of land within the University Field Station. This chocolate factory will be a subsidiary company within IFCIC.

Present at the occasion were Senator Paula Gopee-Scoon, Minister of Trade and Industry, Mr Ric Javed Ali, Deputy Permanent Secretary of the Ministry of Agriculture, Land and Fisheries representing Agriculture Minister Senator Kazim Hosein, and European Union Ambassador Peter Cavendish. Campus Principal Professor Rose-Marie Belle Antoine, Director of the Cocoa Research Centre Professor



Campus Principal Professor Rose-Marie Belle Antoine (centre) applies the cement in preparation for the bricklaying at the chocolate factory ceremony while UWI Cocoa Research Centre Director Professor Path Maharani (left) and Trade and Industry Minister Senator Paula Gopee-Scoon (right) provide assistance. Looking on are (from left) Cocoa Research Advisory Board Chairman Winston Rudder; Ministry of Agriculture, Land and Fisheries Deputy Permanent Secretary Ric Javed Ali; and European Union Ambassador Peter Cavendish.

PHOTO: ANEEL KARIM

Path Umaharan, members of the Diplomatic Corps, representatives from the public and corporate sectors, and cocoa industry stakeholders were also at the event.

Since its inception in 1930, CRC has focused its work around three mandates: conservation, research, and development. The UWI's current strategic thrust towards revenue revolution has led the CRC to include commercialisation of cocoa. The IFCIC is an innovation ecosystem that includes technology incubators, business incubators, a model cocoa orchard and a Chocolate Academy for courses to support bean-to-bar enterprises. Future plans for IFCIC include a cocoa museum; a cocoa tourism centre and a restaurant, and a bean-to-bar tour to support agrotourism.

The factory will be equipped for chocolate-making and the manufacturing of a range of products such as couverture, cocoa liquor, cocoa nibs, and chocolate. The construction of the factory is expected to be completed and commissioned in January 2024.

■ UWI IN SOCIETY

As he worked with Caribbean countries recovering from hurricane devastation, Dr Asad Mohammed found unexpected inspiration. As part of The UWI's support efforts, he applied his expertise in city and regional planning. At the same time, he gained insight for a project which could pioneer lasting change in regional communities.

Dr Mohammed, a lecturer in the Department of Geomatics Engineering and Land Management within the Faculty of Engineering, observed instances where existing technologies could have helped solve issues, but countries did not have the technical capacity.

"That's why the idea of harnessing innovations and digital technologies and modelling came," he explained.

It was the impetus for Harnessing Innovative Technologies to support Resilient Settlements on the Coastal Zones of the Caribbean (HIT RESET Caribbean).

Sponsored by the ACP-EU Research and Innovation Programme, and overseen by The UWI's St Augustine Centre for Innovation and Entrepreneurship (STACIE), HIT RESET Caribbean supports projects designed to increase resilience in coastal communities, and strengthen stakeholders' ability to use information to improve policies.

Dr Perry Polar, Project Manager of HIT RESET Caribbean, said this is the first time the university is supervising grant money distribution to regional third parties as part of an organised grant programme. With 4.6 million euros in funding, it is STACIE's largest venture.

NINE REGIONAL PROJECTS

The team is focusing on nine projects. They shortlisted entities which identified problems and solutions clearly. The projects had to be innovative, be easy to replicate, and support strong stakeholder involvement. Dr Mohammed said that stakeholder engagement is critical. They want to ensure stakeholders know their beneficiaries, and are linked with communities on the ground. It is important that their needs are heard, and they understand how this empowerment can improve the quality of their lives.

The nine projects include:

- Trinidad's Caribbean Natural Resources Institute's efforts to assess coastal vulnerability in several islands;
- An app enhanced by the University of Trinidad and Tobago to provide security for public transportation users;
- Habitat for Humanity Trinidad assessing coastal vulnerability and other data in communities;
- La Pontificia Universidad Católica Madre y Maestra (PUCMM) in the Dominican Republic collecting data on urban heat indices;
- The Caribbean Agricultural Research and Development Institute, Trinidad using available technology to monitor red palm weevils found in coconut trees;
- Spatial Innovation, Jamaica developing a data collection and management system designed to map and improve small communities;



HIT RESET Caribbean

uses innovation and technology to solve coastal challenges

BY DIXIE-ANN BELLE



Members of the HIT RESET team (from left, standing), Dr Graham King (Director of STACIE and Project Contract Lead), Dr Perry Polar (Project Manager), Mr Johan Martinus (Anton de Kom University of Suriname/AdeKUS), Dr Asad Mohammed (UWI Technical Advisor), Dr Lennise Baptiste (ANEVER, Independent Project Monitor and Evaluation Expert), Mr Gerard den Ouden (Technical Assistance Unit Representative, OACPS Secretariat), and Ms Olivia Ramkissoon (UWI Project Coordinator). Seated are Ms Angelika Namdar (AdeKUS), and Ms Cheryle Dubay-Tewarie (Senior Project Personnel). Not present are Lt Col Kester Craig and Dr Nicole Greenidge, both representatives of the Caribbean Disaster Emergency Management Agency (CDEMA). PHOTO: JAVIER ACHMADPAWIRO AND IRVIN HOOST.

- UTECH, Jamaica determining the boundaries of informal settlements;
- Smith Warner International, Dominica creating a model that predicts coastal erosion;
- Atom Solutions, Barbados developing an app to observe the movement of Sargassum seaweed in the ocean.

The team is determined that the data collected is not wasted. "The aim is to get that data into the hands of those people that can make use of it," stated Dr Polar.

INNOVATION ECOSYSTEM

Dr Mohammed wants to ensure the projects are enduring, and with time, can benefit many communities.

"We are doing more than simply having nine specific applications," he said. "We also address what is called the innovation ecosystem."

Dr Polar explained that this ecosystem makes it "easy for us to start off with a project idea, get it funded to get the research done, [including] the testing, get it into the marketplace, internationally".

Both Dr Mohammed and Dr Polar talk about the value of empowerment in these communities, ensuring the projects truly address local issues.

"It allows us to be closer to other parties, and we could really work together on finding better solutions" said Dr Polar, emphasising the importance of "community cohesion".

"That is what is lacking in our Caribbean societies: that trust," she said. "Trust is something that we've lost in communities, and these sort of projects can build back trust."

Dr Mohammed anticipates that HIT RESET Caribbean will further cement The UWI's regional role.

"We are providing leadership," he declared. "I'm hoping the outcome of this will show the relevance of our institution and tertiary institutions, research, and innovation, and how it directly impacts the quality of life of people in Caribbean coastal communities."

■ Find out more about HIT RESET Caribbean on their website <https://hitresetcaribbean.org/>

Dixie-Ann Belle is a freelance writer, editor and proofreader.



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■ INNOVATION AND ENTRENEURSHIP

Directing the INNOVATION and the ENTREPRENEURSHIP ECOSYSTEM

BY DIXIE - ANN BELLE



Dr Graham King, new Director of STACIE, shares UWI St Augustine's vision for university-industry partnerships, research, commercialisation, and profitability

Since Dr Graham King joined The UWI in 2009, he has been acutely aware of the potential benefits of the university engaging more systematically with industry.

“What we haven’t done very effectively is build a widespread university-industry collaboration effort that allows for a concentration of efforts and leveraging up our impact,” he says.

When the automotive engineer took up the mantle of Director of the St Augustine Centre for Innovation and Entrepreneurship (STACIE) in August 2022, he was primed to help the centre establish stronger connections externally and internally. Used to living between the worlds of industry and academia, Dr King believes STACIE is perfectly positioned to help drive The UWI to become more financially independent.

UT: What role do you see STACIE having in making UWI self-sufficient and independent financially?

GK: STACIE is a very important player. We have five pillars of activity. In one area, we are engaged in managing research projects, especially larger multidisciplinary ones across faculties. Secondly, we are the centre point for consultancies. If an entity is looking for support or wants the university to bid for some consultancy activity, they come to STACIE. Thirdly, we are basically the tech transfer office, managing the commercialisation of the university’s intellectual property. Fourth is university industry collaboration. We are an important interface with industry partners. Fifth is engendering student entrepreneurship. Our mandate is to coordinate innovation and the entrepreneurship ecosystem.

UT: What management philosophy do you embrace?

GK: I have high expectations of my team. At the same time, I give them a lot of encouragement and empowerment. I try to engender transparency and visibility. It’s important to build a harmonious dynamic that also extends to engaging internal stakeholders – primarily the faculties.

UT: What motivates you?

GK: The core is working with our industry partners – manufacturing, energy, construction – to make sure what the university does is highly relevant.

We focus on UWI becoming more financially independent. Not that we don’t want government interventions, but we need to build up other elements of financing. That motivates me to build our income from grant funding. It allows us to scale up our research to a different level, have more people collaborating – ideally multidisciplinary people – so we’re putting out high quality publications. It allows us to get better equipment, to really build everything up.

UT: Do potential investors see UWI as an opportunity?

GK: We do know individuals and companies looking for investment opportunities outside the University, but they have been disappointed because the ideas pitched to them didn’t meet the mark. There’s no pipeline of mature developed ideas.

UWI stands in a very strong place there. Some of the things coming through us are very high quality. Products, ideas, services, ventures... and if we can help our inventors get to that place of maturity and improve the packaging of ideas, we stand a good chance. We actually have investors who are very keen. We’re just trying to thrash out the details.

UT: What are some of the most exciting projects happening at STACIE?

GK: We have an exciting engagement with ANSA McAL. They’re supporting us in our commercialisation efforts and getting over the bar with some projects.

UWI Fine Cocoa Products Ltd has been formed as a spin-out company, emerging from the globally renowned Cocoa Research Centre. This company will commercialise the production of the world’s best chocolate and processed products for boutique chocolate making. We are targeting global markets with these products.



‘Some of the things coming through us are very high quality. Products, ideas, services, ventures... and if we can help our inventors get to that place of maturity and improve the packaging of ideas, we stand a good chance. We actually have investors who are very keen.’

Emerging from years of research and development in the Department of Chemistry, we have a line of asphalt-based products that are better than any equivalent products available on the market. Two products are already licensed to a company for production and now we are getting external support for market studies and further performance testing so that we can license the other products and bring them into production.

The PHI (Percussive Harmonic Instrument) is establishing a small-scale plant which can produce 100 units a month. They are going to begin production in June/July.

The Department of Life Sciences has some very interesting Sargassum-based products like Sargassum-based biostimulants for crops. They also have an antibiotic adjuvant with huge potential.

UT: Tell us about the HIT RESET project (Harnessing Innovative Technologies to Support Resilient Settlements on the Coastal Zones of the Caribbean) under STACIE?

GK: So, HIT RESET focuses on improving the resilience of coastal communities through urban planning and innovation. We are focusing on projects that will bring new technologies – ideally indigenous technologies – to create solutions.

This is one of the larger projects we’ve undertaken, with a value of 4.9 million euros. This is one of the first projects where we are the executing entity and dispersing funds. Usually, we are only beneficiaries.

We have third-party projects from Jamaica, Dominican Republic, Barbados, and Trinidad.

It’s important to UWI in terms of building capacity and potential impact.

UT: What do you hope to see from STACIE in the coming years?

GK: STACIE provides a service function. We rely on the outputs of others on campus. I hope that we will facilitate more cross-faculty, multi-disciplinary, high impact research. We are strongly supporting expanding our externally-funded research. It allows us to coalesce activities so that we get that critical mass and high impact in a few domains.

We have one or two areas where we’re already global leaders. Right now, we are in cocoa, but we can be in others like energy transition, especially small island energy transition. We could be global leaders in the utilisation of natural tropical products, in creating medical solutions.

■ Find out more about STACIE, visit <https://sta.uwi.edu/stacie/>

Dixie-Ann Belle is a freelance writer, editor and proofreader.

■ OUR PEOPLE

Macro Journey through a Micro World

BY SERAH ACHAM



Professor Adesh Ramsubhag
PHOTO: KC MEDIA

A man of many accomplishments, his ascension to the rank of professor followed his 2018 Anthony N Sabga Award for Caribbean Excellence in Science and Technology, and his 2019 Vice Chancellor's Award for Excellence in Research. Prof Ramsubhag is now set to make a substantial contribution to several of the UN Sustainable Development Goals through his research on the Caribbean's microbiomes.

We live in a microbial world. So says Professor Adesh Ramsubhag, newly inaugurated Professor of Microbiology and Biotechnology at The University of the West Indies, St Augustine campus.

We can't see its microscopic inhabitants, but they're a population of millions of trillions and they're all around us – on every surface and in our every breath. In fact, there are more microbes on a speck of dirt than there are human beings on earth, and here in the Caribbean, that number increases vastly. Size never being a good indicator of worth, however, these microscopic creatures are fundamental to the survival of all life on our planet, and offer serious potential for our local and regional health and wellness, and agriculture industries.

On April 12, 2023, Professor Ramsubhag took the stage at UWI's Daaga Auditorium to educate an engaged audience on our region's unique microbial world at his Professorial Inaugural Lecture, "Journey through the local microbial landscape: Challenges and biotechnological potential for the Caribbean".

From reluctant student to scientist

It's a route he knows intimately, having trod, waded and dug his way through our region's natural environment to make the discoveries and breakthroughs that led him to this moment. A self-proclaimed unwilling-student for much of his pre-tertiary education, Professor Ramsubhag joined UWI as a student of the N1 programme, fell in love with science, and stayed because of it, conducting research, developing powerful biotechnological innovations, and producing results that have deep impact for the future of the Caribbean. He did this all together with his students.

Along the way, he served as Deputy Dean of Graduate Studies and Research from 2012 to 2015, and Head of the Department of Life Sciences at the Faculty of Science and Technology from 2015 to 2018. A man of many accomplishments, his ascension to the rank of professor followed his 2018 Anthony N Sabga Award for Caribbean Excellence in Science and Technology, and his 2019 Vice Chancellor's Award for Excellence in Research. Prof Ramsubhag is now set to make a substantial contribution to several of the UN Sustainable Development Goals through his research on the Caribbean's microbiomes.

The importance of microbes

In his lecture, Professor Ramsubhag explained that microbes have significant impact on our health – for humans, animals and plants alike, as well as our environment.

"We depend on certain microbial compositions to maintain our good health," he said.

The microbiome of our skin, for example, helps to protect us from harmful environmental conditions. Those of plants protect them from disease, and are essential to their nutrition and to soil fertility. Microbes also clean our environment by degrading

toxic substances, and are a vital component of most antibiotic medication, and a source of food – think the mushrooms that pepper our pizza and pasta dishes, as well as the chemical reactions that leaven our bread and brew our favourite libations.

"These are very, very critical organisms," particularly within the Caribbean, Professor Ramsubhag asserted. Ours is a unique environment, rich in microbial biodiversity.

He explained that having been in existence for approximately four billion years, microbes have had a long time to evolve. The result has been a level of diversification he describes as "mind-boggling". Look again at that speck of dirt and you could find 10 billion individual microbes and 50,000 microbial species. Subject it to the warmth and moisture of our tropical climate and the numbers increase ten-fold.

That, in fact, was one of Professor Ramsubhag's research projects.

"We explored the diversity of microbes in different types of ecosystems," he shared, revealing that some of his team's samples showed hundreds of thousands of microbial species in just one sample – an occurrence found nowhere else in the world.

Tremendous potential

What that means, he said, is that "we have tremendous potential". Using a warfare analogy, he explained microbes' natural synthesis of antibiotics to protect themselves from one another – "one will produce an antibiotic and the other will produce a chemical to counter [it]" – and reflected on how "this type of environment is a driver for novel antibiotic [and] bioactive compounds", like new drug molecules and antibiotics.

There's a "trade-off" however, he said, as "you also get new antibiotic resistance... and they cause more serious disease". Professor Ramsubhag's current research in this area looks at both aspects, "[t]he good and the bad and the ugly," and he divides his work into two broad categories – the first: detection and characterisation of harmful organisms; and the second: biotechnical applications, through which he seeks to learn, "How can we generate beneficial products or processes, and utilise [them] to solve problems in society?"

Through his research, always in collaboration with his students, fellow UWI lecturers, and external researchers, Professor Ramsubhag and his team produced work whose results showed serious implications, and produced viable applications.

Among the implications is this: our heavily polluted fresh and marine water bodies, soil and air, as well as antibiotic and copper resistance, means that our crops are susceptible to disease, and so are we. However, Professor Ramsubhag and his respective teams were also able to produce solutions that have already borne incredible results, including using different combinations of bacteria to degrade contaminants in our soils; converting the Sargassum that blankets our shores into plant supplements to enhance crop growth; developing environmentally friendly and faster-working alternatives to pesticides and fungicides; and developing probiotics that have been shown to protect against some diseases.

Having met this major milestone, Prof Ramsubhag has now turned to the UN Sustainable Development Goals, and if his results are proof of anything, we should be well set to meet them.



Prof Ramsubhag (right) in a file photo with Prof Jayaraj Jayaraman (left) and graduate student Antonio Ramkissoon conducting seaweed research in a Department of Life Sciences lab.

FOOD

Over the past three years, food and agriculture stakeholders from across Trinidad and Tobago have been engaged in a range of hands-on capacity-building exercises conducted by nearly 50 local and international volunteers.

Administered under the United States Agency for International Development (USAID) Farmer-to-Farmer Programme, training activities focused on using new farming technologies, environmentally sustainable farming practices, climate resilient farming, and the creation of value-added products.

In total, an estimated 750 participants from 11 groups were trained under the project which was implemented locally by UWI St Augustine's Faculty of Food and Agriculture (FFA) with the support of Purdue University.

Programme Director Amanda Dickson explained that she started thinking about bringing the programme to T&T when she met former FFA Dean Professor Wayne Ganpat at a 2019 Association for International Agricultural and Extension Education conference.

She recalled, "I attended [Prof Ganpat's] sessions where he was talking about extension in the Caribbean, including some of the opportunities and challenges that the region was facing."

Speaking on the programme, she said, "The project is titled Farmer-to-Farmer but it doesn't necessarily have to be farmers engaging with each other. It can also be an institution and an institution, or an agribusiness and an agribusiness."

Exposing participants to agricultural perspectives and technologies from around the world

In her capacity as an international extension specialist at Purdue University, Dickson reached out to Prof Ganpat and pitched the idea of working on a local Farmer-to-Farmer project.

Ganpat said that he instantly recognised the programme's importance because it had the potential to expose local stakeholders to a variety of agriculture perspectives and technologies from around the world.

"Purdue and Amanda have a lot of experience in this field, so we saw and jumped at the opportunity to get involved," he said.

Stakeholders trained under the programme were selected from the Agricultural Society of T&T; the Cocoa Development Company Ltd; the Ministry of Agriculture, Land, and Fisheries; Green Market Santa Cruz; NAMDEVCO; the Network of Rural Women Producers; Tri-Valley Cluster; Tobago URP; Vision on Mission; and the Tobago Agricultural Society.

In designing the programme's targets, Dickson said there was a focus on aligning them with the country's key national priorities on addressing food and nutrition security as stated in the government of Trinidad and Tobago's Vision 2030 strategic framework.

Prior to planning any training activities, local stakeholder groups were consulted to get a sense of what areas they needed training in.

TO EMPOWER LOCAL AGRICULTURE

Faculty of Food and Agriculture teams up with Purdue University and USAID

BY TYRELL GITTENS



From left: Professor Mark Wuddivira, Dean of the Faculty of Food and Agriculture; Amanda Dickson, Programme Director for the Farmer-to-Farmer programme (F2F); Campus Registrar Dr Dawn-Marie De Four-Gill, US Ambassador to Trinidad and Tobago, Candace A Bond; and Professor Gerald Shively, Associate Dean and Director of International Programmes in Agriculture, Purdue University at an F2F culmination event held in May at the St Augustine campus.



Professor Wayne Ganpat, F2F Country Director for Trinidad and Tobago and former Dean of the Faculty of Food and Agriculture.

In total, an estimated 750 participants from 11 groups were trained under the project which was implemented locally by UWI St Augustine's Faculty of Food and Agriculture (FFA) with the support of Purdue University.



Local volunteer Adanna Piggott (left) conducts a training session on how to properly grow seeds in nurseries with four employees of the Tobago Unemployment Relief Programme (URP) during USAID's recent Farmer-to-Farmer programme.



Members of the Tri-Valley Cluster learn to make value-added products from cocoa.

‘We were able to give them suggestions which they accepted, and we were able to build a certain level of trust amongst them. They expressed trust in our capacity to assist them.’

Dr Lorraine Waldropt-Ferguson

For example, the programme’s field coordinator Dr Lorraine Waldropt-Ferguson said some stakeholders asked for training in making flour using local provisions given the recent increase in flour prices.

She said the process also revealed other needs to help stakeholders create more sustainable business models:

“Engaging them at first, they thought they knew what their needs were because they expressed certain needs to us in terms of what areas they wanted training in. But upon engaging them further, we learnt their business models better, and we were able to recommend things that they needed which they were not aware they needed.”

She added, “We were able to give them suggestions which they accepted, and we were able to build a certain level of trust amongst them. They expressed trust in our capacity to assist them.”

UWI and Purdue, maintaining relations

Overall, Prof Ganpat said the initiative was designed to empower stakeholders and ensure that they were self-reliant using their available resources, and to build sustainability into their enterprises. In the long-term, he said, the programme’s networking will help them have access to different resources and knowledge sources around the world.

Coming out from the project, he shared that one local volunteer will be going abroad soon on a study tour.

Dickson added, “We don’t know what our relationship will look like going forward. But we know that we want to maintain the relationships. So, there have been discussions about maybe having study abroad classes where we mix UWI students with Purdue students.”

As part of her duties, local volunteer Adanna Piggott worked alongside a volunteer from the US to train stakeholders from Vision on Mission, Tobago URP, and the Tobago Agricultural Society.

Piggott stated that the trainees were excited and receptive to the training provided.

She said, “It was the first time that many of them engaged with someone from an international background to offer training for free. They were also happy with the model of the programme where they were able to tell us what they needed training in.”

Some of the training activities Piggott did with her group included record management, aquaponics, urban farming, commercial sheep and goat production, pest management, and alternative production methods.

In all, she facilitated ten training activities with clients in both Trinidad and Tobago.

Ultimately, Piggott said the programme was a good opportunity, and it was something which helped stakeholders become more aware of different and new ways to do things, especially in developing a more business-centred approach to activities.

UWI IN SOCIETY



Understanding How to BREAK THE SILENCE ON CSA

BY KHADIJAH PIERRE



From left, panellist Mr Luke Sinnette, moderator Dr Sue-Ann Barratt, Emerita Professor Rhoda Reddock, Dr Vasant Basdeo and Mr Daren Dhoray.
PHOTOS: COURTESY IGDS

In 2008, a group of researchers led by Emerita Professor Rhoda Reddock of the Institute for Gender and Development Studies, St Augustine Unit (IGDS SAU), embarked on the Break the Silence (BTS) Action-Research initiative, bringing visibility to the issue of child sexual abuse (CSA). Most recently, the Banker’s Association of Trinidad and Tobago (BATT) has pledged \$488,000 for a period of one year to the IGDS to continue the work of the BTS campaign. This project is entitled “Filling the Gaps: Enhancing Evidence-Based Advocacy to End Child Sexual Abuse”.

In commemoration of Child Sexual Abuse Awareness Month, a panel discussion was convened on Thursday, April 20 at the School of Education Auditorium. The panel, entitled, “Child Sexual Abuse Interventions: How Far have we come and where are we now?” included Professor Rhoda Reddock, founder of CyberSafe Trinidad and Tobago Mr Daren Dhoray, Ministry of Social Development and Family Services social worker Mr Luke Sinnette, and family care physician Dr Vasant Basdeo. Dr Sue-Ann Barratt, Head of the IGDS, was the moderator.

The panel aimed to encourage a multi-sectoral conversation on prevalence, manifestations, and existing interventions for CSA in Trinidad and Tobago.

A primary subject discussed was the existing referral pathways to facilitate the reporting of CSA cases. Dr Basdeo indicated that, upon medical staff receiving reports of CSA from the Trinidad and Tobago Police Service (TTPS), District Medical Officers (DMOs) rostered with the TTPS are contacted.

He explained, “These can be both reports made directly to police stations or reports from the Child Protection Unit. Instances of CSA are then treated as medical emergencies. Survivors typically require emergency contraception, emergency STI testing, and HIV prophylaxis. In some cases, suturing is also necessary.”

Mr Sinnette said that “reports of CSA can arrive at the National Family Services Division in various ways. These include direct information from the child’s parents, and evidence of CSA might emerge in counselling sessions. The Child Protection Unit or Children’s Authority is typically contacted in the latter’s case.”

Professor Reddock said the traumatising effects of CSA are not being sufficiently addressed as issues surrounding self-harm concerning traumas of CSA are not being taken into account, along with other mental health implications. Mr Dhoray spoke about the manifestation of CSA in the digital space, expressing that “online spaces can be both a safe space and a site of abuse; places where CSA and the taboos surrounding it can be addressed, but they are also spaces where a lot of CSA occurs.”

All stakeholder representatives at the forum agreed that many adults fail to report cases of CSA despite it being mandatory. They called for a Children centred approach, which includes building children’s self-confidence, adopting a duty of care, safeguarding children, ensuring that adults are held accountable, and facilitating CSA awareness workshops for children. They also called for increased public education on CSA, research opportunities and activism, and implementation of the Health and Family Life Education (HFLE) curriculum within schools.

The BTS Campaign promises to continue its action-research approach while creating stakeholder engagement opportunities.

■ **For more information,**
visit <https://sta.uwi.edu/igds/breakthesilence/>



Members of the BTS Event Team.

Khadijah Pierre is the Project Coordinator of the IGDS/BATT Break the Silence Project.

■ ENVIRONMENT

In 2005, The National Gas Company of Trinidad and Tobago Limited (NGC) embarked on its ambitious 315 Reforestation Programme to replace forests removed to make way for two of its major projects. From 2005 to 2018, more than 100,000 seedlings of 17 species of trees were planted. The question then became, what was the impact of this initiative on the plant and animal biodiversity in the reforested areas?

NGC engaged The UWI St Augustine campus to help them find the answers.

“The NGC reforestation exceeded expectations,” said John Agard, Emeritus Professor of Tropical Island Ecology. “Biodiversity was increased in each of the plant diversity indices The UWI team used. Also, there was an increase in animals, including endangered species like ocelots.”

Biological diversity – or biodiversity – refers to the diversity within species, between species and their interconnected ecosystems. Scientists see biodiversity as critical to combatting climate change and sustaining life on the planet. NGC, with the assistance of The UWI, embarked on the biodiversity study in 2022.

Myles Lewis, NGC’s Head of Corporate Social Responsibility, explained that “the evidence from the study shows emphatically that the NGC Reforestation Programme has enhanced both plant and mammal biodiversity.”

He added, “The exercise yielded additional benefits as well, with the observation that deer appear to be switching from diurnal to nocturnal patterns, possibly due to hunting in the area. Also encouraging is the comparatively high number of ocelots recorded, given the animal’s status as an environmentally sensitive/endangered species in Trinidad and Tobago.”

Deer, ocelots, tayras, armadillos, opossums, tamanduas, agoutis, and squirrels assessed

The biodiversity study was conducted at Grants Trace, Rousillac, Guapo/Parrylands, and Morne L’Enfer, as sufficient data was available to conduct species richness calculations in these large areas (the Reforestation Programme included Morne L’Enfer Forest Reserve near La Brea at Rousillac and Guapo, the Victoria-Mayaro Forest Reserve in Moruga, as well as Mayaro and Rio Claro).

Data outputs from a Rapid Botanical Survey (RBS) conducted by The UWI National Herbarium, in collaboration with the Forestry Division and Oxford University in 2005, was compared with data recorded for Phase 1 of the programme in 2018. The RBS took place shortly before the replanting exercise commenced, providing a reliable reference point for comparison.

A range of indices were employed to determine the impact on biodiversity, including:

- Species richness – calculated using the Margalef Index (d), a measure of the total number of species (S) present for a given number of individual trees (N)
- Equitability or evenness – expressed as Pielou’s Evenness Index (J’), a measure of how evenly the individual trees are distributed among the different species
- Diversity – measured using the Shannon-Wiener Diversity Index (H’), a measure of the proportion of the entire community made up of a particular species. The higher the value of H’, the higher the diversity of species in the community.

The impact of the reforestation initiative on eight species of wild terrestrial mammals was also assessed: red-brocket deer, ocelots, tayras, nine-banded armadillos, common opossums, southern tamanduas, red-rumped agoutis, and red-tailed squirrels. This was achieved through the deployment of 10 Reconyx HC 600 Hyperfire camera traps.

Over a period of 50 days, a total of 2,761 photos were taken. While there was no baseline data on the relative abundance (number of camera captures per 100 trap days) for the study sites, the survey results could be compared



A much-needed boost to Biodiversity

UWI study shows NGC’s Reforestation Programme enhances plant and animal life in forests in southwest and southeast Trinidad



to similar survey sites in the Trinity Hills and Central Range of Trinidad. The comparison revealed that there was a higher relative abundance for red-brocket deer, ocelots, tayras, tamanduas, and red-tailed squirrels in the reforestation sites.

Biodiversity strongly related to climate change

Speaking on the benefits of biodiversity to both the natural world and society, Mr Lewis said, “The variety of plant and animal life contributes towards the world’s food supply, raw materials for manufacturing, and employment

of people. A healthy biodiversity leads to a healthier and more secure supply of food, materials and medicine, and more vibrant economies.”

In addition, biodiversity is strongly correlated to climate change.

The UWI team involved in the biodiversity study was headed by Prof Agard and included both staff and students. Working with NGC, UWI has previously conducted studies to estimate the amount of carbon dioxide sequestered by the reforestation project both above and below ground.

Completed in 2021, NGC’s Reforestation Programme was a collaborative effort with the Forestry Division of the Ministry of Agriculture, Land and Fisheries, and the company’s fence line communities to replant 315 hectares of forest in the southwest and southeast forest conservancies in Trinidad. The project reflected NGC’s “No Net Loss Principle” as part of its wider company ethos, in alignment with the National Environmental Policy of Trinidad and Tobago.

“Though the Reforestation Programme began as a provision of our Certificate of Environmental Clearance for our pipeline projects,” said Mr Lewis, “The initiative evolved over the years to become part of NGC’s CR/CSR practice and sustainability culture.”

Having completed all phases of the project, NGC delivered the replanted forests into the care of the Forestry Division in 2023.

“NGC’s commitment to environmental preservation does not end here,” Mr Lewis added. “We continue to explore opportunities to partner with stakeholders and communities through The NGC Group’s Green Agenda to contribute towards environmental entrepreneurship, carbon reduction and further enhanced biodiversity.”



The impact of the reforestation initiative on eight species of wild terrestrial mammals was also assessed: red-brocket deer, ocelots, tayras, nine-banded armadillos, common opossums, southern tamanduas, red-rumped agoutis, and red-tailed squirrels.

OUR GRADUATES

UWI graduates are everywhere – politics, business, the arts, and as public intellectuals. In the coming months, **UWI TODAY** will profile some of our high achieving alumni who have made or are making a positive impact on society.

“When I’m asked what I want to do with the rest of my life, my answer is always ‘write,’” said **Golda Lee Bruce**. The communications specialist and beloved former news anchor will soon launch a book of short stories – **Born on an Island: Stories from a Trinidadian Girlhood** (Charran’s Book Services Ltd, 2022). Bruce hopes this book will be the first of many.

Although Bruce admits that she hasn’t always thought of herself as an author, her love for reading and writing has been constant. She began journaling as a child and most recently, when forced to travel frequently for work, she returned to the hobby.

“I hate to fly.” She says. “It’s my Achilles’ heel. I had to find a way to distract myself from flying. Writing was my safe harbour, so I decided I would dig up those journal entries and expand on them.”

She was able to craft 27 short stories about her life – an unusual upbringing in a home of only women, two of whom were visually impaired; switching schools numerous times and taking the Common Entrance exam twice; people she’s encountered during her career as a journalist; and even her personal struggles with anxiety and depression.

Her mental health battles were also a catalyst for writing the book:

“One of the things that happens with anxiety and depression is that when you’re going through it, it’s very painful and uncomfortable, but you are very easily able to see what is important. It gives you the perspective to prioritise your life, and the gift that that experience gave to me was being able to see what was important for me to do. So, I know that my family is important. I know that my emotional health is important. I also know that it is important for me to do more with my life.”

A mother of two, Bruce intends for writing to be part of her legacy. “I heard a preacher say once ‘Die empty’. And it’s important for me to die empty, to leave the world knowing that I’ve left more than just slaving away behind a dollar. This book is my hope that I’m contributing something that will outlive me,” she says.

Bruce’s legacy will also be defined by her Caribbean identity – an identity to which she attributes her UWI education. Among her many achievements are graduating from Columbia University with an MA in Journalism, and a fellowship from the National Endowment for Democracy. Yet, the time she has spent on UWI campuses has been the most influential.

According to Bruce, UWI is in her blood. She has no less than five relatives who have graduated from The UWI, and if that wasn’t enough, her mother received a PhD from UWI St Augustine and was a lecturer on campus. Bruce spent many an afternoon on campus, drawing in the back of the classroom of the Humanities building while her mother conducted classes.

It was a no-brainer then when she chose The UWI for undergrad and proceeded to Mona where she studied Media and Communication.

“When I got off the plane in Jamaica at 19 years old, my identity grew exponentially because I saw for the first time that I was not just a Trinidadian, but a Caribbean person. My space in the world expanded, and what UWI gave me more than anything else is a Caribbean education. It made me more aware of myself as a Caribbean person. It made me more confident, more sure, more aware of myself, and more able to share that self with the world. I don’t question my accent and I don’t question my history. I feel big when I think of those things.”



Golda’s Girlhood

A beloved face of T&T news launches book of short stories

BY ZAHRA GORDON



She was able to craft 27 short stories about her life – an unusual upbringing in a home of only women, two of whom were visually impaired; switching schools numerous times and taking the Common Entrance exam twice; people she’s encountered during her career as a journalist; and even her personal struggles with anxiety and depression.

■ TECHNOLOGY

“We need to move away from scaremongering when talking about cybercrime and cyberbullying—that’s bloated and sensationalised. We want to empower people instead of simply safeguarding; that’s how we can make young people more digitally resilient.”

This was the rallying call of Dr Vasileios Karagiannopoulos, Visiting Scholar at the Department of Behavioural Sciences in the Faculty of Social Sciences. He delivered a stirring public lecture on “Cybercrime Awareness, Cyberbullying and Cybersecurity Threats” in March to a diverse audience of students, cyber enthusiasts, lecturers, and policymakers, among others.

Dr Karagiannopoulos, or “Vas” as he is commonly called, is an Information and Technology lawyer and associate professor at the University of Portsmouth who specialises in Cybercrime and Cybersecurity. Through The UWI St Augustine’s partnership with the University of Portsmouth and talks with Dr Talia Esnard, Head of the Department of Behavioural Sciences, Dr Karagiannopoulos visited the campus and shared his research from his work with his university’s Cybercrime Awareness Clinic in the UK.

Cyberbullying statistics don’t tell the whole story

He began his lecture by exploring the phenomenon of online harassment through cyberbullying (bullying that takes place online) and how young people would be affected by it across technologies such as social media, gaming, and other online platforms. Cyberbullying can manifest as harassment in anonymous anything-goes types of forums such as 4chan and 8chan, and as revenge porn posting to dedicated pornography sites.

He said that 27 percent of UK students experience cyberbullying. However, not only are they victims, but they can also be perpetrators. Peer pressure may be the reason this occurs, which is also a catalyst for bullying offline. Dr Karagiannopoulos also pointed out that cyberbullying statistics are even higher than the numbers shown because cases often go unreported.

Cyberbullying and the law

How does the law offer protection from online harassment and cyberbullying perpetrators? Based on the UK legal framework, Dr Karagiannopoulos provided an overview of the acts related to cyber communication offences. The Harassment Act covers online stalking specifically involving a fear of violence. To prove that harassment occurred, the offender must show intent and consistency; this makes it difficult to prosecute and resolve cases.

He also mentioned the Malicious Communications Act and the Computer Misuse Act, where a revenge porn law is present, but many cases do not make it to court.

“All these acts have their deficiencies, including the Online Safety Bill,” he said.

Dr Karagiannopoulos shared that there is a push for digital companies to police content pre-emptively, and remove content that is illegal. “The Online Safety Bill expects companies to have a duty of care to protect content that is harmful to young people.”

He said that an upcoming law which states companies should be responsible for age verification may be passed.

But not everything can be dealt with through the law. This is due to the pace of technological advancement. Dr Karagiannopoulos shared how his Cybercrime Awareness Clinic uses a more grassroots communication-based solution.

Bridging the Digital Divide

“Young people go to their parents and teachers about cyberbullying, and they’re not prepared to give advice. They don’t know what young people are doing

Tackling cyberbullying and cybersecurity from the grassroots



BY JEANNETTE GAWAI

At his Cybercrime Awareness Clinic, young people are engaged in skills-based training to teach their peers about age-appropriate cyber issues. The clinic aims to help improve young people’s emotional awareness and digital citizenship.

online, or how to spot issues. Young people view their parents’ advice as obsolete,” said Dr Karagiannopoulos.

In his eyes, the solution to the problem of educating young people and making them more cyber aware is simple: don’t talk down to them, have them talk to each other.

Dr Karagiannopoulos stresses that because parents can be technophobic or digitally unaware of the problems facing young people, and schools are often not equipped to do in-depth work, cyberbullying and cybercrime can be best addressed by developing grassroots solutions that come from young people, their parents and schools, and education.

“It is important for governments to not issue advice non-stop or create initiatives that are government-focused or law enforcement-focused, but to fund multi-stakeholder efforts where schools will come together with academia, law enforcement, and with young people.”

Training at the youth level

At his Cybercrime Awareness Clinic, young people are engaged in skills-based training to teach their peers about age-appropriate cyber issues. The clinic aims to help improve young people’s emotional awareness and digital citizenship. This involves training them to behave the same online and offline. The clinic also equips them with critical thinking skills.

During a follow-up conversation, he shared how this was implemented in one of the clinic’s programmes aimed at training youth from primary school to university to be cyber ambassadors. This incorporates language and tools that are relatable to them based on feedback given by the relevant age groups.

Building a digitally resilient culture

For secondary school and university students, the focus was on mapping out harms and risks that might affect them, and how they could identify them and use the emotional awareness and critical-thinking skills learned in the clinic to be more digitally resilient. They learned how to improve their well-being and online hygiene by recognising when certain websites may be harmful.

The transition from fear-focused training to one based on nuance, self-awareness, and empowerment resonates with young people. This model also works well with businesses. Businesses may become more cyber aware by learning from each other, and moving the conversation away from focusing on the dangers of cyber threats to highlighting the positive benefits of cybersecurity and data protection.

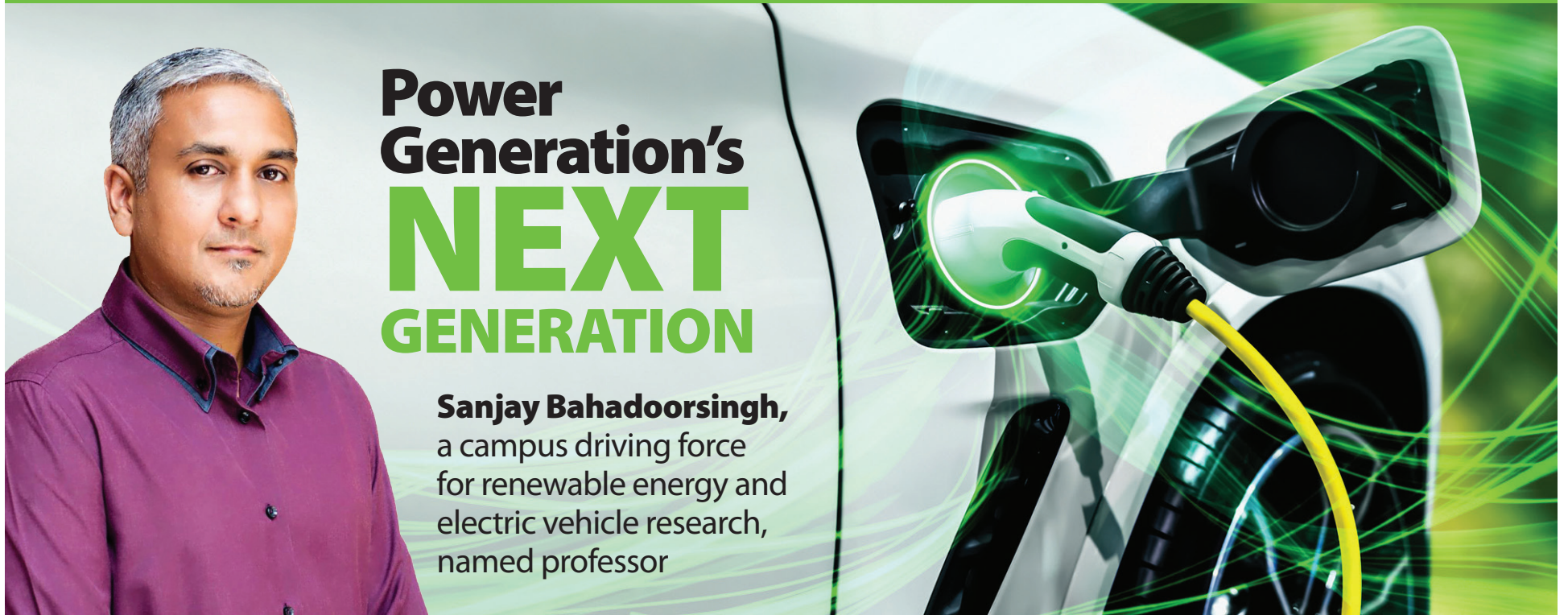
During the Q&A portion, the audience asked questions ranging from topics such as cyberbullying parenting tips to cybersecurity procedural policy. The cyberbullying and cyber issue conversation is ongoing.

As Dr Esnard puts it, “Cyberbullying is a symptom, not a cause – it is a behaviour.”

■ **For more about** the Department of Behavioural Sciences’ programmes, please visit: <https://sta.uwi.edu/fss/behaviouralsciences/>

■ **For more information** on cybersecurity and protecting yourself online, visit CyberSafeTT at cybersafett.com

■ OUR PEOPLE



Power Generation's NEXT GENERATION

Sanjay Bahadoorsingh,
a campus driving force
for renewable energy and
electric vehicle research,
named professor

B Y A M Y L I B A K S H

“I was always interested in how things worked,” says Professor Sanjay Bahadoorsingh, Head of The Department of Electrical and Computer Engineering (DECE) at The UWI St Augustine. As a child, said Prof Bahadoorsingh, he was always curious about the workings of toys and was “... generally inquisitive with artifacts”.

That curiosity, combined with a natural ability for math, led him to study sciences in school, and eventually, to the world of engineering. He considered, for a time, pursuing instead a different career— either a pilot, for his love of flying, or a lawyer, in the footsteps of his late father. But engineering won out, and after doing his BSc at The UWI's Department of Electrical and Computer Engineering, he went on to do an MSc at The University of Manchester Institute of Science and Technology (UMIST) and a PhD in Electrical and Electronic Engineering at The University of Manchester (UoM).

Prof Bahadoorsingh took up the mantle of Head of Department in 2021, in the midst of the nationwide lockdowns during the COVID-19 pandemic. More recently, he was one of five appointed as professors effective from February 1, 2023, and is continuing his work in a swathe of areas including renewable energy, adoption of electric vehicles, and the mouthful that is “dielectric ageing focusing on electrical treeing within polymeric cable insulation”.

“I remember [during my PhD] having to explain to a lot of people— what is an electrical tree?” he laughs. The focus of his study while at Manchester, it gave him lots of practice explaining. “Basically, it is a form of degradation within polymeric insulation that takes the form of a tree-like structure.”

He recalls, “After completing that PhD, I remember telling myself— will I ever use this again?”

Making a positive national contribution

Surprisingly enough, around 2014 his knowledge was called upon for a national legal case involving the Trinidad and Tobago Electricity Commission (T&TEC), involving a failed submarine cable from Trinidad and Tobago. As the expert in this niche area, Prof Bahadoorsingh was able to put his years of study and all those “what is an electrical tree” questions to good work. “I was able to make a positive national contribution. To me, that was a very rewarding experience.”

It is clear that making a contribution to the country, and even the world, has been a powerful driving force in Prof Bahadoorsingh's research, much of which explores ways to function more sustainably on a large scale. Electric vehicle

integration and adoption, and renewable energy integration are two of his ongoing passions.

“We do recognise that there is a push towards the reduction of greenhouse gas emissions, and an integral part of these strategies required power generation from renewable energy sources. It's not just about the technology, but its seamless integration and how you can make it work,” he says.

Because Trinidad and Tobago (and the Caribbean in general) is physically very small compared to continental landmasses, we have unique challenges when it comes to issues like renewable energy production.

“If wind is not blowing in one area, it's not going to stop everywhere else,” says Prof Bahadoorsingh about the advantages of larger countries with interconnected power systems. “In these islands, we just have one power system. So a lot of the work we do has to be in line with understanding the challenges that these smaller islands have as we integrate renewable energy.”

Electric vehicles on Caribbean roads

Another area that Prof Bahadoorsingh is currently working in also targets the issue of sustainability— through electric vehicle integration and adoption. In 2020, CARICOM established the Regional Electric Vehicle Strategy Framework, available online, and states that it “aims to specifically catalyse the deployment of electric vehicles across all modes of transportation in the Caribbean”.

For teams like Prof Bahadoorsingh's, this means solving problems such as how to handle electrical grid integration.

“When these electric vehicles come onto the grid, you want to be able to ensure that you can supply the power demand,” he explains.

The UWI opened its first electric vehicle charging station in 2019, and recently got funding to upgrade the facility to a renewable energy-powered charging station. Although there has been limited activity on campus during the COVID-19 lockdown periods, there has been increased interest in the project. While the station is currently closed pending its new makeover, there are greener days ahead.

“The intention,” Prof Bahadoorsingh says, “was always to move it across to a renewable energy source, so that it now becomes a totally carbon-free, green source that is open to use by the campus community.”

After shepherding the DECE through lockdowns and then a reintroduction of in-person systems of operation, Prof Bahadoorsingh is continuing to work passionately on these vital projects, as well as in his own words, “guiding not only the department, but the Faculty of Engineering into the rapidly changing environment of the 21st century... so that students are well positioned to get not only the best of what the university has to offer, but also to leverage the experience and the network of our academics — many of whom are actively involved in industry and making contributions from policy to studies, technical and otherwise.”

The UWI opened its first electric vehicle charging station in 2019, and recently got funding to upgrade the facility to a renewable energy-powered charging station.



Professor Bahadoorsingh (right) looks on as former Campus Principal Brian Copeland fills a tank at the campus charging station during the launch on December 10, 2019.

■ CAMPUS NEWS

The Caribbean Centre for Health Systems Research and Development (CCHSRD) recently completed a project that aimed to strengthen the capacity of four social sector ministries to use research evidence in policymaking and decision-making. The project activities included a needs assessment exercise, training and coaching sessions, as well as the co-production of knowledge translation (KT) documents to address important policy issues affecting the social protection system in Trinidad and Tobago.

Funded by the Canadian International Research and Development Centre, the Partnership for Evidence and Equity in Responsive Social Systems (PEERSS) was a multinational endeavour with 13 participating countries from Africa, Asia, Europe, the Middle East, Latin America and the Caribbean. CCHSRD was the only participating organisation from the Caribbean region.

Four government ministries participated in the project – Ministry of Labour, Ministry of Social Development and Family Services, Ministry of Planning and Development, and Ministry of Sport and Community Development.

“Prior to the PEERSS project, our partners, collaborators, and stakeholders had generally been within the health sector. This project afforded us the opportunity to work with ministries in the social sector to using appropriate mechanisms to build conducive environments for advancing evidence-informed policymaking, with a focus on Sustainable Development Goals,” said Ms Shelly-Ann Hunte, PEERSS, TT Co-Team Lead and a Research Fellow at CCHSRD.

The project, she explained, was innovative:

“We had the opportunity to pilot methods from the ‘health systems approach’ to determine how well they could be adopted or adapted in the social sector to promote evidence-informed policymaking/decision-making. That was one of the main objectives of the project. Another objective was to identify ways in which stakeholders and citizens could be included in the deliberative process.”

Hunte said that PEERSS, TT can have a meaningful influence on decision-making making locally:

“With policies and programmes that are grounded in evidence, we are more likely to achieve impact and get better value for the money. And, if we have policies and programmes that include citizens and stakeholders in the conversation, then they’re more likely to have buy-in, and implementation would be significant and stronger.”

A key outcome of the project was the KT documents. KT is a process of increasing the systematic and transparent use of research evidence in policy- and decision-making

CCHSRD supports ministries to use EVIDENCE IN POLICY-MAKING

BY ZAHRA GORDON



From left: Ms Jasmine Pascall, Deputy Permanent Secretary, Ministry of Social Development and Family Services (MSDFS); Ms Kevan Cummings-Williams, Deputy Permanent Secretary, Ministry of Labour (MoL); Dr Stewart Smith, Senior Health Systems Advisor, Ministry of Health (MoH); Professor Indar Ramnarine, Deputy Principal, UWI St Augustine; Professor Donald Simeon, Director, CCHSRD; and Ms Natalie Willis, Permanent Secretary, MoL on stage at the culmination event.

to improve outcomes. The KT documents produced by the various ministries focused on issues such as labour gaps in the public service, intervention strategies in education and social services, and sustainable community development.

Another innovation used in the training sessions was joint-learning sessions where the facilitators allowed participants to be actively involved in determining ways in which the proposed approaches and methods could work within their respective ministries. Additionally, the ministries identified commonalities and differences in their policymaking processes, policy priorities and the availability of research.

One participant from the Ministry of Sport and Community Development said he would be applying the skills learned to his daily duties:

“I think that this workshop has been very beneficial because, a lot of the time, we as public servants are called

upon to create programmes at a very rapid pace to meet the needs of the citizens of the nation, and learning how to get the evidence to make the programmes effective is really important.”

He added, “I think this workshop really broadened my horizons in terms of the types of research that could be applied to public policy. In my background, I did comparative analysis, and from this workshop, I’ve learned that there is so much more. I look forward to applying what I’ve learned, and I do hope that in the future this kind of dialogue of experience is going to be allowed to continue.”

CCHSRD is committed to advancing the use of the best available evidence in policymaking in both the health and social sectors and looks forward to maintaining partnerships with government ministries as they seek to institutionalise evidence-informed policymaking and decision-making.

Zahra Gordon is a poet, freelance writer and communications lecturer.

■ CAMPUS NEWS

In April 2023, the Institute of International Relations (IIR) at UWI St Augustine collaborated with the CARICOM Secretariat to host the symposium CARICOM at 50 in celebration of the anniversary of the regional body’s creation. The symposium is one of several commemorative events planned for the occasion.

Spanning 20 nations and housing approximately 16 million citizens, CARICOM’s journey began on July 4, 1973 when regional leaders Errol Barrow (Barbados), Forbes Burnham (Guyana), Michael Manley (Jamaica), and Dr Eric Williams (Trinidad and Tobago) joined forces in signing the transformative Treaty of Chaguaramas.

The symposium, held on Friday, April 14 at the St Augustine campus, delved into 50 years of CARICOM history. Among the many distinguished participants were Minister of Foreign and CARICOM Affairs of Trinidad and Tobago Senator Amery Browne, and Faculty of Social Sciences Dean Dr Acolla Lewis Cameron.

Dr Carla Barnett, CARICOM’s Secretary General, updated participants on CARICOM’s objectives and actions considering the shifting international environment and the challenges the Caribbean faces – climate change, economic instability, and international disputes.



Institute of International Relations hosts CARICOM AT 50 SYMPOSIUM



Institute of International Relations Interim Director Dr Annita Montoute and Minister of Foreign and CARICOM Affairs of Trinidad and Tobago Dr Amery Browne at the CARICOM at 50 Symposium. PHOTO: ANEEL KARIM

In her opening remarks, Dr Annita Montoute, Interim Director of the IIR, highlighted the transformative impact of such events, fuelling public engagement, the sharing of knowledge, and improvements in policy.

The symposium gathered distinguished Caribbean scholars and representatives in two panels – “CARICOM’s Experiences: Achievement and Lessons” and “Looking Ahead: Prospects and the Way Forward”. They reflected on CARICOM’s achievements as well as challenges in meeting its strategic objective to advance Caribbean development and economic integration.

■ For more information about the Institute of International Relations and its activities, visit <https://sta.uwi.edu/iir/>

■ OUR PEOPLE



Dr Jacqueline Huggins

dedicated to student support, development, and success

BY KANISHA VINCENT

SLDD provides a host of high-quality services for students. These include general academic support for all students, international and regional student support, disability and special needs student support, and postgraduate and mature student support.

“This is my life’s work. This is my ministry. This is what I was meant to do, and this is what I am doing,” says Dr Jacqueline Huggins.

From attending a think tank on disability on campus many years ago to becoming the Manager of Student Life and Development Department (SLDD) within the Division of Student Services and Development (DSSD) at UWI St Augustine, she has been on quite the journey.

“Student services is great work. It is the engine room of the university,” notes Dr Huggins.

When asked about her work at SLDD, Dr Huggins admits, “I always wanted to be a teacher, and in this position, I’m a teacher, I’m a counsellor, and so much more.”

Entrusted with ‘Student Support. Student Development. Student Success,’ as their watchwords, SLDD provides a host of high-quality services for students. These include general academic support for all students, international and regional student support, disability and special needs student support, and postgraduate and mature student support.

Dr Huggins posits that the university and its administrative bodies exist because of its students. Within the mandate of DSSD, the focus is on being able to serve students every day.

The impact of this work is seen both in the reactions of students and Dr Huggins’ recent award. Inducted into the 2023 class of Diamond Honourees by the American College Personnel Association (ACPA) Foundation, the award is the culmination of all the work that Dr Huggins has done in her field over the years.

Founded by the ACPA Foundation in 1999, the award serves to recognise colleagues who have made outstanding contributions to ACPA, student support services, and higher education. Nominated by a colleague and getting to the end of a rigorous decision process, Dr Huggins is among an esteemed cohort of recipients.

Of the award she says, “I’m still smiling about it. It is humbling. It makes you reflect on the work that you have done,” and for Dr Huggins, the list is long.

‘Everybody needs somebody to be there’

Dr Huggins urge to help others stemmed from the challenge of assisting her grandfather, who had gone blind. Wanting a better understanding of his issues and how she could help, she answered an advertisement from the Trinidad and Tobago Blind Welfare Association and was quickly introduced to the many challenges that blind and visually impaired people face.

“I have to be a part of the solution,” she explained.

Raised by a single mother after her father passed away when she was nine, Dr Huggins speaks of her mother’s unwavering support and encouragement that she could accomplish whatever she wanted to once she put her mind to it.

“My mother is my mentor. She has taught me everything. It has been her and God that have brought me through,” she said.

It is that sentiment that inspires her to be this person for others:

“My mother was always there. Everybody needs somebody to be there, and from that, I became the person that people would come to when they needed help.”

Shortly after becoming a tutor and then a research assistant upon the request of Dr Innette Cambridge, the position of Head of the Academic Support and Disabilities Liaison Unit (ASDLU) became available; she applied and was successful. A few years later, with the formation of the DSSD, the ASDLU was brought under its purview, and the name was changed to the Student Life and Development Department.

Bolstered by the students

Serving as ACPA’s Assembly Coordinator, International Divisions and Members, Dr Huggins is also a part of the Caribbean Tertiary Level Personnel Association, and she also volunteers with the International Association of Student Affairs and Services (IASAS Global). Through these roles, she shares the Caribbean perspective, presents on the work she does at SLDD, advocates for student services at all levels, and focuses acutely on the inclusion of all persons.

However, SLDD is not without its challenges. With such a robust mixture of services available, there is need for more resources. Additional funding and specialised staff are at the top of the priority list for Dr Huggins.

Even so, she is continuously bolstered by the interactions with students who are at various stages of their journeys, be that dealing with an issue, having just overcome an issue, or being in the process of graduating.

She states, “I feel accomplished [when students graduate] because they came to get a degree, and I was able to participate in that journey.”

Under the leadership of Dr Jacqueline Huggins, SLDD fosters an environment of partnered growth and responsibility. Such an environment impacts positively on the students’ personal development which then translates to schoolwork and success.

Support, development, and success.

“Pride,” Dr Huggins smiles, “comes from seeing students start and being there to watch them graduate.”

■ **For more information** on the Student Life and Development Department and the services they offer, visit: <https://sta.uwi.edu/dssd/student-life-and-development>

Kanisha Vincent is equal parts sport scientist, storyteller, poet and freelance writer.

UWI St Augustine hosts Pop-Up Shop

Usually, when we think about a university campus, we think of a place of study. On June 4, students and staff at UWI St Augustine showed that the campus can be used for more than academic pursuits. They brought their artistry, craftsmanship, and entrepreneurial spirit to the JFK Auditorium, JFK Quadrangle and the Engineering Undercroft for The UWI Pop-Up Shop. Pop-up shops are deliberately temporary stores and shops that give budding and part-time entrepreneurs a chance to do business without the expenses of a permanent operation. As part of The UWI’s 75th anniversary activities, the St Augustine campus held its pop-up shop to “showcase the incredible innovation and entrepreneurial spirit of our campus community”, its official statement said. It was quite a showcase. Sellers brought out handcrafted jewelry, wood carvings, pastries and other desserts, locally designed and sewn clothing, plants, decorative items, fragrances, beverages, and much more.



PHOTOS: ANEEL KARIM



The UWI Calendar of Events June–August 2023

Faculty of Social Sciences Business Development Unit Project Management Seminar

June 21, 22, 28, and 29

ONLINE

This virtual seminar, titled Resource Optimisation for Achieving SMART Project Goals, is designed to increase participants' skills in leading, planning, and executing projects to stringent deadlines and budgets. Participants will learn how to:

- Develop realistic schedules which meet the project owner's constraints
- Prepare project plans
- Develop realistic status reports
- Use stakeholder management techniques
- Assess project team performance
- Implement budget management practices

The seminar will be facilitated by Mr Selris Mahabir, a project management professional (PMP) and Microsoft Certified Application Specialist (MCAS), with vast experience in project management and training faculty and staff at The UWI.

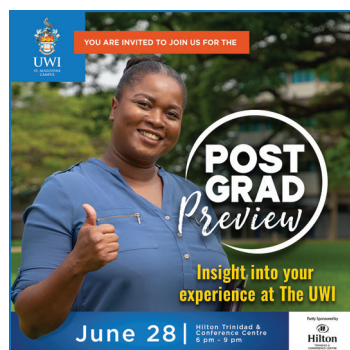
For more information on this seminar, including details on cost, please contact FSS-BDU at sta-fssbdu@sta.uwi.edu, or visit <https://sta.uwi.edu/fss/business-development-unit> for registration details.

The Postgrad Preview

June 28
Grand Ballroom
Trinidad Hilton and Conference Centre
Port-of-Spain

Explore how you can be a #GameChanger with postgraduate study at The UWI. This event, hosted by UWI St Augustine is for prospective students and those interested in continuing their education. Learn how you can finance your degree, get career guidance, and meet faculty members and current students at this special event.

For more information and the registration link, visit <https://sta.uwi.edu/news/calendar/event.asp?id=4097>



UWI St Augustine Academy of Sport Girls' Summer Cricket Camp

July to August
Sport and Physical Education Centre
St Augustine Campus

This cricket camp for girls between the ages of 7 and 17 is meant to introduce them to the sport, and give them the opportunity to develop their skills and play in an age-appropriate environment. Participants in this three-week camp will enjoy learning and improving at the game through fun and engaging sessions, using a range of practices and game-based scenarios.

For information on price and other details, and to register, email specinfo@sta.uwi.edu



Members of the St Augustine Academy of Sport basketball team with their coach, Kern George (left, back row). PHOTO: ATIBA CUDJOE

Excelling in the classroom and on the court

UWI wins first three games in Momentum invitational U23 men's basketball tournament

BY JOEL HENRY

It's Saturday, June 10, and The UWI St Augustine Academy of Sport basketball team has a big game tomorrow. They play New Chapter Academy in the final four of Momentum, The UWI Basketball League under 23 men's invitational tournament.

"We are well prepared," says coach Kern George.

The team, he explained, had practiced, taken an ice bath, eaten lunch together, and were "ready to work".

So far, the St Augustine team has been doing great work indeed. They have won all three of their games in the tournament that started on May 17 and ended on June 17. It's quite an achievement for an institution known for its success in the classroom, not the basketball court.

"They are hungry," says Coach George, himself a national basketball coach and former captain of the Trinidad and Tobago Men's Basketball Team.

"They are young men who were not all that serious about basketball because they were focused on their school work. I call them the second chance team. They just need a chance to show T&T that they can play basketball as well as study."

Once upon a time, The UWI was synonymous with sport. The campuses had student clubs for everything from water polo, to table tennis, to hockey. Cricket legend Sir Frank Worrell was the Dean of Students and the university was seen as the potential breeding ground for Caribbean athletes.

"With the necessary dedication and coaching," Sir Frank wrote in the 1966 *Pelican Annual*, "These young ladies and men should have their university at the top of every sports table in the country."

Today, the drive to reestablish The UWI as a headquarters for sport has been accelerated through several initiatives, the creation of the cross-campus Faculty of Sport and its campus-based Academies of Sport is one of the most prominent. The university's sporting agenda has already helped to develop numerous athletes that have represented their countries and the region at the highest levels.

With tournaments like Momentum, The UWI encourages youth development, both on and off the campus.

"It's been a learning experience," says Coach George of his squad. "We had three games prior to this tournament. We won one and lost two. We worked heavily on our fitness. That is what propelled us through the last couple games. Every game that we played, we got better."

That growth, win or lose, is the gift of sport, fostering both personal growth and team spirit. But let's be clear, The UWI St Augustine team, like the other remaining teams – New Chapter Academy, Matthew Pierre Basketball Academy, and Morvant Oilbirds Basketball Academy – are in it to win it. Good luck to them all.

Editor's note: The UWI St Augustine team lost their match against NCA and at the time of writing are vying for third place.