

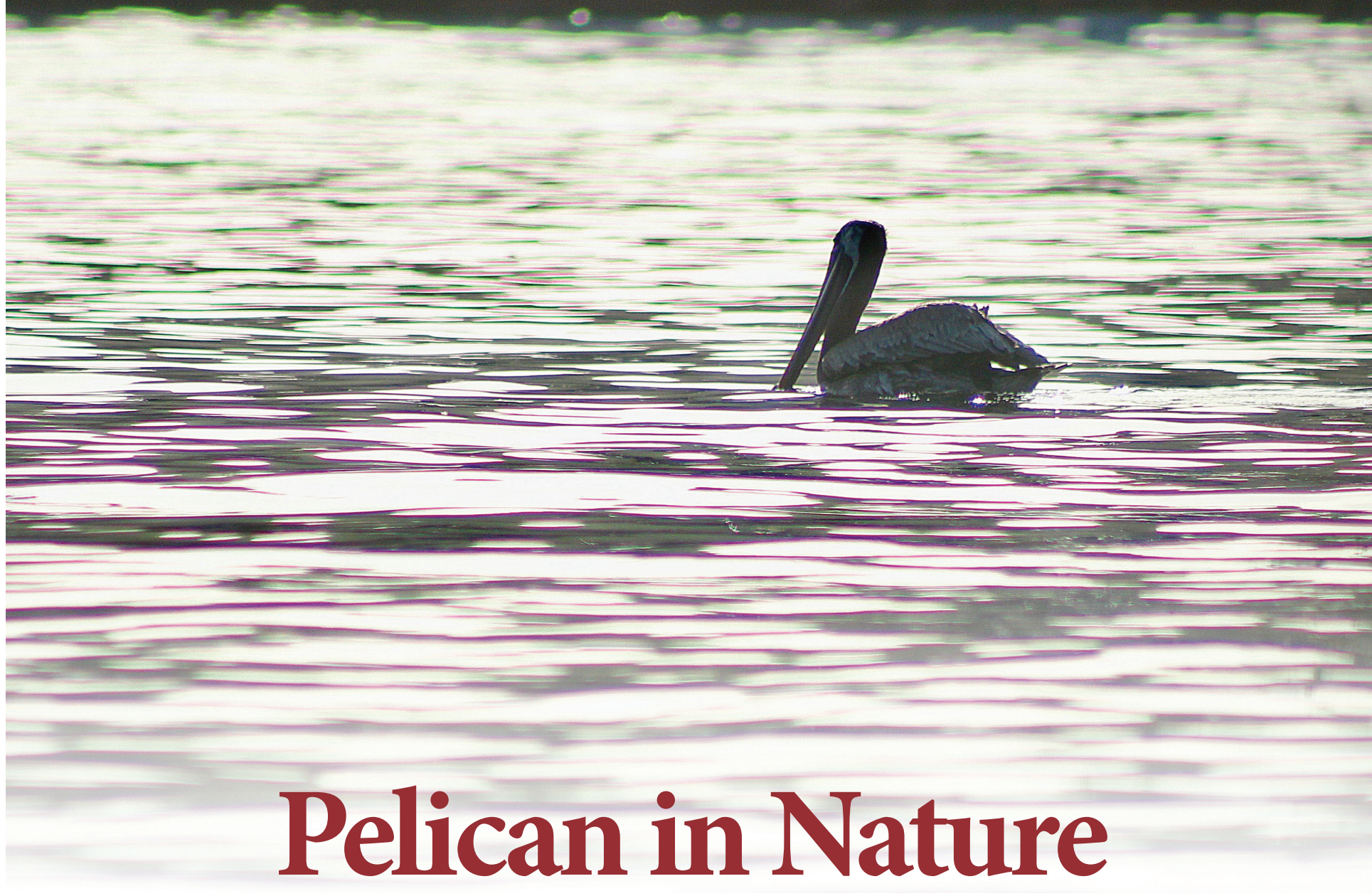


# UWI TODAY

THE UNIVERSITY OF THE WEST INDIES • ST AUGUSTINE CAMPUS

SUNDAY 19 DECEMBER 2021

[www.sta.uwi.edu/uwitoday/](http://www.sta.uwi.edu/uwitoday/)



## Pelican in Nature

A pelican sits in solitary meditation on the cool surface of the coastal waters of Chaguaramas in northwest Trinidad. The pelican adorns The UWI's coat of arms and is considered the university's mascot. Chaguaramas, once a naval base for the US, is one of Trinidad and Tobago's important natural regions. It hosts one of the few remaining dry forests in the west of the island, heritage sites, and coastal and nature-based recreational activities. Like many such environments around the world, Chaguaramas has been negatively affected by human activities. The UWI, through its scholarship, expert policy advice, advocacy, and the outreach activities of members of the campus community, is working to protect and rehabilitate the natural environment, and making sure species like the pelican have a clean and lush space for their meditations. PHOTO: SHEREEN ALI



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## FROM THE PRINCIPAL

# Our Regional Enterprise

**Despite the ongoing crises we face,** I am pleased to end this year in celebration of an outstanding moment for our Caribbean family – the people of Barbados. On November 30, Barbados officially made the transition to a parliamentary republic and installed the country's first president, Dame Sandra Mason. The significance of this moment should not be missed.

Since the Independence era of the 1960s, our region has moved, step by step, to greater self-determination, self-sufficiency, and an understanding of ourselves as a people with roots in the Old World, but very much of the New World. It hasn't always been easy. There have been periods of great turbulence. We are in one now. In fact, it could be said that we are more challenged today than we have ever been before. However, these challenges provide us with the opportunity to grow, to mature, and become more resilient in doing so. Our responses to these challenges define the ethos and culture of the generations that will follow.

Choosing this moment, 55 years after Independence, to, as President Mason said, “fully leave our colonial past behind”, is a powerful affirmation of Barbadian identity, and a resounding statement of ownership of their affairs. It signals that they are in charge of their destiny and empowered to face the challenges of this era.

On behalf of UWI St Augustine, I wish to congratulate the Barbadian people. I wish to salute Prime Minister Mia Mottley, who has been an incredible statesperson with a potent vision for her country and region, and a commanding voice for positive change on the world stage. I applaud President Mason, who has been an exemplar of Caribbean excellence for many decades, and is well-suited to represent Barbados in the new republic's highest office.

Closer to home, I congratulate the UWI Cave Hill campus community. We share both regional and institutional bonds. In fact, Dame Mason, like many Caribbean leaders, is herself a graduate of The UWI. This regional institution has been a part of our Caribbean story since the beginning of our postcolonial journey. It is my hope that as Barbados' relationship with Great Britain diminishes, the republic's relationship with her regional partners grows stronger.

We are stronger together. No institution proves that to be true more than The UWI. Indeed, this excerpt from a speech by Errol Barrow, first Barbados Prime Minister, at the inaugural graduation ceremony of 1968 at the Cave Hill Campus has been a clarion call for me throughout my term as St Augustine Campus



**On behalf of UWI St Augustine, I wish to congratulate the Barbadian people. I wish to salute Prime Minister Mia Mottley, who has been an incredible statesperson with a potent vision for her country and region, and a commanding voice for positive change on the world stage.**

Principal: “...the citizens of the region should be encouraged to regard the university as their most important asset... [and] that the efficient growth of this university is almost their only path to prosperity.”

In this issue of UWI TODAY, we take an in-depth look at the university's role at the United Nations Climate Change Conference (COP26) which took place from October 31 to November 12. UWI experts supported our governments, and made invaluable scientific and policy contributions at the conference.

Well before COP26, UWI scholars such as St Augustine's Prof John Agard have been leaders

in the international mission to curb climate change and preserve the natural world. As a region, we face acute danger to our economies and communities. Rising temperatures lead to rising sea levels, a threat to our coastal towns and villages. Damage to and depletion of our forests, rivers and hills, and the abundance of species that live in these places, can and very likely will have negative effects on our way of life.

In fact, most scientists believe that COVID-19 is at least partially a consequence of our encroachment on the natural world. At present, despite T&T's efforts to eliminate the virus, we are in its worst wave. In the face of this ongoing pandemic, I can only repeat what has been said many times – get vaccinated, practise social distancing, wear a mask, take care of your mental and emotional well-being, and above all, do not lose faith.

Look to the positive, and find moments of celebration. Like the people of Barbados, who in these trying times chose to boldly affirm their independence and identity, we should use this time to advance, not retreat. Embedded in the message of self-determination is a statement of hope, and a conviction that the capacity to solve problems resides at home. COVID-19, climate change, economic slowdowns, social ills – whatever the challenge, Caribbean people can find and implement the solution. This is the belief upon which The UWI was built.

*Brian Copeland*

**PROFESSOR BRIAN COPELAND**

*Campus Principal*

## EDITORIAL TEAM

### CAMPUS PRINCIPAL

**Professor Brian Copeland**

### DIRECTOR OF MARKETING AND COMMUNICATIONS

**Wynell Gregorio**

### AG. EDITOR

**Joel Henry**

Email: joel.henry@sta.uwi.edu

### CONTACT US

**The UWI Marketing and Communications Office**

Tel: (868) 662-2002, exts. 82013 / 83997  
or Email: uwitoday@sta.uwi.edu

## CAMPUS NEWS



Prof Godfrey A Steele

By his own assertions, Professor Godfrey A Steele has always been interested in discovering the links between seemingly unrelated topics and integrating them.

A prolific writer with years of experience in the field of communication, Steele, Professor of Human Communication Studies at UWI St Augustine released a new book entitled *Communication, Culture, and Conflict: Trinidad and Tobago and the Wider World*

in July of this year. The book, published by Kendall Hunt Publishing Company, explores the connections among how people communicate in non-traditional cultural settings when conflict is present. It is the main text in a new course proposal, Integrating Communication, Culture, and Conflict, being considered for approval.

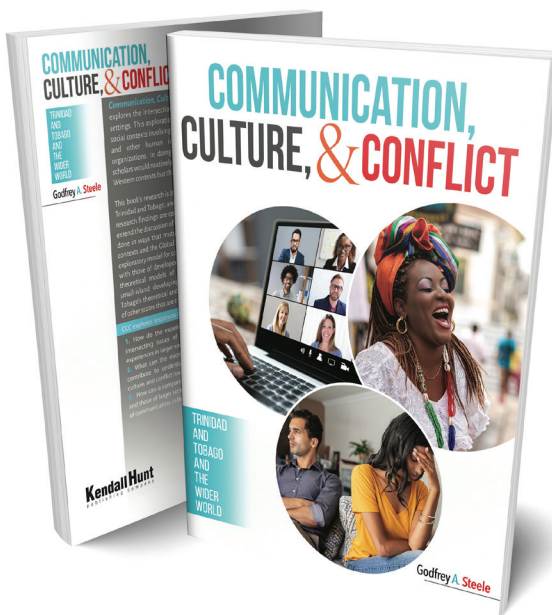
The first part of *Communication, Culture and Conflict* focuses on elementary or primary school students, a population that is often neglected when addressing topics such as conflict management, empathy, and social learning. Professor Steele used the film *Toy Story*, specifically the conflict between Buzz Lightyear and Woody, as an innovative tool for assessing how primary school children learn about conflict resolution.

Covering 24 schools in Trinidad and Tobago, the findings provided some perspective on variables such as gender, school type and geographic location when examining the highlighted topics. The book is divided into a further two sections with sections two and three investigating communication, culture and conflict in the university and workplace settings, respectively. Part two covers topics such as undergraduate student accounts of intercultural conflict, and questions if graduate students share the view of theorists on the use of the caucus in mediation. The third and final section zeroes in on the media's coverage of conflict in work cultural contexts, from wage negotiations to oil spills. In all sections of the book, these elements are explored over a wide range of media from animated film to news coverage.

# Threads of Connection

*Prof Godfrey Steele's latest book finds the links among culture, communication and the way we fight*

BY KANISHA VINCENT



Professor Steele's passion for bridging the gap between topics that might seem unconnected steered him through a first degree in Literature, a Master's in Education, and a PhD in Linguistics. He would eventually take up teaching and research in Health Communication, the experiences of which provided the material for his first three books. Later, his dual focus incorporated the wider field of Communication Studies. Having been awarded the opportunity of a sabbatical from 2020 to 2021, Professor Steele was able to prepare his book in time for release after years of data collection and essay writing from 2003 to early 2021.

He credits his discipline for the laborious process to his early experiences in life and his upbringing. A UWI Premium Teaching Award Winner (2000), Professor Steele reflected on his teachers: "[for] a great deal of the discipline that I managed to develop over the years... I always credit my early teachers".

In the authoring of this book and any other works before or after, Professor Steele seeks to help fill the gap of population-specific literature that exists. The hope is that these works will provide communities within the Caribbean, scholarly or otherwise, with access to the plethora of human communication literature that exists in, and especially those that pertain to, the Caribbean.

As for next projects, Professor Steele continues to challenge tradition by working to flesh out the Caribbean context in the area of Human Communication. He will be giving his inaugural professorial lecture on January 27, 2022, on the topic "Human Communication Studies: What, Why and How from a Caribbean Perspective".

"This body of work allows me, as an academic, to fly the university's flag and show how much The UWI and the Caribbean are contributing to understanding ourselves, each other, and the society within which we live, work, and play," he says.

■ For more information and to purchase *Communication, Culture, and Conflict*, visit <https://he.kendallhunt.com/product/communication-culture-and-conflict>

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

## UWI student/staff member selected for inaugural international climate change fellowship

Mrs Laura Rambaran-Seepersad, a graduate student and a member of staff at UWI St Augustine's Faculty of Science and Technology (FST), has been selected from a group of outstanding applicants to participate in the inaugural cohort of Project Green Course (PGC), a virtual programme for students from around the world. She is one of only 24 participants chosen to take part in the course, and the only one from the Caribbean.

Speaking on being selected for PGC, Laura said she "proudly represents the region as the only participant from the Caribbean and Trinidad and Tobago". Reflecting on her experiences, she said that the students "bring with them passion, diverse experiences and a commitment to addressing environmental issues in their home communities, countries and region."

PGC is "an interactive, interdisciplinary virtual course for undergraduates, master's and PhD students to explore climate and social justice, sustainability, advocacy, and public health", a statement from Turning Green, the movement responsible for the initiative explained.

The 24 participants, now official Turning Green members, will collaborate across disciplines for the 15-week course that will increase their knowledge of environmental and social justice topics, and sharpen their critical thinking, leadership, and communications skills.

Presently reading for a PhD in Climate Change and Finance, Laura spends her time working to educate Caribbean youth in science, technology, climate change, health and safety, and environmentalism. In her professional capacity, she serves in the area of graduate studies, research



Mrs Laura Rambaran-Seepersad

She said that the students "bring with them passion, diverse experiences and a commitment to addressing environmental issues in their home communities, countries and region."

and innovation, and outreach, at FST. She is the coordinator of the Trinidad and Tobago Chemistry Olympiad (Techno), public relations officer of CARISCIENCE, Project Action Officer of the Chaguanas Chapter of Soroptimist International, and Executive Director of Abhisafe Marketing Limited.

Turning Green is a global movement devoted to cultivating a healthy, just and thriving planet through education and advocacy around environmentally sustainable and socially responsible choices. Their programmes include Project Green Course, Project Green Challenge, TG Internships and Conscious Kitchen.

PGC is a 15-week independent study for students from five continents to offer equal access to information and

resources and to mobilize next generation leaders around climate action. For the final six weeks, participants will collaborate on Climate Action Projects to design, create, and implement campaigns to benefit their communities.

"The purpose of this course is to bring a global collective of students who care about our planet together in a communal context for conversations and to learn from, and inspire one another during a challenging moment in time on planet Earth," said PGC facilitator Natasha Mmonatau.

Students taking part in PGC come from academic institutions such as the Indian Institute of Technology, the University of Amsterdam, the University of Finland, Colorado University and Ebonyi State University in Nigeria among others.

Speaking on her motivation to take part in the programme, Laura said that "individually and collectively, we can all make a positive impact. Climate Change is real and urgent and we have a responsibility not just for our generation but for the future generations."



■ For more information on **Project Green Course and Turning Green**, visit <https://turninggreen.org>.

## ■ CAMPUS NEWS

## UWI Researchers published in the *International Journal of Ethics Education*

Researchers in the Department of Management Studies within UWI St Augustine's Faculty of Social Sciences have had their latest article published in the September 2021 issue of the *International Journal of Ethics Education*.

The article reports on their development of an approach that “cultivates imaginative moral development through the virtues” and “helps the development of personal responsibility to choose and do the right thing in all life's situations by infusing practical and existential meaning”, say the authors.

The piece, titled “Imaginative Virtue Ethics: A Transportation-Transcendental Approach”, was written by Surendra Arjoon (Professor of Business and Professional Ethics) and Dr Meena Rambocas (Lecturer in Marketing). It examines their research and teaching in Ethics. UWI TODAY covered the work of Prof Arjoon and Dr Rambocas previously in 2019 ([https://sta.uwi.edu/uwitoday/archive/august\\_2019/article11.asp](https://sta.uwi.edu/uwitoday/archive/august_2019/article11.asp)), which centres on Professional Ethics, a course offered by the Department of Management Studies.

“Among the key distinctive attributes of the UWI graduate is a critical and creative thinker guided by strong ethical values,” says Prof Arjoon. “Developing these three attributes of criticality, creativity, and ethics, have been the focus of the course in Professional Ethics.”

This latest work is based on the teachings of psychiatrist Viktor Frankl (1905-1997), who wrote the highly influential *Man's Search for Meaning*, which chronicled his experience as a prisoner in a Nazi concentration camp during the Second World War.

Describing their latest work, Prof Arjoon says, “Sometimes referred to as the Socratic Trinity or Platonic Triad, the Transcendental corresponds to the capacities of the human soul: logos (truth reflecting our rational capacities), ethos (goodness reflecting our emotional and moral capacities), and pathos (beauty reflecting our aesthetic capacities).”

He adds that, “the teaching and learning approach also incorporates the psychological concept of Transportation



Prof Surendra Arjoon



Dr Meena Rambocas

which is simply the art of ‘getting lost’ through the immersive experience of flow, where the mind becomes fully immersed in literary narrative using the imaginative faculty.”

Professional Ethics is an extremely popular and well-received course among students, and their feedback on the Transportation-Transcendental Approach has been largely positive. One course participant says:

“The philosophical undertones are deep – morality, duty, friendship, struggles and challenges in the journey of life, achieving a meaningful life, and helping others in their journey.”

However, ethical practice still seems elusive in many professions and organisations – even though they often use the language of ethics and morality.

“Knowing about something is not the same as practising it,” Says Prof Arjoon. “Most people have a narrow understanding or misunderstanding of ethics. Many view ethics as legal limits that constrain their behaviour. With little or no attention given to the importance of ethics, organisations will continue to foster toxic environments where narcissistic individuals rise to leadership positions.”

The dilemma, he says, is “can we justify choosing a moral life when the immoral life appears to be more rewarding and a virtuous life appears to lead to poverty, powerlessness, and abuse?”

“The Greek philosophy gives the answer: *The immoral is a worse life than a morally virtuous life because ultimately the immoral life corrupts the soul and leads to unhappiness, mental anguish, loss of friends, and emotional bankruptcy. All the power in the world cannot compensate for the psychological emptiness of an immoral life. The moral person lives a life of integrity, personal fulfilment, and is at peace.*”

■ For more information on the article “Imaginative Virtue Ethics: A Transportation-Transcendental Approach” and the publication *International Journal of Ethics Education*, visit <https://link.springer.com/article/10.1007/s40889-021-00136-0>

## Professor Hamid Ghany named Honorary Professor



Professor Hamid Ghany

Professor Hamid Ghany has been conferred with the title of “Honorary Professor” for his contributions to Constitutional and Parliamentary Affairs at The UWI and across the region. His appointment is for the period October 1, 2021 to July 31, 2023.

Professor Ghany, who recently retired as Director of the Sir Arthur Lewis Institute of Social and

Economic Studies (SALISES) at UWI St Augustine, is Professor in Constitutional Affairs and Parliamentary Studies, and a former Dean of the Faculty of Social Sciences. He currently serves on attachment to SALISES.

Universities like The UWI confer the title of Honorary Professor in recognition of an individual's special contribution to a subject area.

Apart from his directorship at SALISES, a post he held from 2017 to 2021, Professor Ghany created the Faculty of Social Science's Constitutional Affairs and Parliamentary Studies Unit and the Sir Arthur Lewis Distinguished Lecture Series. He has taught political sciences and governance courses at the undergraduate and postgraduate levels since 1993. He was Course Coordinator and Lecturer of Law, Governance, the Economy and Society from 1999 to 2012.

Professor Ghany has authored two books and made substantial contributions to numerous other publications. As part of the 50<sup>th</sup> anniversary of the Independence of Trinidad and Tobago, he received the Chaconia Medal (Gold), the Republic's second highest national award, for “long and meritorious service to Trinidad and Tobago” as an educator in the field of education.



## Learn More

It's never too early (or too late) to learn more about the hundreds of undergraduate and postgraduate programmes offered at UWI St. Augustine across eight faculties; our easy online payment plans, scholarships and bursaries; applying with CSEC, CAPE and alternative qualifications; opportunities for internships and to study abroad; our robust student support programme; how you can build a network of peers across different industries and countries; or how you can become a #GameChanger.

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## ■ OUR PEOPLE



# Fostering change for CLIMATE CHANGE

Q&A with  
Professor Raphael Heffron,  
Dean of the Faculty of Law

BY SERAH ACHAM

From the courtroom to the conference room to the classroom, **Professor Raphael Heffron's** career is the epitome of multifaceted. Combining the areas of law, economics, energy and climate change, policy, and education, his work on achieving a just transition to a low-carbon economy has impacted and continues to impact countries around the world. Hailing from Cobh – a very small island on the coast of Ireland, he specifies – he identifies himself simply as an academic who also holds a “Barrister-at-Law qualification”.

On November 1, 2021, he was welcomed to **The UWI St Augustine Campus** as the new **Dean of the Faculty of Law**. Recently, **UWI TODAY** chatted with Professor Heffron to learn about the man, his work and his plans for the Faculty of Law.

**UT: You've had quite a career – multifaceted, impactful and well-recognised. How did you get here?**

**RH:** Every journey, I suppose, starts with hard work. There is a saying, “the harder you work, the luckier you get”, so I was blessed with some fortune along the way. After qualifying as a barrister-at-law, I went back to do a doctorate.

The corner stone of my work is advice, trying to bring more justice into the whole area of energy, environment, and climate change. If we can ensure more justice in this area, we will ensure that we deliver a better world for the next generation.

That has allowed me to be in the position to give talks, and work with great people, in different places across the world. I've been a visiting professor in universities in Africa, Asia/Pacific, Europe, and over here in the Americas. I was a visiting professor here in Trinidad in 2019 and enjoyed my time. Now I'm back.

I did some research in the Americas and, broadly speaking, inside the Caribbean and across the Americas. I thought that it would be a great opportunity to come to this region and to help continue the good work that has been done at the Faculty of Law by Professor [Rose-Marie Belle] Antoine [the previous dean].



Draped in the T&T flag as Keynote Speaker at the International Just Transition Conference in 2019.

Knowing that the university has already invested in energy and climate change issues, it was a great opportunity to be located in the region and to connect with some of the research and practitioner collaborators that I have, as well as to develop my research in this region.

**UT: Do you currently practice law?**

**RH:** I am a Senior Counsel in Janssen Law Firm in Brussels. In this position, I'm not practicing. I'm able to practice, but there are only so many hours in the day.

However, I am engaged in the practitioner community. I regularly write for practitioner magazines. I give many presentations to practitioner communities, at least 10 times per year.

I think, when you're teaching law, you have to have both the academic as well as the professional side. Many students are going out into the legal practice to become lawyers and it's our responsibility to prepare them for the challenges ahead. Climate change, and how we manage our economies as a result of it are going to be the biggest challenge of our lifetimes.

**UT: Tell us more about the challenge that climate change poses, particularly in the context of law.**

## ■ OUR PEOPLE

**RH:** Climate change, sustainability, the reason they're so important is that they have created a new form of risk in society and they require us to think about risk in different ways. That is not just policy makers or here at the university. People are becoming more aware that we have a responsibility to think about climate change and about being a bit more sustainable.

The research of people I've worked with has enabled me to speak at different venues, and we see more and more events that are championing climate change and sustainability issues.

For my legal community, we need to take the approach that climate change and sustainability risk must be added into the legislation. We've come to a point today where you cannot ignore these risks anymore. If today, as a lawyer, you say "I didn't know those risks existed", in a few years, your client will respond, "how could you not know?"

"Lawyers will be held accountable in the future, and that's one of the big drivers when you think of climate change and related sustainability issues – we need to make sure that every lawyer coming out of the education system today is fully equipped with the knowledge necessary to represent their clients on the issues of climate change and sustainability.

### **UT: Can you share a bit about your research?**

**RH:** My research is to address the issue of justice in our economies. The energy sector is one of the biggest in the global economy [and] in many national economies, so my research is to look at how we can ensure that the energy sector gives value to all people in society. In order to do that, you have to contribute to goals such as the climate goal and the environmental goals. You also have to address things like distributing the wealth that we gain from energy resources, and recognising that some people's lives can be affected in different ways by energy or climate change issues. You have to ask how we will attend to and compensate those people. We are also required to think about the bigger commitment to international climate change issues.

My research focuses on looking at the legal solution, so ensuring that you have legal frameworks that companies,



Prof Heffron after being awarded his Barrister-at-Law degree and called to the Bar at the Supreme Court in Ireland.

the public or governments can follow to achieve more just outcomes for society. So when we think of how our economies and societies are going to develop over the next five [to] thirty years, we need ... fair outcomes and ... we need a just transition. The idea of a just transition is not to leave anyone behind, and this has been a problem in the past and has led to a lot of societal inequality all over the world. That is the key emphasis of my research – trying to ensure that in this new transition ... no one is left behind ... I think if we do that, people will have more confidence in the way society will progress in the future and, overall, that should make society happier.

### **UT: Your impact in your field has been wide. What motivates you?**

**RH:** It keeps being interesting because the change is happening every year and is speeding up. The technology is getting better. Governments are more active, and that means businesses have to get more active. If you're doing work in this energy climate, environment, sustainability, and law space, it's like your work is being updated every year. It keeps challenging you and maintains your excitement. Also, you can teach the students, not only the things they need to know for next year, but also things that will be relevant to them for the next five to 20 years.

### **UT: What are your plans for the Faculty of Law?**

**RH:** My plans are to, first, continue the good work of Professor Antoine and the Faculty. [It has] grown a lot over the last two terms of her office [and] has to continue growing, building its reputation, nationally and internationally. The faculty is very strong at teaching, so we have to make sure we continue that, as well as grow in terms of research and recognition as a leading research community in law in the world.

As I mentioned before, we have to think about how to educate the lawyer for tomorrow's world and that's why climate change is so important. In any type of commercial, civil, or even criminal or family law, it is going to be unavoidable. You will have to ask yourself, "did I address climate change and/or sustainability issues?"

We also need to think about the skill set ... Lawyers need to become comfortable with [using] technology as they practice law ... data driven analysis is widespread throughout society, so there is increasingly going to be a need for tomorrow's lawyer to understand some element of analytics.

For me, ensuring that the law student who passes through the St. Augustine Campus [comes] out with all the skills and the key knowledge that would separate them from other lawyers and [that] they should then go on to have a successful career, whether it be in law or related areas, [is important].

### **UT: Tell us a little bit about yourself outside of your professional life. What do you enjoy doing?**

**RH:** I enjoy a range of activities. One of the plusses of Trinidad, I hear, is the great hiking potential around the island and, obviously, a lot of beaches. I also play some sports, such as football, and I can even play some golf, though the weather might be a bit too hot. I'd have to go out there early in the morning. I have an active off-campus life and I'm hoping to enjoy that more now that I live in a warm climate. It's quite hard to get out when it's only 1°!



Receiving honours for his work on energy law from the Emir of Keffi in Nigeria.

## ■ GOOD COP, BAD COP – UWI AT COP26

# 96° in the shade

## *Real hot as Glasgow feels the political climate*

BY VANEISA BAKSH



The UWI's Dr Hugh Sealy with Barbadian Minister of Economic Affairs and Investment Ms Marsha Caddle at COP26. PHOTOS: COURTESY UNFCCC.

Every day, participants had to submit to nasal swabs, one of the innocuous discomforts wrought by COVID-19, which had caused COP26 to be postponed in 2020. For Dr Hugh Sealy, who has been attending COP sessions since 2007, it was still worth being there, although he had to isolate for a weekend when one of his co-facilitators tested positive.

"The threat of getting COVID was real. It is not an overstatement to say that people risked their lives to go and negotiate," he said.

Dr Sealy, an environmental scientist at UWI Cave Hill in Barbados, was a co-facilitator for the Article 6 negotiations, at the tremulous heart of the Paris Agreement, still throbbing with unresolved issues. It was in this capacity that he was aware of the significance of his physical presence, because that was where you could interpret body language, observe gestures, and find ways to get past language differences—to read the room, as they say.

He was also the lead negotiator on mitigation ambition for the Alliance of Small Island States (AOSIS), a 30-year-old grouping of 39 countries that had the wisdom to believe in the power of a bloc in global matters. Proof of this came just before the end, when they could have shut down the final plenary over what was perceived as very weak text proposed on loss and damage. AOSIS agreed to leave the revised text until the Egypt conference next year.

In that final plenary, India, a large consumer and producer of coal, wanted the words changed from "phasing out" to "phasing down". It caused a ruckus; "the whole plenary was catspraddled," he said.

Dr Sealy was the technical lead of the Barbados delegation at Glasgow, and an advisor to the Government of the Republic on several matters. Prime Minister Mia Mottley had captured global attention with her powerful address at the opening ceremony (Dr Sealy said her words were quoted more than once at sessions, something he had never seen in his 14 attendances), then she returned to Barbados and his team briefed Minister of Economic Affairs and Investment Marsha Caddle, and Ambassador Elizabeth Thompson.

Among the issues that the AOSIS was vocal about was that of "loss and damage" from climate change. Early in the summit, vulnerable nations had pushed for the establishment of a dedicated fund as compensation, but there was resistance, particularly from the USA, the EU and other rich nations, and the most affected nations had to settle for an agreement to initiate dialogue about "arrangements for the funding of activities to avert, minimise and address loss and damage".

The richer nations, responsible for the highest greenhouse gas emissions, are reluctant to agree to anything that might admit their liability in the degradation of the planet's environment. The G20 group—19 countries plus the EU—had committed to providing \$100 billion a year as grants for developing countries as climate finance (over and above what is referred to as ODA or

Official Development Assistance), but had only reached US\$80 billion a year, the majority of which were loans, not grants as originally envisaged.

"COP has failed on the finance side, except for the interventions made by AOSIS on special drawing rights issues. The pledge at Copenhagen in 2009 was to deliver a \$100 billion a year. There is a quarrel because only about 20 per cent goes to adaptation, the rest goes towards mitigation. Most developing countries feel that finance for adaptation has to be a priority now. They want a 50-50 split. The finance gap is somewhere around \$2 trillion to \$5 trillion a year. The adaptation gap is around \$500 million to one trillion a year. I have a problem with trying to define what the adaptation finance gap is because I do not know what we are adapting to. You have to define that."

He said the G20 collectively accounts for 80 per cent of global greenhouse gas (GHG) emissions (the World Resources Institute says 75 per cent), and it was easy for these ageing leaders to pledge goals they would not commit to because they would not be around to account for it.

Global emissions are 50 billion tonnes, he said, and the total GHG submissions from the entire CARICOM region are about 126 million tonnes. Of that figure, Trinidad and Tobago contributes a whopping 74 million tonnes, nearly 60 per cent of the total. "On a per capita basis, that is around 20 tonnes per person, while the rest of us are around seven tonnes per person."

Jamaica is a distant second at 15 million tonnes, and Barbados is at two million. The 126 million is a gross figure that is significantly lower when you subtract the mitigating effect of forests, which brings the region's net emissions down to around 48 million tonnes per year, he said.

"The region as a whole is miniscule compared with global emissions, but we're at a stage now where every tonne counts. We can't say because we're so small we don't count. I think every man jack, every country has to step up. We have to reduce emissions by 45 per cent, let's call it half, by 2030. We have to look at the region's NDCs; are we reducing our emissions enough by 2030?"

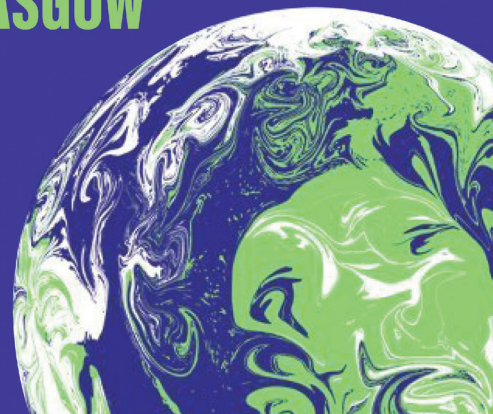
But he knows this will be a difficult and daunting task. He said there was a CARICOM meeting before Glasgow to arrive at a unified position. "When they saw language in there about ending fossil fuels – that was sobering and unacceptable to some."

"It's going to be hard to reduce fossil fuels. Barbados, which has submitted a very aggressive NDC to eliminate fossil fuel use in electricity generation and transport, gets \$100 million a year in revenue from taxes on gasoline. If you take away gasoline, you have to find another source. I'm not even going to talk about the continued offshore oil and gas exploration being conducted by a number of us. The UN Secretary General has clearly indicated that there is enough oil and gas out there already. We have to do some hard thinking."

Quoting Mia Mottley, he urged, "We have to try harder."

# COP26

## GLASGOW



### What is COP?

Since 1995, a two-week conference has taken place annually (except for 2020) as a formal negotiating arena for countries to discuss their climate commitments and actions. It is known as the Conference of the Parties (COP) to the United Nations Framework Convention on Climate Change (UNFCCC). Over time, it has grown to include global stakeholders from a variety of perspectives.



### The Paris Agreement

In 2015, at COP21, the Framework Convention was the first universal agreement on climate change. Known as the Paris Agreement, it has come to be the benchmark for discussions, providing a structural framework by which commitments and progress can be assessed. Except for Article 6, common time frames for nationally determined contribution (NDC) submissions, and the transparency framework which still harboured contentious issues, the "Paris Rulebook" was considered complete, with Glasgow expected to sort out these issues.



### Nationally Determined Contributions (NDCs)

According to the UN, the heart of the Paris Agreement is the NDCs, which represent the efforts by each country to reduce national emissions and adapt to the impacts of climate change. Each country is required to "prepare, communicate and maintain" successive NDCs of its intended goals. The expectation is that each NDC, starting at COP26, will be updated and presented every five years, serving as a progress report and a renewal of the commitment to fulfil pledges.



### Greenhouse Gas Emissions

Basically, the Paris Agreement has quantified the level of greenhouse gas emissions (GHG) that exist, the targets that must be met in order to reduce the catastrophic effects of climate change on the planet (a 45 per cent reduction in emissions by 2030 will bring us only to the brink) and has identified frameworks and areas within which countries can set their policies and actions.



# Half a degree matters

In 2018, the Intergovernmental Panel on Climate Change (IPCC) reported on the difference half a degree can make on the effects of warming.

**The Paris Agreement** had resulted in countries committing to keep global warming below 2°C (3.6°F) while trying to limit temperature increase to 1.5°C (2.7°F). **Prime Minister of Barbados Mia Mottley** insisted at COP26 that the goal be reset to 1.5°C, declaring that 2°C was a death sentence to nations on the frontline, such as in the Caribbean.

According to the IPCC report, "The world has already witnessed about 1°C of temperature rise and is on track to exhaust the carbon budget associated with 1.5°C by 2030."

The World Resources Institute compiled this breakdown of the differences between a 1.5°C and a 2°C world, based on the IPCC report. Here are some of the projections.

**Temperatures:** Average and extreme temperatures will be higher in all inhabited areas under 2°C, of warming versus 1.5°C. Under 1.5°C, almost 14 per cent of the world's population would be exposed to severe heat waves at least once in five years. Under 2°C it would be 37 per cent.

**Sea Level Rise:** With 1.5°C of warming, sea level rise would be 0.4m in 2100, compared to levels in 1986-2005. At 2°C, it would be 0.46 m (Dr Hugh Sealy thinks this is an underestimation.) The risk of flooding increases, affecting 69 million people at 1.5 and 79 million at 2°C.

**Species Loss:** At 2°C, 18 per cent of insects globally, 16 per cent of plants and eight per cent of vertebrates are projected to lose more than half of their ranges. At 1.5°C, this is reduced by two-thirds for insects, and by half for plants and vertebrates. Other factors that lead to losses of species, such as forest fires and the spread of pests and diseases, also decrease if warming stays at 1.5°C.

**Transformed Ecosystems:** At 2°C, 13 per cent of the Earth's land area is projected to witness biome shifts (such as changing from tundra to forest), or transformation, as compared with four per cent at 1.5°C. Ocean ecosystems are already transforming and will change dramatically with just 1.5°C of warming.

Coral reefs are projected to decline by 70–90 per cent with warming greater than 1.5°C. With an additional half degree of warming, more than 99 per cent losses are expected. Loss of fishery productivity at low latitudes, acidification, dead zones and other dangerous conditions are projected to be more pronounced. One study cited in the report found that the global annual catch from marine fisheries declined by 1.5 million tons under 1.5°C of warming. Under 2°C, that loss grew to 3 million tons.

Food shortages, health issues, economic hardship, increased flooding and drought are among the areas to be significantly affected by just half a degree more of warming.

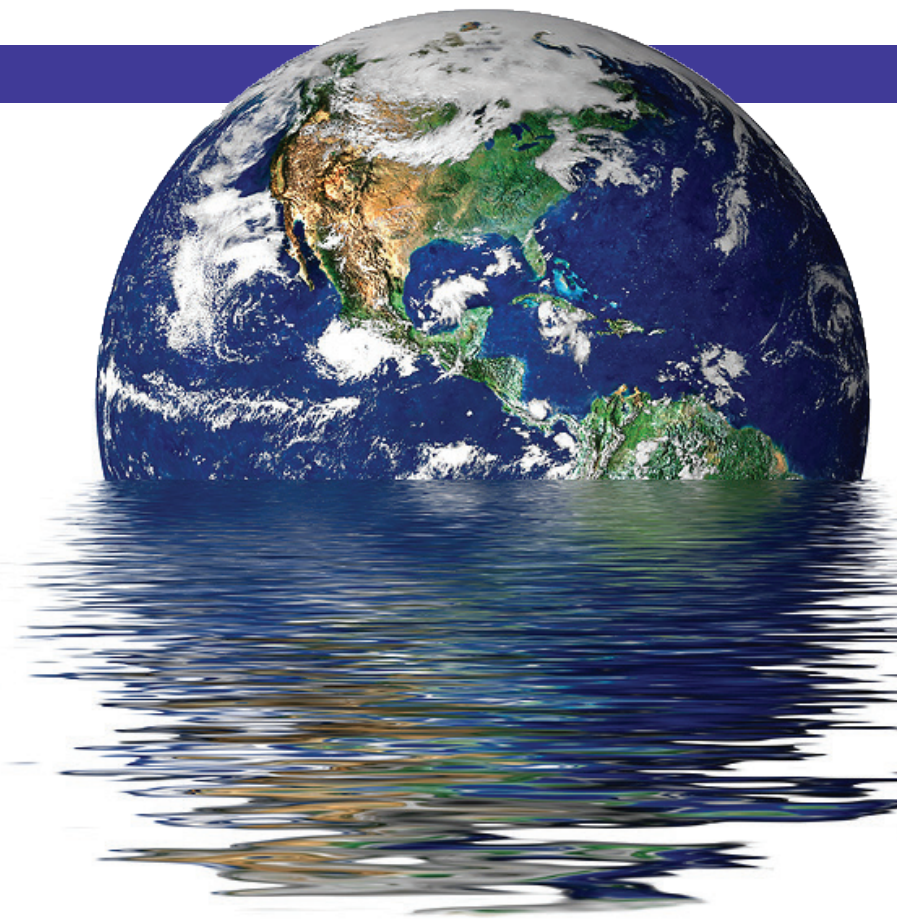
**United Nations Climate Change**

**Prime Minister of Barbados Mia Mottley insisted at COP26 that the goal be reset to 1.5°C, declaring that 2°C was a death sentence to nations on the frontline, such as in the Caribbean.**

# Act now or we will ALL FACE THE CONSEQUENCES

*Climate Scientist Professor John Agard  
on T&T, the region's post-COP26  
approach to climate change*

BY AMY LI BAKSH



The 2021 United Nations Climate Change conference, known as COP26, was held in Glasgow from October 31 to November 13. World leaders from 120 countries and over 40,000 participants gathered to discuss the future of our planet in the face of decades of insufficient climate action. The hope was that they could curb some of the damage caused by fossil fuels, damage that is projected to have dire consequences for the environment and humanity.

Over the past few decades, carbon dioxide emissions have resulted in changes that are already having marked consequences for us in the Caribbean.

"Incredible carbon dioxide emissions are causing the world to get hotter. Not only that, but in the Caribbean, we have a hurricane season every year, and where we used to have Category Five hurricanes that were many decades apart, we are now having them every few years," says Professor John Agard, leading scientist at UWI St Augustine, Professor of Tropical Island Ecology, and Director of the university's Global Institute for Climate-Smart and Resilient Development.

Prof Agard was one of several academics from The UWI that took part in COP26. He attended virtually so as to not contribute to conference's carbon footprint.

As Prime Minister of Barbados Mia Mottley stated at the conference, small island states, like those in the Caribbean, are dependent on finance to limit global temperature rise and ensure our survival. Failure to do so "is measured in lives and livelihoods in our community".

A similar statement was echoed by Dr Keith Rowley, Prime Minister of T&T, who also noted that financing was required for countries like ours to achieve the changes needed to survive.

"As an economy largely based on oil and gas, and petrochemicals, we in Trinidad and Tobago recognise our responsibility in transitioning, over a reasonable and manageable time, to net zero," said Dr Rowley. But will it be enough?

"We are dependent on getting enormous foreign exchange from oil and gas," Prof Agard tells UWI TODAY. "Because of the climate change issue of people trying to get into renewable energy, that's not going to happen anytime soon in Trinidad and Tobago. So we need to develop a zero energy transition plan and roadmap, to see when we are going to exit from oil and gas, as many other countries have done."

Currently underway is the Orange Grove Solar Park, where The UWI has provided land to create a 40-hectare solar panel park at the Orange Grove Estate. According to the Prime Minister, that



A student from UWI's Coastal Engineering and Management programme measures beach elevations for coastal erosion. Comprehensive data collection is crucial for assessing coastal changes, trends and the relationships between these indicators. This will assist islands in planning for uncertain climate changes.



project would produce 10 per cent of renewable energy in T&T, which would be the biggest project of that kind in the Caribbean. However, those are suggestions, and a concrete plan is needed. Production of windmill farms in Jamaica have drastically reduced their CO2 emissions.

"Other counties are making progress in generating energy from other sources rather than buying oil and gas from Trinidad and Tobago. The market is being reduced. We are at risk of being left behind because we produce the oil and gas," says Prof Agard.

It is all well and good to discuss the possibilities of what can be done, but without real action, these are simply words. Already, the Caribbean is feeling the effects of climate change and will continue to do so as it becomes more rapid. Even those who are more focused on the economics over the environment should be concerned because it will also have a tremendous effect on markets.

"Trinidad and Tobago is slipping into the hurricane zone because of heat development," says the climate scientist. "We have massive infrastructure not only in rigs offshore, but also at Pt Lisas, and those companies are close to each other. There could be enormous destruction in Trinidad and Tobago, and years of GDP could be lost in hours."

The government of T&T has opened up proposals for projects for generating renewable energy, and more than 60 companies submitted proposals. They chose a solar panel project that The UWI is involved in.

"But there were many other proposals. Some others involved putting up massive windmills on the East Coast, because there's wind coming in across the Atlantic, and there's no land between here and Africa. So you could generate electricity this way," says Prof Agard. "I think they will have to reopen the invitation proposals so we can have several projects going at the same time."

With sea level rise causing coastal erosion, and heat index rise affecting our wet and dry seasons and our overall ability to work and be outside, we need more than ever to push our leaders to make more meaningful change.

Prof Agard believes that "the voices of young people in particular are important. We have new tools that did not exist before, like social media, and those in leadership roles pay attention to them because information travels globally in real time. This is the avenue that young people use to have their voices heard globally."

And our voices are more important than ever—but ultimately, the most important thing right now is action.

**"Other counties are making progress in generating energy from other sources rather than buying oil and gas from Trinidad and Tobago. The market is being reduced. We are at risk of being left behind because we produce the oil and gas"**



## ■ CAMPUS NEWS

# Training leaders for the Caribbean climate change intervention

Climate change is recognised as an “existential threat to our way of life”, said Dr Colin Young, Executive Director of the Caribbean Community Climate Change Centre (CCCCC). Yet that knowledge hasn’t penetrated the society enough to lead to the kind of urgent action necessary to pull us back from the brink. More is needed.

As part of a four-year European Union-funded project, Dr Young and several other climate and environmental issues experts from around the world, took part in a capacity building and training programme for Caribbean governments. The programme, held virtually, was hosted from December 6 to 8 by UWI St Augustine.

“We need to do much more to improve our understanding of and our ability to make better decisions in the face of climate change,” Dr Young told the attendees, primarily experts from several regional governments, on Day 1 of the programme.

The training was part four of the Enhancing Climate Resilience in CARIFORUM Countries project that was launched in 2019 by CCCCC in partnership with the Intra-African, Caribbean and Pacific Group (ACP) GCCA+ Programme. The project, a statement from CCCCC said, “aims to strengthen the climate risk management framework in the 16 CARIFORUM member countries”.

The Caribbean Forum is a subgroup of the Organisation of African, Caribbean and Pacific States and serves as a base for economic dialogue with the European Union. It is made up of the 15 CARICOM countries and the Dominican Republic.

The three-day training programme, hosted through the St Augustine Campus’ Centre for Excellence in Teaching and Learning (CETL), gave participants information on topics like climate variability, climate change and disaster risk management, the blue economy, food security, and awareness campaigns and messaging.

Speaking on the importance of addressing climate change and the dire consequences faced by the Caribbean, Professor Indar Ramnarine, Deputy Principal of UWI St Augustine, said, “in this region and across the globe, we have been facing the increasingly severe effects of climate change. Our vulnerability, especially that of our low-lying island states, is one of grave concern.”



Dr Colin Young



Professor Indar Ramnarine

The Deputy Principal said that UWI “fully supported the idea of this workshop”, and that “the importance and urgency of climate change has long been a priority of The UWI”. He added that the university was glad for the opportunity to work in partnerships such as the training programme to “increase knowledge, improve attitudes and positively influence practices within the region”.

Among the presenters were Professor John Agard, Executive Director of The UWI’s Global Institute for Climate Smart and Resilient Development (GICSRD), who spoke on “mainstreaming environmental considerations into the core of policy and decision-making”.

The UWI launched the GICSRD in October 2021, to increase the scientific understanding of the changing climate and its impact on communities and economies. The university also recently hosted a virtual gathering of around 25 regional and international organisations to discuss the public health challenges of climate change. The research presented highlighted links between climate change and the non-communicable disease epidemic in the Caribbean.

Mr Bogdan Stefanescu, team leader for Green Economy, Energy and Resilience in the EU Delegation to Barbados, spoke forcefully at the opening ceremony. Quoting from a climate change report, he said that thoughtless little actions add up.

“A disappearing species, a plastic straw thrown on the beach, a bulb left on when not needed, all this will affect us slowly in the long run like our own handmade slow onset disaster,” stated Mr Stefanescu.

The *Enhancing Climate Resilience* training programme is a joint effort of the CCCCC, The UWI, the Intra-ACP GCCA+ Programme, AESA (an international development consulting firm) and OIKO (a provider of technical advice and analysis for sustainable development around the world). CCCCC is the body that coordinates the Caribbean response to climate change. It is the knowledge centre for regional climate change information and provides policy advice to the CARICOM member states.

First announced in September 2019 at a ceremony in Bridgetown, Barbados, the 12 million-euro *Enhancing Climate Resilience* project is being funded by the EU Commission. “The project will,” CCCCC stated, “assist member countries to enhance climate observational and monitoring networks, improve and climate-proof water infrastructures while building the capacity of governments and private sector to integrate risk management techniques into development and planning.”

It will also, “support the expansion of educational and outreach programmes”.

■ For more information on CCCCC and the Caribbean response to climate change, visit <https://www.caribbeanclimate.bz/>.

## DR LEROY HILL APPOINTED DIRECTOR OF THE CENTRE FOR EXCELLENCE IN TEACHING AND LEARNING



Dr LeRoy Hill

Dr LeRoy Hill has been appointed the new Director of UWI St Augustine’s Centre for Excellence in Teaching and Learning (CETL). His appointment took effect from September 1, 2021.

Dr Hill holds a PhD in Education (eLearning) from the University of Nottingham, an MA in Instructional Technology (Curriculum and Instruction) from Virginia Tech University and a BSc in

Social Studies Education from Andrews University. His academic qualifications also include a postgraduate teaching certificate from The UWI and a certificate in University and College Administration from the University of Manitoba.

He has taught online in the fields of Instructional/Learning Design and Educational Leadership for over 10 years. Dr Hill’s research interests include socio-cultural activity theory, distance and online education, learning designs, and teacher education. He is host of the podcast, “Let’s Talk eLearning”, which is available on a number of popular platforms. The podcast shares success tips on eLearning and distance education, and was created as a way to demystify and assist education practitioners to understand issues and opportunities in distance learning.

Dr Hill succeeds the late Dr Margo Burns, who joined UWI St Augustine as Director of CETL in 2016.



## ■ UWI IN SOCIETY

# The Necessity of Risk

*Prof Copeland says Caribbean society should be willing to take the chance on innovation*

BY JOEL HENRY AND RACHAEL ESPINET



Flashback to a display of lubricants and coating products at an innovation conference held by UWI St Augustine in 2017. Developed by inventors within the Chemistry Department, the products are asphalt-based.



Students from the Department of Creative and Festival Arts (DCFA) play the PHI in this image from the archives.

**There is a lot of uncertainty and risk in innovation.** To innovate depends on the market, and if people are willing to adopt the new service or product. One could risk a lot of money in trying and failing. However, with no risk, there's no reward.

Professor Brian Copeland, campus principal at UWI St Augustine, is concerned that our fear of loss has hindered the country from truly breaking new ground.

He elaborated that only about five percent of the patents in the IP archives end up being commercialised and therefore can be truly called an innovation. "It is high risk, and you can understand why people in the Caribbean, in particular, would shy away from it," Prof Copeland told UWI TODAY in an interview at the Campus Principal's Office.

He believes that society tends to punish those who try something new and fail. However, failing is one of the main ways people learn.

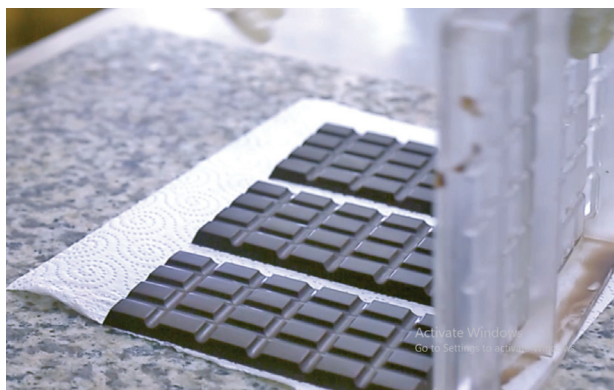
In its Technology and Innovation Report 2021, the United Nations Conference on Trade and Development (UNCTAD) emphasised the importance of developing nations preparing for "deep and rapid technological change that will profoundly affect markets and societies". Innovation is crucial, the report said, in preventing the widening of "new digital divides" and inequality between the developed and developing world.

"All countries will need to pursue science, technology and innovation policies appropriate to their development stage and economic, social and environmental conditions," the document stated. "This requires strengthening and aligning science, technology and innovation systems, and industrial policies, building digital skills among students and the workforce, and closing digital divides."

These recommendations very much align with Prof Copeland's own approach to spurring innovation – both on and off the St Augustine Campus. Since becoming Campus Principal in 2016, he has made the development of an entrepreneurship and innovation ecosystem a central component of his tenure. This involves creating the conditions for innovative ideas to flourish among students and staff, establishing an idea-to-product pipeline, introducing new products to market, and protecting the IP of campus innovations.

At UWI St Augustine, this ecosystem is made up of three units. The St Augustine Centre for Innovation and Entrepreneurship (STACIE) provides funding, IP protection, industry partnerships, and consultative support from UWI experts. The Entrepreneurship Unit helps prospective innovators develop their business concepts, research the market, enhance their business skills through workshops, provide guidance on business and marketing plans, and identify investors.

The third component of the ecosystem is UWI Ventures, a for-profit holding company that is key to the commercialisation



Chocolate bars being manufactured from locally cultivated cocoa at UWI St Augustine's Cocoa Research Centre.

of products and services developed on the campus. Together, these units encourage and support the development of ideas with market potential, protect them, and eventually introduce them as revenue-earning products and services.

UWI St Augustine is not the only campus involved in this type of activity. The entire UWI system has been evolving its approach to innovation. The university's current strategic plan, The UWI Triple A Strategy 2017 to 2022, incorporates commercialisation and the development of spin-off companies as strategic outcomes. This represents a considerable shift in a university culture in which advancement was based primarily on research and published work – not innovation as defined as the development and implementation of new ideas for commercial purposes.

Internationally, institutions such as Stanford University, MIT, and the Imperial College of London have formed symbiotic relationships with governments and the private sector to unleash a host of cutting-edge products and services, including "frontier technologies" such as artificial intelligence, robotics and biotechnology. Currently, this is not what is happening in T&T and the region. The UWI's role is more of a jump-starter of innovation than a partner in a well-funded and enthusiastically supported marketplace for novel idea-based entrepreneurship. In 2017, T&T invested 0.09 percent of GDP in research and development. The average, based on 90 countries, was 1.05 percent. High-ranking countries such as Israel and South Korea invest almost 5 percent.

Prof Copeland sees this lack of innovation as a symptom of our colonial history. As a people, we were taught to be implementers of others' ideas rather than problem solvers and inventors. He referenced Lloyd Best, who called this behaviour a "Muscovado Bias" in the plantation economy. The Muscovado Bias refers to the colonies being restricted to producing unprocessed

raw materials such as cane to make sugar.

"Colonisation has told us that we are not good enough, and that is ending now. In a way, social media has helped. Young people have more confidence than we (older generations) did," said the Campus Principal.

The fear of not being good enough, he said, would dissipate from the country within the next decade, but he is concerned about what will happen in the immediate future to tackle some major problems.

The race to innovate is on, as problems such as climate change force Caribbean people to quickly create solutions to rising sea levels, flooding, and changing weather patterns.

## Paying the cost of viable ideas

Lack of funding is a major hindrance for people starting innovative businesses. Financial institutions and private investors are not willing to take the risk to invest in a business from which they are not certain to get a return on investment.

Prof Copeland said these institutions should set aside a small percentage of their profits for "risky" businesses to see if they could turn into innovative successes: "If your portfolio of initiatives in this country does not include high risk activities, you are not getting anywhere."

Emerging economies such as small island developing states will not progress and the population will always be in a state of dependence if those with the money are not willing to invest in change, he pointed out, adding that, "at every opportunity, we need to try our best to seize them.... Take that risk. You don't have to put all, you just have to put a small percent."

An inventor himself, Prof Copeland knows about risk and the perils of introducing new products in a society not designed to receive them. Working with a team within the Faculty of Engineering, The UWI Steelpan Research Laboratory, and with support from other members of the campus community in areas like design, he invented the G-pan, a steelpan made from high quality steel, with reduced dissonance, more resilience, and a higher musical range.

The team also created the Percussive Harmonic Instrument (PHI), an electronic synthesiser in the form of a steelpan which, unfortunately, was severely hampered in its journey to market entry by a dispute over IP rights a few years ago. As it stands, neither of these outstanding inventions have been commercialised to date.

However, even prior to that, as a member of the Engineering Faculty's Real Time System Group (RTSG) in the 1980s, Prof Copeland and his colleagues sought to provide innovative solutions in T&T. Speaking on that experience in an earlier interview with UWI TODAY, he said:

"The kind of engagement we saw with universities involved in other countries, pushing boundaries in research and using that

## ■ UWI IN SOCIETY



Prof Copeland, left, with UWI Ventures Executive Chairman and Professor of Practice Gerry Brooks.

research to push their products and processes on a total operational basis, we didn't see it happening here... we came to the conclusion that our society was not designed that way."

So, through the ecosystem, UWI St Augustine would lead the movement towards innovation and entrepreneurship. There are already some high potential examples in the works. UWI Seal It, a company that sells asphalt-based products developed by UWI researchers, and UWI Fine Cocoa Products Ltd, a firm that will manufacture and sell innovative cocoa products, and provide incubator services to chocolate companies regionally.

### Generation Innovation

Apart from the ecosystem, UWI St Augustine has another means of promoting innovation and entrepreneurship – through teaching and learning. Students can be the next generation of innovators. However, this is not so easy. Many students, perhaps understandably, want to go to school to get a job, rather than study to create their own.

"Some students just want to be told how to do it. They are not open enough to handle challenges," Prof Copeland commented.

While developing the PHI, he tried to engage students to take part in the project, but few were interested. He said they preferred to work on a project that they deemed more marketable to prospective employers. Only a handful of students took up the challenge. One was David Chow, a pan enthusiast who went on to create his own company called Indigisounds, which sells software samples of indigenous Caribbean musical instruments.

"He's done well," says the campus principal. "He is in international magazines. In entrepreneurship, he has done very well."

Many parents, he's noticed, have put a strong emphasis on their children getting stable jobs in order to survive. However, people do not have to choose between having a stable job and being a business owner. They can do both and let one help support the other:

"You could let the drum and dreary take care of your business. You know where you want to go, and in

time you do that...The job gives you that stability to do what you want."

Prof Copeland envisions a new economy populated with small and medium enterprises that earn foreign exchange. That way, the country still has the large manufacturers and oil and gas entities, and thousands of smaller companies earning foreign exchange. For this type of economy to be formed, the big money-earners in the country need to put aside a small amount of their profits to get the small and medium businesses growing.

"Each one of those small companies creates at least one job," he commented. "That's what I tell my students. If there are no jobs that will satisfy you, make one."

It might seem that the odds are against T&T and the region in increasing our innovativeness. However, for Prof Copeland, a veteran of this decades-long quest, the future is bright. Through interacting with his students, he believes that young people are made to solve the world's difficult problems. In addition, because social media gives them a global perspective, they are aware of what possibilities exist.

If anything, he would like to see parents and members of the older generations give more support to the up and comers.

"This is a new world. It is not our world anymore. We had our shot. Now we have to make sure that those who come after us have a strong base from which they can survive and thrive," he said.

Today, some people now have two full-time jobs. Some business owners work around the clock while some work four days out of the week. What work looked like for the older generation, he pointed out, is vastly different from now.

"You've done your job, now stand back. If you've done well enough, they listen, and they see the world in the way it should be seen by their generation. Now let them go and do it. Don't come down too hard on them unless it is necessary. They will survive and make you proud," he said.

It's a hopeful and positive approach for the future, one that applies to parents, as well as the parent of a new paradigm at UWI St Augustine.



Members of the PHI development team in a file photo from 2009.

## SEVEN RETIRED UWI PROFESSORS receive Emeritus title for their exemplary careers

Seven retired professors from The UWI have been conferred with the title of "Emeritus". The decision, announced on December 7, was made during a virtual university Finance and General Purposes Committee meeting held in late October.

The emeritus designation is given to those who retired at the rank of professor in recognition of their distinguished and exemplary careers. It generally allows them to retain their titles. The seven new Professors Emeriti are:

**Professor Jonas Addae**, who retired in 2020. He served The UWI for 34 years in the Department of Preclinical Sciences, including 16 as Professor of Physiology. He was the Head of the Unit of Human Physiology from 1993 to 2013 and, during that time, held the posts of Deputy Dean of Basic Medical Sciences from 1993 to 1995, and Head of the Department of Preclinical Sciences from 1993-1999. He served again as the Head of Department between 2008 and 2015 and also occasionally acted as the Dean of the Faculty of Medical Sciences.

**Professor Violet Eudine Barriteau**, who retired in 2020 after having served The UWI and the region for over 35 years. Her UWI career includes six years as Principal and Pro Vice-Chancellor of the Cave Hill Campus; one year as Principal and Pro Vice-Chancellor of the Open Campus; six years as Deputy Principal of the Cave Hill Campus; four years as Cave Hill Campus Coordinator of Graduate Studies and Research, and 15 years as Head of the Gender and Development Unit, Nita Barrow Unit, at the Cave Hill Campus.

**Professor John Ayotunde Isola Bewaji**, who retired earlier this year, has spent 29 years at The UWI after joining the Mona Campus as a Rhodes Visiting Lecturer in the 1991/1992 academic year. He has a record of over four decades of distinguished academic, administrative, institutional, and public service at various universities in Africa, USA and the Caribbean, and has been a pioneer in the development of scholarly programmes.

**Professor Sean Carrington** retired earlier this year, after serving for 19 years as Professor of Plant Biology at The UWI Cave Hill Campus. During his tenure, he provided excellent leadership as Deputy Dean of the Faculty of Science and Technology on two occasions, from 1993 to 1996 and 2004 to 2005. He was Head of the Department of Biological and Chemical Sciences for three years, Dean of the FST for four years, and Chair of the Grounds Development Committee for six years.

**Professor Horace Fletcher** retired from The UWI in 2018. He contributed 28 years of distinguished leadership through significant clinical research, publishing, teaching, research development, and building research capacity at the Department of Obstetrics and Gynaecology in the Faculty of Medical Sciences at the Mona Campus.

**Professor Stafford Griffith** retired in 2020. His tenure at The UWI includes interim service as the inaugural Pro Vice-Chancellor and Principal of the Five Island Campus from 2019 to 2020; Regional Director of the Office for Online Learning from 2017 to 2019; Director of the School of Education and Deputy Dean at Faculty of Humanities and Education from 2012 to 2017 at the Mona Campus.

**Professor Mitko Voutchkov** retired in 2015. He served at The UWI's International Centre for Environment and Nuclear Science (ICENS) from 1993 to 2006, and then at the Mona Campus Department of Physics from 2006, until his retirement. He is currently a consultant at the University Hospital of the West Indies (The UHWI) in Nuclear Medicine and Radiation Safety.

## RESEARCH



*Professor Richard Robertson, volcanologist and member of the UWI Seismic team on the ground in La Soufrière, gives his professorial lecture on co-existing with volcanoes*

BY OMEGA FRANCIS

Imagine that you were born and raised on an island in the shadow of a volcano and, when it erupts, you are a teenager and you become inspired. Fast forward 42 years and you are a volcanologist leading a team from The UWI Seismic Research Centre (SRC) to monitor the same volcano, expecting an imminent eruption. What are the odds that you would be a part of the group that would lead the awareness programme and monitoring for citizens, filling a need to have someone familiar with the culture and the region to educate them on what's happening? Well, those odds worked in Professor Robertson's favour. In 2020, he was boots on the ground to witness the eruption of La Soufrière himself and help his fellow "Vincys" – the people of St Vincent – in any way he could.

Professor Robertson is not at all new to this. In fact, he has been putting in the work for years, analysing samples and hundreds of years of volcanic historical data for clues as to when the volcano might erupt again. On November 11, he spoke at his professorial inaugural lecture, titled, *"Living Safely with Explosive Mountains in the Eastern Caribbean"*.

Professor Robertson and his colleagues at UWI SRC have been ready for what they see as the inevitable for any one of the 21 volcanoes that exist within the Caribbean. For many years, they have been building a network within the nine independent territories (from St Kitts and Nevis to Trinidad and Tobago) that they are responsible for and manage. Their research has helped in the production of a *Volcanic Hazard Atlas of the Lesser Antilles*, that published the colour-coded map of St Vincent which was widely used before, during and after the eruption, clearly denoting relatively safe zones (green and yellow areas) and unsafe zones (red and orange). The atlas provides data for disaster management officials to use, as well as knowledge on volcanic activity that is invaluable before an explosive eruption.

Professor Robertson's lecture, held virtually, was a wealth of information about Caribbean volcanism. He explained that out of the 21 volcanoes present within the region, six have erupted in the past 400 years; and we should expect both non-eruptive and eruptive activity associated with any of the 21 in the future.

UWI SRC is the official source of information on earthquakes and volcanoes in the English-speaking Eastern Caribbean. They have developed similar volcanic hazard maps for each island, which are based on scenarios of likely future activity – from determination of pyroclastic flows, mudflows or ashfall. This information has been very useful for islands like Barbados, which has been impacted by ashfall from erupting volcanoes although they do not have volcanoes themselves.

"Given the wind direction, once one volcano erupts, it will impact other areas," said Prof Robertson. "You can't look at it as something that is affecting your territory alone. Once you deal with volcanic ash, and exploding volcanoes, you must look at it regionally. Ash impact is something that is not fully assessed in the region."

Professor Robertson also underscored the importance of being able to live sustainably and safely on an island with a volcano or an island that is itself a volcano. Volcanoes bring many benefits to societies, and as such have always attracted human settlement. The fertile earth that develops from volcanic rock and ash tends

to result in higher crop yields for farmers. Tourists are attracted to volcanoes, and this creates many job opportunities. Volcanoes also hold significance in many cultural and religious spaces.

The activities of UWI SRC prior to the 2020-2021 eruption of La Soufrière have laid the groundwork for empowering communities that live within the shadow of a volcano.

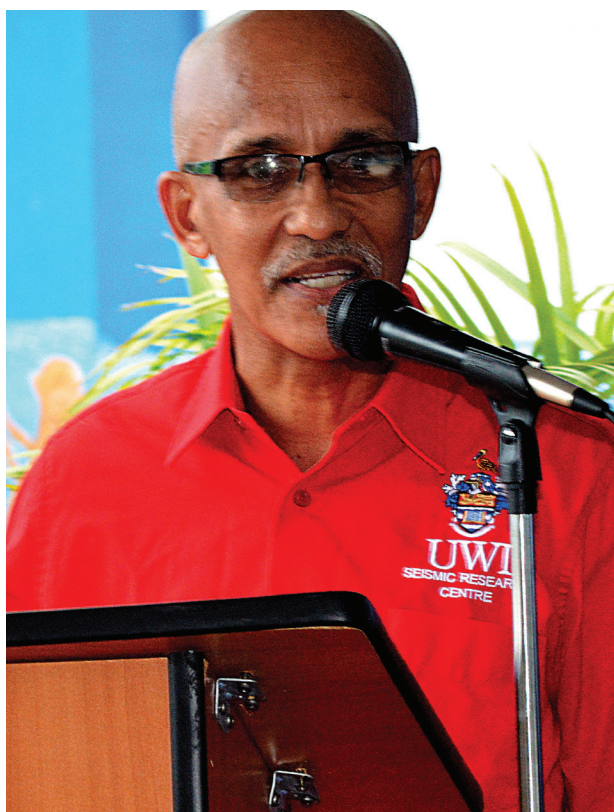
"A lot of the emphasis we have placed in the last couple of years is engagement with communities," Professor Robertson explained to the virtual audience, "trying to find ways in which we could make sure that they understand, and they are aware of the hazards that they are living with, and they are empowered to take measures to minimise that impact."

During the La Soufrière eruption, community engagement and the monitoring network that was put into place enabled the early detection of the explosive eruption, and a responsive public when alerted. Most importantly, it saved lives.

He said, "The management of the situation benefited greatly from a lot of the effort that was put in assessing the hazard, and the development of hazard maps which allowed plans to be made and allowed us to do simulations to test those plans, and then also the engagement of the public. All of that came together to a large extent in 2021 with the result that we had."

Living safely and sustainably with explosive mountains requires the type of consistent monitoring that Prof Robertson and the UWI SRC team has been doing and continues to do. The ongoing efforts to engage policymakers and the push towards enhancing hazard maps and community engagement are one of the many initiatives for the future. Challenges are expected, but the positive outcomes of the management of the 2020-2021 eruption bodes well for islands like St Vincent.

As Professor Robertson said, "We need to live with volcanoes safely and sustainably, but we can't discount the impact they can have, if and when they erupt."



# Innovation HQ

*UWI's St Augustine Centre for Innovation and Entrepreneurship is a campus hub for ideas, investment and opportunity*

BY AMY LIAKSH



Prof Agard discussing a project with a student at the Department of Mechanical and Manufacturing Engineering (DMME) Conference and Exhibition. The exhibition of capstone and postgraduate research projects created to expose the private sector (and wider society) to the innovation taking place in the department.



Student scientists at work in the chemistry lab at The UWI St Augustine Campus' Teaching and Learning Complex (TLC). Chemists at TLC work in areas like liquid crystals (used in display screens for devices such as smartphones), solar cell technology, and synthetic polymers with potential uses in the medical industry.

**The Caribbean and its diaspora has no shortage of ideas.** We are a people with a wealth of creativity and curiosity—but turning these ideas into opportunities has not always been our strong suit. When The University of the West Indies unveiled their Triple A Strategy in 2017, resting on the pillars of Access, Alignment and Agility, the goal was to harness the collective knowledge and creativity of the university and foster academic and entrepreneurial empowerment for the Caribbean.

“In The UWI's Triple A Strategy, the middle ‘A’ was alignment, and The UWI can't be speaking to itself,” says Professor John Agard, Director of the St Augustine Centre for Innovation and Entrepreneurship (StACIE). “We have to talk to industry, private sector, and come up with collaborations with them. We need to find problems worth solving, essentially.”

StACIE, which started out as the Business Development Office and then became the Office of Research, Development and Knowledge Transfer before its current iteration, was created to propel The UWI's evolution beyond traditional teaching, learning and research and into the realm of local and regional innovation and entrepreneurship. This collaborative approach will allow The UWI to get funding for research that can then be used practically within the relevant industries and, hopefully, to boost our economy as well as our sustainability.

One such project aims to use organic material to produce biogas (a renewable fuel produced by breaking down organic matter like food waste) as an alternative energy source that might lessen our dependency on oil and gas. The project is a collaborative effort with Switzerland-based multinational energy producing company PROMAN.

“Biogas is a clean fuel that can be used as a replacement

for natural gas, and also can be used to generate electricity. The intended purpose of the waste to bioresource collaboration between The UWI and PROMAN is to propose a platform for the production and integration of a biogas supply chain from available waste resources within Trinidad and Tobago,” explains a statement from StACIE.

“For The UWI, commercial innovation and entrepreneurship—bringing in money—is the big direction,” says Prof Agard. As the university seeks to change with the changing times, it is necessary to both “ensure its own survival [and] assist Caribbean nations to move to higher levels of economic growth and development,” according to the Triple A Strategy booklet. StACIE's role in this is to coordinate UWI St Augustine's innovation and entrepreneurship ecosystem and be the first port of call for those seeking research and development, prototyping support, grant or seed funding, and IP management, development and protection support.

As the new generation of graduates is heading out into the workforce, many are realising that sending out CVs and looking for jobs is an increasingly frustrating endeavour. The pandemic has put an even greater strain on the economy, and job seekers are finding it difficult to get their careers started.

“A lot of people are out of work,” says Prof Agard. “So what we are working towards is for people to come up with ideas, form a company and employ other persons.” He compared it to *Shark Tank*, where entrepreneurs pitch ideas in the hopes of getting investments for their projects. Similarly, StACIE aims to connect the idea people with the right funding, and get meaningful projects that can change the Caribbean landscape.

Another by-product of not only the changes caused by

the pandemic but also the rapidly altering state of normal created by global issues like climate change, is that we in the Caribbean need to find more self-sufficient ways of existing. As pandemic shortages in 2020 showed—the more we depend on importation of ideas and products from outside the Caribbean, the more vulnerable we are to changes across the world. By supporting and encouraging local and regional collaboration, we strengthen our capacity to deal with future crises, not to mention the current crises that have arisen over the last two years.

“The discussions with the Principal of the St Augustine Campus Prof Brian Copeland was that things have changed,” says Prof Agard. “We have to encourage innovation and entrepreneurship, to share knowledge; to bring in money.”

“The UWI has two funds. One is the Research Development Impact Fund, chaired by the Principal. People present their idea and then the best ideas are given money to start realising their projects. There's another fund called the Innovation and Technology Transfer Fund that only funds projects that are close to commercialisation,” says Prof Agard. “The UWI is trying to push its community to come up with clever ideas, and see if you can turn them into commercial ideas. The intention is that when these ideas start to make money, you would then return some money to The UWI.”

This push to encourage staff and students to be innovative and enterprising is meant to identify and invest in leaders and empower them to improve the world. With a rich creative landscape like ours, we have an unending supply of unexplored ideas, and in moments of crisis like the one we are experiencing now, there is always the chance to not just get back to normal, but to make our new normal even brighter and better than it was before.

# Goodnight, 2021



**And just like that, 2021 comes to a close.** Like the rest of T&T and the world, this was a challenging year for us at UWI TODAY. Apart from the shared struggles of dealing with social distancing, curfews, rising and falling (and rising again) infection rates, there were also the difficulties of producing a paper virtually. A good magician, they say, never reveals the secret of his tricks, so I won't go into how we make it work. I will, however, reveal our most important secret—we receive an incredible amount of support from the campus community.

The core UWI TODAY team is very small, but we are able to do so much through the willingness of many people who give their time and effort to ensure the quality of the publication. That is one of the things that has sustained us through these difficult times. The other is the work we are privileged to do - sharing the stories of the campus and the personalities that make it a hub of Caribbean intellectual excellence.

Whether it was breakthroughs in research, regional and international recognition, profiles of outstanding members of the campus community, our role in managing emergencies both locally and abroad, 2021 might have been a challenging year, but it was a year in which we continued to show the value of UWI St Augustine.

So as the light dims and the louvres close on 2021, we at UWI TODAY look back and smile as we say goodnight to the old year. More importantly, as we look forward to the New Year, we wish all our readers a brighter 2022.

**Joel Henry**  
*Acting Editor, UWI TODAY*

## UWI Calendar of Events | January 2022



### Equity-Oriented Assessment in an Era of Education Recovery January 17 and 19

ONLINE

At the end of 2021, with a year and more of school closure, the Caribbean is now ready to engage in education recovery and transformation. What strategies are now needed to create sustainable change? What approaches will likely make the biggest impact? What tools can classroom teachers use to accelerate learning?

This free, two-day webinar, hosted by UWI St Augustine's School of Education, looks at education recovery from several perspectives by some of Trinidad and Tobago's leading scholars in the field. Teachers, policymakers, practitioners and members of the public will find value in this accessible online event.

**For more information on this free event,**  
visit [SOE.REOunit@sta.uwi.edu](mailto:SOE.REOunit@sta.uwi.edu).  
To register, go to <https://bit.ly/3E6L7Um>

The Alma Jordan Library at dusk from the UWI St Augustine Campus Quadrangle.

