

THE UNIVERSITY OF THE WEST INDIES • ST. AUGUSTINE CAMPUS



SUNDAY 14 OCTOBER, 2018



New students came out with enthusiasm, pride and confidence to show off the colours of their homelands during the Parade of Nations, a fun activity organised by the Students' Guild on Tuesday, September 4, 2018. Here, a young man in an all-blue leotard and draped in Guyanese national flag colours celebrates his mainland country of Guyana, while at right, a young woman celebrates her homeland of beautiful St Lucia while wearing a traditional French creole-influenced costume inspired by the "Wòb Dwiyèt"; she wears a white cotton blouse (chimiz decolté) and an ankle length skirt (jip) made from madras material. See more scenes from the campus welcome to new students on pages 12-13. PHOTO: ANEEL KARIM

FILM - 15 UWI in Film

■ Alumni explore human rights



MARIJUANA & THE LAW - 18 Waiting to Exhale

■ Time to reform ganja laws



Astronomy Hub

■ Processing data from space



ECONOMY - 16 Petrotrin Dilemma

■ Discussing refinery closure





THE ONLY CARIBBEAN UNIVERSITY TO BE RANKED AMONG

Best in the World

The University of the West Indies (The UWI) made its debut in the prestigious Times Higher Education (THE) rankings.







Regarded as the definitive list of the top universities, the prestigious *Times Higher Education (THE)'s World University Rankings* is the only global university performance table to judge research-intensive universities across their core missions of teaching (the learning environment); research (volume, income and reputation), international outlook (staff, students and research); citations (research influence); and industry income (knowledge transfer).

- * among 1200+ recognised universities in Latin America & Caribbean region.
- ** among 25,000+ recognised universities globally.

For more on The UWI's performance, see

https://www.timeshighereducation.com/ world-university-rankings/university-west-indies

UWITODAY GUEST EDITORIAL

Students poised to TRANSFORM THE REGION

By **Professor Indar Ramnarine**, Deputy Campus Principal

Prof. Ramnarine is a Professor of Applied Ichthyology (Fisheries and Aquaculture) He began his term as Deputy Principal at the St Augustine Campus in August 2017

Although the new academic year is already in progress, let me officially say welcome to all new and returning local, regional, and international undergraduate and postgraduate students. I trust that this will be another successful year at the Caribbean region's premier tertiary institution, where some of the most influential minds have studied, taught and researched for seven decades.

As Deputy Campus Principal, with special responsibility for students, I am always conscious of the fact that one of the main roles of the University is to produce ideal UWI graduates. The UWI seeks to nurture students who will one day add to the efforts to revitalize Caribbean development. Achieving this demands that great thought and effort go into developing studentcentred programmes and activities that are not merely qualification-centred. Overall, The UWI aims to build and expand initiatives that develop versatile, skilled, capable, and well-rounded students. The main focus is to guide students along the path to becoming distinctive graduates. This begins in their first semester through to their last day as a UWI St Augustine student.

In academic year 2018/2019, this campus continues its student development and preparation thrust, spearheaded by the Division of Student Services and Development. At this stage of their academic journey, new students need extra guidance to make a smooth transition to university life. They also need to be oriented on the pathway to academic success. To do this, at the beginning of this semester, new students received a grand welcome with a number of activities aimed at helping to create a sense of belonging to this university and campus, and to build camaraderie. Among other events, the highly anticipated 2018/2019 cycle of the First Year Experience Programme was launched. Over the course of the academic year, new students will be exposed to specifically designed activities that will not only help their transition, but also set the foundation for developing the attributes of an ideal UWI graduate.

As students advance from their first year to their second and third years of study, there is an ongoing focus on their holistic development. Continuing students are encouraged to learn a language; join a club; participate in cocurricular courses; volunteer; seek community engagement opportunities; and contribute to community service learning. There are good reasons for this: co-curricular courses foster a range of important life skills that align with the



characteristics of a distinctive UWI graduate; volunteer and community engagement activities impart an increased sense of civic responsibility, and social justice; and service learning promotes the application of scholarship, and learning through service to others. These activities empower students, expose their ability to grow, and facilitate social improvement and change.

The World of Work (WOW) programme is a thriving initiative that is very much in demand by prospective graduates. WOW has proven to be invaluable to our final year students. The main programme objective goes far beyond connecting employers with prospective employees. Each activity (the seminars, mock interviews, resume writing sessions, speed networking) is meticulously designed to ensure that before they graduate, each final year student is given an opportunity to be equipped with the foundational skills and tools to secure gainful employment, and for the duration of their careers. These challenging economic times have created a tough job market. Now, more than ever, students will need to become graduates who are the best candidate for the jobs that are available.

I believe that the launch of the 2018/2019 cycle of the WOW programme convinced students that this year's programme will surpass

their expectations. One memorable moment was when Mr Jerome Precilla shared his insights on entrepreneurship. This feature address aligned perfectly with the projected vision for the university, this campus, and our graduates. In addition to outlining the goal of creating an entrepreneurial university, the Triple A Strategic Plan 2017-2022 describes "entrepreneurial" as a key attribute of distinctive UWI graduates. Hopefully, after hearing that presentation, more of our graduates will begin to see entrepreneurship as a viable career option rather than a last resort.

This campus could not have possibly organised and launched another successful year of the WOW programme without the support of one faithful corporate sponsor. For yet another year, Republic Bank Limited agreed to be the title sponsor of the WOW Programme. This corporate partner has displayed its enduring commitment to corporate social responsibility by supporting this campus in various ways. The UWI, St Augustine campus is most grateful to have a longstanding relationship with this organisation, and to partner in this particular endeavour once again.

We are actively implementing measures to ensure that every October, all graduates who leave the UWI, are poised to positively transform the region, and the world. If they are to do so, we need them to be critical and creative thinkers; effective communicators; IT-skilled and information literate; innovative and entrepreneurial; globally aware and well-grounded in his/her regional identity; socially, culturally and environmentally responsible; and guided by strong ethical values. I believe that we are well on our way.

EDITORIAL TEAM

CAMPUS PRINCIPAL Professor Brian Copeland

AG. DIRECTOR OF MARKETING AND COMMUNICATIONS Wynell Gregorio

AG. EDITOR

Shereen Ann Ali

email: ann.ali@sta.uwi.edu

CONTACT US

The UWI Marketing and **Communications Office**

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

HONOURING THE REGION'S INFLUENCERS

Outstanding Contributions

A calypso legend and a West Indies batting star are among five people to receive honorary degrees from The UWI, St Augustine campus this month. Regionally and internationally, 18 influencers who have made outstanding contributions will receive honorary degrees from The University of the West Indies this year. The UWI's graduation ceremonies began on October 13 at the Open Campus in Saint Lucia, and continue on October 20 at the Cave Hill Campus in Barbados, on October 25-27 at the St Augustine Campus in Trinidad and on November 2-3 at the Mona Campus in Jamaica. Each ceremony will be streamed live. Look out for more in-depth coverage of Graduation in our November issue of UWI Today. Here is the complete list of UWI 2018 honorary graduands.

OPEN CAMPUS

The Honourable Dame Janice Mesadis Pereira DBE from the British Virgin Islands for her work in law – LLD

Mr Larry Quinlan from St Kitts for his work in leadership – LLD

CAVE HILL CAMPUS

The Honourable Justice Adrian Dudley Saunders from St Vincent and the Grenadines for his work in law – LLD

Professor Ebenezer Oduru Owusu from Ghana for his contribution as an agricultural scientist – DSc

ST AUGUSTINE CAMPUS

Mrs Paula Lucie-Smith from Trinidad and Tobago for her contributions as a teacher, advocate and pioneer – LLD

The Honourable Hubert Alexander Ingraham from The Bahamas for his work as a politician – LLD

Mr Shivnarine Chanderpaul from Guyana for his achievements in the sport of cricket – LLD

Mr Winston Bailey, OBE (The Mighty Shadow) from Trinidad and Tobago for his contributions as a musical composer – DLitt

Professor Dermot Patrick Kelleher from Ireland for his contributions to medical research and his innovative patented inventions in diagnostics, drugs and nanofluidics – DSc

MONA CAMPUS

Mr Michael Anthony Holding from Jamaica for his achievements in the sport of cricket – LLD

The Honourable Kenneth S. Benjamin, OJ, CD from Jamaica for his leadership in the field of security – LLD

Mrs Donette Chin-Loy Chang from Jamaica for her philanthropy – LLD

Mr H. Carl McCall from Jamaica for his leadership in public service – DLitt

Dr Shirley J. Thompson from Jamaica for her contributions as an artistic director and educator –DLitt

Ms Grace B. Jones from Jamaica for her achievements as an entertainer, model and global trendsetter – DLitt

Dr Karl Wellington from Jamaica for his contributions as an agricultural scientist – DSc

Mr Lloyd A. Williams from Jamaica for his contributions in leadership – LLD

Mr Montgomery Bernard "Monty" Alexander for his achievements as a musician – DLitt

UWI Honorary Graduands

GRADUATION 2018

Five to be honoured at St Augustine campus



Paula Lucie-Smith

Paula Lucie-Smith is a national scholarship winner, teacher and author best for her enormous contributio as founder of the Adult Literacy Tutors' Association (ALTA). Starting with a small literacy class of 20 students in 1990, ALTA has developed into a multifaceted programme that operates at more than 50 venues and has helped

more than 11,000 students. Born and raised in Trinidad, Mrs Lucie-Smith recognised the growing problem of adult literacy and decided to offer a class. From this small beginning ALTA was born. Mrs Lucie-Smith has been a consultant on many national committees such as the 2007 Ministry of Education National Reading Policy Committee. She has received the Hummingbird Gold National Award, the Anthony N. Sabga Caribbean Award for Excellence in Public and Civic Contributions, and the JB Fernandes Award for NGO Excellence in 2014.



Hubert Alexander Ingraham

The Right Honourable Hubert Ingraham has been a political force in the Bahamas for several decades. As Prime Minister, Mr Ingraham led the Bahamas through tumultuous periods in the global economy and is credited with allowing the Atlantis Paradise Island project to develop, making

the Bahamas a major tourism destination. Mr Ingraham rose to power in the election of August 1992, where his Free National Movement (FNM) Party unseated the Progressive Liberal Party (PLP) of Prime Minister Lynden Pindling, who had held power in the Bahamas since 1967. He served as Prime Minister from 1992 to 2002 and again from 2007 to 2012. Mr Ingraham is remembered for the disengagement of the Bahamas Telecommunications Company in the mid-1990s, and guiding the country through the economic recession.



Shivnarine Chanderpaul

Shivnarine Chanderpaul is a humble legend of West Indies cricket. Born in Guyana, this former West Indies captain is the first cricketer of Indo-Caribbean descent to play 100 tests for the WI and only the third international player to have a career of over two decades. Mr Chanderpaul has

scored over 20,000 runs in international cricket and was awarded the International Cricket Council's (ICC) Sir Garfield Sobers Trophy. In 2008, he was named ICC

Player of the Year and Wisden Cricketer of the Year. In the 164 matches he played between 1994 and 2015, he scored 11,867 runs, coming second only to Brian Lara for West Indian runs. He has been in several crucial batting partnerships with fellow greats such as Brian Lara and Carl Hooper. In 2005 he became Captain of the West Indies team. Off the field, he has led many community projects. His influence as a skilled, focused and hardworking sportsman has extended to many cricket-playing nations.



Winston Bailey OBE: The Mighty Shadow

Winston Bailey, known in the world of Caribbean music as the Mighty Shadow, is a creative calypso artist. With his rich voice, anti-hero/diabolical persona and unique performance style, Mr Bailey is a true musical innovator who has had a major influence on T&T music. Born in Belmont,

Trinidad and raised in Les Coteaux, Tobago, Mr Bailey made his big splash in 1974, winning both first and second place in the Road March competition with "Bassman" and "I Come out to Play". Over the years he has remained consistent, producing original, evocative, insightful and at times dark music in the calypso genre. His hits include "Tension", "Feeling the Feeling," "Poverty is Hell" and many more. In 2003 he received the Silver Hummingbird Medal. In 2011 he received the Order of the British Empire (OBE) for his services to music.



Professor Dermot Patrick Kelleher

Professor Kelleher is a medical investigator who has successfully patented inventions in the areas of diagnostics, drugs and nano-fluidics. His research has been translated to clinical trials (Novartis) and through three spin-out companies of which he was a founder, including Opsona

Therapeutics, Deerac and Cellix. He was a co-founder of the Dublin Molecular Medicine Centre which led to the creation of Molecular Medicine Ireland, a consortium of Irish medical schools created to drive molecular / precision medicine. Currently the Dean of the Faculty of Medicine at the University of British Columbia in Vancouver, Canada, Prof Kelleher is an Irishman born of a Trinidadian mother and an Irish father. He graduated from Trinity College Dublin having trained in gastroenterology. He lectured at Trinity College, Dublin, where he rose to become the Head of the Medical School. He has done highly influential medical research on a broad cross-section of medical ideas.

NEW CARIBBEAN CENTRE FOR HEALTH SYSTEMS RESEARCH & DEVELOPMENT

The formal launch of the Caribbean Centre for Health Systems Research and Development (CCHSRD) on September 14 was a highlight for The Faculty of Medical Sciences at UWI, St Augustine last month. The Centre aims to strengthen research and policy development in the important area of public health, and comes after more than two decades of trying to create such a centre in Trinidad & Tobago. The new research centre will complement work already being done at other centres in Mona, Jamaica (The Caribbean Institute for Health Research) and Cave Hill, Barbados (The George Alleyne Chronic Disease Research Centre).

The Mission of the Centre is to generate and facilitate the use of research evidence, empowering Caribbean countries to strengthen their health systems and policy-making processes. This is important because in the past, public health policies were often not based on research evidence.

Professor Donald Simeon, who will head the Health Systems R&D Centre, said at the launch that the Centre would help bridge the gap between UWI researchers and health decision-makers. He said the Centre would prioritize and conduct research according to an agreed agenda; would have a rapid response service to provide research evidence to health officials; would host citizens' forums to get their inputs in the identification of evidence-based, workable solutions to address challenging health issues; and would also hold training courses for health professionals in knowledge management and evidence-based policy development.

Professor Donald Simeon and Professor Terence Seemungal are the two key visionaries behind the new Trinidad-based Caribbean Centre for Health Systems Research and Development. Both men dreamed of expanding the research capacity of the Faculty of Medical Sciences and they worked diligently behind the scenes, consulting with experts in the public and private sectors and doing necessary work to make the Centre a reality. Prof Seemungal is Dean of the UWI Faculty of Medical Sciences and a Professor of Medicine with expertise in lung health and Chronic Obstructive Pulmonary Disease, and Prof Simeon is a Chartered Statistician and Public Health Nutritionist with additional expertise in research methodology.

The keynote speech by UWI Chancellor Emeritus Sir George Alleyne was a highlight of the launch. The venerable retired Professor of Medicine and former PAHO Director spoke about the grave lack of research in the Caribbean in the area of public health. Sir Alleyne spoke of the epidemic of chronic non-communicable diseases (NCDs) in the Caribbean and warned of "serious social consequences". He noted: "Mortality from NCDs in the Caribbean is the highest in the Americas, diabetes prevalence is double the global rates, more than a quarter of all adults are hypertensive, and obesity and overweight represent a new and growing problem, especially in children."



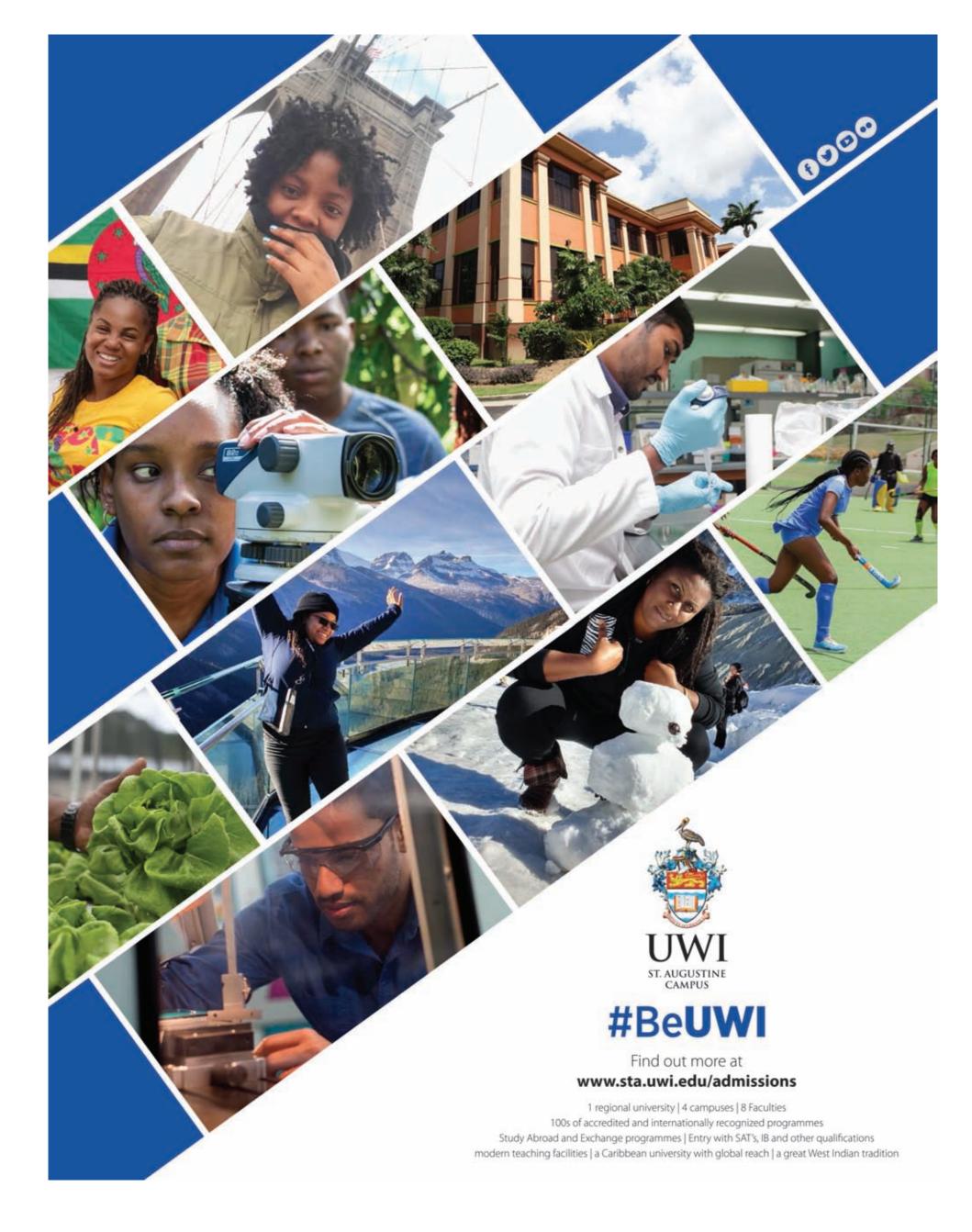
HEALTH SYSTEMS R&D CENTRE LAUNCH: Participants gather on September 14, 2018 at the Teaching and Learning Complex in St Augustine for the formal launch ceremony of the Caribbean Centre for Health Systems Research and Development. From Left: Acting Chief Medical Officer at the Ministry of Health, Dr Vishwanath Partapsingh; Deputy Principal at The UWI St Augustine, Professor Indar Ramnarine; Dean of the Faculty of Medical Sciences at The UWI St Augustine, Professor Terence Seemungal; Chancellor Emeritus Sir George Alleyne; the representative for T&T at PAHO/WHO, Dr Erica Wheeler; Head of the Caribbean Centre for Health Systems Research and Development (CCHSRD Director Designate), Professor Donald Simeon; and The UWI St Augustine Pro Vice-Chancellor and Campus Principal, Professor Brian Copeland. PHOTO: ANEEL KARIM

But although in 2007, the CARICOM Heads of Government issued a Declaration on the prevention and control of NCDs, Sir Alleyne noted that: "many of the policies that were agreed upon or the systems to support them are not being implemented, due in many cases to the influence of commercial interests. For example, in none of the countries has taxation on tobacco products reached the recommended 75% of sales price and the policies to make public places in the Caribbean smoke-free as was agreed subsequently, have not been put in place. This will involve research not so much into the effectiveness of the necessary policies but the factors that block their adoption." **Shereen Ann Ali**

For further information about CCHSRD

Email HealthResearch.Centre@sta.uwi.edu or call (868) 662 2002 Ext: 85415 / 85486





Schol winner gives back

By **Yvonne Web**Yvonne Web is a journalist

Additional Scholarship winner Darren Ramsook has created a free online learning platform, eLearn Caribbean, for CXC and CAPE students who need help with Mathematics. It is a way of expressing his gratitude for the scholarship he received in 2015. A former Naparima College student who recently completed his BSc in electrical and computer engineering at UWI, Ramsook said his intention was always to use his knowledge to give back to the country which educated him.

Last month, when Education Minister Anthony Garcia said nearly 1,500 students got zero passes in the 2018 CSEC examinations (out of 11,000 students regionally), Ramsook felt compelled to launch the free online programme he had been working on. It can be accessed here: http://www.elearncaribbean.com

Within hours of publishing the post online, Ramsook got 200 shares and 400 retweets. Since then, more and more people have been accessing his videos for CSEC Mathematics.

Ramsook hopes to incorporate interactive videos for other subjects too. However, his challenge at the moment is content, and he is appealing to people who are willing to publish content on this site to contact him at darrenramsook@outlook.com.

Ramsook said he sees this platform as versatile: it is not limited to students of any particular age, so it provides a learning platform for older individuals who may never have had the chance to write the subject due to financial or other constraints.

The eLearn Caribbean platform will work alongside current teaching in secondary schools. "The platform can make life easier for teachers and students by sharing the load, as different students can react in their own way to different teaching methods," said Ramsook.

Ramsook said he wanted to help transform at-risk youths into contributing citizens. Some of his "friends" were led down the wrong path because of a series of bad decisions, he said. "That was when I realized that criminals are not formed overnight but are created over an evolutionary progress starting at a very young age. In an effort to make a difference, I began helping out my fellow youths in any way that I could by volunteering in peer counselling groups and even just helping out friends with schoolwork."

During his second year at UWI, Ramsook recalled there was an element in a course called the Community Service Learning Project which challenged groups of students to find problems in their communities and



Darren Ramsook has created eLearn Caribbean to help students learn Maths. PHOTO COURTESY T&T NEWSDAY.

develop solutions to fix them. This gave rise to his work on the first prototype of the online learning platform. After seeing the potential of the platform in Trinidad, he felt certain it could be used in the wider Caribbean.

"I started working more on the platform from the last day of my final exams in May and with advice from one of my key mentors, Dr Akash Pooransingh, I created a plan of how I should start publishing the platform. It was only on August 16 that I went public with eLearn Caribbean and it just blew up since then."

Ramsook said his desire to help is inspired by his family, including his dad, a former police officer, who was left paralysed by an accident from the chest down because of a reckless driver in 2009. "That time right after the accident was a very trying time for my family, but we learnt to play with the cards that we've been dealt. This was really hard on my mom and it forced all of us to take on responsibilities and make sacrifices we weren't comfortable with. Seeing my dad and family fight their way through and emerging the positive people we are today, despite our challenges, makes me believe that there is a better tomorrow."

His free online learning platform, eLearn Caribbean, for CXC and CAPE Maths students, is Ramsook's way of creating a better tomorrow.

Courtesy T&T Newsday. First published in Newsday, Sunday, September 9, 2018: https://newsday.co.tt/2018/09/09/schol-winner-gives-back/

Alpha Sennon wins 2018 SOCIAL ENTREPRENEUR AWARD



Alpha Sennon, UWI alumnus and the founder and executive director of We Help You-th Farm (WHYFARM), has won US\$10,000 seed capital from the 2018 CEMEX-Tec Center for Sustainable Development Award (CEMEX-TEC Award). The TT national was one of three winners in

the Social Entrepreneurs category of the annual award which recognises the social impact of entrepreneurs. Sennon's achievement was announced by CEMEX – Trinidad Cement Ltd's majority shareholder – last month, on September 7.

"WHYFARM promotes the importance of sustainable agriculture among young people, building their capacity in agricultural entrepreneurship and empowering them to contribute to achieving global food and nutrition security by the year 2050," explained Sennon in a Newsday report on the award.



PROF. RHODA REDDOCK elected to ISA

Prof. Rhoda Reddock has been elected to the Executive Committee of the International Sociological Association (ISA). The Executive Council is elected for a four-year period and she is expected to serve from 2018 -2022. Prof. Reddock is the first Caribbean scholar to serve in this capacity. The ISA is a professional organisation of sociologists and social scientists founded in 1949 under the auspices of UNESCO. With a membership comprising individuals who are members of research committees and national sociological associations, its last World Congress of Sociology held in Toronto Canada in July 2018 was attended by over 5,000 participants from various parts of the world.

A long-standing member of the ISA, Prof Reddock is a former President of Research Committee 32 – Women and Society, and is currently a member of the Board of Research Committee 05 – Indigeneity, Racism, Nationalism and Ethnicity. She hopes to use her position to strengthen the position of sociology in the Caribbean region and to support the development of this field in the Caribbean region.



Award for DR RAFFIE HOSEIN

Congratulations to Dr Raffie Hosein who was awarded the 2018 Distinguished

Achievement Award for Petroleum Engineering Faculty by the regional Latin America & Caribbean arm of the Society of Petroleum Engineers (SPC). The regional award recognizes excellence in classroom teaching, research and significant contributions to the petroleum engineering profession. Dr Hosein received his award in June at the SPE T&T Section Energy Resources Conference. Dr Hosein is Head of the Department of Chemical Engineering at The UWI, and Coordinator of the MSc Reservoir Engineering Programme. Previously he worked as a Petroleum Engineer with the Ministry of Energy in Trinidad and later, as a Senior Associate Professor in the Department of Petroleum Engineering at Texas A&M University at Qatar. He received his BSc, MPhil and PhD degrees in Petroleum Engineering from The UWI, Trinidad. He is a registered CEng MEI Chartered Petroleum Engineer with the Energy Institute (EI) of London and a Fellow with the Institute of Materials Minerals and Mining (FIMMM) of London.

WORLD COCOA DAY sees massive growth

By **Zahra Gordon**

Zahra Gordon is a poet, freelance writer and communications lecturer

This year's seventh annual World Cocoa and Chocolate Day Expo, hosted by the Cocoa Research Centre (CRC), was the largest ever. In just one year, the expo has grown from 25 to 60 exhibitors, forcing organisers to move from a much smaller venue – the JFK Auditorium at The UWI – to the expansive Sport and Physical Education Centre on campus. This is according to CRC Director, Professor Path Umaharan, who spoke with UWI Today during the two-day festival on September 28 – 29.

The festival's growth allowed CRC not only to showcase more vendors, but to add entertainment, such as performances by the N9 Dance Company and even a cocoa-inspired fashion show featuring jewelry made from cocoa shells and nibs.

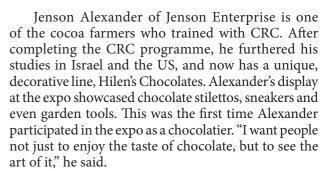
Youth outreach was another major feature this year. Although the expo is usually open to school visits, this was the first year the CRC hosted a nationwide school cocoa cooking competition. This was also the first year that AGRIman - the food security superhero created by the NGO WhyFarm - made an appearance. AGRIman engaged students from primary and secondary schools through interactive chocolate production lessons. However, the highlight of his engagement was an extempo competition. Students were tasked with changing the lyrics to Machel Montano's "Like a Boss" to reflect what they learned about cocoa production and their love for chocolate. The competition sparked uproarious cheering among students and the winner was awarded dark chocolate from Montanos' Chocolate Company Ltd.

Montanos' is one of many local businesses founded within the past few years focused on creating valueadded products using local cocoa. The industry has



Chocolate sweets made by Cocobel.

flourished as a direct result of CRC interventions. CRC began training chocolatiers nine years ago after recognizing that most of the revenue from local cocoa was made outside of Trinidad and Tobago. "The Cocoa Research Centre has trained nearly 250 chocolatiers, and of those, about 40 have start-up companies," said Umaharan. He added that it was important for T&T to stimulate development within this industry, particularly because of the quality and wide variety of locally grown cocoa.



World

COCOA & CHOCOLATE

DAY EXPO

Alexander isn't the only vendor who shared a love for the art of chocolate. Many vendors like Gina's Chocolates and the Trinidad & Tobago Fine Chocolate Company had decidedly artistic blends, mixing dark chocolate with pink grapefruit, passion fruit and most excitingly, Scotch Bonnet pepper. There was cocoa wine and Ponche de Creme from Tamana Mountain Chocolate; chocolate tamarind sauce from Cafe Mariposa; and chocolate samosas from Svadisa Creations. Tea company Twigs Naturals used the event to launch a new line: their Gold Series teas now feature a lemongrass cocoa tea made with Trinitario beans.

Svadisa chef, Ameera Mohammed Ali, said the food innovations were indicative of a thriving industry. "We get our cocoa from a farm so the chocolate sauce is farm-to-table. We support farmers and then people support us, so there's a lot happening with cocoa locally. We actually came up with the chocolate samosa recipe for another event and the response was really positive," she said.

According to Umaharan, the World Cocoa and Chocolate Day exhibitors demonstrated that innovation doesn't take place in academia, but in the hearts of people.



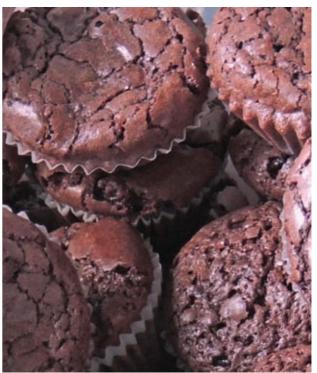
Delicious chocolate gelatos from Ciao Café.



Creamy skin-care soaps, lotions and masks using cocoa products



Jewelry made from cocoa products.



Café Mariposa makes all manner of cocoa infused treats.

■ SCIENCE, TECHNOLOGY, ENGINEERING & MATHEMATICS

Two UWI, St Augustine students, Keenan Chatar and Ariel Chitan, recently represented T&T at the NASA International Internship Programme (NASA I2), a ten-week summer programme which offers promising science students the chance to participate in cutting edge science projects and gain valuable international exposure. The internships this year ran from June 18 -August 24 at the NASA Ames Research Center in Mountain View, California. The two young scientists shared their unique internship experiences to a very attentive audience of about 80 tertiary level students, parents, educators and science fans at Engineering Room 101 in UWI on September 5, 2018.

Keenan Chatar, 24, is currently pursuing his Masters in Applied Science in Electrical and Computer Engineering, and Ariel Chitan, 23, has just completed the final year of a Bachelor of Science in Physics and Mathematics. Keenan and Ariel were among four shortlisted candidates selected following a local screening process that involved more than 20 top students studying Science, Technology, Engineering and Mathematics (STEM) subjects.

The NASA internship programme is intensive. It emphasizes teamwork, research and creativity, balancing science and technology with issues of management, finance, social and human issues faced by aerospace professionals. Students take part in informal discussions, lectures, supervised sessions, group projects and visits to NASA centres, and are mentored by NASA scientists.

Keenan Chatar's internship centred on energy harvesting using nanomaterials. Ariel Chitan's internship was part of aeromechanics research activities that directly support the civil competitiveness of the US helicopter industry and the US Department of

Retired Major Julia Charles-Joseph, Registrar at NIHERST, spoke at the September 5 Lecture Series, describing the success of the NASA I² programme since the first group of T&T students took part in it in 2014. She said NIHERST has supported nine interns to date, and that the purpose of the programme is to increase the number of STEM professionals doing research to help develop T&T. The NASA I² programme is facilitated by the Ministry of Education and NIHERST in collaboration with NASA, with Atlantic Energy as the main sponsor of the programme.

Keenan Chatar worked on designing and building a portable data system for a triboelectric nanogenerator. A "nanogenerator" is a type of technology

NIHERST/NASA **INTERNS RETURN**

By Shereen Ann Ali

Shereen Ann Ali is a freelance writer, culture journalist and publications editor



From left, Keenan Chatar and Ariel Chitan at a recent public lecture to share their summer experiences on the NASA International Internship Programme at NASA Ames Research Centre. PHOTO COURTESY NIHERST

The NASA internship programme is intensive. It emphasizes teamwork, research and creativity, balancing science and technology with issues of management, finance, social and human issues faced by aerospace professionals.

that converts mechanical or thermal energy into electricity, while the term "triboelectric" refers to a process where certain materials become electrically charged after they come into frictional contact with a different material rubbing glass with fur, or a plastic comb through the hair, for instance, can build up triboelectricity.

Chatar explained: "Energy is around us everywhere, in different forms, and is often wasted. There are different ways to harvest that energy and use it better." Imagine, for instance, being able to charge your cellphone just though your own walking. The principle of nanogenerators can be applied to large scale ideas, like harvesting the energy produced by wind and ocean waves, or to small scale uses, such as self-powered micro devices.

Chatar built two prototypes of TENG (triboelectric nanogenerator) devices. He hopes to apply his research to a Masters project proposal for building a TENG wind energy harvester off the Manzanilla coastline – a novel approach to green energy.

Meanwhile, Ariel Chitan worked at the NASA aerodynamics complex where models are tested in massive wind tunnels. She spoke of the "huge, mind-numbing size" of the larger wind tunnel, which measures 80 ft x 120 ft. Her role was to help with research in testing the effect on test results of the 80 x 120 ft wind tunnel when structures (eg buildings or walls) are built opposite the tunnel. A miniature model of the wind tunnel was built, to see how a wall-like construction would affect tests in the tunnel. This involved simulating turbulence with high velocity winds, so a crane had to lift several massive fans to create the winds. Chitan helped measure and examine the behaviour of these wind currents.

Both Keenan Chatar and Ariel Chitan praised the high quality of mentorship and networking experiences they received on the programme. They also enjoyed good fellowship and camaraderie with fellow student interns: "We met some super awesome people, all doing fascinating things" said Ariel. Keenan shared his awe at seeing the NASA facilities at the Ames Research Centre, including the Supercomputer Facility which is used for fascinating computer simulations such as modelling the birth of the universe. He shared some astronaut food - freeze dried banana slices - at the end of his talk, a sweet end to a very interesting public lecture on the NASA I2 aerospace internship.

MORE INFO: http://www.niherst. gov.tt/awards/internships-nasa.html

Tuning into radio astronomy

Bv Dr Shirin Haque





LEFT: The Green Bank Telescope in Green Bank, West Virginia, USA, is the world's largest fully steerable radio telescope. It was designed and built by the National Radio Astronomy Observatory and began observations in 2000. It is the most accurate, versatile, large dish radio telescope in the world. Its suite of receivers covers 100 MHz to 100 GHz in frequencies, its processors can spot nanosecond timing differences in data, and it observes under radio-quiet skies. It can be used to do chemistry, physics, radar receiving, and astronomy. UWI graduate Jason Renwick spent time at this site earlier this year during training to help with the new UWI-NRAO NINE hub for radio astronomy. **PHOTOS COURTESY DR HAQUE**

It all started with a routine sounding email received on February 26, 2018 with the subject heading of "Training and Exchange Opportunity – Caribbean/ USA – astronomy/physics." This was no routine email – it originated from the National Science Foundation (NSF) in the United States, the United States Government Agency responsible for all science that is non-medical. They had sought us out in the Physics Department at The UWI to suggest that we should apply to the National and International Non-Traditional Exchange (NINE) Program with the National Radio Astronomy Observatory (NRAO) with a view to becoming a hub for radio astronomy in the Caribbean.

The NRAO is like the "NASA" of radio astronomy. This was no automatic process. It required a rigorous application process with several criteria and interviews to be satisfied, including the training of a UWI person to undergo a rigorous nine-week training programme at the NRAO headquarters in Charlottesville, Virginia. We leaped at the opportunity and were successful in our application. We were euphoric!

Jason Renwick was selected as the candidate chosen for training due to his ideal background for such a programme. He was an engineering student with programming capabilities and a track record in astronomy-related endeavours, having been a NASA intern twice, as well as an IBM intern.

Our successful application involved the Faculty of Engineering and the Faculty of Science and Technology as the drivers of this initiative, together with the "Radio astronomy has been responsible for the detection of the cosmic microwave background radiation regarded as evidence of the Big Bang theory – the beautiful fossils of the infant universe."

Dr Shirin Haque

department of Computer Science and Information Technology and Physics department.

We are now officially the UWI-NRAO NINE hub for radio astronomy (Dr Shirin Haque, astronomer in the Physics Department, appointed as the programme manager). The hub team members include the deans of the faculties, Dr Brian Cockburn and Prof. Edwin Ekwue, heads of department, Dr Davinder Sharma (Physics), Dr Permanand Mohan (Computing and Information Technology) and Dr Fasil Muddeen (Electrical and Computer Engineering). The NRAO staff working closely with us are Lyndele von Schill (Director of Diversity & Inclusion), Brian Kent (NINE-VLASS Programme Manager and Scientist) and Anja Fourie (NINE Programme Manager and SARAO NINE Hub Lead).

The vision behind this NINE programme comes from the outreach arm of NRAO as highlighted on their website (https://info.nrao.edu/do/odi/broader-impact-programs/Nine) – "In the US there is also a strong desire to develop further our human capacity in the Science, Technology, Engineering, and Mathematics (STEM) fields, especially within traditionally under-represented groups...The program is geared towards enticing the best and brightest, both nationally and internationally, into high quality programs designed to benefit the participant, each partnering location, and the radio astronomy community as a whole."

The future of humanity is highly technological and the developments in this area are moving at breakneck speed. Radio astronomy is thus a powerful tool to excite, introduce and develop STEM capabilities in the Caribbean to prepare the upcoming generation to help fill the needs of the future in such fields locally and abroad. We saw the immediate rewards of engaging in such a programme out of the workshop on "How to display radio images with Python", held at the Faculty of Science and Technology on September 15, 2018, facilitated by our now NINEcertified trainer, Jason Renwick. The NRAO issued certificates to the participants for becoming VLASScertified on completion of the workshop. This created tremendous value for the participants who came with backgrounds from Physics, Engineering, Aerospace Engineering, Mathematics and Computer Science.

Continues on page 11

■ RADIO ASTRONOMY & DATA SCIENCE

Tuning into radio astronomy

Continued from page 10

The feedback from the participants of the workshop was highly inspiring, with requests for further workshops and introduction of radio astronomy courses at The UWI.

We as the UWI-NRAO NINE hub have hit the ground running. Five undergraduate students are also working on image processing from the Very Large Array Sky Survey (VLASS) from NRAO using Raspberry Pis, and working on designs for a radio telescope. We have plans to be out in schools with kits to introduce and engage high school students and to promote STEM fields through radio astronomy in the

For thousands of years, the only band of the electromagnetic spectrum that allowed us to scan the universe was in the optical band, looking heavenwards with our eyes enhanced with the optical telescope just about 400 years ago. It was only in 1932 that this got extended to the radio band, with the first detection of radio waves by Karl Jansky who recorded radiation coming from the Milky Way. Since then, radio astronomy has been responsible for the detection of the cosmic microwave background radiation regarded as evidence of the Big Bang theory - the beautiful fossils of the infant universe.

It is in the field of radio astronomy that Jocelyn Bell-Burnell discovered the first pulsar (rotating neutron star), a discovery for which her supervisors contentiously received the Nobel prize in Physics (1974), excluding her. She has just now in 2018 received the \$3 million Special Breakthrough Prize in Fundamental Physics in recognition of her then discovery of pulsars! Radio astronomy gives us another window to understand astronomical objects such as galaxies, stars, masers and quasars. It is also radio astronomy that leads and paves the way in the search for extra-terrestrial life.

At the department of Physics in The UWI, our foray into astronomy has been wide and varied. It all began with theoretical astronomy with the study of quasars, and moved onto the observation and monitoring of a spectacular quasar OJ 287 at our SATU observatory on the Natural Sciences rooftop building, in collaboration with our colleagues in Finland.

Solar astronomy soon was in the fold with collaboration with the William Hrudey Observatory in the Cayman Islands.

The cutting-edge field of Astrobiology soon put Trinidad on the map as well, with studies at our pitch lake and mud volcanoes as analogues for Titan (Saturn's largest moon) and Mars respectively, with international collaboration.

It is all about trying to understand life in the Universe. This project has resulted in a publication in the prestigious journal "Science". We now stand at the brink of another adventure in another aspect of astronomy - radio astronomy has arrived in the Caribbean!

Using code to see the stars

Shereen Ann Ali is a freelance writer, culture journalist and publications editor

What does computer code have to do with the stars?

Quite a lot, actually. As science writer Sarah Scoles has observed (Learn to Code or Get Left Behind, Wired magazine, May 26, 2017), today's astronomers don't just need to know how stars form and black holes burst: "They also need knowledge of how to pry that information from the many terabytes of data that will stream from next-generation telescopes... So they're largely teaching themselves—using a suite of open-source training tools, focused workshops, and fellowship programmes to help and actually prepare astronomers for the universe they're entering."

Enter Python. The Python programming language is a tool for basic research and engineering, and is becoming one of the most widely used languages for data analysis. In the field of astronomy, Python is increasingly used both by institutions developing software for new instruments, telescopes and missions, and by astronomers for use in analyzing their massive amounts of data. The MeerKat telescope array in south Africa, for instance, generates many terabytes of data in just a single minute.

Here at The UWI, Jason Renwick (a 2018 UWI graduate in Electrical and Computer Engineering) held a workshop last month (September 15) at the Faculty of Science and Technology on "How to display radio astronomy images with Python." Jason, in addition to being a former 2014 NASA International Internship Program intern, recently returned from another training opportunity: the Summer 2018 NINE programme, which he attended from June 2 - July 31, 2018 at Green Bank, West Virginia. There, Jason developed a web app, created on Rasberry Pi (a low-cost, credit card-sized Linux computer), to organize, curate, and process images provided from data captured by astronomy telescopes.

"The main goal is to find radio images in the dataset, for instance, images suggesting galaxies. I have found about 200 (previously discovered) galaxies from datasets I've examined. The Python programming language helps process all this data," said Jason in an interview with UWI Today.

Coming out of this experience, Jason is now a NINE-certified trainer. NINE stands for the National and International Non-Traditional Exchange (NINE) Program with the National Radio Astronomy Observatory (NRAO). The NRAO is based in five sites in the USA, including Green Bank, West Virginia, where Jason went. The NRAO is a US Federally Funded Research and Development Center of the United States National Science Foundation for the purpose of radio astronomy. The NRAO designs, builds, and operates its own high sensitivity radio telescopes for use by scientists around the world.

Jason explained that our Caribbean location may be considered a dead zone for radio astronomy because it is often difficult to collect astronomical data from telescopes in conditions of high humidity. However, because of the huge amount of data captured by radio telescopes elsewhere, the process of helping to crunch some of this data is an interesting opportunity for many countries and budding astronomers. The Open Skies Policy applied to astronomy helps ensure that researchers in less-advanced countries—which cannot fund major telescopes or be part of international



From left, Jason Renwick, newly certified NINE trainer, stands with Brandon Rajkumar, a postgraduate student in Astronomy. Rajkumar proudly shows off his VLASS certification issued by the National Radio Astronomy Observatory,

collaborations—have access to the instruments they need to carry out their research, and have access to specific project data too.

Jason's UWI Engineering degree helped prepare him for his NINE training opportunity by giving him a good foundation in electronics and related software.

"My undergrad studies in electrical and computer engineering at UWI were much more of an asset to have going into the NINE programme than I could have predicted. Radio astronomy has a notable reliance on electronics to enable the collection/observation of radio waves. Being familiar with electronics and the related software made my introduction to radio astronomy very smooth.

'The NINE programme contained a significant emphasis on project management and data science. Following the nine-week training programme, I had a greater appreciation for how project management facilitates successful projects. In particular, when applying project management techniques to endeavours such as the UWI NINE Hub, it allows for greater mitigation of risks, increases accountability and ultimately, enhances the level of achievement.

'On completion of the programme, I had greater respect for the science behind radio astronomy. Only a small portion of the electromagnetic spectrum is made up of visible light. Hence, radio astronomy gives a unique perspective on galactic entities, known and unknown. Sometimes, it answers previously unanswerable questions."

■ CAMPUS NEWS

NEW RELAY OPTION for HALF MARATHON



WE DID IT! When you've completed a Half Marathon, there's a great sense of accomplishment. Here are some participants who completed the course in 2016. This year's event is on Sunday, October 28. **PHOTO: ANEEL KARIM**

This year for the first time, there will be a new relay team category in the popular UWI SPEC International Half-Marathon, a 13.1-mile (21.08 km) race from UWI to D'Abadie and back. Set to take place at the end of the month on Sunday, October 28, the relay category involves teams of four people, with each runner having to complete one part of the race.

Sponsored by First Citizens bank, the race starts at 5.30 am from The UWI Sports and Education Centre (SPEC) and continues along the Priority Bus Route to the La Resource junction in D'Abadie, before doubling back to the UWI SPEC.

The race, now in its 15th year, has a mental health theme this year: "Each Mind Matters." Participation has grown from 300 when the Half Marathon began in 2004 to over 1,200 in 2017. The Half Marathon course will have markers and water stops at every mile for the running convenience of the athletes from around the world, including from the Caribbean, USA, Latin America and Europe.

This year, there will be over TT\$135,000.00 in prizes, including specific categories for UWI students and staff, university students, and wheelchair as well as physically challenged competitors.

Registration for the Half Marathon began on August 15. Registration continues until October 23, and is all online, done at the site: https://evolutiontiming.net/event-registration/?eid=149. There will be no registration on the actual day of the race.

Registration rates are as follows:

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Age Group 15-19:	\$75.00 TTD
Early Bird (Aug. 15 – Sept. 15):	
Regular (Sept 16 – Oct 15):	\$150.00 TTD
Late (Oct 16 – 23rd Oct 23):	\$170.00 TTD
Regional and international participants:	\$50.00 USD

For more information, please visit the website https://sta.uwi.edu/spec/marathon/or call (868) 645-9239 or (868) 662-2002 ext. 83808, 83771, 82660, 83556 or 83571 or e-mail specinfo@sta.uwi.edu.

Welcome

September and October are always full of energy at The UWI as the start of the new term brings with it fresh faces now embarking on their university journey. Students from Trinidad and Tobago joined students from many other countries including Guyana, Jamaica, Barbados, Grenada, Dominica and St Lucia in an outpouring of activities in the first week of term, showing the true spirit of The UWI as a regional institution.

To welcome and help orient all new students, The UWI organised the First Year Experience (FYE) programme, a holistic compilation of all orientation events which embraced every aspect of university life. This included airport greetings, campus tours, different faculty orientations and a "UWI Clicks Workshop" to introduce students to the university's website, student portal and online resources.

A formal September 20 Matriculation ceremony at The UWI Sport and Physical Education Centre officially welcomed new students, chaired by newly appointed Acting Registrar David Moses. Jerry Medford, President of The UWI Alumni Association (T&T Chapter) welcomed new students while Campus Principal Professor Brian Copeland challenged students to become innovators through entrepreneurship. The UWI Arts Chorale of the Department of Creative and Festival Arts entertained students with a beautiful performance of the University Song, led by Senior Lecturer Jessel Murray.

Fun-filled GuildFest activities from September 3–7 drew many "Freshers" and returning students to the library quadrangle and other parts of campus. There were lively club booths offering membership to a wide variety of clubs and interests, from The Biological Society (with displays of live



Part of the academic procession at the Matriculation cerem



Energetic African dance by a UWI Dance Club member on Sept. 3. PHOTO: ANN ALI

owls courtesy the El Socorro Centre for Wildlife Conservation), to The UWI Dance Club, the Hindu Society, and many other religious, scientific, recreational and cultural groups.

The week of GuildFest "Freshers" action included cultural shows, a talent night, a Hall Spirit night, a most delicious Caribbean food festival called "Taste UWI – A Fusion of Flava", and a colourful Parade of Nations which ended in a carnivalesque impromptu jump-up by enthusiastic and patriotic students, several wrapped in their country's flags. A Fresher's Fete at the end of the week crowned it all off.

Here are some candid shots from the first couple weeks of term on campus.



New students from different islands and nations at the Parade of Nations on Sept. 4.

Freshers!





Peli the UWI mascot proved very popular with students at the First year Experience orientation. **PHOTO: KC MEDIA**



This young man embraced a snake which seemed to enjoy slithering up his torso. Part of the UWI Biological Society's booth to promote the club to







These cheerful Grenadian students had some fun as part of their performance in the Parade of Nations on Sept. 4. PHOTO: ANEEL KARIM





At First Year Experience orientation, students check out a map of campus. PHOTO: KC MEDIA



Beating catchy rhythms livened up the opening week of term. PHOTO: ANEEL KARIM

PROFESSOR RONALD JACOBS: Lost your job? Retrain.

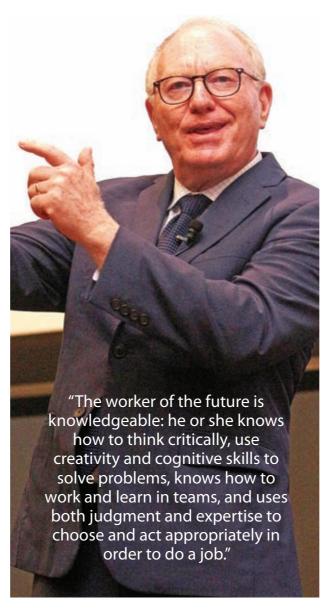
Sometimes, as fast as you train people for one job, the very nature of the job (or the industry) changes, and you need to re-train people in an entirely different kind of way, sometimes for entirely different kinds of work. Such is the dizzying rate of change in the workplace today, where technology is revolutionizing many processes, and where people can no longer rely on lifelong employment doing just one rote job forever. Things change, sometimes rapidly, and employees may find themselves casualties in obsolete jobs or dying industries unless they adapt or retrain for new kinds of work.

This was just part of the message shared by Professor Ronald Jacobs last month when he gave the Distinguished Open Lecture at The UWI St Augustine campus on the evening of September 13. Human Resource professionals as well as curious members of the public flocked to the Daaga Auditorium to hear him speak. Jacobs is Professor of Human Resource Development at the University of Illinois at Urbana-Champaign, and a leading scholar in his field. He previously worked at Ohio State University where he is Professor Emeritus, and he is the principal of RL Jacobs & Associates, a global consulting firm.

Prof Jacobs did an early first degree in Film Studies and English Literature in 1973 before studying for a doctorate in Instructional Systems Technology at Indiana University some years later. Since then, his career has been focused on human resource and workforce training issues, and he has been called the world's subject matter expert on structured on-the-job training. He has authored or edited six books on human resource development, and is working on a new book on work analysis (documenting what people do in their jobs), due out in 2019.

His talk at UWI on "Knowledge work, workforce development and the emerging digital age: New challenges for societies and operations" touched on some of the huge industrial and technological changes sweeping through societies, requiring new answers to some core questions about what we train people for, how organizations provide learning to boost workplace performance, how to "manage planned change" to help individuals adapt; and how to support workers and their families facing the disaster of job loss.

A widely travelled man, Jacobs has visited South Korea, China, Saudi Arabia and other parts of the world to talk about workforce training issues. Jacobs began his Open Lecture presentation at The UWI, Trinidad, by mentioning some major world events he remembers living through: the 1968 domestic strife in the US, with students protesting American involvement in the war in Vietnam; the June 1989 protests of Tiannamen Square, where Chinese students demonstrated in Beijing for a freer, more equitable society; and the fall of the Berlin Wall in November 1989. Such events became widespread knowledge in an increasingly globalized world where mass media and the impacts of industry were creating unprecedented connections among people and markets, he said. By 1989, the world was becoming more open than it had ever been before, with far fewer barriers, he said.



Professor Ronald Jacobs makes a point on September 13 at his UWI Open Lecture on "Knowledge work, workforce development and the emerging digital age: New challenges for societies and operations". PHOTO: ANEEL KARIM

Jacobs noted that big social and economic changes happened especially after 1989 due to a combination of factors including globalization, technology (especially the rise of Information Communications Technology), the "new economy" of "free markets" and cost/price pressures, political legislation and partnerships, changing demographics, and the volatility of work, which has seen a move from stable jobs to sometimes no job stability at all.

Jacobs took a moment to share a story of profound change affecting the small town of Johnstown, Pennsylvania, the place where he himself was born in 1951. A place with lots of water, coal and transportation routes, in the 1950s and 60s Johnstown was a steel town, with more than 30,000 of its people working in the steel industry and having stable jobs there. But by 1977, Bethlehem Steel had closed its Johnstown plant, and by 2000, less than 2,000 local people worked in the steel industry. It was a crushing experience for thousands of people, often members of close-knit families who had all once depended on the

steel mill for their jobs and security, but who found themselves unemployed. In 2001, Jacobs indicated the unemployment rate in Johnstown was still 12%. By 2008, the first wind turbine manufacturing facility had opened. But Jacobs said by 2015 the town was still working on its transition from the "Rust Belt" to the "Health Belt."

The concept of "workforce development" was not on anyone's radar in the US for the longest while, said Jacobs. There were no partnerships between the public and private sectors; they each did their own thing. Not until 1990s did people decide to start using public monies to think about "workforce development", a term the US Federal Government started to use. One definition of workforce development is:

"The coordination of public and private sector policies and programmes for the purpose of providing individuals with the opportunity to achieve and maintain a sustainable livelihood for the benefit of themselves, employers, and society as a whole." (H. Jacobs and J. Hawley, 2007, Emergence of Workforce Development).

But what does the term really mean? It is a collaboration of stakeholders in society with a focus on employment, said Jacobs. Jacobs said the core issue here is: How do you prepare individuals to enter the workforce? He then spoke about various training avenues, including post-secondary vocational education; dual work-learning systems; government training programmes and universities. He spoke briefly of occupational analysis, and the notion of National Occupational Standards which some (not all) countries have established. Germany, the UK and Korea have national workforce approaches with standards set for different occupations, whereas the USA does not (individual USA states have their own approaches, but it is not national).

You can't make an advanced society by workers doing simple, repetitive tasks, said Jacobs, as he launched into the whole concept of "knowledge work." The worker of the future is knowledgeable: he or she knows how to think critically, use creativity and cognitive skills to solve problems, knows how to work and learn in teams, and uses both judgment and expertise to choose and act appropriately in order to do a job.

Jacobs noted that "knowledge workers" are not any exclusive set of people: anyone today might be called on to do "knowledge work." The term simply refers to the ability to troubleshot and solve problems, facilitate work processes, critically analyze situations, and make appropriate decisions, among other qualities, he said.

Jacobs observed how the world has moved from the mercantile age to the factory or industrial age, to where we are now: the digital age (also called the computer or information age). He spoke of the need for continual workforce planning and training as conditions change. And at one point, in the public question session, there was the comment that despite the changing nature of jobs and industries, "You can't worship profits and throw away people."

Shereen Ann Ali



From left screenshots of the short films Judgment Day, The Deliverer. Steelpan, the National Instrument to Steelpan. the Industry.

By Jeanette G. Awai

Jeanette G. Awai is a freelance writer, local film lover and marketing and communications assistant at The UWI St. Augustine Marketing and Communications Office.

This year's trinidad+tobago film/18 festival (ttff/18) featured The UWI staff and alumni tackling social and economic issues behind and in front of the camera in nine films, ranging from shorts to full-length documentaries. Here we look at a few of them.

From Steelpan, the National Instrument to Steelpan, the Industry

Our very own Pro Vice-Chancellor and Campus Principal Professor Brian Copeland took to the silver screen in the documentary short, From Steelpan, the National Instrument to Steelpan, the Industry, directed by Ann-Marie Harry, retired drama and math teacher and founding member of the Pan in Schools Coordinating Council (PSCC). Speaking at the film premiere on Republic Day, September 24, Ann-Marie took the festival's theme, "love film", to heart, saying: "The film is intended to be a tool to inspire the young people and their parents to encourage them to get involved in the steelpan industry." In his role as developer and patenter of the G-pan and P.H.I (Percussive Harmonic Instrument), Prof Copeland commended the film's idea that teaching pan tuning as an examinable CVQ (Caribbean Vocational Qualification) subject in schools would be "an innovative way to diversify the economy and provide recognition for competencies in pan."

Reel Human Rights films

At the Reel Human Rights Films Screening and Panel Discussion, three short films written and directed by UWI alumni looked at different issues surrounding LGBTQIA rights: Please See Attached by Andrei Pierre, I Choose You by Siobhan Millette and **Judgment Day** by Francesca Hawkins. The screening was part of a two-year partnership with the High Commission of Canada where 15 emerging filmmakers were mentored and competed in a scriptwriting workshop. Andrei, Siobhan and Francesca were selected as winners and given CAN\$5,000 to go towards the production of their films.

Andrei saw the motivation behind his film Please See **Attached** as an opportunity to "Find that concept or angle that allows you to tell that story in a respectful manner that dignifies people that are not from your group, but at the same time is also entertaining." His film used some sly, funny instances of T&T picong and humour to liven up a serious theme of job discrimination.



Films by UWI-trained filmmakers included three short films on human rights which received sponsorship from the Canadian High Commission. From left, Francesca Hawkins, Andrei Pierre, Canadian High Commissioner Carla Hogan Rufelds, Dr Bruce Paddington (founder and Film Festival Director), and Siobhan Millette.

Reflecting on her experience, Siobhan felt the relationships she developed during her time at The UWI Film Programme enabled her to rely on some talented fellow filmmakers to make her film I Choose You, about a little boy's hard choices, into a reality.

Meanwhile, the veteran journalist Francesca Hawkins, who was among the earliest of UWI's film studies graduates, applied her sharp eye, narrative talent and sensitive visual storytelling to create a powerful short black and white documentary about a day in the life of Jason Jones in his legal challenge of the Sexual Offences Act, a relic of colonial era laws that criminalise sexual relations between consenting adults of the same sex. Her short film Judgment Day weaves a dramatic tapestry of many different, often vehemently opposing voices on the issue of LGBTQIA rights in Trinidad, all converging on the one day when a landmark historic judgment is made at the Hall of Justice.

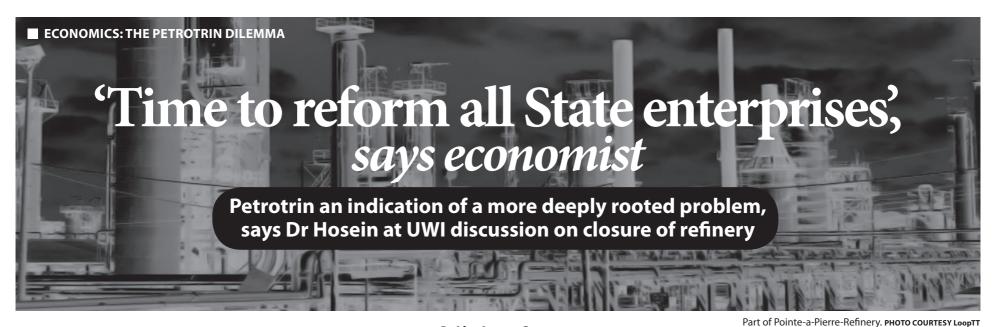
Perhaps Dr Jerome Teelucksingh, UWI History Lecturer and founder of International Men's Day, summed it up best at his own documentary screening of International Men's Day: "When making a film, choose a topic that will benefit in some way. Right now, we need to have movies that are more conscious that deal with pressing issues. We need to produce films that offer solutions and show a different perspective and even have the potential to develop sequels."

Sun, Sea and Science: Trinidad after Oil

Another take on economic diversification was offered in the film Sun, Sea and Science: Trinidad after Oil, directed by Raymond Ramcharitar. This film examines the work of UWI lecturers microbiologist Dr Adesh Ramsubhag, computer scientist Prof Patrick Hosein, and medical researcher Prof Paul Teelucksingh, as alternatives to Trinidad's economic dependency on oil. The documentary shows how the work of these three scientists, and others, as well as the organisation which brought them together, the Anthony N Sabga Caribbean Awards for Excellence, could create a path to economic salvation based on local knowledge and untapped sustainable resources. Raymond gave thanks to UWI Today as the first source of all the information featured in the film, and thanked the film's production team, Pixelplay Media, especially Dion Boucaud, for helping the film come alive after years in the making.

The Deliverer

UWI alumnus and triple-threat writer, director and actor Paul Pryce saw UWI's core values as inspiration for his short film, The Deliverer: "My film seeks to provoke a conversation around the issues of crime and political corruption and how these ills force ordinary men to make morally conflicting choices. One of UWI's core values is to bestow critical thinking skills onto the student and no matter what field you are in, from the arts to economics, one must always seek to question what we accept as truth for something greater."



By **Lisa Luana Owen**

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Lisa Owen is a freelance writer and corporate communications specialist

Petrotrin began its phased exit of the refining business on October 1, and plans to focus its business on exploration and production. A transition process is expected to be completed by November 30, with severance packages for retrenched workers to cost in the region of \$2.6 billion, according to Finance Minister Colm Imbert speaking on Budget Day, October 1. Approximately 4,700 employees – 3,500 permanent workers and about 1,200 non-permanent workers – may be affected. The Department of Economics at The UWI held a public panel discussion on "The Economic Impact of the Closure of the Petrotrin Refinery" on September 19. Featured speakers included Chairman of Petrotrin, Wilfred Espinet; CEO of the Energy Chamber of T&T, Dax Driver; and labour economist David Abdulah. Here are some of the highlights of that discussion.

Trinidad and Tobago has long been a nation built on oil. From the discovery of the first oil well in 1857 to our launch into commercial oil production in 1908, our advent into the oil export market in 1910 and subsequent establishment of our first oil refinery at Point-a-Pierre in 1917, T&T has owed its prosperity to this "dark" discovery that has single-handedly helped shape the patterns of our socio-economic development.

But now, much is changing. The current indebtedness of state-owned oil company Petrotrin (its debt burden is close to \$12 billion, said Finance Minister Colm Imbert in the 2018 Budget) carries the diagnosis of some necessary amputation and immediate reconstruction in order to ensure survival, according to some experts. After listening to some of the discussion at UWI recently, one could be left thinking that Petrotrin's state may be a symptom of a broader underlying illness infecting the T&T economy.



Dr Roger Hosein, Senior Lecturer in Economics and Coordinator of UWI's Trade and Economic Development Unit, said that in his opinion, the local economy is stagnant and "in a bad state." He said the 2018 economy is almost at the same

point as it was in 2007 in terms of the level of GDP, despite producing approximately 3.6 billion barrels of oil and gas equivalent. He said while the growth performance of the national economy from 1999 to 2006 averaged 8.6%, it contracted in the period 2009 to 2017 to -0.51%, which, he said, really troubled him, because "it points to a deeper problem than Petrotrin. Something more deep-rooted is wrong with the system within which State-owned enterprises operate."

Dr Hosein said that for State-owned enterprises, debt by 2016 was TT\$20.5 billion as compared to TT\$7.2 billion in 2007. He strongly disapproved of this indebtedness, commenting: "We do not want to be subsidizing and paying money to State-owned

enterprises. We want money (from them)...and at some point in time, in my view, this nonsense has to stop."

He said the total debt in the economy is approximately TT\$57.4 billion. The State-owned enterprise debt, as a percentage of total Government debt, is 35.7%. "That is absolutely unnecessary", he said.

Stating the reformation of Petrotrin would not herald the end of this "trying situation", he said there is an economic process called creative destruction (where innovation deconstructs long-standing arrangements and frees resources to be deployed elsewhere) – "and I

"This is a golden opportunity for T&T to use this recession to reform the entire Stateowned enterprise system. We have 63, so we need to reform all 63."

Economist Dr Roger Hosein

personally think that this is a golden opportunity for T&T to use this recession to reform the entire State-owned enterprise system. We have 63, so we need to reform all 63."

The decision to close the refinery was made on recommendation from Petrotrin's September 2017 appointed Board following a TT\$28 million study executed by global financial consultant McKinsey and Company Inc. The study concluded that, if left to continue operations as is, the company would require a cash injection of TT\$25 billion over a five-year period to overhaul its infrastructure, service its debt, and

restore machinery and equipment that had not been maintained for several years. However, this cost would have to borne by taxpayers, and would still result in an annual haemorrhage.

Petrotrin has a TT\$12 billion debt and owes Government more than TT\$3 billion in taxes and royalties. Additionally, the company has a US\$850 million bond payment that becomes due in 2019.

McKinsey indicated that although the company had potential to make money in its Exploration and Production (E&P) operations, its Refining and Marketing (R&M) arm was not likely to be profitable.



Chairman of Petrotrin, Wilfred Espinet at the UWI discussion said that the Board was given a very clear mandate by Government to make the company profitable and sustainable. He said the current plan to transform the financial performance of the organisation

would require an immediate cash investment of TT\$10 billion to:

- effect operational improvements and expansion in F&P:
- convert the refinery into a terminalling facility to allow for the importation of bulk fuel to fulfil local requirements and those of existing CARICOM customers;
- facilitate the permanent exit of 2,400 employees and rehiring of 1,000; and
- assist in servicing existing debt.

"We're trying to do an enormous restructuring exercise in a very large company. The final outcome of that is that it would get an E&P stand-alone operation. You would get a T\$5 billion dollar free cash flow which nets – when you consolidate all your other issues – a TT\$3 billion dollar cash flow," Espinet said.

He added it would mean refinancing existing debt to stretch it out over a longer period of time, but "you

Abdulah: Don't close the refinery

Continued from page 16

will have the ability, with the E&P only operating, to finance all of that operation."

Both the Petrotrin Board and the Government have been vehemently admonished for the apparent lack of transparency in deciding to close the refinery. In the confines of the UWI JFK auditorium, the criticisms in this regard came in hard and fast.

Among those proclaiming their dissent were former Petrotrin Board member George De Verteuil and WINAD Director Folade Mutota who called on the Board to share the McKinsey report with the public.

However, Espinet said: "I think that I have, as many times as you have asked for it, said McKinsey never produced a report." He relayed that McKinsey worked together with Petrotrin's team to determine how the R&M division could become cash neutral but concluded that it was not possible because of the quantum of capital required.

The beleaguered Chairman said the only way to maintain refinery operations was for the State to take this on as an additional debt, with no understanding of how it was going to be paid, "and we said to the Government: we don't agree to that."

"Our offer was to tell the Government: You don't get involved in this. We don't want you to refinance, we don't want you to do anything. If this has to be refinanced, let it be that it pays for itself rather than have my granddaughter pay for it," said Espinet.



Economist David Abdulah, labour rights activist and a former leading member of the Oilfield Workers Trade Union, disagreed with closing the refinery. He argued that the focus should be on improving the refined product in order to stop the losses on the international market where the majority of Petrotrin's crude is being sold at a

lower price than competing West Texan crude because of its high sulphur content and viscosity level, which makes the production process more costly.

Abdulah said the union had submitted an option for the leasing of the refinery to foreigners who would be able to put the necessary infrastructure in place to do so.

"Knowing what is happening with renewables...the market for hydrocarbons is going to be limited. Surely we need to try to monetise those assets now, in order to build up our reserves in our Heritage and Stabilisation Fund by investing directly in diversification," said Abdulah.

He added that although diversification cannot take place in a one to five-year timeframe, T&T should seek to use its hydrocarbon windfalls and assets to start the diversification process.



Dr Thackwray "Dax" Driver, who is CEO of the Energy Chamber of T&T (formerly the South Trinidad Chamber), spoke about how to ameliorate the impacts of the refinery closure. He suggested several things, including:

- increasing local content on projects;
- involving local capital markets;
- conducting competency assessments and retraining;
- helping people in entrepreneurial industries;
- working with exporting services.

In a later public question session, Dr Roger Hosein suggested that the State could consider opening two e-TecK Parks near the refinery to help create jobs to reduce human suffering. "We have a history of saying that we will provide financing for community care and we will aid employment, and then nothing amounts from it. There's a real human side to this whole dilemma, and so the State can consider that," said Dr Hosein.

Lively youth debates precede **CONFERENCE ON** THE ECONOMY

Igniting commitment to tackle developmental challenges is central to the Conference on the Economy (COTE), the annual landmark event of the Department of Economics which took place October 10 - 11 at the Learning Resource Centre Auditorium (LRC), at UWI.

The theme this year was "Economic Development Challenges: Looking towards 2030." This year's conference honoured Professor Patrick Watson who has served The UWI for over 30 years in many capacities, including as Dean of the Faculty of Social Science and Director of the Sir Arthur Lewis Institute of Social and Economic Studies (SALISES).

The conference was organized around the sub-themes: Non-energy Export Growth; Issues in Labour Economics; The Informal Sector and Economic Development; Monetary Policy Challenges; Greening the Economy; and Economics of Social Issues.

Before the conference, on Thursday, September 27 there was a lively day of events which included an armchair discussion, graduate poster competition, Make-a-thon and youth debate competitions.

The Arm-Chair Discussion was on the topic "Looking towards 2030: A Youth Perspective". It was facilitated by Nikolai Edwards, with representation from The UWI, University of the Southern Caribbean, and NorthGate College. Panelists Lyndrison Lincoln, Rocyn Vitalis and Zachary Joel presented a youth perspective on topics including Education, Training and Development, Health and Entrepreneurship.

This was followed by presentations from three students as part of the Graduate Poster Competition. The Make-a-Thon competition involved building a model based on a Circular Economy.

The debate competitions involved two secondary schools (NorthGate College and Bishops East/Trinity College), and two tertiary institutions (The UWI and the University of the Southern Caribbean). The high school students debated the topic: "Be it resolved that privatization will improve the efficiency of the health sector", while the older university students debated the topic: "Be it resolved that the introduction of crypto-currency is beneficial to SIDS".

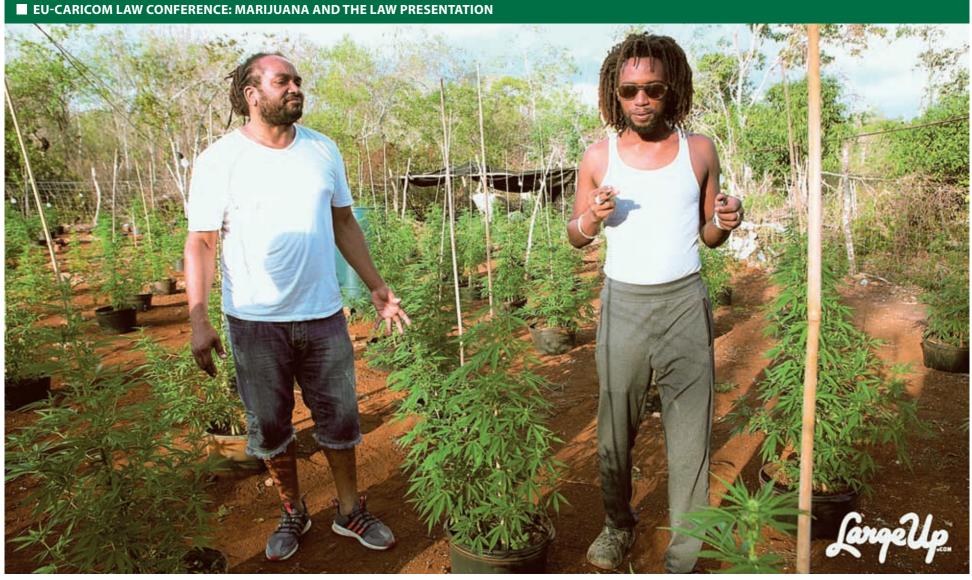






Some of the student debaters





Ganja farmer Junior Gordon from Westmoreland, Jamaica (at left) is reputed to grow some very high-grade marijuana, with THC content in excess of 23 per cent. That compares to the 9-13 THC content normally found in Jamaican ganja. Gordon is a premier ganja grower in Jamaica. Here he talks with musician and herbalist Christopher "Birdheye" Gordon (at right) during a tour of Tender Buds Farm. In 2015, Jamaica decriminalised small amounts of ganja for personal use, legalised medical ganja, and allowed folks to grow up to five ganja plants in their households. Rastafari adults can use it for sacramental purposes. Many farmers and others are looking forward to increased ganja tourism. PHOTO BY MARTEI KORLEY via LargeUp blog site (http://www.largeup.com/2017/03/27/birdheye-all-peoples-medicine-jamaica-tender-buds/).

WAITING TO EXHALE: It's time to reform our ganja laws

We can learn a lot about enlightened cannabis policies from Europe, says Professor Rose-Marie Belle Antoine at the recent EU Law conference.

By **Shereen Ann Ali**

Shereen Ann Ali is a freelance writer, culture journalist and publications editor

"Law reform for marijuana can no longer be ignored," says Prof Rose-Marie Belle Antoine, who believes our current prohibitionist approach is "ineffective, incongruous, obsolete and deeply unjust." Speaking at the recent EU-CARICOM Law Conference held at the University Inn on September 26-27, she said the European Union has "led the way in rethinking the issue of marijuana, and more broadly, drug control. Europe has provided the intellectual leadership and the rest of the world is now following."

In an interesting presentation (see her full speech at UWI Today online), Prof Antoine said scientific research, empirical data and Caribbean public opinion all now support a serious overhaul of our outdated laws on cannabis. Our current laws criminalise both the plant and its users, and even patients taking the drug for medical reasons such as pain relief. Current laws also excessively and often unfairly punish small-level, lower income users who have received longer jail sentences than those meted out to people committing more serious crimes.



Medical marijuana, like these state-authorised samples from California, US, are legal for a variety of ailments in several countries, but not in Trinidad and Tobago. PHOTO: Courtesy Post and Courier

Prof Antoine recently completed a two-year exercise as part of a team reviewing Caribbean Community policies on cannabis. She was Chair of the CARICOM Commission on Marijuana, which

submitted its report to CARICOM heads in July 2018. The full findings of the downloadable report are online (see Caricom website, Report of the Caricom Regional Commission on Marijuana).

Rather than treating cannabis use as a criminal offence, it should be dealt with as a public health issue and/or a human rights issue, said Prof Antoine. Just as alcohol and tobacco are not deemed "dangerous drugs" but are controlled substances which are legal and regulated, so, too should cannabis be decriminalised and regulated, she advocated.

Prof Antoine said medical evidence establishes that cannabis is less harmful, or no more harmful than some other substances that are currently not prohibited or criminalised under law, such as alcohol; several studies have established this.

That's not to say that cannabis has no harmful effects. Prof Antoine said evidence shows it has had negative effects on adolescent brains, affecting memory, learning and attention, and may put some youth at risk for early onset of psychosis. Therefore

■ EU-CARICOM LAW CONFERENCE: MARIJUANA AND THE LAW PRESENTATION



At right, Professor Rose-Marie Belle Antoine at the recent EU-CARICOM Law Conference held September 26-27 at the University Inn ad Conference Centre, St Augustine. Seen to her left is Ambassador of the European Union to T&T, Arend Biesebroek. PHOTO: ANEEL KARIM

cannabis is not recommended for young people whose brains are still developing.

But for adults who use cannabis, the CARICOM Commission on Marijuana found that on balance, the proven medical benefits of cannabis in several areas outweigh the risks.

Marijuana has been used for medicinal purposes for more than 3,000 years. Medical marijuana is used for treatment of glaucoma and epilepsy. There are at least two active chemicals in marijuana that can have medicinal applications. Those are cannabidiol (CBD) and tetrahydrocannabinol (THC). THC has painrelieving properties and is largely responsible for the high. People take cannabidiol by mouth for anxiety, bipolar disorder, a muscle disorder called dystonia, seizures, multiple sclerosis, Parkinson's disease, and schizophrenia. THC extracts are used to treat nausea from cancer medicines, to increase appetites in AIDS patients, and for other uses.

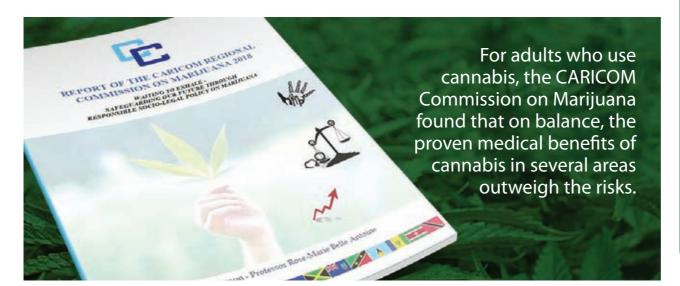
For most of our Caribbean history, marijuana was a free substance, grown naturally and easily throughout the region, and part of many people's ethnic cultural heritage, noted Prof Antoine. Current draconian ganja laws were responses to international treaties which deemed cannabis a "dangerous drug" without any value, medicinal or otherwise, she said. "Harsh, criminal penalties were then imposed on cannabis in all its forms within a context of strict liability, meaning no discretion or mitigation is allowed. This was despite

the lack of scientific or medical data to support this classification," said Prof Antoine.

She explained: "This is significant given that the harshness of the law was premised on this supposed egregious harm. There is credible evidence that its acquisition of an illegal status was also due to attempts to stifle competition with alcohol, which had just emerged out of prohibition itself. This classification, first in international treaties, was spearheaded by the US and was automatically followed domestically. Documents declassified and released to the public in 2002 illustrate that the US Shafer Commission, established by Nixon to cement marijuana laws, came to the opposite conclusion. Its 1972 Report to the US Congress challenged this classification, finding that marijuana presented little harm and could 'not justify the intrusion by the criminal law into private behaviour".

Prof Antoine said the CARICOM Marijuana Commission found that "the existing prohibitionist regime induces more harm than any possible adverse consequences of cannabis/marijuana itself."

She noted we can learn some lessons not only from the European Union but also more close to home, from Jamaica, which decriminalised ganja three years ago in 2015. She said "there has not been any discernible increase in use, or in psychosis cases. Further, criminal arrests have decreased, and Jamaica has begun to reap benefits from the cannabis industry."





What is Cannabis?

Cannabis is a psychoactive drug from the Cannabis plant used for medical, recreational or spiritual purposes. The main psychoactive part of cannabis is tetrahydrocannabinol (THC), one of 483 known compounds in the plant. Cannabis can be used by smoking, vaporizing, within food, or as

Countries that have legalized the **medical** use of cannabis include Australia, Canada, Chile, Colombia, Germany, Greece, Israel, Italy, the Netherlands, Peru, Poland, Sri Lanka and the United Kingdom. About 30 states in the US have legalised medical marijuana.

Canada (effective 17 October 2018) and Uruguay are the only countries that have fully legalized the consumption and sale of **recreational** cannabis nationwide. In the United States, nine states and the District of Columbia have legalized sales and consumption although it remains federally illegal.



Recommendations

- CARICOM Member States should act together to formulate a formal, regional position with a clear, informed roadmap, to give credibility to policy reform initiatives. Consider partnering with powerful allies like those in Europe, Canada, Uruguay and other Latin American states, to press for amendments to the Conventions.
- In the interim, Member States should declare that the treaties contravene human rights principles in CARICOM states to ground a justification for avoiding treaty obligations.
- Dismantle cannabis prohibition. Replace it with a regulated framework akin to that for alcohol and tobacco, which are harmful substances that are not criminalised.
- Classify cannabis as a "controlled substance", and not a "dangerous drug" with "no value".
- Legalise marijuana use for medical purposes. Remove all criminal penalties from marijuana laws. In this way, cannabis sales and profits will no longer be treated as proceeds of crime under anti-money laundering and proceeds of crime legislation.
- Protect children and young people from cannabis by prohibiting its use for certain age limits, except for medical reasons.
- Pass drug-driving laws.
- Decriminalise possession of small amounts of ganja for use in private households and for personal use. This means allowing limited home-growing for a small number of plants.

LANGUAGES & LINGUISTICS



Called "A Alma Brasileira" — The Brazilian Soul — a spirited concert recently showcased some of the best of Brazil through samba and bossa nova songs, music, dance, capoeira and cultural/historical lessons. Held at Queen's Hall, Port-of-Spain on Thursday, September 6, the concert raised awareness of the disciplines of Portuguese and Brazilian Studies at The UWI by using the academic training of members of the Department to teach some Portuguese to the cast and crew, most of whom were meeting the language for the first time.

It was the second outreach concert of this kind, the first having been held in 2016 to celebrate 100 Years of Samba and 194 Years of Brazilian Independence. The 2018 edition was even more spectacular than the first, with a larger, more diverse cast and the blessings of the Embassy of Brazil.

Conceptualised by Sean Samad (PhD Candidate in Cultural Studies) and Heather Mac Intosh-Simon (former national Calypso Queen), both part-

time lecturers in the Minor in Portuguese and Brazilian Studies programme, the show came off in fine style. The dynamic lecturers of the Department of Modern Languages and Linguistics hold a passion for all things Brazilian and Lusophone (Portuguese-speaking), all having studied in Brazil. With the coordinator Dr Jo-Anne Ferreira, the team was delighted to have the support of sister Department of Creative and Festival Arts (DCFA). Together, the lecturers taught eight professional adult singers and 21 children.

The team believes in the need to link up with Brazil, our largest CARICOM neighbour, through a solid programme of language and culture learning and teaching. The Minor in Brazilian Studies opens up the colossus that is Brazil to the English-official Caribbean, and deepens knowledge of the existing commonalities between the two regions.

The concert's cast included five national champion songbirds: Helon Francis (National Calypso Monarch 2018), Devon Seale (National Calypso Monarch 2016), Heather Mac Intosh (National Calypso

Queen 2002 and 2011), Daniel Griffith (MusicTT 2017 Showcase Winner), and Jonathan Simon (2016 National Patriotic Song Competition Winner). Also performing were singers Candice Alcantara, Moricia Cagan, Gerelle Forbes, Karla Gonzales, Kevin Humphrey, Nigel O'Connor, Juliet Robin and Sean Samad. The Barataria Anglican Primary School Choir stole the hearts of all. The show was narrated

by Conrad Parris, representing the 196-year old Brazilian Soul, and young Yasu Riley, who represented the younger 56-year old Trinidad & Tobago, as the two got to know each other for the first time.

The band included members of Elan Parlé, including Michael Low Chew Tung (Director), Rodney Alexander, Richard Joseph and Anthony Woodroffe Jr, DCFA lecturer and student, Mikhel Carter and Shea Sealey, Theron Shaw, and Bahian percussionist, Marcus Santos, of Latin Percussion and Grooversity.





The Barataria Anglican Primary School Choir and Kevin Humphrey sing Preciso Me Encontrar (I Need to Find Myself), composed by Antonio Candeia (1976).

CONFUCIUS INSTITUTE DAY

The Confucius Institute hosted its fifth annual Confucius Institute Day at JFK Auditorium, UWI St Augustine on Friday, September 28. People keen on visiting China could visit a China tourism booth, while there was lots to do for the young ones, with a range of crafts activities including classes on Chinese knotmaking and elementary calligraphy. Many secondary school students visited, and enjoyed taking part in Ti Chi Fan exercises, following an instructor who demonstrated the moves.

For more information on The Confucius Institute, see: https://sta.uwi.edu/confucius/home.

Youngsters got introductory lessons in Chinese calligraphy.



Youth enjoyed Ti Chi Fan exercises.



■ LANGUAGES & LINGUISTICS

What Japan Means To Me: First Ever Japanese Language Speech Contest

The Embassy of Japan and the Centre for Language Learning jointly mounted the first Japanese Language Speech Contest to be held in T&T on Friday, August 24, 2018. The contest was held at the CLL Auditorium and had three objectives: to offer Japanese language students an opportunity to express their thoughts using the target language; to improve participants' Japanese language proficiency by guiding them through the process of drafting and delivering a speech; and to promote and increase public recognition of Japanese language education in T&T.

Thirteen participants each prepared and delivered a speech in Japanese on the contest theme: "What Japan means to me" and responded in a short question-and-answer period with the contest judges Mr Yoshinori Yakabe, Counsellor and Deputy Head of Mission, Embassy of Japan and Ms Misato Noto.

The participants were: Akelia Wilson, Sabrina Morgan, Aidan Roberts, Adanna Simon, Michelle Rattansingh, Analecia Charles, Terrell Pinto, Sheron Legall-Dixon, Christian Jalim, Tevan Z. Mclean, Aneeqah Ghany, Emily Forde and Daniel Gordon.

Each speech was judged on linguistic competence, content and performance. A small but enthusiastic audience was on hand to hear the language enthusiasts talk about what inspires and sustains their love for Japan: its cuisine, art, history, culture, technological prowess and distinctive world view. Perhaps unsurprisingly, anime and manga featured heavily in the evening's offerings. All participants were heartily congratulated for their contributions.



First prize winner, Christian Jalim. With the sponsorship of Caribbean Gas Chemical Limited, Jalim is off to the Dominican Republic this October to compete in a regional speech contest for the chance to win a sponsored trip to Japan.

There was unanimous approval for the first prize winner, Christian Jalim, who with the kind sponsorship of Caribbean Gas Chemical Limited, is off to the Dominican Republic this October to compete in a regional speech contest for the chance to win a sponsored trip to Japan. More Vino sponsored the second place prize.

The community of Japanese language learners are among the most dedicated of CLL learners and it is planned that the speech contest will become a staple in CLL's annual schedule of events. The CLL remains committed to language learning that holds cultural exposure and eventual competence high on its list of priorities.



Participants and judges of the Japanese Language Speech Contest on August 24, 2018. At centre, in grey suit and tie, is Mr Yoshinori Yakabe, Counsellor and Deputy Head of Mission, Embassy of Japan.

Want to Learn a LANGUAGE? Here's what we offer at DMLL and CLL

Modern Languages and Linguistics (DMLL)

The Department of Modern Languages and Linguistics (DMLL) trains and qualifies future teachers, translators, interpreters, speech therapists, specialists, and researchers through Bachelor of Arts (BA), Master of Arts (MA), Master of Philosophy (MPhil) and Doctor of Philosophy (PhD) degree programmes in French, Linguistics and Spanish, and five complementary minors in the fields of Brazilian Studies with Portuguese, French, Linguistics, Spanish, Caribbean Sign Language Interpreting (CSLI), with two certificates offered to non-degree students (CSLI and Speech-Language Pathology or SLP), all supported by study and work abroad programmes.

The DMLL teaches and researches the history and structures of four of the six official languages of the Caribbean, Belize and the Guianas, namely, English, French, French Creole/Patois and Spanish), and the regional and international literatures and cultures of three Romance languages (French, Portuguese and Spanish).

The five BA degrees include two Linguistics-related programmes, namely, English Language and Literature with Education, and Speech and Language Science, and another interdisciplinary BA, namely, Latin American Studies.

For postgraduates, the DMLL offers two diplomas (the Diploma in Interpreting Techniques, the Diploma in the Teaching of English to Speakers of Other Languages (TESOL), three taught MAs (Spanish, SLP and TESOL) and six research degrees (three MPhils and three PhDs) in French, Linguistics and Spanish.

The DMLL also delivers the English Language Foundation courses to the entire Campus, and administers The Writing Centre for students. DMLL Services include the Caribbean Interpreting and Translation Bureau (CITB), and the UWI Speech-Language Clinic. **Visit them at http://sta.uwi.edu/fhe/dmll and FB: dmlluwista.**

Centre for Language Learning (CLL)

The Centre for Language Learning (CLL) offers language programmes to UWI, St Augustine students and staff, and offers non-specialist classes to the public. You can learn Arabic, Chinese (Mandarin), French, German, Hindi, Italian, Japanese, Korean, Portuguese, Spanish and Yoruba. Non-specialist language courses are conveniently scheduled at lunch time, on evenings and on Saturdays. Conversation-only classes are available at the post-beginner level. The CLL also delivers an English As A Foreign Language (EFL) programme for non-native speakers of English.

The CLL also has a collection of multimedia and hard copies of language materials available for consultation, including the Korea Corner located in the Self-Access Centre.

The CLL's services to the public include off-campus classes for groups and individuals and international standardised testing in English (IELTS), Spanish (DELE), and Japanese (JLPT). Standardised testing in Mandarin (HSK) is available through the Confucius Institute. The Confucius Institute (CI) complements the CLL's Mandarin offerings with cultural programmes on and off-campus and off-campus language and culture classes.

The CLL and CI welcome all to share in their love of languages and culture. For more information visit their website: http://sta.uwi.edu/fhe/cll or follow them on Facebook, Flickr @clluwista or Twitter @clluwi. Follow the CI on Facebook @Confucius.UWI.

MEDICAL SCIENCES: MENTAL HEALTH SYMPOSIUM Hello ANXIETY Phobia STRESS Sham PANIC

HUGE FUNDING GAP for MENTAL HEALTH TREATMENT

By Zahra Gordon

Zahra Gordon is a poet, freelance writer and communications lecturer

The University of the West Indies School of Nursing (UWISON) in collaboration with the London South Bank University, Pan American Health Organisation and World Health Organisation (WHO) hosted a two-day International Mental Health Symposium geared toward capacity building efforts on key issues of mental health on September 26 and 27 at the Hilton Trinidad and Conference Centre, Port of Spain. There were four broad areas of focus: solutions, policy, skills training and prevention. UWI Today reports on the feature address given by Dr Taraleen Malcolm on behalf of Dr Claudina Cayetano of PAHO.

T&T is the only country in the Caribbean to establish guidelines for ethical reporting on suicide. In a region where mental health illness carries weighty stigma, the launch of these guidelines was progressive. Still, statistics gathered by the Pan American Health Organization (PAHO) show a significant gap in funding allocation for mental health locally.

Dr Taraleen Malcolm, T&T-based PAHO NCDs & Mental Health Advisor, shared these statistics at the International Mental Health Symposium "No Health Without Mental Health" hosted by the UWI School of Nursing on September 26 and 27.

Malcolm presented the day two keynote address, "Emerging Trends & Issues in Mental Health," on behalf of Dr Claudina Cayetano, PAHO Regional Mental Health Advisor

According to Malcolm, in T&T 3.7% of the total health budget is allocated to mental health. However, in Latin America & the Caribbean, mental health disorders account for 22.2% of the burden of disease. As Malcolm put it, the treatment gap is overwhelming and requires urgent attention.

Studies have shown a global disparity between treatment for physical disorders and treatment for mental health disorders. The disparity is even further exacerbated when countries are divided into high income and low and middle income categories, Malcolm explained. In high income and low & middle income countries, diseases like diabetes had 94% and 77% treatment rates respectively. Meanwhile, depression had treatment rates of 29% in high income countries and 8% in low & middle income countries.

Barriers to the provision of mental health treatment exist globally in both high income and poorer countries. So although T&T is a high income country, the healthcare sector still faces challenges such as insufficient financial and human resource allocation and the centralisation

of services making mental health care inaccessible to patients.

The need to focus on community-centered mental health care services is key to closing the treatment gap. Malcolm noted that of the 3.7% of the T&T health budget spent on mental health, 94% goes to mental hospitals. The location of mental hospitals – which tend to be in urban areas – makes accessibility an issue, explained Malcolm.

"Financial resources and geographical locations limit access to services. You have situations where you have general hospitals that do not admit or treat people with mental health disorders and then you have poor accessibility at the primary care level that forces people to either not receive care at all, or access care at centralised psychiatric institutions," she said. "We have been talking about community-based mental health services for years, but still two-thirds of all available beds are in mental hospitals."

Other barriers to mental health care provision outlined by Malcolm were: the inability to integrate mental health into primary care services due to a lack of clinical supervision and understaffing; the lack of investment in tertiary psychiatric institutions; the tendency of people in leadership roles to lack public health training; and the lack of political will to advocate for better mental health services.

Mental health issues are often characterised as isolated, but Malcolm pointed out these issues affect all corners of society. "The burden and impact of mental health are large and widespread and can be felt at all levels. It can be felt at the individual level in terms of disability and premature mortality; at the societal level with the issues of discrimination in the community; and at the economic level which is the cost to the individual, the cost to the family and the cost to society."

According to Malcolm, bridging the treatment gap is a case of striving to achieve universal access to heath care.

Suicide Prevention

The National Media Guideline for Responsible Reporting on Suicide was launched on September 10, World Suicide Prevention Day. The guidelines were developed by PAHO and adopted by the Ministry of Health. At present, media houses that implement the guideline will do so voluntarily. However, Malcolm said the Ministry and PAHO are working with the T&T Publishers and Broadcasters Association towards official incorporation into the code of conduct. "For now, we are hoping that people will recognize the importance of it and put it into practice," she said.

Malcolm added that a trend of "copycat suicides" prompted the creation of ethical guidelines.

"It's not that we're telling the media not to report, but how should you report it? Is it the front page? The main headline? What should the headline be? We also included in that guideline a requirement to provide a message of hope and also contact information for hotlines so persons who are in that situation know what resources are available."

The guidelines are just one strategy implemented by PAHO to provide tools for professionals. The organisation also launched a free, online course last month for primary health care providers, "Preventing self-harm/suicide." The course, which is available in the Caribbean, teaches early detection techniques, behaviour management, identification of risk factors and includes modules on stigma and discrimination.

Another regional initiative supported by PAHO is the Intentional Self Harm Alert System in Belize. The alert system is part of the Belize computerised health information system, a national, electronic patient record system. Patients suspected of or with previous cases of self-harm are closely monitored through the system. According to Malcolm, this initiative presents a prime opportunity for South-to-South sharing between Belize and T&T.

PROFESSOR EDWIN EKWUE: Engineering will rise to the challenge

By Joel Henry

Joel Henry is a freelance writer, journalist and corporate communications specialist

On August 1, 2018, Professor Edwin Ekwue was appointed Dean of the Faculty of Engineering at UWI, St Augustine. It's a critical appointment at a critical time. Since its establishment in 1961, the St Augustine Campus' Engineering Faculty has produced generations of engineers, research and policy ideas that have helped shape the destiny of the Caribbean.

Today the Faculty is needed more than ever. Persistent economic challenges, crime, climate change, food security – the list of challenges facing the region is daunting. And as the premier Caribbean institution for tertiary education, UWI is one of the best resources for dealing with them. The Faculty of Engineering is an important tool in its arsenal.

"Engineering is very versatile," says Professor Ekwue. "You can create enduring structures like skyscrapers. If there is an erosion problem, you can solve it. If there is a food problem, you can develop systems to produce more food."

When asked if he is deterred by the challenges of his new position, the Dean smiles confidently and says: "I know the job has a lot of challenges, but having a lot of experience within the system, I know that I am prepared for the challenges."

Ekwue, a professor of biosystems (agricultural) engineering, certainly has the experience. He has worked at St Augustine for more than 26 years, starting in 1992 as a lecturer in the Department of Mechanical and Manufacturing Engineering. As a researcher in the area of soil and water resources engineering, he has made major contribution in scientific inquiry and knowledge. He has written or contributed to more than 100 academic papers. As a teacher he has educated thousands of students and supervised more than 150 undergraduate projects. And as an administrator he has been representing the Faculty in various senior positions for over 15 years.

"My personal maxim is: 'Anything I want to do, I do it and do it very well," Ekwue says.

It is an outlook he attributes to his parents and teachers in his home country of Nigeria. Ekwue is the fourth of eight children, four boys and four



Professor Edwin Ekwue, Dean of Engineering

girls. Most of them are academics. Four of them have PhDs. All of them are high achievers. Growing up in the agricultural region of eastern Nigeria, he had the strengthening influence of life on a farm and parents who were both teachers, at a time when the Nigerian government was making major investments in the education of its youth.

"From age two or three we were taken to the farm," he recalls. "I was also very good at mathematics. So I said I would become an engineer. The question was what kind of engineering I should do"

Agricultural engineering was the obvious choice. So he embarked on his academic career. And it was while pursuing his graduate studies in England in the 80s that he learned of Trinidad and Tobago.

"There was a graduate student from Trinidad," Ekwue says. "He told us all about BWIA (the predecessor of Caribbean Airlines) and said a lot of nice things about the country. I said to myself this is a place I have to visit."

He did more than visit. After

returning to Nigeria and working as a lecturer for some years at the University of Maiduguri, he applied for a lecturer post at UWI, St Augustine and was hired. That was in 1992. Ekwue has lived and worked here ever since.

He smiles and says: "In Eastern Nigeria the weather is almost the same as Trinidad. The kind of food, the people, almost everything is similar to what we have. So by the time I came here, despite some very minor cultural differences, I was at home."

Ekwue certainly doesn't fit the stereotype of the introverted academic. He smiles warmly, he laughs. In his very limited free time he chooses outgoing activities. He has served as both president and secretary of the Nigerian Community in Trinidad and Tobago, positions that involve a host of social activities. He loves music – Fela Kuti and Oriental Brothers International.

"You also have very good music in Trinidad – calypso. I like a lot of that," he says.

That capacity for interaction and organisation are vital for his new

post. The first item on his agenda is addressing the staff of the Faculty at all levels.

"I've already started meeting with staff to find out their concerns and to explain to them what the University expects of them," he says. "They should be happy in their jobs because once they are, they will be able to deliver the best possible service."

Apart from that, the new Dean also has major objectives for promoting impactful research and commercialization, and improving teaching and career opportunities for students

Most importantly, he wants to inculcate the kind of positive and productive energy that has powered his own life:

"We know that the Government has a lot of financial challenges," he says, "but all the Faculties have to work together, raise themselves and do all they can to improve and generate more value for the University and the country. UWI has done good work and made a good impact. It is now for us to build on that work."

UWI Calendar of Events OCTOBER - DECEMBER 2018





Climate Change Impacts on Food and Nutrition Security

November 12-16 Conference Centre, Radisson Hotel Trinidad Wrightson Road, Port of Spain

Caterina Batello

The UWI Faculty of Food and Agriculture is hosting an important international conference next month to address the challenges of food and nutrition security in our current era of climate change. What crops do you grow in times of drought? How best can you grow them? What should our priorities be? These and many other issues will be explored. Important themes will include climate smart agriculture, the concept of agro-ecology, and integrated management of plant, animal and environmental health.

The conference will be a five-day event from 12-16th November 2018 at the Conference Centre, Radisson Hotel, Port of Spain, T&T. On the last day of the conference, Friday Nov. 16, there will be field visits to the Cocoa Research Centre, the Herbarium, the Coco Germplasm Collection, the Chocolate Company and Caura Valley.

Experts in the field of sustainable agriculture, food security, nutrition security, climate change, integrated pest management, organic farming, agro-ecology, value addition, soil health management, policy experts in climate change and sustainable agriculture will be presenting the lead papers.

Among the presenters is Caterina Batello, a Leader of the Ecosystem Management team of the Food and Agriculture Organization of the United Nations (FAO), Plant Production and Protection Division, Rome, Italy. She will be presenting on the topic: "Agroecology for Food and Nutrition Security in the Framework of SDGs." Batello is an expert in grassland management and ecosystem services, including legume management for soil fertility enhancement, crop-livestock systems management to close soil fertility gap, and climate change adaptation of agro-pastoral systems.

Dr Davide Spadaro, an Associate Professor at the University of Torino (Italy) and Researcher at AGROINNOVA on plant diseases, crop protection, food safety and plant-pathogen interactions, will present on the topic: "Integrated Control of Diseases: A way forward for quality production of fruits and vegetables."

Dr James Fletcher, former Minister for Public Service, Sustainable Development, Energy, Science and Technology in Saint Lucia, will present on the topic: "Climate Change and the Threat to Food Security in the Caribbean: How Should We Respond?" Fletcher is well known for his work in international climate change negotiations. He led the Caribbean's delegation to the negotiations on the Paris Agreement in 2015. Currently, he is in Dominica, on assignment with the United Nations Development Program as head of the Transition Team to establish the Climate Resilience Execution Agency of Dominica.

The main aim of this conference is to bring together leading local, regional and international researchers, academicians and practitioners in the fields of climate change, sustainable agriculture and food security to share research; to strengthen regional and international networks; to develop climate resilient sustainable agriculture models that are suitable for different conditions; and to develop sustainable agriculture and climate change policies to be shared with relevant stakeholders for consideration and adoption.

For more information, please contact the conference's secretariat at climatechange.tt@gmail.com; or call Thara Gabriel at (868) 662-3719 (email: thara.gabriel@sta.uwi.edu), or call Sally-Ann Henry at 662-2002, ext. 82113 (email: sallyann.henry@sta.uwi.edu). Conference website: https://www.foodsecurity2018.com/

Graduation Ceremonies October 25 to 27 The UWI Sport and Physical Education Centre (SPEC)

Celebrate the graduating Class of 2018 at this year's Graduation Ceremonies which will also commemorate The UWI's 70th Anniversary.

For more information and updates on all of The UWI's 2018 Graduation Ceremonies, please visit http://uwi.edu/graduation/

The UWI SPEC International Half-Marathon October 28 • The UWI Sport and Physical Education Centre (SPEC)

There's still time to register for The 15th Annual UWI SPEC International Half-Marathon presented by First Citizens. For the first time, registration is open to relay teams of four people. Proceeds from the race will go towards the local mental health organisations ChildLine and Lifeline. Pledge your support by registering to run, or by making a donation by visiting: https://sta.uwi.edu/spec/marathon/register.php.

For more information, visit: https://sta.uwi.edu/spec/marathon/.

Call for Papers – Third Biennial Oil and Gas Law Conference Deadline: October 31

The UWI St Augustine's Faculty of Law has issued a Call for Papers for the Third Biennial Oil and Gas Law Conference and the Just Transition Initiative Conference. It takes place March 27-29, 2019 at the Hilton Trinidad and Conference Centre. The deadline for submission of abstracts is October 31, 2018.

For more information, visit the Campus Events Calendar at www.sta.uwi.edu/news/ecalendar

13th Annual Caribbean Child Research Conference November 15 to 16 • The UWI, St Augustine Campus

The Sir Arthur Lewis Institute of Social and Economic Studies (SALISES) in partnership with the Institute of International Relations (IIR) and the Institute for Gender and Development Studies invites you to register for the 13th Annual Caribbean Child Research Conference under the theme: Leaving No Child Behind: The 2030 Agenda. The featured speaker for the conference is Her Excellency Paula-Mae Weekes (ORTT).

For more information, visit www.uwi.edu/salises/ccrc2018.php.

Industrial Engineering and Management Conference December 7 and 8 • The UWI, St Augustine Campus

The Department of Mechanical and Manufacturing Engineering will host the fourth Industrial Engineering and Management Conference under the theme Striving for Performance Excellence with Quality Management and IEM Practices. The Keynote speaker is Dr Damian St Jude Graham, CEO, Urban Development Company, Jamaica. Venue: Faculty of Engineering, Ken Julien Building (Block 1), Room 101. Times: Friday: 8am to 8pm & Saturday: 8am to 6pm.

For more information, visit the Campus Events Calendar at www.sta.uwi.edu/news/ecalendar or email cilla.pemberton@sta.uwi.edu.

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