

THE UNIVERSITY OF THE WEST INDIES • ST. AUGUSTINE CAMPUS



SUNDAY 9 SEPTEMBER, 2018



THE MOMENT THE QUAKE STRUCK AS RECORDED BY THE SEISMIC RESEARCH CENTRE: Trace of the 6.9 magnitude taken from one of the seismic stations. The event occurred at 5:31 pm local time west of Trinidad at a depth of 127 km. It was felt in the Eastern Caribbean and South America. See Page 7

70TH ANNIVERSARY – 05 Black Ties

■ Staff come out in tribute



LITERATURE - 08 V.S. Naipaul

Created in the West Indies



AN ENGAGED STUDENT - 11 Fantastic Voyage

■ Discovery through language



FOOD – 13

Super Sexy

■ Kale pumps up the volume



UWI SPEC INTERNATIONAL HALF-MARATHON 2018



SUNDAY OCTOBER 28, 2018 AT 5:30 AM UWI SPORT & PHYSICAL EDUCATION CENTRE, ST. AUGUSTINE, TRINIDAD & TOBAGO

REGISTRATION PERIOD: 15 August - 15 October, 2018

OVER \$150,000 IN CASH PRIZES

First Citizens

First Citizens

OPEN/INTERNATIONAL 1st Male US \$2,500 First Citizens US \$2,500 First Citizens 1st Female 2nd Male US \$1,800 First Citizens 2nd Female US \$1,800 First Citizens First Citizens 3rd Male US \$1200 US \$1200 First Citizens 3rd Female US \$800 First Citizens 4th Male 4th Female US \$800 First Citizens

US \$500

US \$500

5th Male

5th Female



New Course Record Male (1.05.06.9) New Course Record Female (1.12.07.6) US \$1,000

Local Runners Incentive Male Sub - (1:10mins) TTD\$5000 • Female Sub (1:17:30 sec) TTD\$5000

University Student Male & Female 1st TT \$1,500 • 2nd TT \$1,000 • 3rd TT \$500

UWI Student Male & Female 1st TT \$1,500 • 2nd TT \$1,000 • 3rd TT \$500

UWI Staff Male & Female 1st TT \$1,500 • 2nd TT \$1,000 • 3rd TT \$500

UWI STA Alumni Male & Female 1st TT \$1,500 • 2nd TT \$1,000 • 3rd TT \$500

NAAA National Championship 1st TT \$1,500 • 2nd TT \$1,000 • 3rd TT \$500

THESE CATEGORIES EXCLUDE THE TOP FIVE (5) MALE & FEMALE ATHLETES

15 - 19 Male & Female 1st TT \$1,000 • 2nd TT \$700 • 3rd TT \$500

20 - 29 Male & Female 1st TT \$1,000 • 2nd TT \$700 • 3rd TT \$500

30 - 39 Male & Female 1st TT \$1,000 • 2nd TT \$700 • 3rd TT \$500

40 - 49 Male & Female 1st TT \$1,000 • 2nd TT \$700 • 3rd TT \$500

50 - 59 Male & Female 1st TT \$1,000 • 2nd TT \$700 • 3rd TT \$500

60 - 69 Male & Female 1st TT \$1,000 • 2nd TT \$700 • 3rd TT \$500

70 - 79 Male & Female 1st TT \$1.000 • 2nd TT \$700 • 3rd TT \$500

Over 80 Male & Female 1st TT \$1,000 • 2nd TT \$700 • 3rd TT \$500

Physically Challenged Male & Female 1st TT \$1,000 • 2nd TT \$700 • 3rd TT \$500

Special Olympics Male & Female 1st TT \$1,000 • 2nd TT \$700 • 3rd TT \$500

Wheelchair Male & Female 1st TT \$1,000 • 2nd TT \$700 • 3rd TT \$500

Team/Club Category 1st TT \$8,000 • 2nd TT \$4,000 • 3rd TT \$3,000

D'ABADIE LA RESOURCE **TURN AROUND** POINT MALONEY MILE MARKERS WILL BON AIR BE PLACED ALONG THE ROUTE HIGH SCHOOL RACE ELECTRONICALLY TIMED ATHLETES WILL BE PHOTOGRAPHED **FIVE RIVERS CROSSING THE FINISH LINE** JUNCTION AROUCA AROUCA WATER STOPS AT POLICE **EVERY MILE** STATION TACARIGUA ORANGE GROVE CONSTANTINE PARK MACOYA

PASEA

UWI

NORTH GATE

ENTRANCE

ST. AUGUSTINE

CIRCUL AR

MAP OF THE ROUTE

Online Registration (Local and International) www.sta.uwi.edu/spec/marathon Promo codes available at selected First Citizens branches PACKAGE COLLECTION OCTOBER 8 - 24

START/FINISH





A Vision for Development



As a nation, Trinidad and Tobago has just marked 56 years of independence. In comparison with many selfdetermined nations of the world, it is, as the song says, young and moving on. No one would

deny the fact that in many ways we are still inching our way towards a national identity.

Regionally, a failed attempt at forming a Federation of Caribbean territories set us off on the path towards independence from colonial rule in the two decades following 1962, when Jamaica and Trinidad and Tobago gained their independence. That time and that movement defined an epoch in West Indian development. Indeed, it was in 1962 that The UWI of today took its form with the establishment of the St Augustine and Cave Hill Campuses to expand the University College of the West Indies formed in 1948. Globally, the world itself was going through revolutionary changes that would transform world culture, politics and geography - the Civil Rights movement in the US which had strong links with the growth of black awareness and the black power movement in Trinidad and Tobago, the Cuban missile crisis and the threat of nuclear warfare, the hippie youth movement, the space race and the first manned trip to the moon. In those days, particularly in the sixties, a sense of idealism and excitement permeated the region, as visions of the kind of societies we could build seemed ready to take off once the colonial mantles were shaken off.

In the post-independence world, however, many of those dreams seem to have been buried. It has not turned out quite the way it was imagined. On the economic front, for example, a March 2018 World Bank Brief reported that in Jamaica "over the last 30 years real per capita GDP increased at an average of just one percent per year, making Jamaica one of the slowest growing developing countries in the world." The 2018 CDB outlook for the Caribbean projects a 1.8% economic growth, still behind the 3% global projections. Similar economic challenges across the Caribbean, our vulnerability to climate change effects exacerbated in part from environmental abuses, the social malaise of income inequality and increasing crime rates and concerns about food sustainability continue to be our greatest

There is almost a sense that the region is operating in neutral, without a clear idea of what should be done to deliver on the promises rendered at independence. It is tempting to focus on the many negative challenges to society and to give up on the Caribbean as failed states. However, as I said,

Do we as Caribbean peoples have what it takes to sacrifice traditional practices and biases to do whatever is necessary to forge a society that betters the one dreamed of by our forefathers? Others have.

we are still quite young as nations go. It is up to us who populate and govern these territories that make up the Caribbean to strategically plan, set clear targets for sustainable growth and development and then agree on clear action plans to achieve that state within reasonable time. This would require a vision for development, strong resolve and courage from our leaders and many sacrifices on the part of the

Can this be done? Do we as Caribbean peoples have what it takes to sacrifice traditional practices and biases to do whatever is necessary to forge a society that betters the one dreamed of by our forefathers? Others have. The most commonly referenced example is Singapore whose economy in 1962 was well behind that of Trinidad and Tobago and Jamaica, but whose visionary leader, Lee Kuan Yew, worked hard to impose a strong culture of detailed planning, intolerance to corruption and cultural transformation to make it one of the strongest economies in the world with a GDP of around USD500 billion, reported as the 3rd largest per capita. Lee Kuan Yew's policies were not without opposition but given where this country came from, I suspect that only a few Singaporeans would trade, what many see as a harsh legislative regime, for the level of prosperity they have achieved.

At the risk of prolonging this thread of thought, I must make reference to very recent discussions I held with colleagues on South Korea and Norway.

In 1997 South Korea was facing bankruptcy and took a US\$ 58-billion loan from the IMF under onerous contingencies. One picket sign by a displaced worker said it all - "I.M.F. = I'M Fired." However, within three short years the country turned around its economic fortunes and proceeded to pay back the loan. Underscoring the success was prudent planning and the sacrifice made by the South Korean peoples who willingly bought into the notion of "burden-sharing" and in a clear demonstration of national pride and patriotism donated their personal treasured gold belongings family heirlooms, rings, medals, trophies and the like - to be melted down into ingots for international sale.

I have always admired how Norway has invested its oil and gas revenues into a Sovereign Fund, on which the Trinidad and Tobago Heritage Fund is modelled in part, to take care of future generations. It is now the largest such fund in the world, sitting at some USD 1 trillion in 2018. The Norwegians have crafted a "fiscal rule" that governs how the fund is used to phase oil and gas revenues into the immediate economy while ensuring that the fund capital remains and grows. The Fund is also guided by an Ethics Council that blacklists investments in companies associated with severe human rights violations, gross environmental degradation and

Finally, closer to home is the Central American Republic of Costa Rica which, despite its current challenges and the fact that it abolished its army some 70 years ago, has a very stable democratic government and has fairly successfully diversified its economy from agriculture. The country has clearly set its eyes on achieving the UN development goals for environmental sustainability. It was identified by the New Economics Foundation as the greenest country in the world and plans to become carbon neutral by 2021. Indeed, by 2016 98% of the country's energy from "green" sources, notably hydro-electric, geothermal, solar and biomass.

To varying extents, these global examples reflect the importance of having a commitment by all national stakeholders - Government, the business sector, NGOs and the ordinary citizen - to the shaping and execution of detailed and well thought out national development plans. But this will all be for naught if the populace is not adequately motivated to comply. Can we, for example, work together to improve our food security through better collaboration between researchers and the food sector to improve the viability of locally produced food and through a deliberate action by our citizens to change their buying habits from local imports? After a generation or more of craving

Continued on Page 4

EDITORIAL TEAM

CAMPUS PRINCIPAL Professor Brian Copeland

DIRECTOR OF MARKETING AND COMMUNICATIONS Dr Dawn-Marie De Four-Gill

EDITOR

Vaneisa Baksh

email: vaneisa.baksh@sta.uwi.edu

CONTACT US

The UWI Marketing and **Communications Office**

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

FROM THE PRINCIPAL

The earthquake of August 21st

serves as a reminder that we

should be prepared for such an

eventuality given that we are in

an earthquake zone that experts

are telling us is winding up to

deliver a "big one."

for apples and grapes, changing local appetites to bananas and cerise will be quite a challenge.

Do we have what it takes to flip our education system - formal and informal, primary to tertiary on its head so that we could eliminate the causative factors behind the alarming situation of having 1,486 youths achieve zero passes at the 2018 CXC examinations? One could hazard a guess that these are mostly males, potential fodder for the scourge of criminal gangs. But even beyond this red flag, there is much to motivate the complete overhaul of our education system. For example, there is the persistent claim that the system is so examination oriented and too heavily steeped in academics, resulting in some doubt that even the "more successful" students have really acquired the level of understanding one would expect. This does not augur well for the creation of a populace that is sufficiently well educated to enable the achievement of the UN Sustainable Goals. When one adds to this the very valid claims that, despite the best efforts of past Governments, in 2018 there is still too much scorn heaped on the technical and vocational (trades) professions, we see that our education

system remains all too encumbered by traditional biases and myopia. Furthermore, as evidenced by the revelations of saturation in our professional job markets, there is a disconnect, a lack of proper detailed planning, that manifests itself in the misalignment between the job

demand and the supply of qualified individuals. All of these combine to stifle any meaningful attempts to maximize our human capital.

So what is the solution? From the national education perspective, we at The UWI St. Augustine have proposed a 3-tier strategy for a new much more relevant national education system that has at its very foundation the concept of education for survival. While the two higher levels address preparation for current and future job markets, the survival agenda will ensure that every single citizen has the basic wherewithal to survive the fallout from a national disaster that cuts them off from essential supplies. The earthquake of August 21st serves as a reminder that we should be prepared for such an eventuality given that we are in an earthquake zone that experts are telling us is winding up to deliver a "big one." But even beyond disaster preparedness, this level of education should strive to build a citizenry with full knowledge and understanding of their body, mind and spirit. Such an education system would, from a very early age, develop and enhance our ability to perform all manner of physical activities in a manner that prolongs its utility while minimizing damage due to improper technique and complement that with a sound knowledge of personal diet and exercise. It would help each citizen to complement this level of physical literacy with programmes that optimize the development of their mental abilities and their social skills. All of these are required for the development of a more capable and mature citizenry who, in the best of times would populate a sustainably developed society, who us well prepared to thrive in other cultures and, most importantly, well equipped to face survival challenges in the aftermath of any disaster. I challenge my University colleagues, educators and other national and regional stakeholders to work with us to begin the discussions that will flesh out the details of this new 3-tier educational agenda.

I close with some mention of the new 2018-2019 academic year. September heralds the beginning of our new academic year, bringing with it fresh batches of new students and those returning to continue their degree programmes. Although we have a fairly diverse range of students in terms of age, we are aware that a substantial number of the new ones will now be making the transition from secondary school to university life and it is an enormous step in their personal journeys towards independence.

If you are a new student, fresh out of high school, you need to be aware that you will be coming to an environment that is completely different from that which you would have previously e x p e r i e n c e d. Significantly, you will now have to take full responsibility for your success, including becoming familiar

with applicable regulations, locating classrooms, understanding UWI structure, determining schedules, attending lectures, keeping up with assignments and finding out about campus amenities and clubs. The Campus provides an enormous range of information packages – its code of conduct, security guidelines, maps, health information – all that is needed to navigate this new environment, but you have to take the time to make yourself familiar with them all. Our experience has shown that those who take the time to learn what the university has to offer are the ones who get the most benefit from being part of the campus community.

As someone who has been in this environment for decades, it is tempting to say "I've seen it all" when it comes to the kinds of challenges that students encounter. It is never smooth sailing, but in most cases, it is those bumps along the way that enrich the experience. To all students I wish you a rich and rewarding learning experience here at The UWI.

Brian Copeland

PROFESSOR BRIAN COPELAND

Campus Principal



From left: St. Augustine Campus Principal, Professor Brian Copeland; The Hon. Minister of Sport and Youth Affairs Shamfa Cudjoe; First Citizens Deputy CEO, Jason Julien; and Director of SPEC, Grace Jackson at the launch of The UWI SPEC International Half-Marathon

Each Mind Matters

The race, in its 15th year, will run off on Sunday 28th October with a mental health theme, 'Each Mind Matters'. In her remarks Minister Cudjoe confirmed that the Ministry and the Government are committed to moving "mental health treatment beyond treatment oriented programmes in the health care system to include broader approaches." She noted that her Ministry's business was holistic, including physical and mental health. She said she enthusiastically looks forward to participating in this year's race and went on to commend The UWI for being ahead of the curve by already implementing facets of the soon-to-be launched National Sport Policy 2017–2027.

Registration for the **UWI SPEC Half-Marathon** is open at **sta.uwi.edu/spec/marathon**.



School Bags Champ

The indefatigable Erica Williams-Connell stands alongside this year's winner of the Eric Williams "School Bags" Essay competition, Omari Joseph, while PS in the Ministry of Public Administration, Maxie Cuffie shares in congratulating the young man. The prizegiving ceremony was held in August at the Alma Jordan Library. The biennial competition is one of the outreach activities coordinated by the Eric Williams Memorial Collection, which is in the custody of the AJL. Regional students are invited to submit their essays on a chosen subject.

THE UWI 70TH ANNIVERSARY



The Human Resources Department of The UWI hosted a Black Tie Dinner on August 17 for members of staff to come out and celebrate the University's 70th anniversary, which is being observed this year. Titled, "The UWI: Celebrating 70 years – Transforming Trinidad and Tobago and the Caribbean through Quality Talent Management," the dinner was held at the University Inn and Conference Centre.

Guests were treated to a dinner that included roasted lamb with rosemary, stuffed chicken breasts, fish fillets with caper sauce, sweet potatoes in tamarind sauce and vegetables, rice and pasta.

Among the guests caught on camera were the Chancellor, Mr. Robert Bermudez; St. Augustine Campus Principal, Professor Brian Copeland; Deputy Principal, Professor Indar Ramnarine; Ag. Campus Registrar, David Moses; Dean of the Faculty of Humanities and Education, Dr. Heather Cateau and Senior Lecturer and Deputy Dean of Distance and Outreach at DCFA, Mr. Jessel Murray.

THE UWI 70th ANNIVERSARY







PHOTOS: ANEEL KARIM



KNOWLEDGE WORK, WORKFORCE DEVELOPMENT AND THE EMERGING DIGITAL AGE:

New Challenges for Societies and Organizations

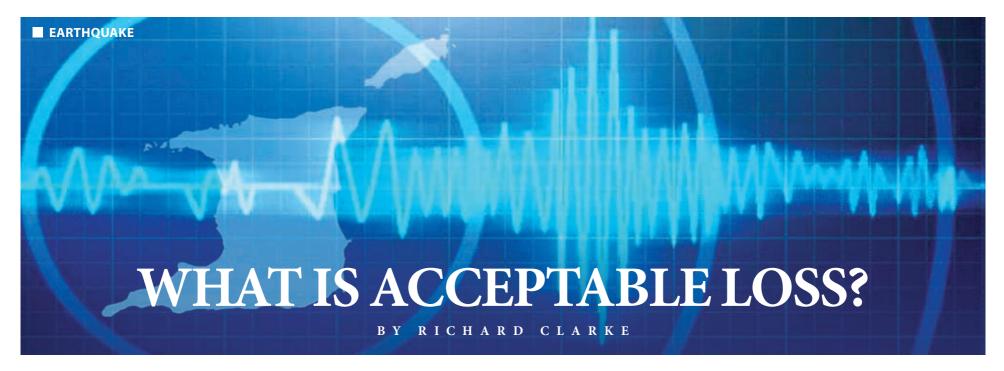
BY RONALD L. JACOBS
PROFESSOR, HUMAN RESOURCE DEVELOPMENT



Thursday 13 September, 2018 | 6.00 pm Daaga Auditorium, The UWI St. Augustine Campus

OPEN TO THE PUBLIC
RSVP: uwistaevents@sta.uwi.edu or call 662-2002 ext. 83635





As we seek to assure appropriate seismically resilient communities there is a particular hurdle to be overcome. This concerns a critical lack of awareness of what a building code provides to property owners and end-users in terms of losses. Appropriate seismically resilient communities are those that implement the latest scientific and technological advances in the design and construction of physical infrastructure in consideration of all the costs involved. Such advances are passed on to society via the latest building codes and any property owner or occupant should be keen to know of same so as to maximize safety and minimize costs. Hence there is a vital role to be played by property owners, end-users, and the population as a whole.

The following statement is invariably shocking at first and there seems to be no easy way to introduce it. When the earthquake a building is designed to resist occurs, there will always be losses in terms of casualties, damage, and functionality for a period of time (i.e. downtime).

Therefore for any town, there will always be a risk that medical and other services or resources required for recovery operations will be overwhelmed. However, it is at first believed by property owners or end-users that not only should there be no losses but that this is the engineer's job. Engineers truly wish this were possible but it is not possible due to the way nature operates. The issue is this: when a structure vibrates due to the vibration of the ground, the damage imparted to the structure depends on the sum of the forces at each instant of time during the vibration, and not just the maximum force and it is literally impossible to predict what that will be (viz. the technical term is "record-to-record variability").

So when your engineer designs your structure for a certain level of force, there is always a chance that the actual force (hence damage) will be higher. This is often observed after an earthquake; say there are 10 identical houses on a street, one will collapse and another will not have a single crack.

This implies that expected losses are to be considered by the populace who must then decide if they are acceptable to society. Therefore acceptable losses represent the basic safety, in monetary terms, that should be built into the structure. Such acceptable losses also represent a benchmark that can then be made part of local design and construction policy. This benchmark represents basic safety but, of course, a



"The expected number of casualties due to collapse of concrete buildings or its components is 50 to 100 persons per 1000 buildings. This is for buildings designed and built to code. If the buildings are not designed and built to code, the number of casualties is about 10 times higher."

property owner or end-user can specify a different but lower level of acceptable loss and instruct the engineer to design the structure to suit. That is, the engineer is instructed on the maximum number of casualties, the maximum repair cost, and maximum downtime for the building. The owner specifying the acceptable losses, and the engineer providing a structure to suit these losses, is the core of the state-of-the-art of building design, called "performance-based design," and is the latest approach to safety under earthquakes.

At this point it is prudent to provide examples of the extent of losses associated with basic safety provided by the latest building codes applied to an earthquake prone region sufficiently similar to Trinidad and Tobago. For example, the expected number of casualties due to collapse of concrete buildings or its components is 50 to 100 persons per

1000 buildings. This is for buildings designed and built to code. If the buildings are not designed and built to code, the number of casualties is about 10 times higher. The economic cost due to building damage is about 20 to 30 percent of the replacement value of the building and roughly 15 times the cost associated with the casualties for buildings built to code.

Note that these losses are the expected losses given the latest building codes but the question remains open as to the acceptability of these and other specific levels of losses for Trinidad and Tobago. As would be expected, a higher level of safety hence lower losses requires providing more resilient buildings. Some may consider it reasonable that a more developed country should have lower acceptable losses than a less developed country for its basic safety provisions. As a first step the citizenry needs to appreciate the concept of inevitable losses even if the building is designed and built to code. Then, in order to provide a policy on basic safety in the form of acceptable losses, public consultation is needed. The aforementioned expected losses are for the region of southern California, USA. A decision was made by the Association of Professional Engineers of Trinidad and Tobago in 1978 to adopt the building codes in use in California for local application. To simplify the decision-making process, the question can be phrased in terms of what percent of this benchmark should be adopted for local application. A level of acceptable loss below 100 percent means setting a level of basic safety for Trinidad and Tobago that is higher than that for California and a level above 100 percent means a lower level of safety. Ultimately, a survey of the public can be conducted and possibly phrased as follows: "select from the following list, relative to California, what should be the Trinidad and Tobago policy on acceptable losses: 80, 90, 100, 110, 120, 130 percent".

It is envisaged that representatives of residential districts, commercial, and governmental properties, will make the final decision. To facilitate the process, an internet-based questionnaire can be readily prepared and activated for a certain period and when that period elapses, the responses are analyzed and the results presented for discussion by these representatives, other stakeholders, and authorities responsible for policymaking. Such input will eventually be vital for the local building code development personnel, practicing engineers, disaster managers, and development economists.

This was not the Big One

Seismologist says more to come

The Eastern Caribbean region is susceptible to large earthquakes and Trinidad and Tobago is no exception. Scientists, researchers, disaster officials and others have echoed this statement for decades but the public often responds to felt events with some alarm and calls for action that are usually quickly forgotten. On Tuesday 21, August, 2018, the largest earthquake event in the last 50 years brought earthquakes; their associated dangers and our island's vulnerability back to the front pages and to the forefront of the nation's discussions. The magnitude 6.9 event was located west of Trinidad at a depth of 127 km and was felt as far north as Dominica, as far west as Colombia and as far south as Suriname. Intense ground shaking, structural damage and liquefaction were observed and in the aftermath, disruption of the mobile networks, electricity and water supplies was experienced. Despite the large magnitude, no casualties or fatalities were reported, in Trinidad and Tobago. The largest aftershock, at magnitude 5.9, was recorded just under 14 hours later. Up to 10 a.m. on 23 August, 37 aftershocks were recorded.

Senior Research Fellow and Seismologist at The UWI-Seismic Research Centre, **Dr. Joan Latchman** answers some pertinent questions that have arisen since the event.

How long after an event like this one can we expect aftershocks and how large can they be?

We can expect aftershocks to continue for weeks and even extend to years. We cannot estimate how long the area in which the earthquake occurred will take to settle and as such aftershocks related to this event can be recorded and felt over a long period of time. From past events, we observed aftershocks in the magnitude 5.0 - 5.9 range and this was recorded on Wednesday 22, August at 9.27 a.m. Other aftershocks have been felt and will continue to be felt over the coming weeks and months.

This was the longest shaking most persons have ever experienced (a maximum of 90 seconds was reported) and many people ran out of buildings during this event. Is this the safest thing to do?

Generally speaking, no. During an earthquake, it is best practice to stay where you are. If you are outdoors, stay there and move away from things that can fall (e.g. buildings, trees and electricity wires). If inside, do NOT try to exit the building. It may seem unsafe to stay in a shaking building, but, research has shown that most casualties are caused by falling debris as persons run to seek 'safer' areas. We recommend you Drop, Cover and Hold on (DCH) until the shaking stops. Stay away from windows and unfixed objects. We do not recommend going under doorways as construction methods have changed. If there is no sturdy piece of furniture, you still drop and cover your head and neck, remaining alert at all times. Conducting regular earthquake drills can serve to encourage persons to adopt this safety technique.

You have been quoted numerous times about the need for T&T to be prepared for a large earthquake. Was this it?

This earthquake was not in the range that we consider the event that the region can experience. The region has experienced events close to magnitude 8 and these are the ones, for which we have warned the public to be prepared. This one was not the strongest but it serves to reinforce the fact that large earthquakes can and will occur. The duration of shaking and the damage that occurred during this event highlighted what still needs to be done to better be prepared for larger events. Such events need not be the largest possible but can simply be sufficient to cause damage.



Dr. Joan Latchman

The magnitude of this event was almost to the same as the 2010 Haiti event. Why is there not as much damage?

The 2010 Haiti event was located at a very shallow depth, close to a densely populated area with poorly constructed buildings. As a result, more energy reached the surface and more damage occurred. Had the 6.9 event been shallower and closer to Trinidad, we would have seen much more damage.

When the earthquake occurred, there were various magnitudes being reported. Which one is correct and why can all the agencies not use the same method?

Different monitoring agencies use different systems for determining magnitude given their location and their network. As such there are different types of reported magnitudes, with different values. This apparent discrepancy is, therefore, expected and acceptable to scientists with each agency's value being correct in its own context.

Why was a tsunami warning issued if no tsunami waves were observed?

A tsunami warning was issued by the Pacific Tsunami Warning Center (PTWC); the agency that monitors tsunamis for the region. This is part of the normal procedure for an earthquake of this magnitude. The warning does not necessarily mean that tsunami waves have been generated from the event. An advisory was sent out shortly after determining that no tsunami waves were observed and the warning cancelled as per procedure.

Industrialized countries like the US and Japan have some warning system in place for earthquakes. Earthquakes cannot be predicted, but why can we not have something like that here?

The warning systems that industrialized countries may have for earthquakes give only a few seconds' notice before large events, which they have tried to use to send out warning messages and are usually linked to critical facilities such as power generation plants and hospitals. This allows these critical facilities to shut down operations just before the ground shaking starts preventing further damage to costly and critical machinery. In 2015, research was conducted to determine the usefulness of such a system in the Eastern Caribbean, with various regional stakeholders from critical facilities participating. It was found that the relatively short distances involved, in this region, would afford only a very short warning time, which had very limited application to us.

Has there been an increase in global seismic activity in recent years and is this event linked to it? Can we expect more and stronger earthquakes in the coming months?

The global seismic system has been steadily producing more large magnitude events since the mid-1990s, reflected in the mega-earthquakes occurring around the world, since 2004. This earthquake fits with expected activity for the Eastern Caribbean, although the global system had a shortfall in 2017, which seems to have continued into 2018. Of course, there are still several months to go in 2018 and time will tell if the shortfall continues.



Established in 1953, the **Seismic Research Centre** is an agency within The UWI. The UWI Seismic Research Centre is the leading authority on earthquake and volcanic activity in the English-speaking Eastern Caribbean. It operates the largest network of seismographs and other geophysical instruments in the Caribbean region, manages the Montserrat Volcano Observatory and conducts education and outreach activities in these countries. The Centre is involved in a regional effort to establish a tsunami warning system for the Caribbean. For more information, please visit **www.uwiseismic.com**

A Writer's People for V.S. Naip

BY DR. VIJA

The title of this essay borrows from the two main books that inspire it, the first by V.S. Naipaul, A Writer's People: Ways of Looking and Feeling: An Essay in Five Parts and the second, Created in the West Indies: Caribbean Perspectives of V.S. Naipaul edited by Professor Barbara Lalla and Dr. Jennifer Rahim, the most recent book of criticism of Naipaul's work produced in the Caribbean after his last public visit to Trinidad and Tobago in 2007.

The connections between the two books became apparent at the time of his visit simply because I was reading the first which had been released just prior to the celebration of the Year of Sir V.S. Naipaul in 2007 at The UWI hosted by then campus Principal, Dr. Bhoendradatt Tewarie, as part of a three-year series of celebration of Caribbean Nobel Laureates, on which the second book was based. For me, the most outstanding connection between the two was the sameness of personality in real life and text – including what we had heard from a number of different sources about the writer's infamous irascibility.

Throughout his life, Naipaul's depictions of himself in his fiction and non-fiction give one the impression that he immerses himself in every experience so fully that he touches its very core. This was certainly an impression that was heightened in the chances for one and only close encounters that his visit presented, albeit ones where he was usually on a stage and I was either a member of the audience or even more frequently a backstage gopher. But even given this distance, one had the sense that he focused intently on one thing/ question/ person at a time even while he was aware of his own place within any whole tableaux at any point, even when that focus brought out the shortness many have feared or loathed as in his response to students during his visit. In the hopeful desire to share something of his ability, I borrow his own words to say that because of these encounters, I think "I got to know [him] ... well, though I never spoke to [him] ... and [he] ... never spoke to me. I got to know [his] ... clothes and style and voice[s]" (A Writer's People 1).

This impression was indisputably heightened by the tone, pace and atmosphere that Naipaul evoked in *A Writer's People* which I was reading simultaneously. This is how the book begins:

Up to about the age of six or seven I lived mainly in my grandmother's house in a small country town in Trinidad. Then we moved to the capital, Port of Spain, to my grandmother's house in the Woodbrook area. I immediately fell in love with what I could see of the life of the Woodbrook street, and its municipal order, the early-morning washing of the gutters on both sides, the daily gathering-up of rubbish into the blue city-council horse carts. My grandmother's house stood on tallish concrete pillars. It had a front verandah hung with ferns in open metal baskets ... (1)

In clean spare lines, he draws for us his memory

of the child's experience of the city and reminds us of the extreme desire for order, shelter and beauty born in infancy that every post-plantation Creole individual and group would exhibit, even when imagination could not go beyond that offered by the plantation itself. This desire lives still in the eagerness with which many shades of Woodbrook, unfortunately minus the gutter washing but still with their timely garbage trucks and hanging ferns, continue to crop up daily across the islands. The Merchant-Ivory adaptation of Naipaul's *Mystic Masseur* certainly captured this in Ganesh's Port of Spain setting.

In setting his first collection of stories on the street in front of his grandmother's house in Woodbrook and building an imaginary one for his narrator on it, Naipaul admits that what he wrote:

... was a "flat" view of the street: in what I had written I went right up close to it, as close as I had been as a child, shutting out what lay outside. I knew even then that there were other ways of looking; that if, so to speak, I took a step or two or three back and saw more of the setting, it would require another kind of writing. And if, in a greater complication, I wished to explore who I was and who the people in the street were (we were a small immigrant island, culturally and racially varied), that would require yet another kind of writing. It was to that complication that my writing, in fact, took me. I had lived all my writing life in England; that had to be acknowledged, had to be part of my world view. I had been a serious traveller; that had to be acknowledged as well. I couldn't pretend as a writer I knew only one place. There were pressures to do that, but for me such a world view would have been false.

All my life I have had to think about ways of looking and how they alter the configuration of the world. (2-3)

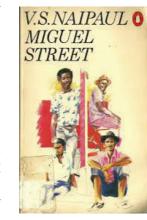
That first 'flat' book that we still love is of course *Miguel Street* now found in many translations.

As Rhonda Cobham-Sander reveals, like so many of us still, although she had been taught to disdain local writing, she and her siblings read it nonetheless and her experience of this book was as follows:

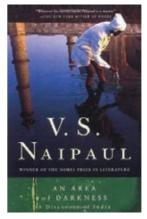
I no longer remember whose copy of $\it Miguel Street$ we found wedged between the blue cushions, but I

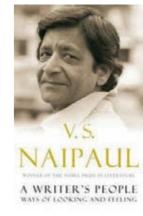


remember one suitor looking at the title and saying with an air of self importance; "That's Luis Street, you know," which was the street at the other end of Woodbrook where he lived. We read Naipaul's stories out loud to each other. I remember laughing till I cried at Man Man on the cross, urging the onlookers to "stone me, brethren, stone me!" and screaming with











aul: Created in the West Indies

Y MAHARAJ



delight at the idea of his dog leaving symmetrical piles of droppings on the stools in the Café at the corner of Alberto Street where we regularly stopped for sweet drinks. And of course we were convinced that Man Man really must have been Mr. Assee, whose endless chalked sentences on the pavement of Damien Road we were careful to circumvent when we took the

short cut from the Avenue to Roxy Roundabout. It never occurred to us that we also might have been the subjects of Naipaul's satire: Mrs. Cobham's daughter, hedged in by all the elaborate protocols of black middle class respectability, but longing to play out a grand passion before the cinema audiences she could not be a part of. The suitor, somebody's well behaved boy child masquerading as a Black Panther under his Afro and knitted beret, reading short stories on the blue couch when he really wanted to do something else.

Naipaul's later writing would no doubt have taught Cobham-Sander to see herself and her childhood environment with such clarity but when he began taking those few steps back and back from the immediacy of the broad contours of lives lived in a place with few divisions between private and public spaces, hackles began to rise. This happened, for example, when his ways of looking at persons were not the kind of looks the particular reader who perceived him/herself in a book's characters or setting desired or when Naipaul perhaps gave one image in a situation that required an album if not a montage of disparate images or when his one image was condemned for not being in sync with the reader's. With each book after Miguel Street that problem became more intense and when Naipaul finally began representing persons beyond the boundaries of Trinidad and Tobago, the ire began creeping increasingly across a global range. The Middle Passage brought the first repercussions and it was followed shortly thereafter by even more violent reactions to An Area of Darkness - his first book on India.

Subsequent books on India led to a somewhat toned down reaction because of Naipaul's approval for some of the developments in the modernization of India via greater technological advances. After the Nobel Prize was awarded to him, the Indian books were even printed as a single Trilogy, intended now to be read as one.

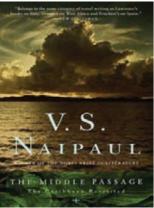
But a similar turn-around cannot be said to have occurred in the Caribbean, where umbrage has been taken about all other areas of Naipaul's writing, his books on conversion to Islam in non-Arabian territories as well as those on Africa. In fact,

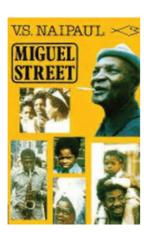
it is not uncommon to see essays with titles like "The Caribbean through European Eyes: V.S. Naipaul's *The* Middle Passage."

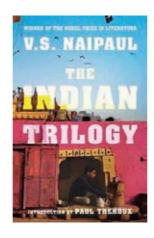
That is until 2007, when a certain level of acceptance was evident in each of the articles first published immediately after his visit in the journal Anthurium: A Caribbean Studies Journal and then in book form in 2011 with the title Created in the West Indies: Caribbean Perspectives on V. S. Naipaul which tried to indicate acceptance that the person Naipaul was, owed a great deal to his Caribbean upbringing as did the views of the people who had a unique insight into so much of what he had written because of their shared upbringing. The book was in short nothing less than a discovery with Naipaul of how "ways of looking [can] ... alter the configuration of the world" and how we read books about it (2).

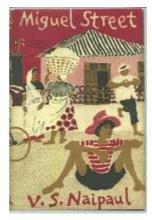
Four years after the publication of Created in the West Indies, another conference that sought to re-emphasise V.S. Naipaul's Caribbeanness and the familial context of his life and work titled "Seepersad and Sons: Naipaulian Creative Synergies," was held, this time under the watchful eye of the NGO, Friends of Mr. Biswas, that has been established by Professor Kenneth Ramchand to promote Naipaulian creative genius among young and aspiring writers of Trinidad and Tobago. The book from that conference will be published by Peepal Tree Press shortly. This book too reveals new ways of looking at Naipaul and anticipates a long-lived legacy of doing so into the distant future. Some pictorial memories are shared here as we remember how this realization sank in as we mourned the dilapidation of the Lion House and the need for a quick intervention to prevent further deterioration, the loss of the Luis Street house as well as the real life counterpart of the Shorthills house, joined V.S. Naipaul's and his father, Seepersad's, grief at the ephemerality of life in the erasure of the father's childhood dwelling places and finally celebrated the preservation of the house on Nepal Street in St. James,

No doubt in the years to come, many will continue to try to understand how ways of looking and feeling create the people of the Caribbean - Naipaul's people - and out of that understanding viable futures will emerge. Naipaul is gone and all those to whom his works bring insight are grateful that he has lived and mourn his passing but in the sure knowledge that his works will continue to deliver as they have done and perhaps even moreso now than in the 1950s when they first began appearing.

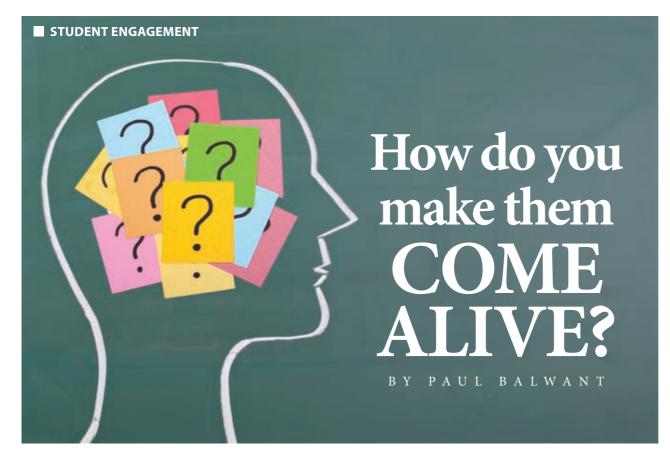








Dr. Vijay Maharaj is a lecturer in the Department of Literary, Cultural and Communication Studies of the Faculty of Humanities and Education, UWI St. Augustine.



In a published interview, author and professor, Robert E. Quinn describes his observations of teaching at a higher education institution (HEI).

"I taught on a university campus where the main building was constructed with long rows of classrooms and each one had a big window. As I walked along I could look in on each class ... As I passed the classes, I would ask myself what was happening in each one. I never had to look at what the teacher was doing. All I had to do was look at the body language of the students ... In the majority of the classes, the students were draped over their desks, only half awake," he said.

Such apparently withdrawn students may be detrimental to a HEI's service and its survivability given the increasingly competitive market.

The competition between HEIs for students means that students are becoming more like 'customers' of the institutions' service. Historically, service quality and higher education seemed about as compatible as oil and water. Students are now more savvy and selective in their choice of a HEI, often relying on university rankings (The UWI recently ranked 37th among universities in the Caribbean and Latin America).

This change, accompanied by shifting socio-economic conditions such as globalization, withdrawal of funding for education, and emphasis on graduation rates, means that HEIs must transition towards a service quality mentality in order to attract students. If students become dissatisfied, enrolment figures can fall and this in turn can negatively influence funding and job security.

In a race to provide the best student 'experience', the term 'student engagement' has captured the spotlight in the HEI context. Despite the popularity of student engagement, there is surprisingly little regard for its meaning. In fact, educational researchers explicitly acknowledge that there is considerable ambiguity with respect to the definition and scope of student engagement. For instance, student engagement has often been defined according to its measurement by popular student engagement surveys such as the National Survey of Student Engagement (NSSE) used in Canada and the US.

The NSSE contains questions such as, 'During the current school year, how often have you had discussions with ... people with religious beliefs other than your own?' The approach of using such wide-ranging scope of questions to conceptualize student engagement is counterintuitive to

the theoretical development of student engagement because (1) operational definitions follow conceptualizations in scientific research and not the other way around, and (2) student engagement becomes an all-encompassing construct riddled with ambiguity and fuzziness. Evidently, there is a need to clearly outline what constitutes student engagement.

One approach to conceptualizing student engagement is to adopt the conceptual features of engagement from the organizational behaviour discipline. Within this discipline, the concept of engagement has matured more than in the education discipline by focusing on what it means to be 'engaged'. Borrowing from organizational behaviour, the scope of student engagement can be narrowed so that engagement is characterized by high levels of activation.

The idea that student engagement can be characterized by activation is not completely new. In the early 1990s, educational researchers distinguished between two types of engagement – procedural and substantive. Procedural engagement is characterized by normal or 'undistinguished' activity. Here, students 'go through the motions' in order to develop competence in academic activities. In contrast, substantive engagement transcends procedural engagement, and is characterized by meaningful and highly energetic activity. From this perspective, there is a clear similarity between substantive student engagement and the concept of work engagement from organizational behaviour research.

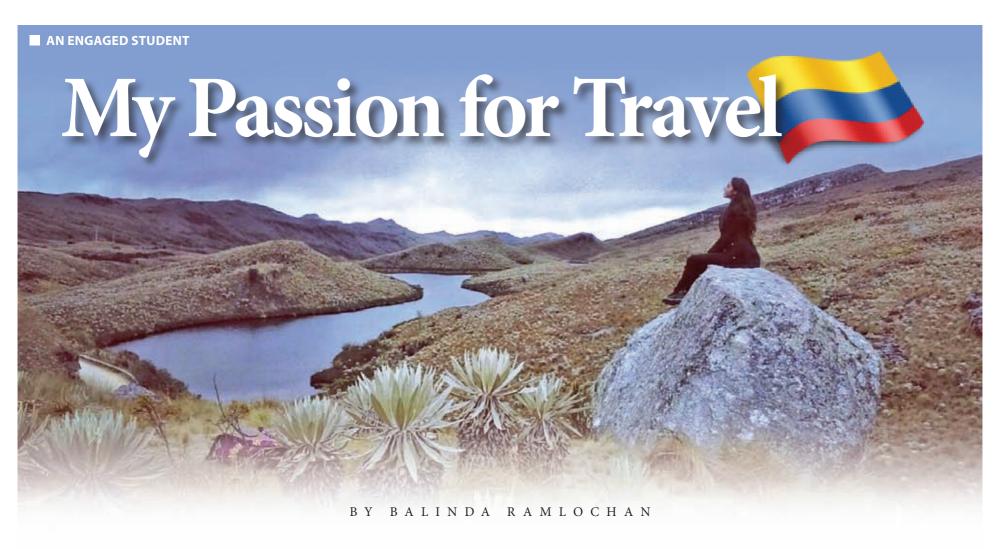
Both (1) the concept of substantive student engagement and (2) empirical studies using work engagement measures adapted for the HEI context, emphasize high activation for engagement. Accordingly, the eclectic concept of student engagement in extant educational research needs to shed its procedural aspects in order to have value as a distinct concept that would be aligned with the latest developments in organizational behaviour approaches to engagement. In this view, student engagement refers to highly activated emotional (passionate feelings and beliefs), behavioral (demonstrations of initiative, proactivity, and/ or innovation), and cognitive (deeply immersed and focused) involvement in academic activities. This definition of student engagement describes a state of activation that surpasses student satiation/satisfaction and even motivation. Following this definition, researchers and practitioners should consider using recently adapted measures of engagement from organizational behaviour research that capture the activated state of student engagement.

WHAT STUDENTS WANT

The Campus Office of Planning and Institutional Research regularly administers a survey targeting incoming students that seeks socio-economic demographic information on them. The key findings of the most recent survey, done in 2016, are outlined in the points below. One of the main findings was that a large part of our student population comes from middle to low income backgrounds and are first-generation UWI students – the first in their families.

- In terms of the socio-economic profile of respondents, approximately 49.5% of respondents came from households earning \$15000 or less monthly, with 40% of respondents also being first generation university students. It was noted that for those who had family members who were pursuing or had pursued tertiary level education, approximately half of them had attended or were attending UWI.
- UWI was a first choice institution for approximately 1 out 2 respondents and this is likely to be attributed to the fact that financial assistance (GATE) was provided and also that they perceived UWI St Augustine to be an institution which had a good academic reputation.
- In respect of student pre-university activities, survey results indicated that most respondents spent more time on academic work and using social media platforms and were less inclined to participate in extracurricular activities on a regular basis.
- Respondents indicated that they would want to participate in non-academic activities or extra-curricular activities at The UWI, such as student clubs/organisations/activities, participating in internships and taking cocurricular courses. More specifically, it was noted that respondents who were more interested in participating in non-academic activities at The UWI, were also more likely to have had pre-university experiences such as participation in in-class and extracurricular activities, and also perceived themselves as possessing leadership skills.
- Respondents who were inclined to look forward to in-class participation at The UWI were more likely to have higher scores with respect to leadership skills, writing, thinking and communication skills, pre-university in class participation and study habits.
- Respondents with higher cumulative GPA scores corresponded with higher scores for attributes such as study habits and preuniversity in-class participation but was negatively correlated with non-academic activities.
- Respondents anticipated that they would encounter challenges with time management as well as keeping up with academic work but were looking forward to completing their degree and maintaining a good GPA.

Source: UWI Incoming Students Survey, 2016



What comes to mind when you think of Colombia? Undeniably, the first things that rush to my mind are the Andes mountains, breathtakingly beautiful landscapes, the Transmilenio, Empanadas and Arepas, good customer service, vast lands, rich colonial architecture and pigeons! Before embarking on this unforgettable journey of becoming an English Language Assistant in Colombia, my main intention was to just take a year off and travel.

The opportunity to teach English in a Latin American country inevitably resulted in many changed perceptions, improved my foreign language capabilities, improved my teaching and public speaking skills, gave me a great sense of independence and personal growth and introduced me to a completely different culture which, in my strong opinion, can all come with the experience of a study exchange or being an English Language Assistant in a foreign land.

I completed my UWI degree with a special in International Relations and a minor in Spanish. At first, I thought that the English Language Assistant programme was limited to students with a Major in Spanish. It turned out that students pursuing a minor in Spanish could also

The native Spanish Lecturers and their excellent course plans at the Centre for Language Learning (CLL), set the general foundation, but the learning experience you get from living in an actual Spanish-speaking country can never be gained in a classroom setting.

I was forced to speak the language every single day since most people did not know English. I was able to speak more fluently after a few months. Bearing in mind that conversational Spanish was not so easy for me before, I can now confidently tell anyone to take advantage of opportunities like these and live in a country for a year if you really want to fully learn a language or improve your fluency!

Teaching was the last thing on my mind as a profession. Leading up to the training sessions and mock classes at CLL in preparing us for the trip, I did not feel confident at all in the way that I presented topics and I clearly remembered questioning myself if this was



The English Language Assistants at the University (Gracie, Balinda, Megan and Chris)



something that I was capable of doing. More anxiety came when I learned that Language 'Assistants' would be individually assigned classes at the university, that is, no supervisor, no head of the language department, just you and the University students.

When I got to the University in Bogota I found that three language assistants from the United States and England would be there too. The teamwork, the creation of lesson plans, presentations and even a workbook for students to follow definitely made our work much easier and enjoyable. Without those three, life at the University would not have been the same and I must say that dancing to the Black Eyed Peas' songs in our planning sessions was memorable!

So what were the students like in Colombia? I taught at a private university and found they were very respectful and willing to collaborate. Their English levels were really low and most times I found myself teaching English by speaking Spanish for them to fully understand the explanations. We used technology in class, the television, did PowerPoint presentations and played games. I often found myself Googling various in-class activities in order to make learning more fun.

Sharing the culture of our island was perhaps the best part where I often showed music videos and even did cultural presentations. I was amazed at the interest they had in our culture, even though most did not know where Trinidad and Tobago was located. The expressions on their faces were priceless and many were astonished at the fact that such a tiny island can comprise such diversity and yet exist in harmony. I had never felt this much patriotic in my life.

Even after 2 years I can vividly remember every single detail of my time in Colombia. I only worked 18 hours for the week which therefore meant a lot of free time to explore and learn! I took advantage of almost all the long weekends and holidays and attempted to travel to every inch of Colombia. This was to my disappointment impossible but I did get to do a substantial amount of trips while I was there. I mostly found myself hiking on the mountains, getting lost at times, learning about the history of various sites and mastering the art of travelling on the Transmilenio.

A LIFE WELL LIVED

BY TERENCE SEEMUNGAL



Andy Bhagwandass graduated in 1999 with the Doctor of Medicine (DM), and in 1993 with the Medical Bachelor, Bachelor of Surgery-MB, BS, at Mona Jamaica. He became a Lecturer in Adult Medicine in 2001, UWI, St. Augustine and co-authored two articles (2002 and 2003) in Lupus and the West Indian Medical Journal, respectively.

are expected to be comfortable with death. After all, in our profession it is a constant companion, hovering just out of eyesight in our daily routine. We do our best to delay the inevitable while balancing our concern for the quality of life of our patients. Does this mean we are better

As doctors, we

prepared for its appearance?

The sudden passing of our colleague and friend, Andy, generated ripples of shock and dismay throughout the medical fraternity. As we reflect on a life, cut short in its prime, can we inspire ourselves and our students with Andy's unique approach to the profession, which to him was no mere job, but a calling?

Andy was a very dedicated and compassionate doctor, who treated each patient as a whole person and not simply as a diseased body part. With his gift of gab, he was able to explain his thinking and treatment protocol to his patients in terms they could understand. He listened and guided them and their families into making the best decision for their particular case. Recently, the relatives of a terminally ill patient told me a story about their loved one who was in a private hospital accruing a huge bill. Andy called them aside and explained that there was no advantage to the patient being in hospital. As expected, the patient passed away, but at home surrounded by loved ones. The relatives valued that moment of honesty and consideration from him, and still recall it, many years later.

He empathized with his patients and was readily available to them, allowing nothing to hinder him from getting them the best treatment options. I remember going to see one of his patients only to be told that she had arrested earlier at 3 a.m. Andy had been there and accompanied her in the ambulance to the ICU at the Eric Williams Medical Sciences Complex. Though this may not seem particularly extraordinary, whilst in the ambulance, Andy was working on resuscitating her!

When the Faculty of Medical Sciences, at The UWI, offered the Doctor of Medicine in Internal Medicine, in Trinidad, in 2007, Andy immediately expressed an interest. He could see the need for this programme to build capacity, at the Specialist level, in Internal Medicine in Trinidad and Tobago. I could depend on him for sound advice and, when he thought fit, scathing criticism of the programme! He had several ideas for the programme and before his sudden death, we had an in-depth conversation, only a few days before, about his plans for expansion of his teaching sessions with the students.

He was very appreciative of his lecturers who guided him along his medical journey. I recall visiting his home when he had a "curry lime" in honour of two of his mentors, Professors Michael Lee and Owen Morgan of the Mona Campus. With tears in his eyes (unusual for him), he thanked them for their contributions to his professional training.

Andy however, was not all work. He organized a doctors' 'cook out' at EWMSC recently and I hope this cultural event will continue in his absence in memory of him.

He enjoyed a close-knit family relationship – full of laughter and love. His mother was particularly proud of her boys: two doctors and a pharmacist, but joked that with all their qualifications, she wished one of them could repair her broken tap!

One of the rites of passage for a doctor is the recitation of this paragraph from the Hippocratic Oath –

"If I do not violate this oath, may I enjoy life and art, respected while I live and remembered with affection thereafter."

If I could say one more thing to Andy, it would be this: Bravo, my friend. Congratulations on a life well lived and a job well done. You will be sorely missed.

Digging Up The Farm



"This volume focuses on how early native communities in the region practised various forms of agriculture from 8,000 years ago to the period of European contact. Given its multiple case studies and its discussion of state-of-

the-art technologies, the book should be of immense value to archaeologists, ecologists, biogeographers and agriculturalists," says Dr. Basil Reid, the editor of the 17 chapters covered in "The Archaeology of Caribbean and Circum-Caribbean Farmers 6000-BC-AD 1500."

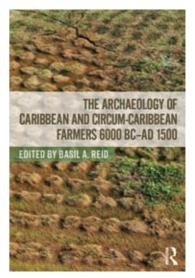
According to the publishers, Routledge, it spans "a wide geographic reach stretching from the Florida Keys in the north to the Guianas in the south," and "places a well-needed academic spotlight on what is generally considered an integral topic in Caribbean and circum-Caribbean archaeology."

"The book explores a variety of issues, including the introduction and dispersal of early cultivars, plant manipulation, animal domestication, dietary profiles, and landscape modifications. Contributors discuss their findings within multiple constructs such as neolithisation, social interaction, trade, mobility, social complexity, migration, colonisation, and historical ecology. Multiple data sources are used which include but are not restricted to rock art, cooking pits and pots, stable isotopes, dental calculus and pathologies, starch grains, and proxies for past environmental conditions."

It is available online.

Dr. Basil Reid is a Senior Lecturer in Archaeology, in the Department of History at The UWI, St. Augustine.

The Archaeology of Caribbean and Circum-Caribbean Farmers 6000 BC-AD 1500



Today I'm doing a farm-to-table view of Kale, noting some interesting developments on the local front as it pertains to research and development. Kale is not an indigenous plant to Trinidad and Tobago, but you could never tell that by walking into a supermarket and seeing rows upon rows lining the produce aisle. Being mostly imported, the price makes it more of a high-end item, and it's very popular with consumers who can afford to add this perceived superfood to their diet.

Through Dr. Wayne Ganpat, Dean of the Faculty of Food and Agriculture, I was introduced to two students seeking to diversify the diets of Trinbagonians by using scientific methods to grow low-cost, highyield, consistent and high quality produce that is typically imported.

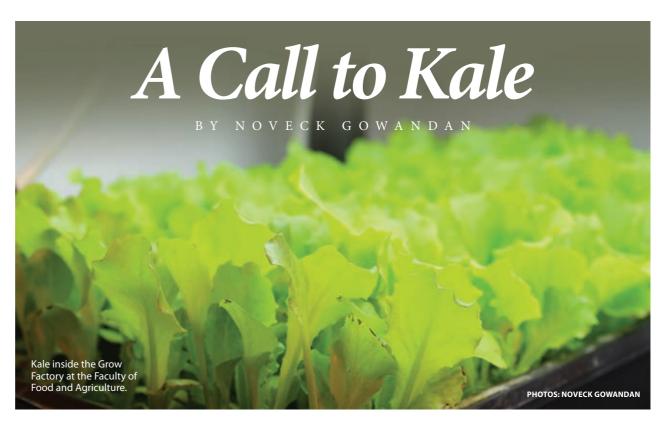
Nkosi Felix and Jessica Churaman are both research students in Agricultural Economics, and I was fortunate to see their prototype "Grow Factory" in operation. A grow factory is an indoor facility where all environment variables are tightly and precisely controlled - carbon dioxide, light, temperature, nutrients, and moisture - all critical components to help plants grow. The fact that no pesticides or fungicides are used make it a clear winner over open field farming, which is at the mercy of the weather, pests and a large number of other threats.

From Nkosi's and Jessica's research, grow factories do have a higher start-up cost, but boast lower operational costs, higher yield per square foot, a significantly lower environmental impact, as well as the opportunity to be an automated 24/7 type operation. It can also scale easily from small, backyard type installations to massive indoor farms. The potential is huge for growing produce locally, instead of importing and thus making it affordable for the everyday consumer.

A tour of the research facility revealed a fairly small room, perhaps 10 by 16 feet, maintained at a frigid 17 degrees Celsius with a slight but constant hum from the hydroponic pumps. The grow lights were a brilliant yellow; stepping into the room from a dark corridor felt like walking outside into lustrous sunshine. When my eyes adjusted I saw the vibrant swatches of green; countless seedlings and plants of temperate varieties (that I was asked not to name just yet since they are currently being researched).

The science behind this innovative farming is amazing, but I'm a foodie and was more interested in actually creating something with the bunch of fresh Kale I managed to score. I was able to sample a leaf directly from the equipment; and it was tender with a light crunch, with a distinct sharpness and lingering bitterness, a flavour somewhere between local green plums and fresh celery. The stems were quite bitter and would serve well cooked, or perhaps in your favourite healthy smoothie. I was made to understand that the leaves I was given were a bit on the young side, and would benefit from a raw or semi-raw consumption, whereas the older leaves and stems are better suited for cooking methods such as stir-fried, sautéed or otherwise incorporated into your favourite dishes.

Armed with a basic idea of its complex flavours as well as pro tips from the master farmers/researchers, I decided on a salad. Not necessarily a run-of-the-mill leaves-with-dressing type salad. What immediately



came to mind was a warm salad - a flavour-packed concoction of locally grown wholegrain brown rice, kale, cranberry and cashews tied together with some locally produced coconut oil infused with fresh garlic.

The wholegrain brown rice is inherently nutty and has a lovely chewiness. Kale leaves, sans stem, added an earthy complexity with fruity undertones. Cranberries added both sweetness and acidity, but also a pop of vibrant colour. Cashews added a bit of fat to balance the acidity and sharpness, as well as bring some lovely contrasting crunchiness to each bite. The combination of fat and tartness certainly helped mellow out the residual bitterness of the raw kale.

The secret here is timing of the ingredients,

folding in the Kale into the hot rice and allowing it to sit while covered for a few minutes, produces a light steaming effect which will tame some of the naturally harsh character of the kale. Then the remainder of the ingredients can be tossed in and served.

Overall this dish is a simple-to-prepare, but paradoxically complex with layers upon layers of texture and flavour.

The recipe for this dish is below.

Inspiration: The Editor of UWI TODAY who knows I can't let a challenge pass by, as well the Dean, Faculty of Food and Agriculture who spared the time for enlightening conversation about agriculture in Trinbago. (Editor's note: This recipe rocks!)

My Kale Salad



A Simple Range of Ingredients: Kale, Rice, Cranberries and Cashews

Ingredients

5-6 cups loosely packed Kale, roughly chopped 3/4 cup wholegrain brown rice (yields about 2 ½ cups cooked) 34 cup roasted cashews 3/4 cup dried sweetened cranberries 1 tbsp coconut oil 1 clove garlic, finely minced salt and black pepper to taste

Preparation

Serve immediately.

Add garlic to coconut oil and let sit Rinse Kale leaves with gently running water. Cut and discard stems (or save for soups, smoothies or stock) Roughly chop into about 1 $\frac{1}{2}$ inch pieces and divide in two Cook rice according to instructions (approx 2:1 water to rice ratio in rice cooker) In a large mixing bowl with a tight fitting lid, add half the Kale Spoon in hot rice and then top with the remaining Kale Cover dish and let sit for 7-10 minutes. Fold in infused coconut oil, cranberries and cashews. Add salt and black pepper to taste.

Serves: 3-4 Est. Prep. Time 40 minutes

Look out for the New National Plan for PROTECTING OUR NATURAL AREAS

Two years ago, an oilbird had to be rescued from a ledge on one of the upper storeys of the Twin Towers in Port of Spain. Yellow-headed green parrots used to perch and peck at the glass windows of another high-rise office building on the Savannah. In any of the residential valleys off the Northern Range, iguanas, agoutis and manicous regularly walk through backyards. And birds – native and visiting – nest in many urban gardens. The wild, it seems, is never far from where we live in Trinidad or Tobago.

As cited in the new Protected Area Systems Plan (TTPASP), "Trinidad and Tobago is among the most biologically diverse countries in the Caribbean with over 3639 species of plants (including 2407 native species) (*Baksh-Comeau et al. 2016*), 600 species of terrestrial vertebrates and 1100 species of recorded invertebrates (*Starr 2010*)."

It is this diversity that the Plan seeks to safeguard. The 2018 TTPASP is to be presented this month. It represents five years of fieldwork, consultations with communities, and distilling the native knowledge and surveys – historical and contemporary – of specialist scientific and interest groups. The thoroughness and specificity with which ecosystems on land and in the marine areas have been considered is laudable.

The result is a document that should be required reading for students of ecology from secondary school and beyond. Published, it may be a reference collection for every Trinbagonian wanting information on the precious resources of our native isles. Furthermore, it takes into account the up-to-date thinking and practice of the global Convention on Biological Diversity.

Most importantly, the 2018 TTPASP is not set in stone. Building on the 1980 plan (Thelen and Faizool), it provides a realistic and sensitive roadmap for the way forward. It is intended to be a living document: as initiatives are implemented, levels of protection may be changed, and areas under conservation may be modified or expanded.

Of greatest significance perhaps, are the recommendations for managing the Open-Ocean Waters and Deep-Sea (OOWDS) areas, especially in the country's exclusive economic zone which extends into the deep Atlantic; much of which has not been explored. Recent forays have revealed life in hot water vents and methane seeps: "Many of these ecosystems, for example, the deep marine ecosystems within Trinidad and Tobago's exclusive economic zone (EEZ), remain areas of active biological exploration, while simultaneously being important areas of economic development (Amon, et al. 2017)."

For consideration too is the Northeast Tobago Marine Protected Area, some 53,000 hectares of coastal and marine ecosystem comprising "a



complex seascape of offshore islands, coral reefs, sponge reefs and sandy beaches important for recreational, fishing and ecotourism use."

The Plan was commissioned by the Government of the Republic of Trinidad and Tobago in 2013 and was developed and completed through partners, the European Union, Food and Agriculture Organisation of the United Nations (FAO) and the Global Environmental Fund (GEF). It aims to bring Trinidad and Tobago in compliance with the Aichi targets under the Convention on Biological Diversity (CBD). At the 10th meeting (2010) on Biological Diversity in Aichi, Nagoya Japan, the countries/parties agreed on strategic biodiversity targets to be achieved by 2020; these include, among others, the strategy "to improve the status of biodiversity by safeguarding ecosystems, species and genetic diversity."

The TTPASP includes recommendations for implementation, management and opportunities in education, employment and entrepreneurship. Like the battle against climate change, protecting natural areas is an investment in future wealth and well-being. It requires individual buy-in to a collective benefit.



"The new system plan identifies 136 PNAs (protected natural areas) across Trinidad and Tobago. Of these, 92 are terrestrial/freshwater (79 in Trinidad, 13 in Tobago), 40 are coastal/marine (18 in Trinidad, 22 in Tobago) and four are deepsea marine areas. In total, approximately 1933 km2 (1866 km2 in Trinidad, 67 km2 in Tobago) of the country's land mass are covered by terrestrial/ freshwater PNAs. The coastal and marine areas are approximately 580 km2 (14 km2 in Trinidad and 566 km2 in Tobago) in size. Open-ocean waters and deep-sea marine areas cover 15.600km2 of Trinidad and Tobago's Exclusive Economic Zone. Thus, 38% of the country's land mass is protected by terrestrial/freshwater PNAs and coastal, marine and OOWDS PNAs protect 22% of Trinidad and Tobago's EEZ."

(Extract from National Protected Area Systems Plan for Trinidad and Tobago, 2018)

Connect, Collaborate, Conserve

The theme of the LACCCB conference was "Rainforest to Reef: Strengthening Conservation Connections Between the Caribbean and the Americas." Most natural spaces – montane ecosystems, forests, rivers, savannahs, mangroves, and shallow marine and deepsea environments - were represented. But these forced consideration of the "unnatural" spaces, including urban areas, roadways and agricultural lands. It is hard to disconnect discussions of conservation biology from the impact of our species: humans. Most discussions focused on protecting organisms and their habitats through ecological strategies - building connectivity, restoration and repatriation, and social change effected through education, policy and regional collaboration among one species, us.

First came the bad news. This was delivered by Gerardo Ceballos, Professor of Environmental Science at the Universidad Nacional Autonoma de Mexico in the opening plenary. Prof. Ceballos presented the global overview on the status of biodiversity among

There was evidence of significant loss in the global biodiversity over the last 100 years, significant enough to be considered "the ongoing sixth mass extinction event." The main drivers of these extinctions are growing human populations and their consequential actions - resource extraction, loss and alteration of habitats, pollution, disease and introductions of invasive species. Extinction rates calculated from the declining populations of mammals, birds, fish and amphibians species (to name a few) are expected to continue into the future, especially with the long-term impacts of man-made climate change. However, there is still a chance to alter the trajectory through persistent and even creative conservation strategies but we need to act with urgency. Prof. Ceballos established the first challenge of the conference – creative thinking for conservation strategies.

Later conference talks definitely provided specific regional cases for Prof. Ceballos' theory. Studies about disturbances to habitat and animal populations, as well as conservation efforts have been undertaken all over the Latin American and Caribbean region. An example of creative thinking was conveyed in the plenary talk of Dr. Howard Nelson from the University

Dr. Anjani Ganase, marine scientist and coral reef specialist, reports on the Latin America and Caribbean Congress for Conservation Biology (LACCCB) Conference. This inaugural conference was hosted by the Department of Life Sciences at the St. Augustine campus, 15 years after the Latin America and the Caribbean section of the Society for Conservation Biology was formed. She concludes that scientists in every ecosystem must connect, collaborate and conserve before we lose not just species, but our home.

of Chester. Dr. Nelson discussed the benefits of tapping into the valuable asset of regional (ecological, social and political) diversity in the Caribbean and South American region: utilising indigenous strategies, he proposed, may improve biodiversity management of protected and unprotected areas. Such strategies offer innovative approaches for conservation management of unprotected natural areas or privately owned lands. What were his take home messages? Collaborate and build connections across borders, language barriers and cultures. Having a broad diverse scope of understanding at multiple scales (from community to national and regional levels), and even outside the realms of traditional ecology, will only improve our conservation efforts. With that, he delivered the second challenge - engagement across languages and across social structures, as far as the national agenda.

And so we kicked off the series of formal talks and workshops with creativity and engagement in mind, with doubles and roti mixed in. Throughout the varied habitats, common themes of human disturbance including invasive species and pollution - pervaded most ecosystems. But there were also success stories about habitat restoration and repatriation as well as social engagement. Discussion about habitat fragmentation and the methods to improve

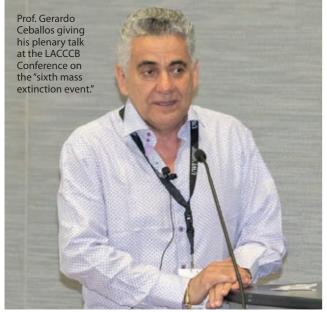
connectivity across habitats and ecosystems, as well as the challenges to assess spatial distributions on broad landscape scales – even across borders or with the sea between - resonate with me as a marine scientist. I have experienced similar challenges in coral reefs and coastal ecosystems. These discussions provided insight and opportunity for adapting innovative ideas and technologies to different ecosystems - at the levels of the rainforest or the reef.

To end the conference, it was refreshing to be taken on a journey of discovery, delivering hope. The third plenary speaker, Dr. Diva Amon, deep-sea biologist fellow at the Natural History Museum in London, spoke about the discoveries in the deep ocean of the Caribbean and Atlantic. In the deep Caribbean, new invertebrates are still being identified signalling greater diversity among marine organisms. We appreciated this simple reminder of the reasons we became scientists and conservationists: the joy of exploration and discovery. Despite the new discoveries, she stressed that even these remote ecosystems were not immune to human activities; she expressed urgency for others to get involved and expand the research efforts. Losing deep-sea ecosystems to commercial activities such as drilling even before we even get the chance to understand them would be a tragedy. Dr. Amon's challenge: discover and protect what's there before we lose it.

There were about 150 attendees to the inaugural conference, coming from 17 countries within and beyond the Latin American and Caribbean region. Over the two days, over 150 organisms and groups of organisms were discussed: plants, mammals, amphibians, fresh and saltwater species and even bacteria. Roughly 100 study locations were mentioned in the Latin American and Caribbean region, but with special mentions of Antarctica, Sub-Saharan Africa and the Indian Ocean. These locations covered more than 20 different types of ecosystems from the high altitude montane ecosystems and cloud forests to the deep-sea mounts of the Caribbean as well as the urban and agricultural landscape.

We were taken around the world to devise strategies to protect home, whether we consider home these two islands, or the planet.

PHOTOS: RYAN MANNETTE





UWI Calendar of Events SEPTEMBER - NOVEMBER 2018



The Emerging Digital Age HR lecture by Professor Ronald L. Jacobs September 13 at 6 p.m. Daaga Auditorium, UWI St. Augustine

The Open Lectures Committee in collaboration with Huawei presents a Distinguished Open Lecture by Professor Ronald L. Jacobs, College of Education, University of Illinois, Urbana-Champaign on the topic, Knowledge Work, Workforce Development and the Emerging Digital Age: New Challenges for Societies and Organisations. The open lecture will take place at 6pm. This lecture is free and open to the public. To indicate your attendance, email UWISTAevents@sta.uwi.edu or call 662-2002 ext. 83635.

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



EU-CARICOM Law Conference September 26 to 27 University Inn and Conference Centre

The UWI St. Augustine's Faculty of Law, Brunswick European Law School of Ostfalia University and Coventry Law School present the EU-CARICOM Law Conference under the theme, Present and Future Challenges. The conference will feature topics on International Economic Law, UN Agenda 2030, EU and CARICOM issues of developing and how to foster trade relations in times of evolutionary development of regional cooperation and their related aspects to other communities.

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



Dr. Claudina Cayetano

Mental Health Symposium September 26 and 27 Hilton Trinidad and Conference Centre Port of Spain

The UWI School of Nursing and London South Bank University, PAHO and WHO will be hosting this "No Health Without Mental Health" Symposium.

On the first day Professor Ben Thomas, a Patient Safety Expert Advisor, Mental Health, NHS (London) will be the keynote speaker, and on the second it will be Dr. Claudina Cayetano, the Regional Advisor on Mental Health, PAHO (Washington).

Registration Fees: Day 1 Only: TT\$400 or US\$60; Day 2 Only: TT\$400 or US\$60, and Day 1 & Day 2: TT\$750 or US\$111.

View full registration details online at https://sta.uwi.edu/fms/nursing/events.asp

Caribbean Energy Policy, Societies and Law Conference October 4

University Inn and Conference Centre

The UWI St. Augustine presents this multidisciplinary conference happening from 8.30am to 4.30pm that will showcase participants from diverse academic and practitioner backgrounds who will exchange knowledge and ideas and create new networks for 21st century solutions. Topics include: Laws and Policies for Sustainable Oil and Gas Development in the 21st Century; Gender, Energy and local Content/Workforce Issues; Environmental Law and Ethics among others.

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



COTE 2018
October 10 to 11
Learning Resource Centre (LRC)
St. Augustine Campus

The UWI St. Augustine's Department of Economics hosts their annual Conference on the Economy (COTE 2018) under the theme, Economic Development challenges: Looking Towards 2030. This year's conference honours Professor Emeritus Patrick Watson.

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

Call for Papers – Third Regional Mixed Methods Research Conference Deadline: October 31, 2018 The UWI, St Augustine Campus

The Mixed Methods International Research Association-Caribbean Chapter (MMIRA-CC) together with the Schools of Education (Cave Hill, Mona and St. Augustine), Sir Arthur Lewis Institute of Social and Economic Studies (SALISES), Schools of Nursing (Mona and St. Augustine), Arthur Lok Jack Global School of Business, Centre for Language Learning, Faculty of Medical Sciences (St. Augustine) and the Department of Government (Mona) present the 2019 Mixed Methods Conference in Trinidad and Tobago. They have issued a Call for Papers with the deadline of October 31, 2018. The conference takes place on March 26 to 28, 2019.

For more information, please visit http://conferences.sta.uwi.edu/mmiracc/.



Climate Change Impacts on Food and Nutrition Security Conference November 12 to 16 Radisson Hotel Port of Spain

The Faculty of Food and Agriculture (FFA) hosts the Climate Change Impacts on Food and Nutrition Security Conference which aims to collate and share new research experience and findings in sustainable agriculture and climate change through interactions and publications.

For more information, visit the Conference's website: www.foodsecurity2018.com.

UWI TODAY WANTS TO HEAR FROM YOU **UWI TODAY** welcomes submissions by staff and students for publication in the paper. Please send your suggestions, comments, or articles for consideration to **uwitoday@sta.uwi.edu**







