



UWI TODAY

THE UNIVERSITY OF THE WEST INDIES • ST. AUGUSTINE CAMPUS

SUNDAY 3 JUNE, 2018



Celebrating CREATIVE ARTS at DCEFA

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UWI's Department of Creative and Festival Arts produces 40 shows a year, making it one of the university's most prolific departments for dynamic outreach to the public. In this photo, we see students Jeanelle Phillip, April Lewis, and Lisa McSween (Certificate in Dance and Dance Education) performing in Spem Venimus, choreographed by Jeanelle Phillip, from the show Sole to Sole on April 29, 2018. PHOTO: VIBERT MEDFORD

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FROM THE PRINCIPAL

Academia in Action



“No, I didn’t feel like Bill Gates.... Honestly, I didn’t feel like a UWI student at an undergraduate level could impact the society in this way.”

Three years ago Jesse Saitoo, a Department of Electrical and Computer Engineering final year student, was

overwhelmed at the outpouring of delight and gratitude from the beneficiaries of an app he had produced. For the visually impaired in Trinidad and Tobago, his app - Maverick - gives them independence in financial transactions. The app, based on facial recognition algorithms, allows the visually impaired to identify local currency without assistance from the sighted.

Jesse’s app is a perfect example of social innovation – a novel tool that benefits people’s lives. And, yes, this is happening right here at the St. Augustine Campus. At just 22, Jesse truly understood what it meant to innovate not just for profit, but to meet pressing unmet needs and improve the lives of people.

Our vision here at St. Augustine of an education system for sustainable development has driven this Campus’ initiatives to reform its curriculum and pedagogy, to overhaul its supportive business processes and to change Campus culture to one that is more entrepreneurial in outlook. By seeing ourselves as innovators and entrepreneurs, we are committed to using research, knowledge, and innate creativity to deliver solutions to issues plaguing Trinidad and Tobago, the Caribbean, and the world.

Kevin Chika Urama and Ernest Nti Acheampong, in the Stanford Social Innovation Review (Summer 2013) argue that *“a prosperous society consists of economic prosperity and social prosperity combined”*. They put forward the case – if one were needed – for social innovation:

“Rarely has the need for new ways of thinking been more glaring. From the sluggish economic growth and financial instability of the last several years to the perennial issues of political upheaval, resource crises, hunger, poverty, and disease, people have come to realize that the old ways of doing things no longer work.”

Take, for example, our research outputs in agriculture. There can be no disagreement that agriculture should be the backbone of any society. If strategically engaged, agriculture could, at the very least, provide an effective level of food security but could also be a strong export earner. In times such as these, where foreign exchange is exceedingly scarce, it is therefore imperative that our focus on innovation, entrepreneurship, and commercialisation in strategically determined areas, such as agriculture, is sharpened and given the support it desperately needs.

Another example of collaboration on this Campus for social innovation is AgriNeTT - an Agriculture ICT project, funded by The UWI-Trinidad & Tobago

Research and Development Impact (RDI) Fund.

AgriNeTT, a collaboration between The UWI’s Department of Computing & Information Technology, the Faculty of Food and Agriculture as well as representatives of industry in the agriculture sector, provides yet another example of social innovation. AgriNeTT is an Agriculture ICT project, funded by The UWI-Trinidad & Tobago Research and Development Impact (RDI) Fund. The project engages in research and development on Intelligent Decision Support apps for Enhancing Crop Management. AgriNeTT apps can be downloaded from the Google App Store and include *AgriExpense* for managing finances and monitoring crop production, *AgriMaps* that provides soil characteristics of any identified parcel of land and also enables the user to make informed decisions on the best crops for planting on the identified area, and *AgriPrice* for monitoring the daily crop prices. The benefits to the agriculture industry are clearly nothing less than tremendous.

Then there is ‘Project mFisheries’, conducted by the Department of Electrical and Computer Engineering and funded by International Development Research Centre (IDRC). The focus of ‘mFisheries’ is on support for the small scale fisheries industry in the Caribbean, with particular emphasis on Trinidad and Tobago. It is developing capacity in the Caribbean to pursue opportunities arising from the provision of innovative mobile-enabled services for small scale fisher folk, and providing related empirical data and analysis to inform Caribbean policy and regulation.

My final example looks at how we are redefining our social outreach and engagement within our fence-line community of Farm Road, St. Joseph.

For 70 years, this regional University has been a tool for sustained Caribbean development. And, for 70 years, the St. Augustine Campus has been an integral part of the Tunapuna/Piarco region.

It is only fitting that, in celebrating our seven decade tradition of service to the Caribbean, the St. Augustine Campus include a main constituent. This line of thought led to the launch of The UWI/Farm Road Collaborative Project, a story in this issue of UWI Today.

Through this collaboration, UWI is developing

an innovative model of social work education and practice. Our social work students are given the opportunity to complete their practicum hours in the community through hands-on service-learning, with the goals of developing the students’ skills and commitment to community service while developing a mutually beneficial relationship between the University and the community. Through this model, students in the entire University community can participate in in-service learning and engagement in a community.

According to research estimates, 70% of the population in Farm Road falls within the at-risk range of 12-29 years of age. It is a young community. The UWI/Farm Road collaboration will work to improve the education, health and well-being of residents in the community by empowering them to enact social change through training, research, and community mobilization.

Together we – UWI and Farm Road - will forge a unique participatory model of intervention over the next five years. The result of this will be a locally designed **and** tested intervention model for university/community/civil society partnership, which can be replicated in communities with similar needs in Trinidad and Tobago.

This collaboration is not about tokenism. It is about achieving a shared sense of community spirit and cohesion. Indeed, community members already assist in planning and coordinating activities. In time, we expect that a community liaison committee will be formalized to ensure the continued life and strength of the project.

This is academia in action, moving theory into practice.

We are UWI and we are building a nation and a Caribbean that are both economically and socially prosperous.

Do enjoy the issue!

Brian Copeland

PROFESSOR BRIAN COPELAND

Campus Principal

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Learning to Feed Ourselves

Food and Nutrition Symposium aims to clarify national priorities for food security

BY SHEREEN ANNA LI

Reliable, healthy food sources are central to everyone's wellbeing and survival. Indeed, one of the first things any young child learns to do in life is to feed himself. But right now T&T imports most of its food to the tune of some \$6 billion a year. That includes foreign fruits and vegetables, cereals, dairy, meat, alcohol, butter, spices, cocoa, fruit juices, flour, rice, fish and cheese. If such foods from the global food trade are ever disrupted, or if they become difficult or simply too expensive or unhealthy for ordinary folk to access and safely enjoy, we need to rethink those sources, and find other, perhaps better food options right here at home. We need to ponder our food security status.

These and many other relevant issues were raised at the recent May 10 national symposium on Food and Nutrition Security held at the University Inn and Conference Centre, St Augustine, and spearheaded by The UWI's own Faculty of Food and Agriculture (FFA). The one-day symposium brought together diverse major stakeholders in food, agriculture and governance from T&T and the region to discuss and brainstorm some ways forward. Representatives from farmers' groups, supermarkets, local and regional

food organizations, NGOs and local government all participated in the UWI-led initiative.

"Trinidad is not a food secure nation. We have not been for a long time," says Dr Wayne Ganpat, Dean of UWI's Faculty of Food and Agriculture (FFA), in a recent interview. "But we once used to be, when our parents and grandparents grew indigenous foods and knew how to live off the land."

"Have you ever heard stories of the War Gardens?" he asks, raising his eyebrows. "During World War II in the 1940s, you couldn't get anything, no ships were coming into the Gulf, there was no foreign exchange to buy anything because all money went into the war machine. So how were you going to get food? The then administration gave some people (rural and urban) a piece of land to plant food. These were called the 'War Gardens'. Everybody grew some food, growing and eating basic but more nutritious home-grown food in the absence of luxury imports. And we all survived and did well."

He encourages us to think of parallels today: lack of foreign exchange to import food in a time of economic challenges, and the possibility of food scarcity if our imported food trade were ever to be disrupted. He also reminds us that the destructive

impacts of climate change are already wreaking havoc on regional agriculture – violent hurricanes, prolonged droughts, the threat of pest and disease invasions decimating crops, and short, more intense rainfall and subsequent flooding doing damage, for instance.

"We have to start taking action," warns Ganpat.

The Food Security Symposium organizers note that serious challenges in T&T's agricultural and food sectors include:

- **poor food safety standards**
- **lack of institutional coordination across sectors**
- **insufficient human and capital investment**
- **low levels of competitiveness and innovation, and**
- **improper agricultural practices.**

All these factors are things that we could fix. Taken together, they result in an overall alarmingly low level of food and nutrition security in T&T, say the experts. So there is much work to be done.

Dr Ganpat would like to see clear national agricultural policies and strategies for the short, medium and long terms – such as a five-year plan, a ten-year plan and a 20-year plan.

"We can't just focus on the short term. We have to plan for our children. So for instance at UWI Faculty of Food and Agriculture, we need to know what crops

Professor Clegg visits Trinidad

Eminent scientist Professor Michael Clegg visited Trinidad to give a public lecture on May 9 titled "Successes in Food and Nutrition Security in Latin America and the Caribbean" and to present the feature address at the opening ceremony of the Food and Nutrition Security Symposium at the Faculty of Food and Agriculture, UWI on May 10.

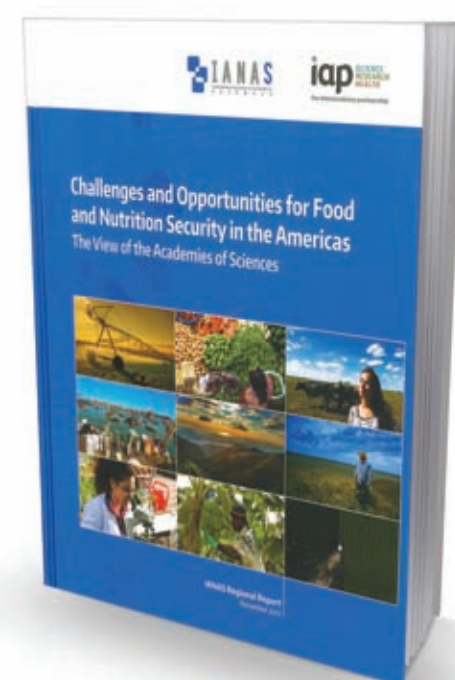
Prof Clegg's scientific work is focused on population genetics, molecular evolution and agricultural genetics. His early work addressed the evolutionary dynamics of linked systems of genes. In the 1980s and 90s, he helped pioneer the use of molecular sequence data for understanding plant evolution. In recent years, Clegg has used genetic methods to explore the history of plant domestication, an important area of agricultural science.

His visit was facilitated by the Caribbean Academy of Sciences.

From left, Professor Brain Copeland (Pro Vice-Chancellor and Campus Principal) has a word with Professor Emeritus Michael Clegg (guest speaker, University of California)



Challenges and Opportunities for Food and Nutrition Security in the Americas – The View of the Academies of Sciences was one of two recently published regional books on display at the Food and Nutrition Symposium. It is an Interamerican Network of Academies of Sciences (IANAS) and IAP (the Inter Academy Partnership) regional report published in November 2017. It discusses the state of Food and Nutrition Security in South America, Canada, Dominican Republic, Cuba, the USA and has a chapter on the Caribbean. The Caribbean chapter notes that "The status of Food and Nutrition Security (FNS) in the Caribbean, however, has been challenged by natural disasters, overexploitation of natural resources, volatility in food production and prices, barriers to trade, outdated technologies, high incidence of pests and diseases, climate change, and lack of an enabling environment to foster innovation... Food policies are weak and driven by socioeconomic and political forces."



Challenges and Opportunities for Food and Nutrition Security in the Americas

The View of the Academies of Sciences

FOOD & AGRICULTURE

and livestock to focus on. We may need to breed heat tolerant animal species; as temperatures rise, this will lower milk production in cows and affect production from many other animals, for instance. And we will need drought-tolerant crops that can also withstand short periods of flooding. But developing these things will take time. So we need a clear direction.”

He acknowledges that UWI’s Faculty of Food and Agriculture will need to reset its research and teaching agenda to better adapt to our changing world and food production challenges. In the meanwhile, he is very grateful to the Campus Principal, Brian Copeland, for his strong support of the FFA’s food security initiatives.

Dr Ganpat mentions many issues – the need for more entrepreneurial-minded food and agriculture UWI graduates; the expanding role of technology in agriculture which is making some forms of agriculture less land-intensive and less labour-intensive than before (such as aquaponics, hydroponics). He also mentions his deep concern if good fertile agricultural land in T&T is diverted for other uses.

Dr Ganpat believes when it comes to growing local foods, we should be thinking about developing and expanding our fruits, vegetables and root crops sectors. He thinks that some amount of foreign imports, especially wheat flour, is inevitable in the short and medium terms.

The Symposium was the second of three major efforts this year by the Faculty of Food and Agriculture to promote local food sustainability and better agricultural and nutritional awareness and practices. The first was TechAGRI Expo, the faculty’s very popular annual local agricultural and food expo which this year attracted well over 7,000 visitors. Later this year there will be an international conference on “Climate Change Impacts on Food and Nutrition Security” at the Radisson Hotel on November 12-16, 2018.

The Faculty of Food and Agriculture plans to identify the key strategies and action items that emerged from the recent symposium and submit these to the Ministry of Agriculture, Land and Fisheries and other key stakeholders for consideration.



From left: Dr Wayne Ganpat (Dean of The UWI Faculty of Food and Agriculture), Clarence Rambharat (Minister of Agriculture, Land and Fisheries) and Winston Rudder (Chairman of the Cocoa Development Company of T&T Limited)

PHOTO: COURTESY FACULTY OF FOOD & AGRICULTURE



Growing more local food, including animals like this Barbados Blackbelly sheep spotted at the TechAgri expo held at UWI earlier this year, will help us become more self-reliant and food secure. Barbados Blackbelly sheep can tolerate heat, breed all year round (unlike other sheep breeds), are generally disease-resistant and are farmed for their lean and mild-flavoured meat. PHOTO: ANN ALI



Locally grown sweet peppers at the TechAgri expo held at UWI earlier this year. PHOTO: ANN ALI



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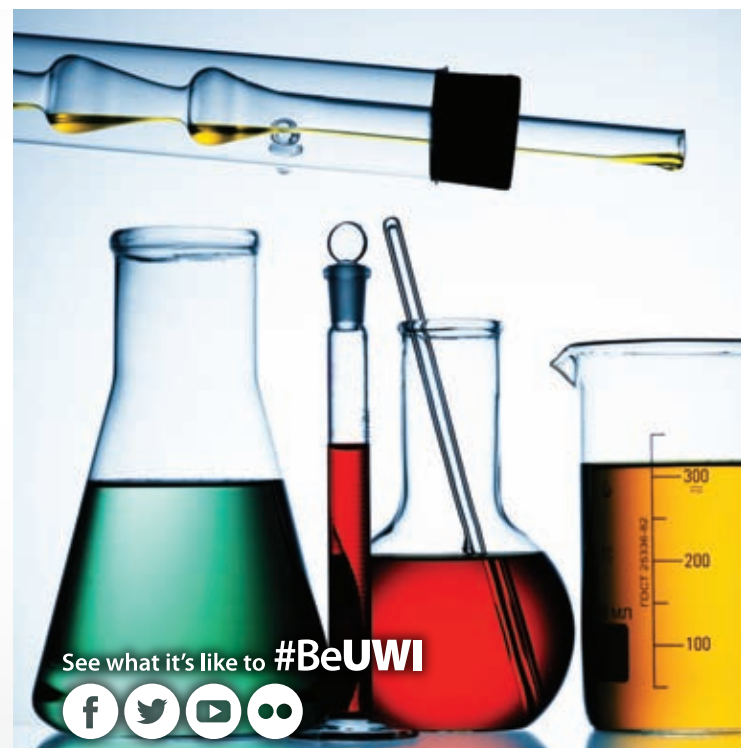
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“When I found out that I was the recipient of the Makandal Daaga Scholarship in Law I literally cried with joy. I was doing my community activism and working with NGOs. Who would have thought that my work fighting for others would have helped me to achieve my goals.”

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■ LIFE SCIENCES – MARKING ENVIRONMENT DAY (JUNE 5) AND INTERNATIONAL DAY FOR BIOLOGICAL DIVERSITY (MAY 22)

Impacting National Policy through UWI'S BIODIVERSITY RESEARCH

BY LEE ANN BEDDOE, LUKE ROSTANT AND JOHN AGARD



PHOTO: RENATO AUGUSTO MARTINS

Following intense citizen outrage over poaching of one of the national birds – the Scarlet Ibis (*Eudocimus ruber*) – a request was made to have it be declared an environmentally sensitive species. The UWI and other stakeholders were invited by the EMA to partner on this policy decision and to help better inform the process. Fortunately for the state, the MSc in Biodiversity Conservation and Sustainable Development in the Caribbean at The UWI, St Augustine had recently concluded a Research and Development Impact Fund project that provided data from several pertinent research projects. Specifically referenced were Deanna Albert's "Participatory GIS for nesting, roosting and feeding habitat sites of the Scarlet Ibis *Eudocimus ruber* in Caroni Swamp, Trinidad"; Aditi Thanoo's "Local community use of the Caroni Swamp: use, attitudes and perceptions"; and Reisha Boodram's "Public participatory GIS for traditional uses of the Caroni Swamp". We are pleased to continue to collaborate with our nation's decision-makers in the pursuit of this designation based on scientific research, participatory GIS (PPGIS), and trends observed.

Albert's research used participation methods alongside Geographic Information Systems (GIS) technology in order to engage a variety of stakeholders, both community participants as well as experts, to map the habitat sites where the Scarlet Ibis nests, roosts and feeds in the Caroni Swamp. After a short orientation on the project objectives, mapping groups were asked to identify areas which the Scarlet Ibis use on an aerial photograph of the Caroni Swamp, using colour-coded stickers for nesting (yellow), roosting (red) and feeding (blue) sites. Additional data were collected on these identified points through semi-structured interviews, asking questions such as numbers observed, habitat characteristics, prey, predators, etc.

Assessment of the effectiveness of existing Protected and Prohibited Areas can be done through

comparison of identified points against the boundaries of the Forest Reserve, Wildlife Sanctuaries, and RAMSAR Site (Protected Natural Areas – PNAs). Survey data were used to determine the degree of overlap between local and expert knowledge collected through mapping exercises. It is expected that data collected from this project can facilitate better management planning for PNAs within Caroni Swamp and be used as a foundation for further studies focused on the Scarlet Ibis within Caroni Swamp or along its wider habitat extent along the wetlands of the west coast of Trinidad.

Thanoo's research demonstrated that restricting use and access of protected areas can lead to local people holding negative attitudes towards protected areas and violating regulations to illegally use protected areas (Allendorf *et al.* 2012). Negative attitudes can affect local perceptions of any future policy action and management strategies. In this regard, one way to improve protected area management is to conduct a qualitative study that encourages an understanding of local people's resource use, attitudes and perceptions, and underlying causative factors (Chandool 2007; Allendorf *et al.* 2012).

Boodram's study reiterated the importance of the Caroni Swamp as the largest mangrove forest in Trinidad. It provides a range of resources which makes it economically important to local people. Uses of the swamp include recreational activities such as sport fishing, bird watching and photography, and extractive activities include subsistence or commercial fishing, oyster harvesting and crab harvesting (Bacon, 1968; 1993; Juman, Bacon and Gerald, 2002). The Swamp was declared a Ramsar site in 2005 in order to protect its rich biodiversity including many threatened species, and to practice sustainable use of its abundant natural resources (Juman and Ramsewak, 2013). Prior to this, in 1987 a large portion of the swamp, bounded by the

Blue River to the north and the Madame Espagnol River to the south, was designated a Prohibited Area in order to protect the country's national bird *Eudocimus ruber* (Linnaeus, 1758), the Scarlet Ibis. This ban resulted in a significant decrease in legal resource use within the swamp (Juman, Bacon and Gerald, 2002). The use of local knowledge is important for conservation and sustainable natural resource management. This study used PPGIS to access local knowledge from Felicity residents on resource locations within the Caroni Swamp. Multiple objectives for one defined area can lead to conflict of interest amongst stakeholders and resource extraction outside legal limits. The use of PPGIS is important for visualising hot-spot areas and would be important for in-situ management planning.

The designation as an ESS will enhance the protective legal status of the Scarlet Ibis. The fine under this designation will be increased to TT\$100,000 and imprisonment for two years. It is anticipated that all of the research from the RDI Caroni Swamp project will be used to inform the future decision to designate the Caroni Swamp an Environmentally Sensitive Area.

Enhancing the protective status of the Scarlet Ibis and the area should not be done in isolation. This must be pursued in concert with raising public awareness and sensitisation of the importance of the national bird and other animals within our country.

In order to sensitise the public, we need to know what exactly exists in Trinidad and Tobago. So the National Wildlife Survey that is being conducted as a collaborative effort between the EMA and the UWI's MSc Biodiversity team, funded by the Green Fund under the EMA's "National Restoration, Carbon Sequestration, Wildlife and Livelihoods Project", is important. Data collected from the National Wildlife Survey can be used to inform decision-makers in the forging of state policy and management of our national heritage.

■ LIFE SCIENCES: BARCANT BUTTERFLY COLLECTION

Making Museum Specimens Useful

UWIZM, GBIF and the Barcant Butterfly Collection

BY MIKE G. RUTHERFORD

Curator of the UWIZM

How do you make a museum specimen useful? Putting it on display and letting visitors come and look would probably be the most common answer. Although it's true that this helps with education and hopefully inspires a love of nature, the scientific usefulness is still lacking. A good scientific specimen is one which has lots of information: what species it is, where and when it was collected, who collected it along with any other details. However, it only really becomes a useful specimen when that information is easily accessible.

For example, if a researcher from the U.K. is studying a particular species of butterfly that is only found in Trinidad and they want to know which museums have specimens, it could take them a long time to track down every relevant museum collection. They might have to visit many collections all over the world, or these days, search through online records (if available!), then contact curators who would then have to go through their collections and find the correct specimen and then pass that information back to the researcher. All this could take months of work. It would be much easier if there were a single source of easily accessible online information that covered all museum collections and other species occurrence records. Fortunately there is - the Global Biodiversity Information Facility (GBIF for short).

Last year The University of the West Indies Zoology Museum (UWIZM) partnered with the National Zoological Collection of Suriname and the Barbados Museum and Historical Society in a project titled Improving biodiversity data accessibility in the Caribbean countries of Trinidad & Tobago, Barbados and Suriname. This project was funded by the European Union through the GBIF - Biodiversity Information for Development (BID) programme. The purpose of the project is to upload the biological records currently housed in these museum collections onto the GBIF platform and to encourage and help other collections in the region to share their data as well.

The funding given to the UWIZM was used to employ a database assistant responsible for converting and uploading the museum records. These records are then publicly available for anyone to search – you can have a look for a particular species or study a certain place and see what has been found there in the past. As of May 2018, the GBIF site has over 981,500,000 occurrence records from more than 1,100 institutions worldwide and these numbers are growing all the time.

As well as uploading the UWIZM's records, we will also be sharing species records from other collections. Some of these are physically housed in the UWIZM, such as the Centre for Agriculture and Biosciences International (CABI), Caribbean Epidemiology Centre (CAREC) and the National Museum of Trinidad & Tobago zoological collections, but there are other zoological collections in Trinidad such as the Barcant Butterfly Collection (BBC) at the House of Angostura Museum.

This well-known collection of thousands of preserved butterflies was bought by Angostura in 1974 from the collector Malcolm Barcant and has been a prized possession ever since. The BBC is overseen by Giselle Laronde-West, Senior Manager of Hospitality and Communications, and Ronda Betancourt, Public Relations Officer. Although they have done a great job of displaying and promoting the BBC, they don't have the zoological experience to make the most of the data, so a few years ago they invited the UWIZM to help



This is a section of one of the more than 120 drawers in the Barcant Butterfly Collection. PHOTO BY RICHARD ACOSTA

catalogue the butterflies. The collection information associated with each butterfly is carefully placed next to each specimen in a label and is also contained in Barcant's book *Butterflies of Trinidad And Tobago*. Unfortunately this book is out of print and copies are rare, so sharing the data online is the best way to make it accessible.

Pauline Geerah, an on-the-job trainee attached to the UWIZM for two years, and I collated previously taken photographs of the butterflies and then Pauline spent much of her time transcribing the collection data from the thousands of tiny hand-written labels into a spreadsheet. This was then uploaded to the UWIZM's database along with a photo of each specimen. Renoir Auguste, the GBIF database assistant, then took these records and transformed the data into the correct format for uploading to GBIF. This involved adding geographic coordinates for each record and making sure that the species names were the most up-to-date available. Once the more than 4,000 records were

ready, they were uploaded and are now accessible to anyone with access to a computer, making them truly useful.

To see the butterfly records, visit www.gbif.org, click on Datasets and search for Barcant Butterfly Collection (the collection has been split into six family groups). You can zoom in on the map of Trinidad & Tobago to see what species were found where or look through the lists to discover rare and common butterflies.

To see the butterflies themselves you'll need to arrange a tour of the House of Angostura. Visit www.angostura.com/tours/ for more information.

Finally, if you would like to visit the UWI Zoology Museum to see thousands of other animals specimens, come to The University of the West Indies, St. Augustine campus from Monday to Friday between 9am and 4pm and ring the doorbell or email uwizoologymuseum@sta.uwi.edu or mike.rutherford@sta.uwi.edu to arrange a date and time.

Celebrating CREATIVE ARTS

BY SHEREEN ANN ALI

Carmina Burana, the recent classical music production performed by students at the Department of Creative and Festival Arts (DCFA), was one of several final year UWI creative productions to challenge and inspire students in remarkable collaborations of performance artistry. The play *The Crucible* was another major public production, performed over two weekends in April.

It is a little-known fact that the DCFA performs some 40 productions every year involving talented students and members of the public. These productions are all done in the absence of a proper theatrical performance stage on campus, yet remain consistently professional, world-class works of musicianship, theatre, dance and other combinations of performing arts done at different theatres and venues throughout the country as these become available for bookings.

DCFA Head of Department and Senior Lecturer Jessel Murray is justifiably proud of his students' accomplishments, and has settled in well into the new administrative headquarters of the DCFA at the Cheesman Building in St Augustine, located in a quiet side road off Gordon Street. The new building opened for business just about a year ago, and already the confluence of different creative skills there is producing synergies and artistic collaborations that previously were quite rare.

Exploring indigenous Caribbean as well as international performance forms and genres, the DCFA aims to produce well-rounded students who can include interesting, challenging artistic work in their repertoire and performance portfolios as they move on to develop their careers.

DCFA students performed *Carmina Burana*, for instance, for one night on Sunday, April 8 this year at the Lord Kitchener Auditorium at the National Academy for the Performing Arts in Port of Spain. It was the culmination of much hard work and artistic collaboration spanning steelpan and piano music, choral singing, solos, percussion and dance. *Carmina Burana* is the Latin for "Songs from Beuern," and is a secular oratorio or cantata composed by the German musician Carl Orff who was inspired by irreverent, satirical medieval poems from the 12th century. The word "cantata" comes from the Italian word "cantare", to sing, and refers to a vocal composition with instrumental accompaniment in movements, often involving a choir. The form developed from Italian madrigals.

The songs and music of the *Carmina Burana* cantata can have an epic quality, soaring to crescendos or floating like haunting hymns in the air, with an undeniable sense of the marvels, beauties and tempestuous devils of the medieval imagination. It is a staple in the classical music repertoire. Students who



Soloist and Theatre Major Anika Ward performing *Inutk* accompanied by the UWI Arts Jazz Ensemble under the direction of Khion DeLas.
PHOTO: VIBERT MEDFORD

may never have been previously exposed to or aware of this kind of music became educated about it through the DCFA this year, while also learning valuable skills in musical and vocal collaboration, rehearsal, timing, discipline and artistic production. The actual show combined forces of the UWI Arts Chorale, UWI Arts Percussion, UWI Arts Steel, and vocal soloists all conducted by Jessel Murray. It also included a special guest, the UWI Arts Dance Ensemble, while Dr Jeannine Remy conducted the UWI Arts Percussion in separate works for percussion and Khion De las led the UWI Arts Steel. It was a concert to remember.

"I call the DCFA a coalition of units," explained Jessel Murray in a recent interview at his office. "We have three performing units: music, theatre arts and dance. They interface with the public through performances. Then there is Visual Arts, which does exhibitions and work in fine arts and design. And then there is Carnival Studies, about the business, creativity and sustainability of Carnival, which holds two symposia a year, and which hosts the Old Yard every Sunday preceding Carnival Sunday."

"There is also a Masters in Creative Design and Entrepreneurship, available in any of the disciplines, open to people with a first degree as well as to any skilled person with a good portfolio or repertoire."

Murray, in addition to his roles as musical conductor of choral and orchestral masterworks and musical theatre director of many productions for Must Come See Productions, has been leading the DCFA since 2011, and says it has been an extremely rewarding experience for him as the department raises its public profile and role as a creative thinktank. He spoke about the changes in the department in recent times as it moved to its new location and had to streamline ways of doing business, rolling out courses, internal staff

redeployments, and communicating better with colleagues, partners and community members. And he expressed a deep gratitude and satisfaction with the new headquarters of the DCFA at Cheesman Avenue, while fervently hoping that Phase Two of DCFA development plans – the construction of a campus theatre – would soon take place. It is one of his long-held dreams.

One of the strengths of a DCFA music education, in particular, is the sheer number of ensembles which exist for students to hone their skills. Ensembles are performance units which music students are required to take part in, in addition to their regular studies. Under the umbrella brand of UWI ARTS, there are ensembles for choral singing, steelpan, percussion, guitar, jazz, Sinfonia, Indian classical music, wind instruments and African drumming. Students are assessed both during rehearsals throughout the year and during final event performances.

Murray said the school benefited this year from the generous bequest of a baby grand piano owned by Dr Anne Marion Osborne, a dedicated music lecturer and the first coordinator of UWI St Augustine's music Unit. She worked at the DCFA for more than 25 years and died this January.

The new DCFA building headquarters at Cheesman Avenue opened for operations in August 2017 and includes two well-appointed dance studios, three teaching classrooms, two technical theatre rooms, and offices for lecturers and administrative staff. It was built as a public-private partnership with considerable generous funding help from Republic Bank as well as from The UWI. Plans for a campus theatre will likely follow a similar public-private partnership funding model.

Plants and the People who love them

BY PAT GANASE



Under a campus ackee tree, here are the dedicated staff members of the Herbarium. Front row, from left: Shahada Paltoo, Technical Assistant; Keisha Manaure, Research Assistant; Shane Ballah, Research Assistant. Back row, from left: Prudence Roberts, Senior Secretary; Indira Maharaj, Cleaner; Necheia Falby-Peters, Technical Assistant; Beverly Adams-Baptiste, Library Assistant; Yasmin Baksh-Comeau, Curator; Professor Howard Griffiths, visiting researcher. PHOTO: ANN ALI

The Royal Botanic Gardens in Port of Spain was established in 1818. It was a living site for the study of trees, particularly those that were relocated here from around the tropical world. The Gardens' museum partner is the National Herbarium of Trinidad and Tobago. Two centuries of plant collections – one living, the other dead – were celebrated on May 22, 2018, World Biodiversity Day. **Yasmin Baksh-Comeau** talks about how the two collections complement each other.

Yasmin Baksh-Comeau was appointed Curator of the Herbarium in 1980. She had recently graduated from the UWI in Botany and Chemistry: it was her first job, became her only job, and fostered a lifelong passion, a love of living trees and the comforts they provide. Even as relics, the trees are useful. As Baksh-Comeau wrote succinctly in a recent issue of UWI Today, the museum collection serves a valuable purpose, “using the dead to inform the living.”

“Taking on the role of curator was a challenge. There was one room with tables and cupboards. The collection was in various stages of decay. There were boxes of unprocessed, unmounted specimens. Some of the mounted specimens were as old as 1842; everything was deteriorating. I had one technician inherited from

the Imperial College of Tropical Agriculture (ICTA).

“What’s the use of a herbarium? This is an archival collection of plant specimens. These samples say ‘I was here. I existed.’ How do we know the dodo existed? We have pictures or relics; we have something that is the proof of existence. That’s what these specimens represent.”

Baksh-Comeau refers us to Vicki Funk’s (US National Herbarium) treatise *100 Uses For An Herbarium*: “Herbaria, dried pressed plant specimens and their associated collections data, ancillary collections (e.g. photographs) and library materials, are remarkable and irreplaceable sources of information about plants and the world they inhabit. They provide the comparative material that is essential for studies in

taxonomy, systematics, ecology, anatomy, morphology, conservation biology, biodiversity, ethnobotany and paleobiology, as well as being used for teaching and by the public.”

The National Herbarium in St Augustine, Trinidad is one way of accessing the history of our islands. Baksh-Comeau says, “By the time the Spanish arrived, the vegetation of these islands was already changing. Colonisers brought in plants that transformed the original landscape; of course, it was all for economic gain.

“The Herbarium was established alongside the Royal Botanic Gardens, which was a teaching site. It was relocated to the ICTA in 1947, and eventually was left to the UWI as custodian. It was Professor

■ NATIONAL HERBARIUM 200TH ANNIVERSARY

Ken Julien, then Chairman of the Scientific Advisory Council, who recognized it as a most valuable resource and recommended that the Government of Trinidad and Tobago take over its financial support as a 'national asset' with UWI as the custodian. We became the National Herbarium of Trinidad and Tobago (registered as TRIN in the Index Herbariorum) in 1973."

Skipping 30 years, Baksh-Comeau says, "In 2005, the UK government funded a Darwin Initiative Project, awarded to Oxford University to collaborate with the Herbarium at UWI and the Forestry Division. They introduced us to the RBS (Rapid Botanical Survey) method. Trinidad and Tobago was the first Small Island Developing State (SIDS) to implement this method. We collected approximately 25,000 specimens in two years. It was the most intensive and extensive survey ever undertaken on the islands, and combined with the herbarium historical and modern collections, resulted in the identification of 'botanical hotspots' of high conservation value on our two islands. The herbarium collection was digitized and the RBS samples databased and uploaded into the BRAHMS (Botanical Research and Herbarium Management System) software and sent electronically to the Oxford University website. It was a pioneering project and represents a model of collaboration."

The survey resulted in the 2016 publication, "An annotated checklist of the vascular plants of Trinidad & Tobago with analysis of vegetation types and botanical hotspots." This project involved plant ecologists Dr William Hawthorne and the taxonomist Dr Stephen Harris, both from Oxford University, the full staff of the TRIN Herbarium, along with a team of volunteers, 29 forest officers, who assisted Shobha Maharaj, Research Officer, who conducted the survey of 240 sites from which over 22,000 specimen samples were identified. The "checklist" may be purchased online through the link: <http://www.mapress.com/j/pt/article/view/phytotaxa.250.1.1> or from the limited number of printed copies available at the Herbarium.

By the numbers, according to Baksh-Comeau, a total of 3,639 species were recorded, of which 108 are endemic, 2,407 indigenous and 1,222 exotic. Indigenous plants are those found in specific regions or ecosystems as the result of natural processes; endemic species are exclusively native in a particular place or ecosystem. Pride of place in the Herbarium is occupied by the special collection of *Theobroma* and *Herrania* species inherited from the Anglo-Columbian Cocoa Collecting Expedition of 1952-53 to the tributaries of the Amazon and Magdalena rivers in the Andes by staff from the Cocoa Research Scheme of the ICTA.

We may be rich in the trees that have taken root here over the years: a reflection of all the people who came to populate the Caribbean. But Baksh-Comeau's response to a question about what's really native to our islands in our daily diet is a revelation: "Shadon beni," she says, "may be the only native (named by those who came from India, *bandhania*) plant. And balata." Almost everything else that we eat came from elsewhere.

The Darwin Project 2006 to 2008 coincided with the refurbishing of the Herbarium. It was an intense double workload with satisfying results: the Herbarium now features state-of-the-art facilities, microscopes and photographic equipment, climate-controlled storage lockers, and a library. Beverley Adams-Baptiste, the librarian, who joined in this period,



Curator of the National Herbarium of T&T, Yasmin Baksh-Comeau, here identifies plant specimens for an isotopic research project. PHOTO: TERRY SAMPSON

welcomes visitors whether their interest is scientific or merely curious. Among the artifacts in this library are watercolour paintings of common Tobago plants drawn by Major Charles Dalton Grigson between 1946 and 1948.

"Today, we have over 50,000 specimens. I think we have covered most of the vascular (ferns and flowering plants) plants in Trinidad and Tobago in the collection. We are looking at a mycological (fungi) collection

next." Baksh-Comeau is concerned that the Herbarium needs a new expansion: more space for research and outreach, and certainly for public engagement and exhibits, is required. Her vision, however, goes beyond the museum walls. She advocates for living collections all over our two islands.

"The trees here on the campus at the UWI - some of which may be decades even a hundred years old - should be a teaching collection. Many of them have created the settings for students' social activity marking memorable occasions on campus - cool spaces for meals, quiet contemplation, courting, proposing - and should be cherished. Our task must be to foster and seed the greening of the urban landscape. Our campus should be a continuum of the Northern Range, the living heritage of appreciating and conserving our biodiversity.

"We started on World Biodiversity Day (May 22) with the ceremonial planting of two trees by the President of the Republic of Trinidad and Tobago, Her Excellency Paula-Mae Weekes, and our Pro Vice Chancellor and Principal, Professor Brian Copeland. At the same time, the label on one mature tree was re-installed by the Deputy British High Commissioner; this is symbolic and relevant since the new labels on all the trees will bear QR codes which will link to the Virtual Campus Arboretum on the new herbarium website under construction."

In mid-June, students from Hillview College, in collaboration with the UWI Biodiversity Society, will undertake the planting of 200 native trees on a degraded hill slope near the college premises. These trees will also be labeled in due course. It will be the pilot for getting many other communities involved. Baksh-Comeau is excited by the prospect of living trees and forests. She is grateful for the contribution of trees by the Herbarium volunteers, Dan Jaggernaut and George de Verteuil and the Forestry Division, saying:

"We need to bring all sectors of society to reforest the landscape, especially urban areas, in order to instill appreciation of trees and the value of biodiversity; in order to foster conservation and protection of the natural forest."



Her Excellency President Paula-Mae Weekes plants a tree at The UWI St Augustine Campus grounds at the launch of the 200th anniversary celebrations of the National Herbarium. Looking on, from left, are Pro Vice-Chancellor and Campus Principal Professor Brian Copeland; Yasmin Baksh-Comeau, Curator at the National Herbarium, and Senator Avinash Singh, Parliamentary Secretary in the Ministry of Agriculture, Land and Fisheries. PHOTO: GUYTN OTTLEY

ENGINEERING

From a vertical wind turbine to a miniature controlled atmosphere greenhouse, there was lots of applied technology on display at the recent annual exhibition held by the Department of Mechanical and Manufacturing Engineering.

The exhibition, held on Wednesday May 23 at the JFK Auditorium, showcased undergraduate final year projects in a wide range of categories, and was the companion outreach event to the Faculty's conference event held earlier that morning.

Among the exhibits was an electric Cadet-class racing go-cart for the Caribbean region by Joshua Deonarinesingh, who is completing a BSC degree in Mechanical Engineering – Applied Mechanics. His go-cart was an eye-catching cheerful bright yellow, and uses increased electrical drive systems for a greener, more eco-friendly go-cart.

"The Cadet class is an introductory class of go-cart racing types used for leisure or competitive purposes," explained Deonarinesingh. "Currently there are no electric models in T&T, but there are equivalent Cadet class gas go-carts. I wanted to eliminate fossil fuel burning and gas emissions while achieving comparable performance with the gas go-carts. I completed the project, but there are several initiatives that could be implemented for a better project."

Another interesting display was a range of hard plastic objects all generated by 3D printers, an innovative solution to parts requiring custom-made design or parts no longer being manufactured and readily available. These display objects included a model toy car, a component for an older model of motorcycle, and a very lifelike human skull. The technical term for this manufacturing process is Additive Manufacturing: it allows users to make three-dimensional objects from computer-generated 3D models.

The UWI acquired a high-end Fused Deposition Modelling (FDM) machine some years ago. The 3D printer, a Fortus 400mc manufactured by Stratasys, cost approximately TT\$1.25 million and is a rapid prototyping (RP) technology, meaning that it can create 3D objects primarily for prototyping purposes. Several students in the Manufacturing Engineering department showed projects related to 3D printing, including Dillon Chong who was testing a model of a 3D printer. Meanwhile Arshad Mohammed, a PhD student in Manufacturing, wants to research aspects of traditional machining and 3D printing, saying: "There are advantages and drawbacks to both; I want to look at ways to combine them, to build on the strengths of both of them."

Some projects at the exhibition used easily available local raw materials to create unique, fun local products, such as the portable bamboo-framed kayak designed by student Ispahari Hosein. The exterior casing could be zipped over the bamboo frame and it looked extremely light and portable.

Undergraduate student Lynessa Leonard decided to modify and test an existing vibratory soil compactor designed by Anika Taylor in 2015, to test the maximum density of soils. There were several projects like this which took useful ideas from past years and improved on them or meticulously tested an aspect of them, demonstrating the necessary ongoing experimental research involved in developing or improving manufactured products.

Other interesting projects included: Modeling of vibration transmission in offshore platforms using statistical energy analysis; a solar-powered water purification system; waste heat recovery in combustion engines; a cocoa-picking rod; a miniature controlled atmosphere greenhouse; and a cryogenic freezer for food products. (SAA)

Engineering the Future

Mechanical and manufacturing engineers show off undergraduate projects at annual exhibition

PHOTOS: ANEEL KARIM



Lynessa Leonard modified and tested this vibratory soil compactor.



Ispahari Hosein demonstrates his bamboo portable kayak.



Dillon Chong stands beside his model of a 3D printer.



Joshua Deonarinesingh developed this electric go-cart.



Oranges anyone? Visitors check out the mechanized orange peeler.



A 3D printed skull at the recent Engineering Exhibition.

■ ENGINEERING

On a regular Friday afternoon, the Marketing and Communications Office posted a video of the Department of Mechanical and Manufacturing's 2018 Exhibition themed Engineering for the Future on its UWI St Augustine Facebook page. In less than two days, the video earned over 5,000 views and 100 shares by people praising the work of final year students who exhibited, including the top three students who won prizes for the Final-Year Capstone Project Contest.

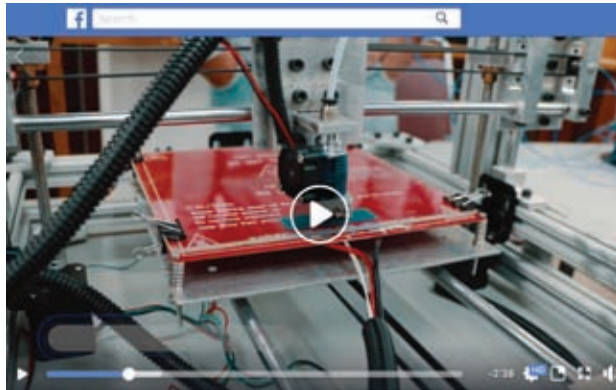
Students' work was judged according to four main areas: Poster and Methodology; Exhibits or Prototype; Presentation and Interview and Overall Accomplishments and Commercial Viability.

When this social media correspondent interviewed First Prize winner Dillon Chong, he was overwhelmed by the sudden attention, saying: "I didn't expect all this." Nonetheless upon subtle prompting, he explained that he built his prize-winning 3D printer to educate Trinidadians about its endless possibilities: "Anything you can think about making, you can print a plastic 3D model for." His advice for aspiring engineers was to "Try to challenge yourselves, do something outside the box so you could actually become better by doing something you didn't think you could do."

Creating a Cadet class electric go-cart was a no-brainer for second place winner Joshua Deonarinesingh who spoke about his love for racing, cars and anything to do with motor sports in general. Deonarinesingh knew by creating a cadet class of go-cart, he would enter his creation into a popular class of vehicles used

'If You Can Dream It, You Can Achieve It'

BY JEANNETTE G. AWAI



by professionals and motorsport enthusiasts alike.

Similarly, Ispahani Hosein alongside one of his supervising technicians, Marlon Dolloway, Senior Laboratory Assistant, exhibited a bamboo canoe because of his love of kayaking. Hosein did not compete in the contest, but was one of the main attractions because of his canoe's sleek bamboo frame and outer waterproof polyvinyl canvas. Hosein came up with this idea as a cheaper, more lightweight

alternative to the existing plastic kayak design. "The bamboo canoe is 47 lbs. and can hold up to 250 lbs. I tested it myself in the deep waters of Chaguaramas."

The third place winner was Lynessa Leonard. Her modifications to an existing design put her invention, a rotating soil compactor, in a class of its own. Literally. The initial model was done by another student, Anika Taylor, three years ago and Leonard's updated design includes a rotating and balance effect to induce vibration resulting in the first ever soil compactor to do this on an international scale. The machine is used to measure the density of soil by means of measuring the soil compaction in order to determine the maximum density and load that can be applied to the soil. The ramifications of this are integral to the construction and agricultural industries. Leonard was quick to add that "We had a lot of help, from the department and supervisors to the chief technicians. If it wasn't for them, we would never be able to finish these projects." When asked what she would tell other women interested in creating solution-based machines, she humbly stated, "If you can dream it, you can achieve it. Just try hard with whatever you do."

The video featuring all of these students is available at The UWI St. Augustine YouTube channel: <https://www.youtube.com/user/uwistaugustine>.

Jeanette G. Awai is a freelance writer and a Marketing and Communications Assistant at The UWI St. Augustine Marketing and Communications Office

UWI launches Social Innovation Project for Farm Road, St. Joseph Community

The University of the West Indies (UWI) St Augustine Campus launched an integrated community project for the Farm Road, St. Joseph community on May 7 which aims to collaborate with the community in order to improve the education, health and social well-being of residents.

The UWI-Farm Road Collaborative Project comes out of the Office of the Deputy Principal through the Careers, Co-curricular and Community Engagement department of the Division of Student Services and Development (DSSD), in collaboration with the UWI's Social Work Unit, Department of Behavioural Sciences, Faculty of Social Sciences. The project provides an innovative model for community engagement, in-service learning and cross collaboration, already partnering with the School of Education in many of its activities. The project creates a space for partnership and involvement of all members of the University community as well as stakeholders in the public and private sectors.

A major outcome of this five-year project will be a designed and tested intervention model for university, community and civil society partnership which can be replicated in communities with similar needs across Trinidad and Tobago. The project, aimed at encouraging positive change, hopes to develop a strong partnership between the University and communities.

Deputy Principal Professor Indar Ramnarine spoke on the project, stating "Within the higher education sector, community engagement and service learning programmes are increasingly being valued as a means for transforming students into more civic-minded, engaged citizens with a keen sense of social responsibility. This project has many wins. In-house,



Members of UWI's Division of Student Services and Development (DSSD), Social work Unit, Dept. of Behavioural Sciences and members of the Farm Road Community. PHOTO: KEYON MITCHELL

we are pleased to facilitate cross-faculty collaborations that have direct positive impacts on the community. On the research front, the project will also give us insight into the best ways to equip communities to drive their own development and also allow our social workers to develop and test strategies for interventions in low-income, often under-represented communities. This is us living our mission of transforming the region through innovative thinking."

The project has been in progress since last year under the guidance and vision of former Deputy Principal, Professor Rhoda Reddock. Some of the initiatives already rolled out (with the support of Social Work and School of Education students) include:

- Drapery and Home Linens skills training course
- 'The White Tent' project which provides a weekly homework and life-skills training centre in the community
- Movie night
- Vacation Camp
- Conflict resolution training sessions

This year The University of the West Indies (UWI) celebrates its 70th Anniversary under the theme 70 Years of Service, 70 Years of Leadership. Across the institution special campus events and projects such as the UWI-Farm Road Collaborative Project will mark the milestone.

HEALTHCARE QUALITY SYMPOSIUM

Models of Best Practice

BY RIAN MARIE EXTAVOUR & RAHUL NAIDU

Defining and achieving quality in health care remains a challenge to health systems locally, regionally and internationally, as “quality” carries different meanings for different people. The UWI Faculty of Medical Sciences held its second healthcare quality symposium recently, on April 21 at the University Inn and Conference Centre.

The one-day symposium involved 60 participants including health professionals, health administrators, educators, and students. They discussed best practice models to improve and sustain high quality health care, and heard interesting panel discussions on quality in health systems, health education, patient care and diagnostic services.

Dr Vishwanath Partapsingh, Acting Chief Medical Officer at the Ministry of Health, attended. Dr Edwin Bolastig who is Health Systems and Services Advisor for the Pan American Health Organization, spoke on behalf of the Director General of the World Health Organization, Dr Tedros Adhanom Ghebreyesus.

Dr Joshua Tepper, CEO of Health Quality Ontario (HQO), gave an impassioned and inspiring presentation on delivering quality healthcare across a vast geographic area to a diverse population with socioeconomic challenges. He said in Ontario this is mandated by a government bill called “Excellent Care for All”, requiring accessible, appropriate, effective, equitable and safe health care for all citizens.

Dr Tepper highlighted the approaches taken by Ontario’s HQO to realise this goal through nine key activities: (1) Create the conversation (a culture of quality); (2) Public Reporting; (3) Provider Reporting; (4) Quality Improvement Plans; (5) Quality Standards; (6) Patient Engagement; (7) Skill Building; (8) Large Scale Improvement; and (9) Clinical Engagement.

Davlin Thomas, CEO of the North Central Regional Health Authority (NCRHA), spoke on “Improving Quality at the Edge of Chaos”. Through the lens of disruptive innovation, complexity management and health systems theory, he provided recent examples of improvements in service quality at the NCRHA, such as significantly reduced waiting times for emergency care and the Walk-The-Talk initiative. The latter, he said, empowers communities to take ownership of their health issues.

Dr Henry Bailey of the Arthur Lok Jack Global School of Business gave an insightful presentation on his research in patient-reported outcomes, and how tools such as the EQ-5D can aid clinical decision-making through patient involvement in health care. He also highlighted the shift in the use of patient-reported outcomes from population studies towards collecting this type of data as part of healthcare delivery in order to improve quality of care.

The important issue of monitoring the quality of medicines was given focus by Dr Rian Extavour of The UWI School of Pharmacy, in particular post-marketing surveillance of the quality of medical products. She highlighted the global prevalence of



From left, Dr Joshua Tepper, Dr Rian Extavour, Professor Rahul Naidu and Professor Michael Branday at the health care quality symposium held on April 21 at the University Inn and Conference Centre, St Augustine. PHOTO: DEXTER SUPERVILLE

substandard and/or falsified medical products and practical approaches used to monitor the quality of medical products, which were pivoted on prevention, detection, response.

Quality in health education

Professor Joseph Branday, who is Director of Medical Education at UWI’s Mona campus, traced the history of medical education in the Caribbean and highlighted the development of accreditation systems and standards. He described quality assurance in education as a continuous process of reviewing how students are taught and assessed, whereas accreditation, he said, is intermittent and focuses on evaluation of the product offered. The participants were reminded that robust quality improvement systems may facilitate both global recognition and local relevance.

Dr William Smith and Dr Shivaughn Marchan led the audience through the steps involved in acquiring and maintaining accreditation for the postgraduate residency at the School of Dentistry. The School is the only non-US dental school to be accredited by The American Dental Association’s Commission for Accreditation for this programme, offered by NYU-Langone.

To describe the need for quality in optometry and eye care, Dr Subash Sharma pointed out the approaches applied in the areas of patient services, and research at the Unit of Optometry, including the National Eye Study of T&T. The latter grew out of a collaboration with the Ministry of Health and Anglia Ruskin University in order to identify areas for quality improvement and is used to guide policy and practice.

Quality in patient & diagnostic services

Dr Steve Weaver, Director of The School of Nursing (UWI, Mona) outlined the importance of policies, practice guidelines, leadership and management in quality improvement for clinical practice in the Caribbean. This principle was echoed during the presentation by Professor Chief Patrick Akpaka, Clinical Microbiologist, who emphasized the need for laboratory services that produce results that are accurate, reliable and timely to support optimum patient care. Dr Michael Morris of the School of Veterinary Medicine discussed services of veterinarians at his School who support small animal health, milk and meat production and aquaculture.

Participants left the symposium satisfied, and called for more forums to discuss and plan quality improvement in healthcare.

Opportunities for supporting quality improvement initiatives in healthcare are available with the recent establishment of the Caribbean Centre for Health System Research and Development at the Faculty of Medical Sciences. The mandate of this Centre includes the strengthening of health systems through the conduct of research relevant to the needs of the Ministry of Health and the Regional Health Authorities, and communicating the findings to them in a format that facilitates uptake in policies, programming and practice.

In order to understand areas for improvement, benchmarks and objective measures or indicators are needed to assess all levels of care, particularly patient engagement. Unless we know where our weaknesses lie, how can we develop our strengths?

PROFESSOR JOHN AGARD Island Man, Global Mind

BY PAT GANASE

Professor John Agard has recently been listed as Judge on the MIT CoLab Centre for Collective Intelligence. PHOTO: ATIBA CUJJOE

John Agard is a man in a hurry; he speaks quickly about the multitude of committees and projects he's involved in. But he slows down with his students; he makes sure he has time for them. He is enlisting them to his cause: knowledge and proficiency and activism for a purposeful life.

Agard's career started simply, growing out of his love for science and for teaching; science reflecting his sensitivity not only to living creatures but the web of life itself; and teaching from his desire to engage with youth – students or his own children – to make sure they know “everything that I know as their starting point.” Today, he is more succinct: “it must be about building a better society.”

We catch up with him at a 70-year-old house-turned-office: in his capacity as the Director of the Office of Research Development and Knowledge Transfer. He greets you warmly, apologizing for the delay; he was speaking with students that he had arranged to meet in his other office, in Life Sciences (his substantive post is Professor of Tropical Island Ecology), but he was delayed so they trekked across the campus to find him.

Here, he carries out his second job: seeking out grants and contracts to bring in money, working to help “commercialize UWI's intellectual property.”

He says, “So, the Campus Principal has seen me operating globally, successfully, and enlisted me to help change the UWI to an entrepreneurial campus.” In 2016, Vice-Chancellor Sir Hilary Beckles introduced The UWI's Triple-A-Vision strategy which “focuses on alignment of industry and academia, expansion of access to tertiary education and agility to global opportunities.”

“We can no longer rely on governments. We have to leverage the intellectual capital here in practical ways. There's now an Invention Disclosure Process in which if you have an innovation or invention while employed at the UWI, there is a basic procedure to assess and patent your work. Principal Brian Copeland has several patents. We have not in the past been business oriented; look at our poor record in profiting

off our world class cocoa germplasm and research as a typical example.

“In our Team which assists Departments at UWI in project development and funding, we have business managers, Indira Jagassar and Cheryl Dubay-Tewarie, and an intellectual property lawyer – Lauren Boodhoo. We also have project specialist experts like Angela Escalante and Lois St. Brice, supported by Damian Ali, Shomari Smith and Ena Siew Persad. The intention is to be an entrepreneurial campus and to work with the IP Office of the Attorney General, to establish at UWI an IP Academy as core to the university; to provide training and workshops delivered by world experts; and to have all students doing courses on intellectual property rights. We want to create spin-off companies, and to foster social change in which every graduate becomes an entrepreneur rather than graduate and seek a job position.

“Because I operate globally, as one of five members of the Independent Advisory Group to the board of the IDB in Washington; as a Review Editor on Small Islands in the Intergovernmental Panel on Climate Change (IPCC); as a member of the Scientific Advisory Panel on the Global Environment Outlook for UNEP and as a Coordinating Lead Author in the Intergovernmental Panel on Biodiversity and Ecosystem Services, I have access to a network of expertise and funding. We have raised substantial donor support from the European Union, Inter-American Development Bank, UN Global Environment Facility. This departure towards commercializing UWI's vast knowledge base is both about funding and upping our game to a global platform as UWI develops an alternative funding model to reliance on the government.”

“With all that I am doing, I continue to teach in order to pass on what I have learnt to young people, with the expectation that they will do better than my generation. We need the optimism of youth to move our society forward. We need young people to professionalize politics. We need young people in government before society breaks their enthusiasm.

They must understand that a university education is not about certification to get a job. We have to awaken that passion and purpose to make society better; we need active leaders.

“I know that it's not about me. It's about a contribution. The values associated with biodiversity are about more than money; it's about life and the services it provides. Our oxygen is produced by plants. We produce carbon dioxide. At the level of the IPCC, we consider what is happening in the whole world; what humans are doing to the planet. At the personal level, I have to be concerned about a big carbon footprint: when there are conferences in China and Cairo and everywhere else; how to balance videoconferencing with personal contact? How many trees do I have to plant?

“The planet is a living thing; it could support us forever if we allow it to continually restore itself. We need to find the right balance for our own survival. The challenge now is to go beyond what we know must be done, beyond what we have committed to paper, to act, to do what we have put on paper. We now have to operationalize pathways to a sustainable future.”

Agard has recently been listed as Judge on the MIT CoLab Centre for Collective Intelligence. At the Climate CoLab, an on-line community hosted by MIT “to harness the collective intelligence of thousands of people from all around the world to address complex societal problems, starting with global climate change,” Agard is a Judge for projects of the open community: “over 90,000 people – including hundreds of the world's leading experts on climate change and related fields – with plans to reach global climate change goals.”

This new global approach will synthesize knowledge across many platforms. It will be integrative and collaborative, meshing information and processes stored in computers with creative collective human intelligence, logical and rational, and also capable of emotional and intuitive breadth. And Agard expects to be there on the leading edge of change; gathering knowledge so he can pass it on... and with urgency.

UWI Calendar of Events

JUNE – JULY 2018

Diplomatic Academy of the Caribbean Workshops June 7 and 8

UWI St Augustine

The Diplomatic Academy of the Caribbean (DAOC) presents the following workshops:

Summer Executive Programme for Young Professionals: Protocol, Diplomacy and Business Etiquette 101 with facilitator Gail Guy, retired diplomat and protocol consultant.

Session 1: June 4 and 5 or Session 2: June 7 and 8. 9am to 4pm. Cost: US\$300

The Art of Corporate and Diplomatic Communication with facilitator Sharon Welsh, Communications Consultant and Adjunct Professor at Georgetown University | June 26 to 29 | 9am to 4pm | Cost: US \$800 (10% discount for each member of groups 3 or more)

MORE INFO: Email DiplomaticAcademy@sta.uwi.edu or call 662-2002 ext. 85362; 85360; 85359 or visit www.sta.uwi.edu/daoc/

Caribbean Cyberfeminisms June 27 to 29

Register now for **Caribbean Cyberfeminisms: Redefining the 'Trenches'** master class and symposium hosted by the Institute for Gender and Development Studies (IGDS). The event takes place as follows:

- **June 27 | Keynote Address** (free and open to the public) – Dr Tonya Haynes Caribbean Cyberfeminist, leading researcher on Caribbean Feminisms
- **June 28 | Masterclass and symposium** – Dr Jolynna Sinanan, scholar with a background in anthropology, development studies and creative arts. Her books include *Social Media in Trinidad* (UCL Press, 2017), *Visualising Facebook* (Miller and Sinanan, UCL Press, 2017), *Webcam* (Miller and Sinanan, Polity, 2014) and *How the World Changed Social Media* (Miller et. al. 2016, UCL Press).
- **June 29 | Open Discussion** and archiving project.

MORE INFO: Visit <http://sta.uwi.edu/igds/CaribbeanCyberfeminisms.asp>

5K Fun Run for Scholarships June 24

The UWI Sport and Physical Education Centre (SPEC) premieres **The UWI Scholarship 5K Fun Run** – All proceeds will go towards student scholarships! People can register and donate online. Gates open at 2pm; Fun Run starts at 4pm. The run kicks off at The UWI SPEC. There will also be a fun zone for kids, Zumba before and after the race and prizes and giveaways. Special prizes will be given for the largest team and the most creative crew.



MORE INFO: Visit <http://sta.uwi.edu/spec/5k>

Register now – Basic Surgical Skills Workshop EWMSC Mt. Hope

The Faculty of Medical Sciences (FMS), Department of Clinical Surgical Sciences in conjunction with the Royal College of Surgeons present the **Basic Surgical Skills Workshop** with UK Course Directors: Eric Drabble and Professor Michael Parker. The workshop will also feature local Course Director Michael Ramdass. The workshop takes place **September 8 and 9, 2018** at the Eric Williams Medical Sciences Complex (EWMSC), Mt Hope. The cost is: US\$1,500 or TT\$9,000 with an administrative fee of TT\$500. Registration closes **July 31** (or as soon as spaces are filled).

MORE INFO: Please visit the **Campus Events Calendar** at www.sta.uwi.edu/news/ecalendar

Rainforest to Reef 8am to 6pm July 25 to 27

Teaching and Learning Complex
UWI St Augustine



The Latin America and Caribbean Section (LACA) of the Society for Conservation Biology in collaboration with The UWI hosts the inaugural **Latin America and Caribbean Congress for Conservation Biology (LACCCB 2018)** under the theme **Rainforest to Reef: Strengthening Connections between the Caribbean and the Americas**.

For conference rates and registration information visit <https://laccb2018.org/registration/>

The Grooming of a Chancellor June 4

Main Salon, Office of the Campus Principal,
UWI St. Augustine

The Office of the Campus Principal in collaboration with The University of the West Indies Press is hosting the Book Launch of **The Grooming of a Chancellor** by Sir George Alleyne, former Chancellor of the University of the West Indies, at 6 pm. The book encapsulates Sir George's profound journey from St Philips Barbados in the 1930's to The University of the West Indies in the 1960's, peaking in 1995 at the Pan American Health Organisation (PAHO) and concluding with the Chancellery of the University of the West Indies. Limited copies of the book will be available for sale on the day at the special launch price of TT\$300. The event is by invitation only.

MORE INFO: Please email uwistaevents@sta.uwi.edu

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TO HEAR FROM YOU**

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