



UNIVERSITY of GUYANA

RENAISSANCE



In this Edition:

Undergraduate research transcends borders

UG graduate and lecturer win inaugural 2018-19 Guyana Innovation Prize

Alternative medicine beneficial to health

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Editor's Note

Dear Reader,

The University of Guyana (UG) welcomes you to Vol. 4, No.2 of the *Renaissance* Newsletter from the Office of the Vice-Chancellor. The *Renaissance* is a medium through which we share all the latest activities and events, as well as developments taking place at the university.

The dreaming and doing vision of building a better University of Guyana continues. One of the initiatives cultivated to achieve the continuous development of the institution was the establishment of a Centre of Excellence for Teaching and Learning, which will be hosting its first teaching conference in October 2019. In addition, undergraduate research continues to develop and transcend borders. This was evident at the 3rd Annual Undergraduate Research Conference held in April 2019 and through student participation in the Second World Congress on Undergraduate Research in Europe.

Among the many noteworthy events were: the release of Renaissance Papers through the University Press, the announcement of the winners of the inaugural 2018-19 Guyana Innovation Prize and the hosting of the annual Awards Ceremony of the Faculty of Earth and Environmental Sciences to recognise student-excellence.

Also in this edition, you will read about the collaborative workshop which was hosted by Berbice Campus and Nand Persaud, under the theme 'Identification and Environmental Protection of Indigenous (Local) Medicinal Plants and their uses for Human Health'. Read about these and more in this edition of the newsletter.



A handwritten signature in black ink that reads "Lijia Somvati".

Editor

Professor Ivelaw Griffith withdraws request for a renewal of contract Transitional Management Team identified

On June 7, 2019, The University of Guyana Council convened to make a determination on the matter of the renewal or non-renewal of Vice-Chancellor Professor Ivelaw Lloyd Griffith's contract. At the centre of the issue was the evaluation of Professor Griffith's term in office as one basis for the determination of the matter.

During the course of the meeting, correspondence was received from the Vice-Chancellor withdrawing his previous request for a renewal of his contract. The University Council accepted his withdrawal and hereby notifies the public that as of June 14, 2019, Professor Griffith, who is at present on terminal leave, shall cease to be Vice-Chancellor of the University of Guyana. The public is further advised that a Transitional Management Team has been duly approved by the University Council. The Team will be chaired by Deputy Vice-Chancellor for Academic Engagement, Professor Michael Scott; with Deputy Vice-Chancellor for Philanthropy, Alumni and Civic Engagement, Professor Paloma Mohamed serving as the Deputy Chair and Registrar, Dr Nigel Gravesande will serve as Secretary to the Management Committee.

According to Pro-Chancellor Major General (ret'd) Joseph Singh, "The Team has been identified to take control of the Management of the University with effect from June 14, 2019, until such time that a new Vice-Chancellor is appointed." He further stated that, "The aforementioned notwithstanding, the University Council will continue to pursue its agenda, including the conduct of a



Professor Ivelaw Griffith

Management Audit, the identification of a new Chancellor and the soon to commence search for a new Vice-Chancellor".

The University Council looks forward to a cessation of the recent exchanges in the media on the University's internal pro-

cesses, but in the interest of openness, will keep the University Community and the wider society informed of unfolding developments as the University seeks to continue its work and to provide for a seamless transition of leadership in the interest of its students, faculty and staff members.

The University of Guyana (UG) Press recently released the first six editions of The Renaissance Papers, its online occasional paper. The first one, “Petroleum and Climate Change in Guyana’s Future” by Professor Jay R Mandle, W. Bradford Wiley Professor of Economics Emeritus at Colgate University in New York, was delivered at the inaugural CY Thomas Distinguished Lecture, while the second one, “Whither Guyana’s Public Sector Reform? Towards A Game-Changing Economic Sector” is authored by Deputy Vice-Chancellor Professor Michael Scott and was his Professorial Lecture.

The link between science and agriculture is the subject of the third Renaissance Paper, which is called “Uses of Soil Microorganism” and is written by Professor Gomathinayagam Subramanian, Director of the UG Berbice Campus. “Engineering and Entrepreneurship” is the title of the fourth paper, which was the keynote address delivered by leading engineer-entrepreneur Mr Charles Ceres, at the inaugural UG Entrepreneurship and Innovation Conference.

Former UWI Chancellor and PAHO Director, Sir George Alleyne, wrote “The Multiversity Universities of the Caribbean.” It was delivered as part of UG’s Renaissance Lecture series in September 2017.

The final paper was also originally delivered in that lecture series. It is written by Mr Ian Randle, Chairman of the Board of the Jamaica-based Ian Randle Publishers and is called “The Publishing Pillar of The Renaissance Bridge”.

Vice-Chancellor Professor Ivelaw Griffith calls the publication of The Renaissance Papers “a noteworthy step in the journey along the road to strengthening research, scholarship and publishing at our University”.

He added, “I applaud the authors of the first Papers and commend their writings to members of the academic and broader communities. They add a rich stock of knowledge to things that are important to our university and our nation.”

The UG Press Editorial Board, which is chaired by Professor George {Ken} Danna of The University of North Georgia, views The Renaissance Papers as an important part of its mission, which includes publishing books, journals and creative expressions, and making them acces-



THE
UNIVERSITY of GUYANA
PRESS

The Renaissance Papers



Paper 1

Petroleum and Climate Change in Guyana’s Future

Jay R. Mandle

sible to academics, civil societies, the Diaspora and online communities. The Renaissance Papers will be published occasionally, and only electronically.

Additionally, the Papers will be linked to some of UG’s public intellectual engagements, in that works under the Renaissance Lecture series, the Conversations on Law and Society series, Yesu Persaud Lectures and distinguished lectures honouring Professor Clive Y. Thomas, Professor Sister Noel Menezes, and Dr Neville Trotz, will be presented as Renaissance Papers. The Renaissance Papers are available for free download at: <http://www.ugpress.com/the-renaissance-papers/>.

University of Guyana academics, students, government policymakers and business and civic leaders are encouraged to submit their writings for publishing consideration. For more information about the Renaissance Papers and how to publish with the UG Press, visit the website at www.ugpress.com or contact Ms Danniebelle Mohabir, Manager of the Press, on telephone numbers: (592) 222-4932, (592) 222-8063, (592) 623-0926 or E-mail: info@ugpress.com/danniebelle.mohabir@uog.edu.gy.

Alternative medicine beneficial to health



Professor Gomathinayagam Subramanian, Director, Berbice Campus, University of Guyana addresses participants at workshop

A Workshop on “Identification and Environmental Protection of Indigenous (Local) Medicinal Plants and their uses for Human Health” was held in the Conference Hall of Nand Persaud & Company Limited at No. 36 Village Corentyne Berbice, on June 1, 2019.

The workshop was a collaborative initiative between Professor Gomathinayagam Subramanian (familiarily known as Dr Goms or Prof. Goms), Director of The University of Guyana Berbice Campus (UGBC) and Nand Persaud & Company Limited.

The event was conducted by Professor Subramanian, assisted by Laboratory Technicians, Ms Keneisha Gopaul and Mr Davindranauth Goberdhan. Each participant was presented with a laboratory manual which was used as a guide during the presentation. The forum was complemented with numerous medicinal plant exhibits which were used for illustration, in addition to a display of relevant books on the subject.

Among the thirty-six participants were farmers, university lecturers, students from high schools and UG, school teachers and representatives from other organisations. Participants, among whom were a significant number of females, came from areas as far as Georgetown and Essequibo.

The morning session was chaired by Ms Vidyawattie Ramnarine, opening remarks were delivered by Mr Mohindra Persaud, Chief Executive Officer of Nand Persaud & Com-

pany Limited, followed by Mr Phillip Da Silva, Assistant Director, UGBC, and Prof. Goms.

The participants displayed much enthusiasm. This was evident through lively discussions and questions posed. Here are a few suggestions and comments. 1) “I am pleased to see the spread of farmers and young scientists at today’s workshop. I hope to see more workshops like this.” 2) “My grandfather died of diabetes at the young age of 45. Today’s workshop demonstrated that we can learn about the various plants that are used for diabetes prevention.” 3) “We are blessed with plants here in Guyana. We need to pass the knowledge of the benefits of these plants to the young.” 4) “I have gained a whole new perspective on ‘bush’ from today’s workshop.” 5) “I knew of the medicinal value of neem leaves before. At today’s workshop, I now know about the use of the seeds of the neem plant. In fact, we should use the term ‘bush medicine’ instead of ‘bush’ when referring to plants with therapeutic perspective.”

In his closing remarks, Mr Mohindra Persaud expressed delight at the high turnout of participants to the workshop. He urged the participants to share the knowledge gained with their family, friends and co-workers.

Ms Sherena Persaud, Coordinator, Division of Agriculture, UGBC, delivered the Vote of Thanks.

FEES award ceremony

The Faculty of Earth and Environmental Sciences (FEES) held its Annual Award Ceremony on May 31, 2019 in the Education Lecture Theatre (ELT). The ceremony was held in recognition of the outstanding performance by students of the faculty during the 2017-2018 academic year.



SUBMISSION DEADLINE: JULY 31, 2019

WOMEN IN SCIENCE SCHOLARSHIP

Sponsored by the Women and Gender Equality Commission

The **Women and Gender Equality Commission** is offering a scholarship to an **outstanding female student** in her second or third year of a degree programme at The University of Guyana from one of the following Faculties: 1) Natural Sciences 2) Earth & Environmental Sciences 3) Health Sciences and 4) Engineering and Technology.

The student must have a demonstrated interest in Women's Rights and Gender Studies and must take a minimum of one course offered by the Institute of Gender Studies no later than in the year of the scholarship application.

The scholarship is an annual tuition award, inclusive of facilities fees to a maximum of GY \$300,000.

ELIGIBILITY CRITERIA

To be eligible for the scholarship, a student:

- Must be majoring in the **Sciences** and registered in one of the following faculties: 1) Faculty of Natural Sciences 2) Earth & Environmental Sciences 3) Health Sciences and 4) Faculty of Engineering and Technology
- Must be entering her **second or third** year at UG at the time of applying for the scholarship.
- Must commit to completing a minimum of one Gender Studies course offered by the IGS either in the second or third year of their programme.
- Must have a **3.0 GPA** or higher.
- Must be **less than 36** years of age.

APPLICATION REQUIREMENTS

Applicants must submit the following:

- A 300 word personal statement describing yourself, your career, and personal goals and motivation.
- A one-page resume.
- A 900 to 1000 word essay answering the question: "*Why Are Women's / Gender Studies important in Guyana today and what is the specific importance of women's empowerment and gender equality to my chosen profession?*"
- A Personal Reference Letter from the Dean of the Faculty.

Enquiries and clarifications may be emailed to: IGS@uog.edu.gy

CONTACT

All applications and application materials must be submitted in PDF format to:

EMAIL ADDRESS: IGS@uog.edu.gy

Dr Pauline E. Bullen

Director, Institute of Gender Studies
University of Guyana, Turkeyen Campus,
Greater Georgetown



UNIVERSITY of GUYANA

Personality Profile - UGSS President

Devta Ramroop

Ms Devta Ramroop is a final year student of The University of Guyana, Turkeyen campus, pursuing a Bachelor of Science Degree in Biology. She is also the current president of the University of Guyana Students' Society (UGSS). She notes that the UGSS Presidency has tremendously contributed to her self-development. It has specifically helped to improve her leadership skills, "I have learnt a lot about the use of the appropriate strategy and approach to engage people." She considers herself somewhat of a humanitarian and says her calling is to help people.

She was encouraged to run for the presidency by friends and UGSS colleagues from the previous year. Their encouragement she admitted, relit the burning desire to make the changes she wanted to see occur at UG, "I knew I had the experience so I wanted to apply it." Admittedly, she was a little indecisive about running at first, "I only filled out my application and submitted it one hour before the submission deadline."

Ms Ramroop describes herself as a determined, independent, and responsible person. Though a little quiet in the home environment, her family describes her as a loving character. They applaud her for being a great role model to her little sister. Her friends describe her as a humorous person (the life of the conversation). She believes life should be fun "But I also believe that one should be focussed and have aspirations in life."

In her leisure time, she enjoys debates, reading, karaoke, volunteering, being among nature, studying animal behaviour and spending time with family. Quite a list, she said "The more things I do, the more things I find the time to do."

She explained that the position she currently holds as UGSS President requires dedication. Her charge to interested persons, is to take the challenge. "It creates opportunities to expand your knowledge base. However, you have to campaign hard, work on a manifesto you believe you can achieve. Bearing in mind the issues of current students. You have to get out into the university community and meet students. Finally, be mindful not to make promises you cannot keep and be transparent".

Her list of mentors evolves as she goes through different phases of her life. Among those mentors are former UGSS presidents Ron Glasgow and Norwell Hinds. She considers her mother Mrs Elizabeth Aziz her life role model and admires Professor Paloma Mohamed and Honourable Minister of Public Telecommunications, Catherine Hughes in a professional capacity.

During her tenure Ms Ramroop said she observed an increase in student development activities. UGSS has worked on constitution reform, instituted a performance based stipend system for representatives, increased social cohesion among faculties and campuses, increased the number of Berbice representatives, launched a new logo and brand building, collaborated with outside organisations to benefit student population, joined Free UG Movement, started a Biology Club in Berbice and created a Mash Band to bring more visibility to UGSS.



Undergraduate research transcends borders

Six students and one faculty member represented The University of Guyana in Europe at the Second World Congress on Undergraduate Research held in Oldenburg, Germany, from May 23 to 25, 2019.

The Undergraduate World Congress presents an opportunity for global dialogue across many different fields of inquiry. Students from universities around the world congregated at the seminal event to share their research, discuss global issues and create international research partnerships.

They were also afforded the chance to enjoy and explore the northwest of Germany. The Undergraduate World Congress is a product of the Council for Undergraduate Research of which UG is a member.

This organisation is comprised of individual, institutional, and affiliate members from around the world, whose mission is to promote high-quality and collaborative undergraduate research, scholarly and creative activity opportunities for faculty and students.

The UG students had their abstracts selected from a pool of over 8,000 abstracts for the World Congress. The student representatives were: Shikema Dey and Nerissa Persaud, two second year Associate Degree in English majors from the Faculty of Education and Humanities, whose research focussed on the Discussion of Suicide in Guyana: The insiders' perspectives (documentary); Shemain Robinson, graduate from the Faculty of Social Sciences, who researched The Challenges faced by Orphanage direct Care Workers; Jomesha Stewart, graduate from the Faculty of Agriculture and Forestry investigated the Tolerance of two grafted tomato plants to diseases; Jason Jaikissoon, graduate from the Faculty of Health Sciences, focussed on Estimating organ dose for a standard chest X-ray at the Georgetown Public Hospital; Benita Davis, graduate from the Faculty of Earth and Environmental Sciences, concentrated on An examination of physicochemical water-quality parameters in the vicinity of the Kaieteur National Park; and Kwesi Elliot, graduate from the Faculty of Natural



From left: Ms Pamela Rose, Assistant Director, Undergraduate Research, with students of The University of Guyana

Sciences, focussed his research on The use of keywords dynamics as a means of user authentication.

Commenting on the university's participation in the World Congress on Undergraduate Research, Vice-Chancellor (acting) Professor Michael Scott said, "This is truly a watershed moment in the University of Guyana's 55-year history. The entire UG Community is elated and justly proud of this global recognition of our undergraduate research scholarship". He further congratulated the researchers (four females and two males), head of the delegation Assistant Director Undergraduate Research, who accompanied them and also their research supervisors for a job well done. He also encouraged the team to "keep going forward and upward to greater accomplishments."

The students who attended the World Congress in Germany were extremely grateful for the opportunity to present

their research and to represent the University. Jomesha Stewart noted that "it was an honour to have a research that has piqued the interest of individuals on the team of the WorldCUR 2019. I am grateful and quite ecstatic for having been given the opportunity to share my research with scholars from various countries of the world."

By the same token, Benita Davis, highlighted that "the aim of the World Congress for Undergraduate Research is to bring together the world's best Undergraduate Research that addresses the major challenges the global community is facing today. Therefore, it was an honour and a privilege to represent The University of Guyana on a global stage".

Jason Jaikissoon called attention to the fact that, "Guyana is now one of five South American countries to participate in the event, with more than 117 international universities". He is pleased that he was

able to demonstrate the quality of research done at UG and also for the chance to network for possible collaboration with other universities for future medical research at The University of Guyana.

The students were accompanied by Ms Pamela Rose, Assistant Director, Undergraduate Research. Ms Rose also made a research presentation titled: "Implementing an Undergraduate Research Office: Insights from Undergraduates". In giving her praise to the students, she said the participation of "seven UG students as

part of a global community of undergraduate researchers from 35 countries, six continents, 92 universities and 100 academic disciplines is both a rewarding and a productive experience. The exposure to research excellence, creative inquiry and networking opportunities had inspired them and increased their self-confidence. If we are to encourage innovative inquiry, our students need more of this type of exposure."

The Office for Undergraduate Research was established in the latter half of

2016 as an initiative of the Office of the Vice-Chancellor at the University of Guyana. The mission of the Office is to promote and facilitate the engagement of students in research and other creative activities; to demystify research and increase knowledge about its nature and methodologies; to obtain competitive advantages to pursue opportunities in the workforce and for postgraduate or professional study.

Lecturer participates in faculty seminar series and overseas conference

Professor Raymond Jagessar, lecturer, Faculty of Natural Sciences presented a paper titled "The fermentation of the pulp of watermelon (*Citullus lanatus*) in the absence and presence of additives with a view to obtain ethanol for commercial use" at the Faculty of Natural Sciences Seminar Series



Professor Raymond Jagessar, lecturer, Faculty of Natural Sciences

JAGESSAR₁, R.C; LYNCH₂, J.

The premise of the research was to determine whether the increased interest in the use of renewable energy, such as Bio-ethanol, can decrease dependence on fossil fuel and curb global warming. Previous research has shown that Bio-ethanol can be used for a variety of purposes, of which, when blended with gasoline can produce gas/alcohol to power automobiles.

Ethanol can be obtained via the fermentation of glucose or sucrose under the influence of *Saccharomyces cerevisiae* at room temperature or acid hydrolysis of lignocellulose material followed by subsequent fermentation.

The research has found that the pulp of the fermented watermelon mash in the presence of additives such as ZnSO₄, Promalt, Potassium Phosphate and Yeastex, induced an increase in alcoholic strength, with ZnSO₄ being the most effective, producing an ethanolic strength of 7.11 w/v.

It was anticipated at that time in research, that future research would increase the ethanolic content above the 15% (w/v) recorded in the literature. This was found to be so, as seen in one of the papers presented at the conference below.

Two subsequent research papers were presented at the Biennial Regional Conference and Expo 2019 (BRCC-2019), held at St Augustine, Trinidad on May 22-24, 2019 by Raymond. C. Jagessar and Maurissa Collins.

The title of the papers are: "The Fermentation Capacity of the Pulp of *Magnifera indica*, *Carica papaya* and the Peel of *Magnifera indica* in the Absence and Presence of Additives" (R.C. Jagessar^{1*}; T. Meusa²) and "The ethanolic content of papaya (*carica papaya*) versus saponilla (*manilkara zapota*) via fermentation" (Raymond. C. Jagessar^{1*}; Maurissa Collins²).

It was found that *Magnifera indica* (mango) in the presence of additives produced the highest mean yield of ethanol content of 25.16%, w/v. *Magnifera indica* (mango) without additives produced the second highest yield with an average of 20.56%, w/v, but *Carica papaya* (papaya) without additives had the third highest average yield of 7.537%, w/v, and *Carica papaya* (papaya) with the additives present, had the least average ethanol content of 6.69%, w/v.

The peel of *Magnifera indica* (mango) in the absence of additives produced an average ethanol content of 1.33% w/v, and the reference (glucose), without additives produced an average ethanol content of 11.3%, w/v. The mean ethanol content of saponilla (14.91, v/v) was found to be significantly higher than that of papaya (1.964, v/v).

Of pertinent note, the ethanolic content of *Magnifera indica* (mango) in the presence (25.16%, w.v) and absence (20.56%, w/v) of additives are higher than the 15% (w/v) reported in the literature, whilst that of saponilla (14.91 v/v) is comparable with the 15% (w/v) reported in the literature.

Our research shows that the above fruits can be attractive substrates for the production of Bio-ethanol and hence their cultivation should be encouraged as a boost to the Agro Sector of the country. The fermented bio-ethanol could also be blended with gasoline to produce gas alcohol as a renewable energy source.

The Public Relations Division Autism Awareness observance

Every April, Autism Speaks kicks off World Autism Month beginning with UN-sanctioned World Autism Awareness Day on April 2. In observance of this day the Public Relations Division, hosted its second annual Light It Up Blue event to shine a light on autism and increase greater understanding and acceptance of children with AUTISM.

This year the event was held on the lawn at the Eastern side of the Education Lecture Theatre, Turkeyen campus

Brief remarks were made by Paulette Paul, Public Relations Officer; Ms Karen Hall, Lecturer in the Faculty of Education and Humanities; Ms Ingrid Trotman, Deputy Chief Education Officer in the Ministry of Education and Professor Ivelaw Lloyd Griffith, C.C.H. former Vice-Chancellor and Principal of the University of Guyana.

The flipping of the switch to light up the tree was done by Professor Ivelaw Lloyd Griffith.

About Light It Up Blue

Joined by the international community, hundreds of thousands of landmarks, buildings, homes and communities around the world, light blue in recognition of people living with autism. Autism-friendly events and educational activities take place all month to increase understanding and acceptance and foster worldwide support.





Personality Profile - Optometrist

Madonna Narine



“ I am inspired by working hard and I’ve managed to stay focussed when challenges arise.”

Mrs Madonna Narine graduated with a Bachelor of Science Degree BSc. in Optometry from The University of Guyana (UG) in 2014. She is currently the Administrator of Optique Vision Care. Mrs Narine was born and bred in the city of Georgetown where her late father Mr Allan Chin originally resided. Her mother Mrs Mariam Chin - O’Connell is originally from South Rupununi, Region Nine. “I have very fond memories of visiting my maternal family there. The third of five children, she prides herself in respect for elders and others. “I was raised with good family values and manners,” she explained.

She grew up with four siblings - two brothers and two sisters. She remembers their activities were primarily intertwined with each other. “As a child I loved the outdoors, I explored camping, hiking, swimming etc., and used every opportunity to enjoy nature.” This was evident through her participation in Girl Guides and Boys Scouts.

She is a nature enthusiast, who loves travelling and the outdoors but admits her fear of heights, including flying. “I usually pray when faced with situations involving

heights and flying,” she said with a smile.

Her other hobbies include spending quality time with family and friends, working out at the gym and watching select television programmes.

Mrs Narine’s educational journey began at Central Primary School, thereafter she transitioned to Alleyne High School. After high school she worked at Ming’s Optical from 1998 to 2012.

During her work tenure she commenced the Bachelor of Science Degree BSc. in Optometry at UG in 2010. Optometry however, was not her first study option at UG. About nine years prior to the commencement of the Optometry programme she was accepted to study Accountancy. As fate would have it, she was unable to get the time off from work and decided to put her studies on hold.

The knowledge and work experience gained in the optical field provided a foundation for her studies. “I was convinced that Optometry was a profession that would allow me to make a real difference in someone’s life,” she expressed with de-

light. “Working in this field, I am inspired to see the lives of patients improve with vision correction in just minutes, more so to see the positive impact it has on their lives over time.”

Good general health is very important and is linked to good eye health, she explained. To maintain good eye health she advises:

1. Visit your eye doctor regularly. Adults over 20 should do so every two years unless they have systemic conditions such as High Blood Pressure and Diabetes. Such patients should visit every year or as often as recommended by their eye health professional. Children, on the other hand, should have their eyes examined every year.
2. Take breaks from digital devices - Staring at devices can cause eyestrain, blurry vision, headache, dry eyes, as well as neck/back and shoulder pains. Practice the 20-20-20 rule, rest your eyes every 20 minutes by looking 20 feet away for 20 seconds.
3. Eat healthy, drink lots of water and take your vitamins.

HARD WORK AND COMMITMENT

In addition to a Bachelor of Science degree in Optometry from The University of Guyana, she obtained a Certificate from the National Academy of Opticianry in the United States of America in 2018 and an Ordinary Diploma in Commerce from the Government Technical Institute (GTI) in 1998.

Her strength and courage are visible through hard work and commitment, “I have had a lot of challenges in my career before becoming successful, and I am still working on improving daily. I am inspired by working hard and I’ve managed to stay focussed when challenges arise. Do not give up, regardless of how many times you fail at something,” she encourages.

She advises potential UG students “to seriously consider the career you would like to have in the future and pursue your studies in that area. It is not just about having a degree, but how you can apply what you have learnt from those studies to

an industry that you are passionate about.” Moreover, she encourages the maintenance of high standards and excellence.

Her vision for the Faculty of Health Sciences is to improve all facilities available to all students, such as laboratories with upgraded equipment, upgraded Optometry clinics and specialised classrooms etc. This improvement, she notes, will better equip students with the knowledge and skills needed to function in the world of work and to compete on the international arena; will offer more practical sessions to students in the Optometry clinic at UG; and will also result in more qualified optometrists and ophthalmologists to facilitate lectures within the faculty.

“I am grateful to UG for offering the Optometry programme and for being part of the first cohort of students from this programme, as well as to my husband, Mr Dhani Narine, family and mentors, namely Ms Daljit Kaur Bhandari and Dr Genalin Ang, for guiding me through not only my

university life but also my business.”

At an early age her father also taught her the importance of “giving back” to the homeless and less fortunate in society. This resonates with her today and she uses her platform to give back to others and assist children with eye-care needs.

Mrs Narine wants her legacy to be one where she is recognised for contributions for providing quality eye care in Guyana and giving back to children in all areas as needed. “I want my daughter to remember me as being a great mom, and for making her appreciate life and all persons, regardless of who they are or where they come from.”

She further stated, “It is through giving that we gain the opportunity to really create a legacy that will outlive us and benefit the world even after we have gone.”

Engineering & Technology Faculty receives Universal Testing Machine

A \$40 million Universal Testing Machine was purchased for the Faculty of Engineering and Technology. The machine is a major plus for the Civil and Mechanical Engineering Departments. According to Mr Karyl Arthur, lecturer, Department of Mechanical Engineering, “it augurs well for these Departments. It’s an equipment that was sorely needed since the previous tester is obsolete. It is an essential equipment that is used by both the Civil and Mechanical Engineering Departments in all Universities.”

The machine produces labelled colour printouts of all tests and is the INSTRON Model 300DX with Bluehill Universal Testing Software. It was made by a world leader in the Manufacture of Industrial Testing Machines (INSTRON of MA., USA). The tests done by this machine are (tension, compression, shear, bend/flex, bolt testing, force testing of structural components, model structures etc.)

Its acquisition will enable work to be undertaken in the following areas: Industrial Strength Testing of a wide range of materials (principally metals as well plastics, wood, composites etc).

Students of the Mechanical & Civil Engineering departments will soon be able to do laboratory work, which, incidentally, is a necessary part of their training experience. It will also facilitate & stimulate necessary research work by lecturers & students.

In addition, the testing machine provides accurate and efficient testing for engineering and construction companies in accordance with a wide range of Industrial Standards (i.e. ASTM, BS, ISO, EN, JIS). Fees for these tests will be standard.

The machine is expected to become operational for the new academic year 2019/2020.



UG graduate and lecturer win inaugural 2018-19 Guyana Innovation Prize



Dr Dawn Fox, Lecturer, Department of Chemistry, Faculty of Natural Sciences

Ms Lisa Dublin, a graduate of UG, and Dr Dawn Fox, Senior Lecturer in the Department of Chemistry, are the winners of the inaugural 2018-2019 Guyana Innovation Prize. The Innovation Prize is an initiative of the Guyana Economic Development Trust (GEDT), a U.S.-based, independent philanthropic organisation that incubates and supports start-up enterprises to boost the private sector of Guyana.

The award provides pre-seed funding to commercially viable research in agro-processing and technology from students, alumni, and UG faculty. The total prize is US\$10,000 and it will be presented to the winners at the Diaspora/Entrepreneurship Conference in July.

The GEDT also partners with the Guyana Marketing Corporation (GMC) to provide Innovation Prize Fellows with technical support, including market analysis, product market-fit, supplier sourcing and package design. This helps to move the product idea from the laboratory to the shelves, homes and offices.

The winning team's project is based on the use of processed coconut as a low-cost water filtration solution. The focus of the project is to optimise the production of granular coconut shell-activated carbon to produce a low-cost activated carbon that is effective in improving water quality.

According to Ms Oslene Carrington, Chief Executive Officer of GEDT, "Through the fund, the Diaspora has an opportunity to give back to our society using a platform that is not connected to anything except a desire to see really great things happen."

She emphasised that it is "a desire to empower our university, a desire to empower our young people and a desire to empower our intellectuals to develop new ways of doing things - things that will ultimately have our country thriving and (being) successful".

The Guyana Innovation Prize sees promising research ideas being selected based on a competitive application process. Selected Innovation Prize Venture Fellows are then paired with mentors, both in and outside of Guyana, over a 12-month period to help

develop business plans and revenue models for commercially viable, scalable businesses.

Vice-Chancellor of The University of Guyana, Professor Ivelaw Lloyd Griffith, lauded the initiative: "Major kudos to Ms Carrington and the GEDT for this powerful initiative, which is a major way to celebrate and incentivise Entrepreneurship and Innovation.

"Let me also extend congratulations to the winners - Senior Lecturer Dr Dawn Fox and alumna Ms Lisa Dublin, who are the innovation frontrunners. Professor Griffith further stated, "Ms Carrington approached me with the idea last year as a way to support Project Renaissance's emphasis on entrepreneurship and innovation and to give back to her native land. The splendid work she and her team have done in the Diaspora and in Guyana in bringing the idea to fruition is itself a powerful example of innovation. I deeply appreciate it."

The Vice-Chancellor also thanked the individuals at UG who were part of the collaboration that translated the idea into reality: Dr Gerry Yaw, Director of Strategic Initiatives; Professor Leyland Lucas, Dean of the School of Entrepreneurship and Business Innovation (SEBI); and Dr Troy Thomas, Director of Undergraduate Research.

Ms Dublin graduated from the University in 2017 with a Bachelor of Science degree in Chemistry, and is currently employed as a Laboratory Analyst in the Environmental Department of Guyana Goldfields. She is responsible for monitoring the ion chemistry associated with the effects of the mine site on the waterways.

In 2017, she presented her undergraduate research project at the McNair Scholars Conference for Undergraduate Research in Florida. Her project focussed on developing cost-effective systems for water treatment using natural waste materials.

Additionally, Ms Dublin participated in the Undergraduate Research Conference at the University of Guyana in 2017 and 2018. Outside of her academic work Ms Dublin was a member of the UG Chemistry Club and the Campus Lions Club.

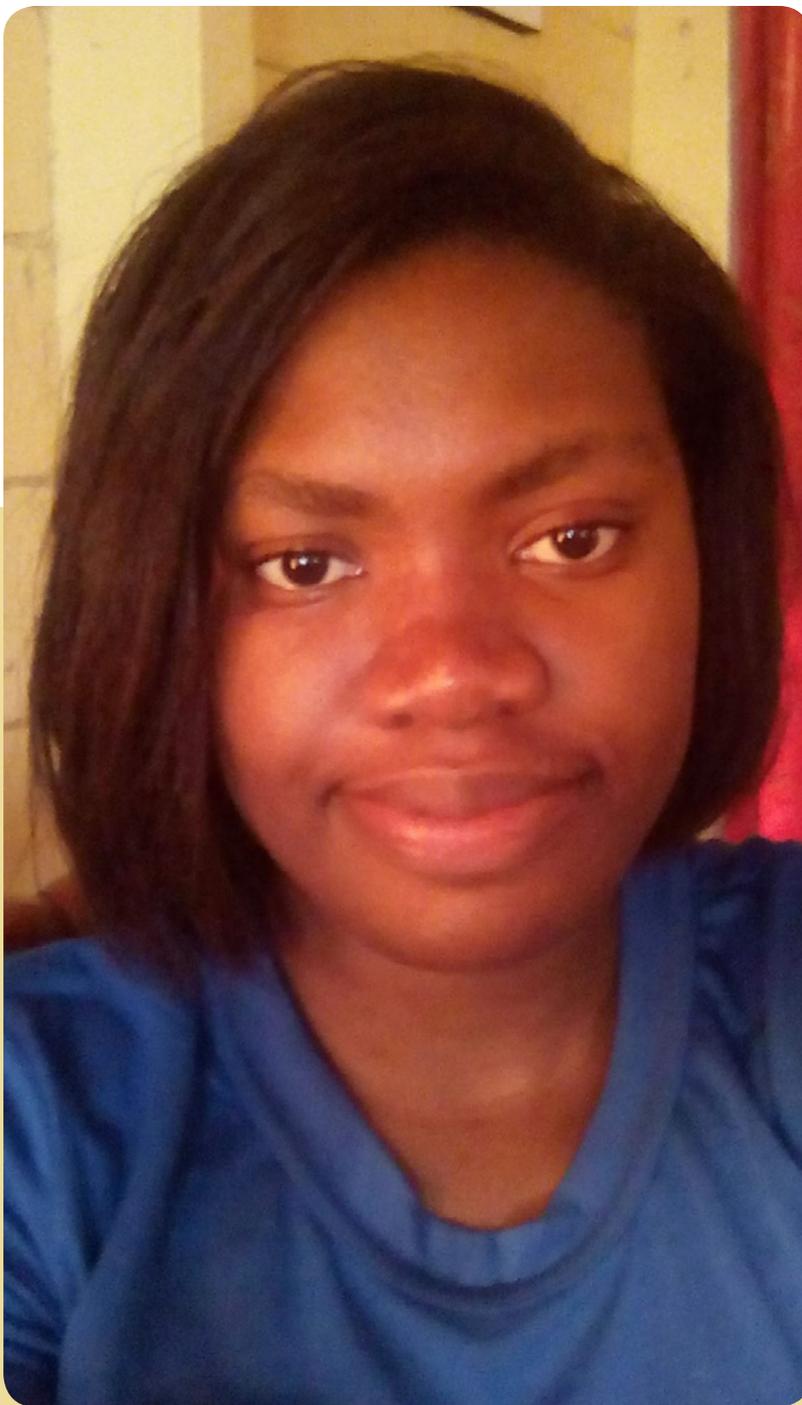
Dr Dawn Fox is also a graduate of the University of Guyana. Her overarching research interest is in converting local materials, especially waste materials, into value-added materials to solve environmental problems. She has extensive experience in characterising sorbents with microscopy and spectroscopy, water and wastewater treatment, and water quality analysis.

She and her undergraduate students made aqueous phase sorbents using a variety of materials local to Guyana, including waste sawdust, coconut shell, and rice husk.

In 2016, she co-founded a group called Women in Science & Engineering (WiSE), to support, empower and advocate for girls and women to pursue and flourish in STEM careers. In 2018 she became the first Guyanese to be awarded the Organisation for Women in Science for the Developing World – Elsevier Foundation Early Career Award for scholarship and research in the Physical Sciences.

The duo were determined the winners ahead of four other UG graduates. The other applicants were: Rebecca Harris (Bachelor of Science in Chemistry minor in Biology) who endeavours to formulate a more natural, inexpensive product that can be used to fight against various fungal infections; Tandika Harry (Bachelor of Science in Agriculture), exploring the application of beeswax and cassava starch to extend the post-harvest life of mangoes; Juanelle Marks (Bachelor of Science in Computer Science), with a focus on Computerised Cognitive Behavioural Therapy (CCBT): Towards Unlearning Learned Helplessness, and Shavon Sharif (Bachelor of Science in Agriculture and Forestry), who intends to explore the use of vinasse (waste) as an organic fertiliser on crops.

The Guyana Innovation Prize is not a research grant but rather it makes available funding to commercialise research. The funds are provided by members of the Guyana Diaspora to invest in the development of scientific and technological forward-looking ideas that are commercially viable, and can become businesses and provide jobs. The aim of the Trust is to advance the private sector and economy of Guyana, by supporting innovative ideas that reflect the future of science and technology.



*Ms Lisa Dublin , Laboratory Analyst,
Environmental Department of Guyana Goldfields*

UG students present exciting research projects in Guyana and Georgia, USA

Nearly 400 undergraduate students of The University of Guyana (UG) were involved in research conferences held in Guyana and Georgia, USA, to showcase their research projects. The Guyana aspect took the form of the Third Annual Undergraduate Research Conferences, held on April 10, 11, and 12, and the event in Georgia was the 2019 National Conference on Undergraduate Research, an international gathering that brings together student researchers from around the world.

The UG conferences were held over three days. The first two days at Turkeyen and the third day at the Berbice Campus. Day one involved presentations by lecturers on how to support and strengthen undergraduate research. The second day was devoted to student presentations and was attended by almost 240 students, 52 of whom made presentations. Day three took place at the Tain Campus and was attended by 150 UG and high school students, with 28 UG students making presentations.

The annual student conference is a key component of UG's Undergraduate Research Programme, which is an integral part of UG's Renaissance Project and the brainchild of Vice-Chancellor Professor Ivelaw Lloyd Griffith.

Held under the theme: "Undergraduate Research: Sharing Experiences, Making Impacts", the UG conferences witnessed several firsts - the first time students from each campus presented at the other campus; the first time first-year students participated and the first time students from the Department of Law presented research papers.

An additional innovation was the launch of a book, 'Integrated Phonics Workbook for Beginners' by Nicolita Benjamin-Collins from the Berbice Campus. The publication has its origins in the author's research while she was a student at UG.

Student researchers were drawn from Computer Science, Law, Biology, Agriculture, Chemistry, Mathematics, Environmental Sciences, Forestry, English, Education and Civil Engineering. With funding provided by Ministry of The Presidency, Ministry of Natural Resources, Geology and Mines Commission and UG's Office of Philanthropy, Alumni and Civic Engagement (PACE), the Turkeyen conference was inspired by a Keynote Address delivered by Professor Babatunde Ogannaiké, the William L.

Friend Professor of Chemical and Biomolecular Engineering at the University of Delaware who is a Visiting Professor at UG this semester, while the inspiration at Tain was provided by Dr David Singh, former Vice-President of Conservation International Guyana. (CIG)

In reflecting on the events, Director of Undergraduate Research Dr Troy Thomas noted that the conferences "provide opportunities for students to interact and share experiences across disciplines and across the campuses of the university. They unite students both in the spirit of sharing with and learning from one another and in volunteerism." He also observed that,

"Our students are as excited to be part of the preparation for the conferences as they are to present their research and this augurs well for nurturing an undergraduate research culture at the university.

"I am happy and excited to be part of this journey as we grow in breadth and deepen in impact each year." For her part, Assistant Director Pamela Rose indicated that "our conferences hold promises for enhancing our students' university experiences, providing

opportunities for their academic and professional growth, and offering them pathways to present and explore research beyond the university. We thank the government agencies for sponsoring the conferences this year, and we encourage the private sector to come on board".

Meanwhile in Georgia, four students and recent graduates, led by lecturer Lenandlar Singh, made their first presentations at the international conference. Tiffany Jordan, an Agriculture major, from Tain, presented 'Escherichia coli Contamination of Lettuce (*Lactuca sativa*. L.) in the Farm-to-market Continuum in Region Six,' while Ramzee Small, Medical Imaging major from Turkeyen, spoke on 'Patient Dose Audit in Computed Tomography at the Cancer Institute of Guyana'. Nirvanie Sukdeo, Medical Imaging major from Turkeyen presented her research on 'Determination of Calibration Cycle for Computed Tomography at the Cancer Institute of Guyana,' and Marisa Williams, who studied Environmental Studies at Turkeyen, spoke about 'Assessment of Water and Aesthetic Quality of Pit Lakes at Abandoned Mines in Linden, Guyana.'







CALL FOR PAPERS



THE UNIVERSITY OF GUYANA TEACHING CONFERENCE

OCTOBER 3–4, 2019
PEGASUS HOTEL, KINGSTON, GEORGETOWN

THEME:

Investing in educators for academic growth and national development

The University of Guyana *Centre of Excellence for Teaching and Learning (CoETaL)* invites abstract submissions for the *First Teaching Conference* for educators in higher education to be held at Pegasus Hotel, Georgetown, Guyana.

Submissions are invited from the teaching fraternity, curriculum specialists and academic leaders and administrators.

THEMATIC AREAS

- ⇒ Engaging and motivating students
- ⇒ Scholarship of Teaching and Learning (SoTL)
- ⇒ Reinvigorating your discipline
- ⇒ Research methodologies
- ⇒ Technology in education: Leadership, teaching and learning
- ⇒ Programme evaluation
- ⇒ Leadership and Higher Education (administrative and academic)
- ⇒ Financing in higher education
- ⇒ Partnerships in higher education
- ⇒ Educational Policy: Purposes and Feasibility
- ⇒ Indigenous Educational Contexts
- ⇒ Special Populations and Higher Education
- ⇒ Skills for success: New and emerging sectors

Presenters may wish to address other areas related to the theme that draws on their experiences and expertise.

CRITERIA FOR EVALUATING PROPOSAL

Proposals will be evaluated on the ability of the presenter (s) to:

- ⇒ Demonstrate an understanding of the topic and context
- ⇒ Demonstrate how the work has been/will be implemented within the teaching and learning environment
- ⇒ Demonstrate innovation and creativity within the academic environment.

Abstract should not exceed 200 words in length.

KEY TIMELINES

- **Call for papers:** June 14 to August 2, 2019
- **Abstract notification:** August 15, 2019

CONTACT

Abstracts should be sent to:
coetal@uog.edu.gy
Phone: (592) 337-2309
Website: <https://coetal.uog.edu.gy/>

CONFERENCE FEES

STUDENTS:

US \$50 or GY \$10,000

LOCAL EDUCATORS:

US \$75 or GY \$15,000

INTERNATIONAL EDUCATORS:

US \$200



\$40 M Nand Persaud Testing Lab set for July opening

The construction of the \$40M Nand Persaud Soil Testing Laboratory at the University of Guyana's Berbice Campus (John's Science Centre) compound is 97% completed and will officially commence testing in early July.

The laboratory funded by the Nand Persaud Group of Companies, is expected to drastically change the landscape of farming in the Region by providing soil and disease testing for farmers. Staffing for the facility is expected to be sourced from within Berbice.

Chief Executive Officer of the company, Mohindra Persaud said all the major works are completed with the exception of the fencing. He noted the facility is at present undergoing the final touches to accommodate the furniture and equipment.

Persaud told the Department of Public Information (DPI), that the facility would have been ready for opening in another week, however the chemicals needed for the testing which is being sourced from Trinidad has not arrived in the country.

He expressed excitement for the facility to be up and running since he has been doing research over the past few years on the benefits the facility is expected to bring the farmers and hopes it transforms the way farming is done in Guyana.

"Most farmers have been doing farming based on traditional methods that was handed down from their fore parents and



Chief Executive Officer of the company, Mohindra Persaud

often when you try to get them to adopt to new methods they would say their grandfather has been doing that for years and it worked for him why should I change?"

The facility will now help to make that change, by providing scientific information on the efficiency and deficiency of the soil so they can know how to proceed, Persaud highlighted.

Coming from a family of farmers before getting into rice milling and eventually branching off into almost every industry, Persaud is a farmer at heart and strongly

believes that Guyana, given its abundance of freshwater and flat lands, should be the world's leader in agriculture hence is the decision to invest in the much-needed facility.

"From what we have found, about 30% of fertilizers applied is being wasted, this facility will allow for scientific and precise report on what is needed. If you look across the world farmers are getting better yields than us despite less favourable conditions. We are hoping this facility changes that".

He continued, "it will not only help to tell us why we have poor yields but we can compare with fields that have good yields and look to replicate across the board".

Persaud posited that in 18 months, farmers can move their average yield per acre of rice to 45 bags as opposed to the current average of 37, ultimately helping them to get value for their investment.

The construction of the laboratory is a collaboration with the Nand Persaud Group of Companies and the University of Guyana.



Article by Department of Public Information, Guyana, June 15, 2019



UNIVERSITY of GUYANA

THE UNIVERSITY OF GUYANA

CENTRE OF EXCELLENCE FOR
TEACHING AND LEARNING (CoETaL)



October 3-4
2019



Pegasus Hotel
Kingston
Georgetown

CONFERENCE FEES

Students

US \$50 or GY \$10,000



Local Educators

US \$75 or GY 15,000



International Educators

US \$200

INAUGURAL

TEACHING CONFERENCE 2019

THEME:

*Investing in educators for academic
growth and national development.*

This inaugural Teaching Conference organised by The University of Guyana Centre of Excellence for Teaching and Learning (CoETaL), in partnership with the Ministry of Education (MoE) and the Cyril Potter College of Education (CPCE), is designed to expose higher education educators to best practices within the teaching and learning sphere.

The conference targets the teaching faculty in tertiary education, field instructors, curriculum specialists, academic leaders, administrators, and students.

CONTACT

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Renaissance

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