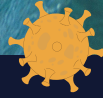




# Med

# WAVES

Issue No.2 AUGUST 2022



## Great Achievements with Small Steps



**Bridgetown International University (BIU) has reached a milestone!** As a new medical university established in Barbados, it has a mission to provide quality and affordable medical education to aspiring doctors, add more physicians to the healthcare ecosystem of the world, and contribute to the betterment of health for all.

BIU was granted a charter by the government of Barbados to operate as a medical University in Barbados with specific guidelines which included seeking registration by Barbados Accreditation Council (BAC) – the sole government agency with the responsibility for assuring the quality tertiary education and training in Barbados. Registration by the BAC indicates that a tertiary provider has met the minimum standards required to deliver tertiary education and training in Barbados.

BIU formed a Self-Evaluation Committee to oversee the registration process. As a requirement, BIU undertook a registration evaluation exercise which included a thorough review by a team of external evaluators. The evaluation was overseen by BAC’s Quality Assurance Officer, Ms. Shonelle Lynch who worked tirelessly with BIU during the entire process and provided the much-needed guidance and support.

The registration process was led by BIU’s Team consisting of Dr. Ganapriya Kancharla – President, Mr. Srinesh Vallabhaneni – Director of Finance, and Mr. Anudeep Reddy – Information Technology Specialist. Dean- Dr. Mohsen Javaheri and Vice-Dean – Dr. James Villanueva

BIU was rewarded for its commitment to becoming a registered tertiary provider in Barbados when the university was granted a Certificate of Registration by the Barbados Accreditation Council on 25th February 2022 for 2 years.



-ANUDEEP BAPATU

## What's Viral About CORONA?

BA5 is now the globally prominent variant that is causing many hospital admissions for SARS-COV2. But yet another variant that is gaining scientists' interest is the BA.2.75 omicron mutant variant that was spotted in several states of India and is spreading at faster rates than the other variants. It was also detected in 10 other countries including Australia, Germany, the UK, and Canada. It is yet to be seen whether the new mutant variant could cause a more serious disease than its other family members.

Keeping these new variants aside, another point of interest is the effect of COVID on the brain. The majority of what we know about COVID’s effects on the brain comes from research on severe infections. Inflammatory cells from outside the brain can penetrate brain tissue and spread inflammation in persons with severe COVID. Blood vessel alterations could occur. Changes in brain cells can even resemble those seen in persons with Alzheimer’s disease.

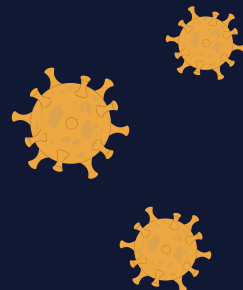
A new study has looked into the effects of mild COVID (an infection that does not require hospitalization) on the brain for the first time. The findings may shed more light on some of the brain alterations linked to extended COVID.

Many people who have had COVID experienced "brain fog", lethargy, attention and memory deficits long after their initial symptoms have subsided. Even with a modest infection, these issues referred to as "long COVID", can linger for months.

They discovered that the overall size of infected subjects' brains had reduced by 0.2 to 2%. The grey matter was lost in the memory regions. Complex mental tasks were more difficult to execute for those who had recently recovered from COVID. The olfactory areas lost the most grey matter, however, it's unclear if the virus affects this region directly or whether cells just die off due to lack of function when persons with COVID lose their sense of smell.

Currently, it's uncertain if all the variants of the virus inflict this kind of damage since the scans were conducted when the original and alpha variants were prominent, and loss of smell and taste were the primary symptoms.

- VINAY.GOTTAM



# BREAKTHROUGH IN CANCER DETECTION

While we were all busy researching about COVID-19 advancements, a breakthrough in early cancer detection was shaping up. In November 2020, a public announcement was made about a partnership between NHS England and GRAIL, an American healthcare company that has been developing a plasma DNA-based test called 'GALLERI' for many cancer sites. It aims to detect cancer in earlier stages by targeting the DNA derived from cancer cells in the blood. With this, cancer signals can be confirmed in more than 50 cancer types, most of which do not have current recommended guidelines for screening. As a Multi-Cancer Early Detection (MCED) test, it screens the whole DNA to identify the DNA derived from cancer cells and identifies the place of origin with high accuracy if any are found.

The test works by looking for DNA found in the blood, called cell-free DNA (cfDNA), shed by both tumor and healthy cells into the bloodstream. To only pick cfDNA that indicates the presence of cancer, Galleri uses modern genetic sequencing technology and artificial intelligence to scan for patterns of chemical changes in the cfDNA derived only from cancer cells and not healthy cells.

The biotech company GRAIL reported that the test can detect 50 different types of cancer with a false positive rate of 0.5%. In a study involving people who had already been diagnosed with cancer, the test accurately detected cancer in 51.5% of people. The test could correctly predict the location of the tumor 89% of the time, which is important for knowing which follow-up diagnostic tests the patient needs for the confirmation of their diagnosis.

A key challenge of this test is the difficulty in detecting very small quantities of abnormal DNA circulating in the blood. Because the amount of tumor-derived cfDNA tends to increase as cancer becomes more advanced, these types of blood tests tend to be better at picking up late-stage cancer. Based on the results, the test is not currently that good at picking up stage 1 cancer where the cancer is small and has not spread to other parts of the body. The NHS trial is an opportunity to try it in a much larger sample that hopefully can lead to enhanced sensitivity even with small amounts of DNA.

The ongoing NHS trial focuses on whether the Galleri test can accurately screen for early-stage cancer to reduce the current mortality rate. Initially, the trial recruited 140,000 people aged 50 to 77 who were identified through NHS records. Everyone who takes part in the trial will have an annual blood test for 2 years. Half of their samples will be tested using Galleri, and the remaining would be stored for future analysis. Those in the intervention group who receive a positive Galleri blood test result will be referred for further investigations in the NHS. The trial will see if the test can significantly reduce the number of cancer cases diagnosed late at stages 3 or 4, compared to those whose samples aren't tested. It will also help to identify the negative impacts of the test. This includes monitoring the number of people who test positive but don't get diagnosed with cancer and if any cancers are missed by false negatives. At the end of the study, using the Galleri test, the team will understand how well it works in this group of people.

Experts are saying MCED tests could revolutionize cancer screening. With point-of-care testing in the US, there is a potential to decrease late-stage cancer diagnoses by two-thirds which will greatly reduce the human and economic toll that cancer has on the world.

- G. SAHITI SRIYA



## A Life Lived for Others

The American Medical Student Association (AMSA) is an independent, global student organization that has the purpose of supporting, informing and inspiring tomorrow's physicians. In March, the AMSA Chapter at BIU reached out to the homeless people in Barbados by distributing food and hygiene kits. This activity was done in collaboration with the Barbados Alliance to End Homelessness in Bridgetown. Cash donations were collected from students and faculty in order to raise funds to help the homeless. The event was memorable since it was the first community outreach of BIU.

This charity work was indeed a learning experience for students to have 'helping hands' dedicated to serving others. An opportunity was also created to encounter and listen to people with different experiences. This undertaking did not only bring joy to the Barbadians in need but also to the student volunteers who collectively felt a sense of purpose as physicians in training.

For its second activity, the AMSA chapter at BIU sprang back up with a 'Blood Donation Program' on May 5<sup>th</sup>, 2022 in collaboration with the Queen Elizabeth Hospital (QEH) Blood Collecting Center under the guidance of Dr. Kandamaran Krishnamurthy, the Clinical Dean of BIU. "You can save a life even if you are not a doctor: donate blood." Students were asked to volunteer to donate blood. Fourteen students volunteered. The experience again brought a sense of joy knowing that blood donation will save lives.

- HARICHARANA NAGELLI, ADNAN HUSSAIN SHAIQ



# Party Life: Celebrating Fresher's and Ugadi!

Students and staff gathered to celebrate the Fresher's party with good food and non-alcoholic drinks. Everybody looked so dazzled on that day excited about the performances. Bringing smiles and cheers to all, the program started with the news that BIU got registered with the Barbados Accreditation Council (BAC), which was proudly announced by Dr. Ganapriya Kancherla, President of BIU.

The activity was a joy to behold as students showcased their talents in dancing, singing, and skits. Professors also took part in the program. The most awaited part of the event was introducing the fresh faces of this year. They modeled in their best attire and answered questions prepared by the organizers. Mr. BIU and Ms. BIU were chosen based on their performances. And how can we forget the most delicious and homely food prepared by our Indian Cook Mr. Ravi? The party ended with more dancing and heartfelt smiles.

Telugu's New Year, the Ugadi, was also observed with a festive cultural celebration. This event is the first festival as per Telugu calendar just like January 1st is the new year for others. The day started by eating Ugadi pickle which is made with 6 different tastes. Everyone all got ready in the best traditional way possible with the stage beautifully decorated with flowers. Traditional Indian food was served and enjoyed by everyone. Students participated actively in the event whether it was a dance, a skit, or a game. Everybody had a great time and will surely keep with them wonderful memories to remember.

**-BHARATHI DOREPALI**



# Active Body, Active Mind



The pursuit of true education requires participation in sports. The Father of the Indian Nation, Mahatma Gandhi, believed that true education involved the harmonious development of a person's body, intellect, and spirit. If any one of these is neglected, the aim of education is unquestionably lost.

Every year, the university holds a sports event which started on March 27th this year. The week-long sports activities were met with great interest. Prizes were awarded to the different teams. The sports coordinators worked hard in getting everything ready.

For spectators, seats were set up. The college's name was unfurled to kick off the day. Students from all classes were given the rules for each game. The meet was declared open by the President, Dr. Ganapriya Kancherla. Indoor games like chess and carroms were played first. Outdoor sports including football, volleyball, dodgeball, kho-kho, cricket, and lemon and spoon relay followed in the succeeding days.

Every game was played with a ton of energy and enthusiasm. Mentors joined some of the matches. Everybody cheered for their respective teams.

The event culminated with a ceremony highlighted by Retired West Indies cricket player TINO BEST, presenting the prizes and awards.

**-YASHWANTH.ARTHAM**





# THE FIRST MILESTONE

In the enthralling journey of becoming a doctor every milestone is precious and to be cherished. For 27 BIU students, one such milestone was the First White Coat Ceremony on May 6<sup>th</sup>, 2022 held at the Accra Beach Hotel in Barbados. Students symbolically donned their white coats and took their oath in the presence of friends, distinguished guests, and dignitaries including the Honorable Deputy Prime Minister Santia Bradshaw.

The special event started with the students in their professional attire marching up to the venue to the delight of the guests. Welcome remarks were given by Dr. Ganapriya Kancherla, president of BIU followed by a classical dance, performed by Ms. Sujana Nagala from the Premed batch. The most important segment of the program started with the students putting on the white coats and stethoscopes under the guidance of Dr. Kandamaran Krishnamurthy, the Clinical Dean, and Dr. Christine Greenidge, QEH Chief Operations Officer, respectively. The pinning was done by Dr. Mohsen Javaheri, the Dean. Beaming with pride, the oath to care and professionalism was recited by the students professing their ultimate commitment towards service with Dr. Javaheri leading the way.



*Congrats*

Another highlight of the evening was the award for academic excellence handed out by Dr. Greenidge. The Hon. Deputy PM. Santia Bradshaw gave a glowing speech about BIU while Dr. Phani Bhushan Potu, ISM Founder encouraged future doctors to be compassionate and to serve the needy. Ms. Harshini Revanuru, president of the Students Government Association (SGA) gave some heartfelt and enthusiastic remarks on behalf of the students. The event was concluded with a vote of thanks given by Mr. Srineesh Vallabhaneni, Director of Finance, and later capped by a sumptuous dinner which was a fusion of Barbadian and Indian cuisine.

This special event was extremely well organized by the BIU teaching and non-teaching staff. This is just the beginning and many more to come in the journey of transforming these ambitious students into superhumans who are going to save the lives of thousands of patients.

-HARSHINI REVANURU



# No Place Like Barbados!



Being a person who loves to experience different lifestyles and cultures, Barbados is indeed a paradise. The people here are so friendly, generous, and fun-loving. As I'm so voluble, I curiously started a conversation with a coconut vendor to know the roots of Barbados. He stated that the name "Barbados" was given by the Portuguese as this place was found with a large number of bearded fig trees. His language was so clear and I can understand the slang and accent as they have a strong English influence because of British colonization for 300 years.

As I walked around Roebuck Street, I was surprised to see people from Jamaica, West Africa, Europe, India, Guyana, and other Caribbean Islands. Having this diversity, culture becomes a beautiful blend. I visited Earthworks pottery which is in White Hill, I saw one of their masterpieces that tries to capture the Caribbean culture and heritage. Going to the beach is one of the nation's favorite past times. I always see a bunch of locals as well as tourists at the sandy lane beach. Furthermore, what I most like about this island is the food! One of the must-tries is Ostin's fish fry. On the other hand, shrimp kebab is the utmost pick. Snacks are refreshing. I savored the flavor of Tamarind balls, sugar cakes, brown mints, and snow cones. The lion's share of the economy is tourism which helps in the employment of the island's citizens.

I believe that festivals are a key aspect of any culture. Crop over has its significance as this celebration signifies the happy harvest of another sugarcane season and the ultimate liberation of enslaved people during British rule. It is one of the most colorful carnivals in the Caribbean. The finale of the festival is Grand kadooment day which features a large group of revelers dressed in elaborate costumes that depict various themes. It includes the intoxicating rhythm of Calypso music. It seems to me that, this community is the true definition of "Age is just a number". No matter what, they make sure to have fun. Certainly, I experienced the real magic of the Tuk band. They are exceedingly talented in music and come up with a bass drum, Kenny drum, and a pennywhistle. This ambiance makes the crowd at least tap their feet. In addition, this place is gifted with proficient sportsmen such as the world's finest cricketers including Sir Garfield Sobers, and the legendary opening pair Greenidge and Haynes. With all these positives, this island is certainly one of the best places you can ever be!

-PRANUSHA RAJALA

# My Love for Cricket



When we hear the word sports in India and the Commonwealth nations, the first sport that comes to every youngster's mind is cricket. Without cricket, our childhood days would have been incomplete. I want to share one of the best experiences of my life: watching the international match between West Indies and England T-20 series at the Kensington Oval Stadium. I was very thrilled and excited about each ball throughout the match. The gameplay, skills, and performance of each player were outstanding. The match was incredibly exciting. The best part of the match was when the entire crowd started singing the national anthem, which brought another kind of excitement to the stadium. All the spectators eagerly waited to have a picture with their favorite players. My dream came true when I grabbed the opportunity to take pictures with two players which was an amazing moment.

Being inspired after watching the great match we got the chance to play a match with excellent players from the Pickwick Cricket Club. The match was an absolute challenge. We lost the match but elevated the team spirit by tons. Had great fun and a good experience.

-KVS NAGASAI





*Friendship doesn't end with school but continues to be cool.*

*When I was in sorrow and in the dark,*

*They were the ones, who brought me to Light.*

*When the world abandoned me*

*They, with their pure souls, embraced me.*

*There were millions of times when I hated myself*

*But, they with their whole heart believed in me*

*loved me and stood by me.*

*I don't know whether I deserve them*

*But my only wish is to keep them.*

*They make my life complete*

*Despite my imperfections.*

*When I lost my voice, they're my sound*

*When I lost my tune, they're my rhythm*

*When I lost my lyrics, they're my music*

*Nothing's better than a friendship forever.*



- PRANUSHA RAJALA



## WHY DO I WANT TO BECOME A PHYSICIAN?

The chapter you are learning today is going to save someone's life tomorrow so always PAY ATTENTION! Everybody is having an aim. My goal is to become a great doctor with all the love and kindness in my heart towards society. Yes, I want to be one of the best doctors in the world!



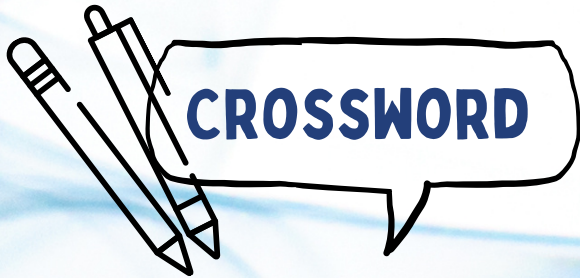
Doctors are considered to be one of the most respected people in society. The life of a doctor is noble and dignified. This profession gives happiness to individuals when they are hopeless. There are so many people in this world who die daily because they cannot afford medical treatment, especially in private hospitals. In government hospitals, the facilities are not enough to serve patients with good equipment which compels me more to do something for those in need. During the pandemic, health care professionals have not only demonstrated the selfless act of healing patients and saving their lives but have also experienced the pain of losing many doctors who even sacrificed their own lives in the line of duty. The sacrifice that physicians are making for the safety and welfare of humanity is priceless and deserves life-long gratitude from our end. Doctors and other medical front liners during the COVID-19 pandemic have encouraged me to choose this profession and I am very happy to be a step closer to my dream. The thought of becoming a continuous source of happiness for many people and their families is humbling and deserves my utmost dedication.

FOR ME, THIS IS A PROFESSION WHERE KNOWLEDGE, POWER, AND HEART COME TOGETHER.

-ABDULLAH HANZALA

*Editor's Note: This article was chosen by Ms. Uina Prescod, a Premed-English lecturer, as the BEST when the Pre-Med students were given the challenge to write an essay on "Why I want to Become a Physician." Congrats, Hanzala!*





# CARTOONS

HYPERDIPLOM  
 EPHUTPSORPE  
 MAOMELANIIT  
 IBTRNEUOAAA  
 PIOPSYRMSHP  
 LSPSITIAIAL  
 EJHCOUTESWA  
 GAOYNIDAHS  
 IYBAPRSANOI  
 AMINZOGMXVA  
 LOAVOEXEMIA

HYPOXEMIA

HYPERTENSION

HEMIPLEGIA

MELANOMA

METAPLASIA

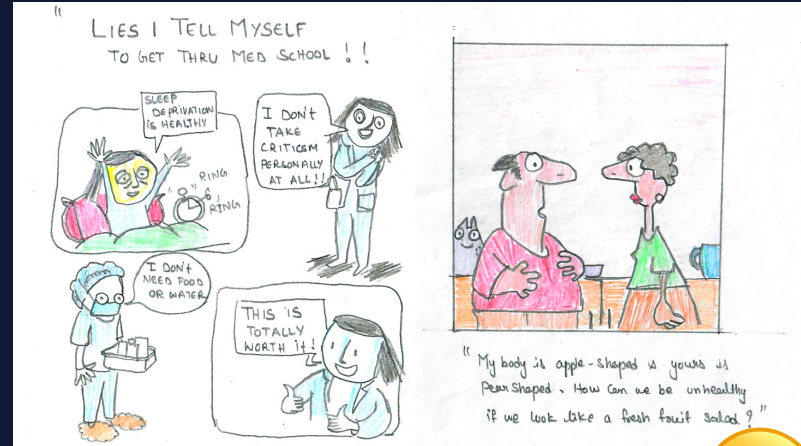
PSORIASIS

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PLEURITIS

DIPLOPIA

BIOPSY



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