



ENHANCING EDUCATION WITH DRONE TECHNOLOGY



UB WINS HACKTHON



CONSCIENTIOUS CITIZENS



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UB Receives Drone to Enhance Education

Today was the inaugural flight for the University of Belize's (UB) first drone at the Central Campus. Drones have been trending as they are being used in video and photo capturing but they can also be put to educational use in the Geographic Information System (GIS). UB and Georgia State University (GSU) have initiated a partnership that will aim at providing collaborative learning across borders through community based research using GIS as its platform. In keeping with this vision, GSU donated a Parrot 2.0 Drone to the University.



GIS Lecturer Antonio Cano directs the drone as it lifts off.

Interim Dean for the Faculty of Science and Technology (FST), Dr Pio Saqui, explained that the equipment "is a wonderful donation that will present a new dimension of learning for our students and amplify our faculty members' capabilities to do research and provide services to our stakeholders in conservation, environmental management and other social services."

The University seeks to develop strong partnership with all the relevant sectors of the Government of Belize, NGOs and CBOs as a means to deliver relevant learning and services for the development of Belize.

Chair for the Science Department in FST, Cecy Castillo, also emphasized that "the use of Drone technology will not only enhance our current GIS course offered by exposing students to cutting edge technology and hands-on learning, but will also enable the University to expand on its research capabilities."

Students from the Natural Resources Management Program (NRMP) were present at the inaugural flight where they then went to collect images which were analyzed in the afternoon.

Dr. Timothy Hawthorne presented the drone on behalf of GSU while Dr. Pio Saqui gratefully received it on UB's behalf.



Drone image of the Central (Belmopan) Campus.

UB Wins Hackathon

A student team from the University of Belize (UB) competed in the inaugural Belize Hackathon and was crowned champions on Monday, June 16, 2014.

The competing teams were from Saint John's College Junior College, Centro Escolar Mexico Junior College, Galen University, and UB. The teams were given two days to come up with or "hack" an innovative solution to a significant real-world problem. The task was to create a mobile application (app) that would help tourists to easily navigate the transportation system in Belize.

After the points were tallied, the UB team won first place in the competition. The UB team members each received a Samsung Galaxy tablet, a gift package, and a \$200 cash prize.

The UB team comprised of Reggie Escobar, Christian Martinez, and Gian Aguilar.



(L-R) Gian Aguilar, Reggie Escobar, and Christian Martinez presenting their 'hack'

On behalf of the Department of Information Technology (DoIT) and the entire University of Belize, the Chair of DoIT Dalwin Lewis congratulates the UB team for doing an outstanding and professional job, demonstrating once again that UB is the premier educational institution in Belize.

UB Receives Donation of Laptops

The University of Belize, through the Faculty of Education and Arts (FEA), received a donation of nine computers from Vancouver Island University (VIU) in Canada. Dr. Victoria McFarlene and Dr. Larry Wolf, adjunct professors at VIU, presented the computers on behalf of VIU on June 24, 2014. Dr. Larry Wolf explains that Mr. Paul Web, I.T. Specialist at VIU, has committed to ensure that on a continuous basis, fully functional computers are donated to UB.

President Alan Slusher received the laptops on UB's behalf and assured Dr. Victoria McFarlene and Dr. Larry Wolf that they will be put to good use. The nine laptops will be utilized to enhance delivery of the teacher training curriculum through increased use of technology. FEA thanks personnel from VIU for this generous contribution.



President Alan Slusher(l) receives laptops from Dr. Larry Wolf (r) and Dr. Victoria McFarlene (c)



UB/UQROO Student Exchange 2014



UB Lecturer Joined Team of Researchers in Training Workshop at Yale University

by Danladi Chiroma

UB Lecturer Danladi Husaini Chiroma joined a team of researchers in a training workshop at Yale University to unravel the Bacterial drug resistance crisis through crowdsourcing antibiotic discovery.

During the period 23rd to 27th June 2014, a group of college professors from different universities in the US, United Kingdom, Netherlands, Malaysia, Puerto Rico and Belize were invited by Yale University in New Haven CT for a one week training workshop on "Crowdsourcing Antibiotics Discovery Through Undergraduate Research."

Background

Numerous expert panels have recommended expanding research experiences for students at the introductory levels of science. For example, the PCAST report, "Engage to Excel" and the AAAS/NSF report, Vision and Change in Undergraduate Biology Education, recommend replacing standard laboratory courses with discovery-based research courses. Recommendations are based on education research demonstrating that students benefit from early research experiences in numerous ways, including persistence in science majors.

Currently, most undergraduates are first exposed to a laboratory when taking an introductory lecture course and perform techniques and experiments with predetermined results. Research must wait until the last two years of college, which



Mr. Danladi Chiroma (left) at Yale University.

is too late to affect students' decisions about whether to leave science majors. In contrast, the reports suggest that the benefits of an early research experience can be best attained through the research courses which are more appropriate and feasible for most introductory students than research in faculty labs. Thus, an introductory biology course, From Microbes to Molecules (M2M), was developed in which student learning is driven by their engagement in original research.

The Antibiotic Crisis

The antibiotic pipeline has slowed to a trickle because the interests of most pharmaceutical companies have shifted toward lucrative drugs for chronic diseases and away from acute infectious disease. Moreover, many of the antibiotics currently in use are losing efficacy due to the development of widespread antibiotic resistance in pathogens. This health crisis creates a vehicle for drawing students into the practice of research as well as the societal implications of its outcomes. Studies have shown that the relevance of research

to human welfare enhances students' motivation and learning, and the effect is particularly strong among women and certain ethnic minority groups who represent a large talent pool that is underrepresented in scientific majors, in part due to current teaching practices.

Thus, with the driving force of providing an authentic research experience early and a relevant research project that addresses a worldwide health threat, an undergraduate research course designed specifically for freshman and sophomore students was created. This novel research course, Small World Initiative, teaches students the principles of introductory biology by engaging them actively in a research project that examines antibiotic-producing microbes obtained from soil. About 75% of antibiotics in current use originate from soil bacteria. Thus, the focus on the discovery of new antibiotics produced by soil microbes connects the antibiotic crisis and infectious disease to broad biological principles. It also provides an opportunity for student ownership of research strategies and results, another well-known factor that fosters student learning and retention.

The training programme ended with a call to do authentic undergraduate research alongside a wide community of young scientists who are eager to learn, discover, and tackle our world's challenges together. Another objective is to develop students' scientific inquiry, problem solving and critical thinking skills while contributing to solving a critical human health threat: the diminishing supply of effective antibiotics.

As a result of its representation at this training, UB is now a member of the Small World Initiative (SWI).

UB ERI/Panthera Seminar Series

Many researchers visit with staff of the Environmental Research Institute (ERI), and now they have a space to present their work and share their experiences with the wider community. In early March the UB ERI in collaboration with Panthera launched the ERI/Panthera Seminar Series for visiting researchers. Since its inception, the series has hosted 5 different speakers who have presented on different topics that range from Mammal Ecology to Forest Management, Optimizing Jaguar Prey Occupancy, and Re-introduction of Mexican Wolves and the Experiences of Jaguar Conservation in Sonora, Mexico. It is the ERI's sincere hope that the experiences shared will inspire and motivate Belizean scientists and students to engage in more research activity. All are invited to keep an eye out for the announcements of these seminars and to join the ERI team as they interact with these visitors.



Dr. Jack Putz presenting one of the seminars

by Kathya Castaneda

The ERI extends special thanks to the presenters: Dr. Dan Thornton (Washington State University), Dr. Francis "Jack" Putz (University of Florida), Robert Euwe (Wageningen University and Research Centre, Netherlands), Dr. Carlos Lopez Gonzalez (Universidad Autónoma de Querétaro), and Carmina Gutierrez (Universidad Autónoma de Querétaro).

Students Green Walk

As part of the core of their mandate, students from the International Forestry Student Association (IFSA-UB) participated in the GREEN WALK 2014 event organized by the Government of Belize's Department of the Environment. The students were able to clean up the entire Mile 41 to 42 stretch along the George Price Highway that was assigned to them.

The Green Walk is a way of raising awareness of solid waste in Belize. The students expressed that they felt proud to be recognized by other organizations as dedicated and exceptional UB students who got up early on a Saturday morning to clean the highway.

In related news, two members of IFSA-UB, Elizabeth Torres and Jani Salazar, will be attending an international symposium in Canada during August 6-22, 2014 where they will join over 120 science/forestry students from 50 countries to engage in conversation, workshops and tours.



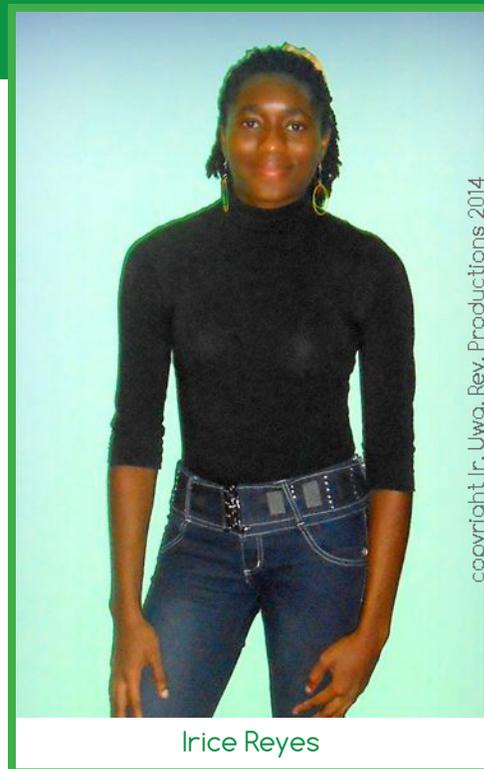
IFSA-UB Students Care About Campus Beautification



UB Student Wins Essay Competition

UB student and Black Jaguar Irice Reyes is the proud winner of an essay competition held by the Department of the Environment in commemoration of World Environment Day celebrated on June 5, 2014. Competitors were invited to write an essay consisting of no more than 400 words and explain what the environment means to them and what they can do to help mitigate the effects of climate change.

Irice says that when she received the telephone call from the Department congratulating her, she was shocked as she thought she had written the essay in a straight forward and simple manner. She adds that she avoided using complicated terms so that any reader would be able to comprehend. Irice already had exposure in international essay competitions, and she learned through those experiences how to be straightforward in getting her points across.



Irice Reyes

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Irice earned her Associate's Degree in Environmental Science from Stann Creek Ecumenical Junior College and is continuing her education at UB where she is majoring in Natural Resource Management. She is grateful to both institutions for being part of her growth over the years. Her essay entitled *"Green Activities, a Greener Belize"* can be found below.

Green Activities, a Greener Belize

Over the centuries, we have all noticed that everything keeps changing around us as each day goes by. These include climate, cities, the environment, governments and even people. In coming to grips with reality, majority of the issues we are facing today are self-made crisis. Despite so many changes, I have learned to adjust & appreciate the environment and its depleting resources. The environment means a lot to me because I know its value and I can experience nature through various eco-friendly activities. It gives me the opportunity to grow my own food, explore new things through educational research and also engage in recreational activities such as sightseeing, hiking, swimming and nature walking. By understanding the environment's importance, I can share my knowledge gained from various experiential.

As a citizen of my country Belize and more importantly as a citizen of Earth, I believe my role is to show others that it is possible to live sustainably and equally in order to mitigate effects of climate change on the environment. This may sound difficult to some people but it's quite easy to practice. It's as simple as car pooling, using energy efficient & eco-friendly products in your home or not littering. Something as easy as riding a bike, creating a home garden, conserving electricity or even trimming trees instead of completely cutting them down are ways to mitigate climate change effects

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by Irice Reyes

WELCOME TO UB

Tieola Lambey Requena

Human Resource Officer

Human Resource Dept.

Central Campus (Belmopan)



Jason Young

Public Safety Officer

Public Safety Dept.

Central Campus (Belmopan)

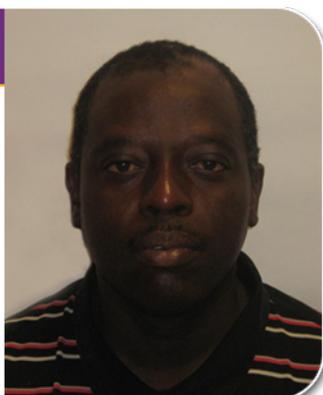


Orvin Luniga

Maintenance Worker

Physical Plant Dept.

Central Campus (Belmopan)



PROMOTIONS

Dr. Pio Saqui

Interim Dean

Faculty of Science and Technology

Central Campus (Belmopan)

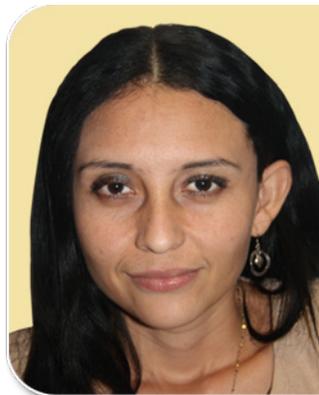


Carla Diaz

Secretary I

Records & Admissions

Central Campus (Belmopan)



FAREWELL

Dr. Joaquin Urbina

Dean

Faculty of Science and Technology

Central Campus (Belmopan)



Steven Burn

Human Resource Officer

Human Resource Department

Central Campus (Belmopan)



Dr. Pio Saqui, Interim FST Dean

As of July 1, 2014 the Faculty of Science and Technology (FST) has a new leader, Dr. Pio Saqui. Dr. Saqui is the new FST Interim Dean after Dr. Joaquin Urbina's departure in June 2014,

Dr Saqui first came to the then University College of Belize in August 1998 where he was appointed as Lecturer within the Marine Research Center and Natural Resources Management Program (NRMP). Later that year, he was appointed as Acting Marine Research Director and Coordinator of Natural Resources Management Program, a post he held until August 2001.

Dr. Saqui's immediate objective is to foster a working environment that will honor a management structure that is transparent and effective in meeting the needs of all the faculty members and students of FST. The faculty will also therefore seek to bolster partnerships with stakeholders, both locally and internationally, seeking to fulfill its vision as an agent of change.



Have you passed by the Belmopan Civic Centre lately? Did you see a very creative mural? It was painted by UB student Kenroy Makin.

Kenroy is currently majoring English and is also part of the UB Black Jaguars football team.

Great work Kenroy!

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on the environment. These practices are interrelated to not only sustainable development but also to equity on a whole because you are thinking about yourself, others and the environment. It may take some time for people to adjust to such a lifestyle but making a start is one step toward a change. Everything starts from somewhere and I do believe that "one man can make a difference" as the phrase goes. The number one will eventually turn to two, then three and so on.

I know that I am only one Belizean girl, with one role, in one world, who is trying to make a difference. However, in the words of the late Nelson Mandela, "Action without vision is only passing time, vision without action is merely day dreaming, but vision with action can change the world." This Belizean girl has a vision ... and I plan on changing the world!

Students: Conscientious Citizens



The Introduction to Tourism Marketing class (Tour 22021), under the guidance of lecturer Eda Arzu, embarked on yet another project to build and install a “manual barrier gate” at the Faculty of Management and Social Sciences Belize City campus, West Landivar.

In previous years, students who took this course designed and installed the welcome sign at the entrance to the campus, built a bus stop shed, stenciled signs and resurfaced ramps, and replaced existing signs around campus. One of the objectives of this course is to promote conscientious citizens/leaders.

The class is grateful to Comex Paint Company for providing the paint.



The University of Belize thanks these students for showing that they care.

Most Wins

UB Black Jaguars won the trophy for the most wins from the Association of Tertiary Level Institutions in Belize (ATLIB) during this school year. Our Black Jaguars are Softball Champions (male and female), Volleyball Champions (male and female), and Basketball (female) champions.

Congratulations to our Black Jaguars.



Recreation and Sports Coordinator Stanley Humes with “Most Wins” trophy