

Top biotech stories cited anew at 2019 Biotech Week

By Allan Mauro V. Marfal, DOST-STII

For the 13th year, published news and feature stories on the many benefits of biotechnology to the Filipino people were recognized via the 2019 Jose G. Burgos Jr. Awards for Biotech Journalism.

The Jose G. Burgos Jr. Awards for Biotech Journalism was one of the main highlights of this year's National Biotechnology Week (NBW) celebration.

Organized by the Joe Burgos Pen, Inc., the said awards aim to push the frontiers of science by popularizing biotech stories, thus making people more aware of this scientific discipline.

The awards were supported by the Department of Agriculture (DA)-Biotechnology Program Office, DA-Bureau of Agricultural Research, Biotechnology Coalition of the Philippines (BCP), Southeast Asian Regional Center for Graduate Study and Research in Agriculture-Biotechnology Information Center, and the International Rice Research Institute.

"Delays in approving GMO permits scored" written by Jasper Arcales from the Business Mirror bagged the first prize in the Best News Story category. Manila Bulletin's Charissa Luci-Atienza won second prize for her article "Solon bats for modernization of biotechnology in PH", while "Farmers to explore agri-biotech farming" by Ace June Rell Perez of Sunstar Davao took the third place.

For the Best Feature category, Louise Maureen Simeon from the Philippine Star won first prize for her article "Commercialization of Bt eggplant eyed next year". Ace June Rell Perez of Sunstar Davao again won the second prize in the feature category for his article "Golden price for golden rice?", while Stephanie Tumampos of Business Mirror bagged the third prize for her article "How a banana tissue culture is now helping the industry."

Recognition was also given to the newspapers with the most number of biotechnology articles published. Business Mirror bagged the first place, second was Philippine Star, and third place went to Manila Bulletin.

The winning articles were chosen by this year's judges that include Rev. Fr. Emmanuel Noli C. Alparce, chair of the technical



BIOTECH JOURNALISTS AWARDED. Due to the positive impact of their stories in promoting the role of biotechnology to improve the lives of Filipinos, some of the country's biotech journalists were recognized at the 2019 Jose G. Burgos Jr. Awards for Biotech Journalism on 27 November 2019 at the Agricultural Training Institute in Quezon City. Among them are (from left to right): Joshua Tumampos (representing Stephanie Tumampos of Business Mirror for winning the 3rd prize in the features category), Ace June Rell Perez of Sunstar Davao (2nd prize in features and 3rd prize winner in the news category), Louise Maureen Simeon of the Philippine Star (1st prize winner in features category), Charissa Luci-Atienza of Manila Bulletin (2nd prize winner in news category), Jenny Ng of Business Mirror (representing Business Mirror for winning the first prize for the institutional category), and Jasper Arcalas of Business Mirror (1st prize winner in news category). (Photo from Peachy T. Burgos, J. Burgos Media Services, Inc.)

committee for Information, Education, and Communication of the DA National Biotechnology Program; Dr. Abraham J. Manalo, executive secretary of BCP; and Georgina Carmelle Siena, communication specialist chief of the Information Division of the DA-Bureau of Soil and Water Management. The Board of Judges reviewed biotechnology stories from July 2018 to July 2019.

Moreover, the top three winners in all categories received trophies and cash prizes, as follows: PhP 30,000.00 for 1st place; PhP 20,000.00 for 2nd place; and PhP 10,000.00 for 3rd place.

According to Tumampos of Business Mirror, the award she received reminded her that there is a need to write about biotechnology and how scientists and their research are constantly looking for solutions to end many problems the world is facing today, such as hunger and malnutrition.

She also added that writers need to write more of these stories for the Filipinos—to impart how much biotechnology has changed lives in the country and all over the world.

The awarding was held 27 November 2019 at the Agricultural Training Institute in Quezon City as part of the NBW that ran from 25 to 29 November 2019. The NBW featured exhibits as well as technology forums that tackled various biotech applications in agriculture, aquaculture, environment, health, and nutrition.

It was co-organized by the Department of Health with the DA, Department of Science and Technology, Department of Environment and Natural Resources, Department of Trade and Industry, Department of Education, and the Commission on Higher Education.

S&T spirit stands firm amid Mindanao quake

By Jasmin Joyce P. Sevilla, DOST-STII



Taken just minutes apart, participants of a science journalism workshop duck and cover during the earthquake that struck on the morning of 29 October 2019. Organizers of the workshop remained calm while giving instructions to the participants and leading them out to safety. (*Text and photo by Reuel Lumawag, SunStar Davao*)

Let that struck Mindanao, the people of Davao have shown not just resiliency but perseverance and hope that the improvement of the lives of the people will not be hampered by any calamity."

These were the encouraging words of Elsie Mae A. Solidum, assistant regional director (ARD) for Technical Services of the Department of Science and Technology-Region XI (DOST-XI), during the closing ceremony of the Regional Science and Technology Week (RSTW) of Region XI in Davao City on 30 October 2019.

To recall, a 6.6 magnitude earthquake hit Davao City on the second day of the threeday RSTW in Davao City. While the quake temporarily impeded the conduct of the event to account for everyone's safety, the RSTW celebration went on to deliver DOST's mission to bring science to the people.

Participants were visibly shaken as a few days before the RSTW, the same area was hit by a 6.3 tremor.

Started off with a bang

A day before the quake, the DOST-XI officially opened the RSTW with festivities during the opening ceremony which proceeded with the opening of exhibits and techno-bazaar to the public.

The RSTW kept the spirit up all day with a series of techno-forum on food processing innovation, halal program, and halal laboratory services, including a forum on earthquake safety—a timely and relevant discussion—led by the DOST-Philippine Institute of Volcanology and Seismology.

#ScienceJournoAko: Communicating Science in Davao City

Day 2 (29 October 2019) of the RSTW featured the #ScienceJournoAko: Communicating Science in Davao City, a science journalism workshop for students spearheaded by the DOST-Science and Technology Information Institute (STII).

The workshop's purpose was to train students on how to communicate science. But just before the workshop, the quake hit the area. Through the calm guidance of the assigned DOST-XI regional staff, led by Kristine Melody C. Perez, the students, including the DOST-STII team, were safely ushered outside of the building.

"I was also nervous that time but it occurred to me that it is important for the kids not to panic, so I had to appear calm," Perez explained as she narrated her experience guiding the students to practice duck, cover, and hold during the earthquake.

Work and class suspension was declared within the day, effectively cancelling the workshop. When the condition was cleared the day after, the workshop proceeded and was successfully conducted.

As the RSTW celebration in Region XI concluded, ARD Solidum, on behalf of DOST-XI Regional Director Dr. Anthony C. Sales, looked back to the past three days and commended everyone for ensuring the safe continuity and successful conduct of the program, in spite of the destructive earthquake that hit Mindanao.

"Not an earthquake nor any calamity will stop our combined efforts in fully realizing our dreams for a better and more sustainable future for all," she said. "As a famous Japanese proverb goes, 'fall seven times, stand up eight.' It is not the fall that defines us, but how we rise higher, further, and faster than before."

The RSTW in Region XI ran from 28 to 30 October 2019 at the SMX Convention Center, SM Lanang, Davao City. It showcased a plethora of locally developed technologies and products assisted by the DOST's Small Enterprise Technology Upgrading Program, including fun science and technology activities for kids, such as Weather Reporting Science, Trivia Game, and Science Vlogging Contest.

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DOST leads biggest S&T celebration in Western Visayas

By Angelica Marie Paz, DOST-STII Photos by Rosemarie C. Señora, DOST-STII

science and technology celebration like no other found its way in Iloilo City – the Queen City of the South.

The Regional Science and Technology Week (RSTW) in Western Visayas, led by the Department of Science and Technology-Region VI (DOST-VI), is a unique celebration that was part of the first Iloilo Innovation Expo 2019—a multi-stakeholder event with various activities to promote science and technology (S&T) and sustainable business ventures in the region.

In his keynote message, DOST Secretary Fortunato T. de la Peña emphasized the crucial role of collaboration and intersectoral efforts for the development of S&T. "With our nation's 16 percent level of awareness in S&T, it is high time we realize that DOST cannot do this alone, it requires a collaborative effort if we want to feel the impact of S&T in the country," Sec. de la Peña said.

Launching of Innovate Iloilo

The RSTW in Region VI was also dedicated to launch "Innovate Iloilo", as well as its logo. Innovate Iloilo is a public-private sector initiative that aims to promote innovation across Iloilo. It is supported by a coalition composed of 32 institutions in the City and Province of Iloilo, and is led by local government units and state universities across the province.

As for the commercialization of technology in Western Visayas, DOST-Technology and Promotion Institute (TAPI) Director Edgar I. Garcia said that Western Visayas is home to many inventors.

"The number of entries we received for this year's RICE (Regional Invention Contest and



DOST Secretary Fortunato T. de la Peña and DOST-VI Regional Director Rowen R. Gelonga officialy launch the logo of Innovate Iloilo.

Exhibits) is a manifestation that S&T is alive and kicking here in Western Visayas, which is why we are encouraging more students and researchers to come forward with their ideas since these count as innovation outputs, our key strength in the yearly Global Innovation Index," he said.

He also added that DOST-TAPI will continuously give support to local inventors throughout their commercialization and protection process.

Promoting innovation in Western Visayas

One way of engaging the people in S&T is by showing how science can be applied in their everyday life. One way is to help them scale up the impact that S&T can create in addressing issues that affect their way of life, which is the primary objective of the Innovation Challenge or iChallenge.



After a series of talks, an open forum was held to discuss the current challenges faced by the region, and possible ways to address them. The discussions were led by (from left to right) Eric Christian Estolatan, Convergence Manager of USAID-STRIDE, DOST-VI Regional Director Rowen Gelonga, JICA Philippines Chief Representative Yoshio Wada, and DOST Undersecretary for Research and Development Dr. Rowena Cristina L. Guevara.

The iChallenge entails identifying key development issues in Western Visayas that could be addressed through S&T. It is a reverse pitching platform where stakeholders can ask about their real-life dilemmas that need S&T solutions from potential partners or solutionproviders.

"Our farmers cannot efficiently use their land because of wrong procedures and technologies... if you don't know your cost of production, you cannot make money," said Ramon D. Uy, an agricultural technologist and industry player. Uy, founder of RU Foundry and Machine Shop Corporation, is advocating for eco-friendly mechanization of farms in the country.

In order to increase farm productivity in Western Visayas, Uy believes that farmers need to be equipped, and stay on board, with the latest technologies. "We are developing high quality machinery to promote farm mechanization, it could make the farmers more productive, and hopefully they will become sustainable in the future," he added.

Another much awaited event during the expo was the Iloilo Innovation Summit. It is a collaboration between public-private sector agencies that aim to make Iloilo the "Innovation Hub" of the country by 2030. The summit talked about the importance of multi-stakeholder collaborations (especially through start-ups and business incubations) in capacitating local government units, state universities, and research institutions in the region.

Iloilo Governor Hon. Arthur R. Defensor Jr. graced the event, and encouraged the audience to support the initiatives of both the government and private sector. "We already have the roadmap, we just have to encourage the people," he emphasized.

Former NASA astronaut headlines STEM leadership summit

By Rosemarie C. Señora, DOST-STII



Dr. Steve Swanson (in blue space suit on the front line, middle) poses with the participants of the First Integrated STEM Leadership Summit in Asia, right after his talk on the role of space technology in building a better future. (*Photo from Facebook page of Unilab Foundation*)

T t is not every day that we see astronauts. The closest we see them is on television shows, sci-fi movies, documentaries, and science books.

So imagine everyone's excitement upon seeing and hearing an actual astronaut talk about space exploration and give his thoughts on the Philippines joining the world's spacefaring nations. This scene surely gets the younger generation interested in science and technology.

The astronaut who actually did this was Dr. Steven Swanson, former National Aeronautics and Space Administration (NASA) astronaut and commander of Expedition 40 to the International Space Station. Dr. Swanson was the featured speaker at the recently concluded First Integrated STEM Leadership Summit in Asia.

Attended by government, industry, education leaders, and STEM (science, technology, engineering, and mathematics) advocates, the summit was held 21 to 24 November 2019 at the Shangri-La Mactan Resort and Spa in Cebu.

Like a rock star

Dr. Swanson was all smiles while accommodating requests for photo opportunity from summit participants who were simply stunned seeing a man wearing a blue NASA space camp flight suit. He looked like a rock star with all his giddy fans waiting to have their chance encounter with him.

When asked about his special suit, Dr. Swanson said that it is actually pretty comfortable. He said that it was made from a fire retardant piece of fabric made up of Nomex (a flame-resistant material), which makes it a suitable choice of clothing for flying an aircraft.

Adaptability is the key

Being an astronaut is obviously not just about wearing a suit and floating in space. It takes a lot of education, work, training, and skills to become one.

After receiving his master's degree in Computer Systems from Florida Atlantic University, Dr. Swanson joined NASA in 1987 as a systems engineer and a flight engineer working on the Shuttle Training Aircraft. Then in 1998, with a Doctorate in Computer Science from Texas A&M University in his credentials, he was selected as an astronaut.

Dr. Swanson said becoming an astronaut is a very long process. From 10,000 to 18,000 applicants, only 20 make it to the last selection phase.

The selection process is tough because he said that NASA is looking for people who know how to learn and adapt to various environments.

"The job of being an astronaut is many different things, you change your hat everyday depending on what you're doing. The work changes all the time so you really have to be adaptable to your new environment," he shared.

On PH space agency

Speaking of something new, Dr. Swanson is hopeful that the recent establishment of the Philippine Space Agency (PhilSA), "will address all national issues and activities related to space science and technology applications."

"I hope it works out wonderfully for you people. I think it's a great way to go. From what

I read on, it already has some space activities going on. Now it's under one or involved with one organization, and I think that can help make it more focused and help it grow better with that idea," he said.

On 08 August 2019, Republic Act No. 11363 or the "Philippine Space Act" was signed into law by President Rodrigo Roa Duterte, providing for the establishment of the said national space agency of the Philippines.

Commenting on public skepticism regarding the PH space agency, especially with the budget allotted for it, he said that every country goes through that.

"For United States, we have a huge return of investment because of the money spent on NASA. We are really indeed a research and development organization. We're trying to make new things and we can take these new things and develop it for consumer products," said Dr. Swanson.

He added that the PhilSA should also devote an area for education to encourage students to pursue careers in STEM, while also admitting that making the younger generation interested in science is a hard work itself.

Dr. Swanson said that NASA is doing a lot of programs to help students realize how science really works. According to Dr. Swanson, there is no doubt that science is fun and exciting. "But the goal is to make humanity better," he continued.

"That's what I really love about working at NASA. Nobody there works at NASA just for the money. This whole idea of space exploration and making the world a better place is what drives everybody, and it's wonderful to be part of that," he emphasized.