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DOST-Pisay scholar wins global science competition

By **Romelie Janelle Maranan**, *DOST-STII*

Photo by **Henry A. de Leon**, *DOST-STII*



Hillary Diane A. Andales, the grand prize winner of the 2017 Breakthrough Junior Challenge, pays a courtesy visit to Department of Science and Technology Secretary Fortunato T. de la Peña.

Grade 12 student Hillary Diane Andales from the Philippine Science High School-Eastern Visayas Campus in Palo, Leyte bagged the grand prize of the 2017 Breakthrough Junior Challenge last December 3, 2017 (December 4 in Manila) at the NASA Ames Research Center in Silicon Valley, California, USA.

In her winning entry, Andales explained about the concept of relativity and the equivalence of reference frame.

After being a finalist for two consecutive years, Andales bested more than 10,000 students from 178 countries around the world.

As the grand prize winner, the 18-year-old Palo, Leyte resident received a \$250,000 (P12,670,000) college scholarship, as well as

a \$50,000 (P2,530,000) prize for her science teacher, and a \$100,000 (P5,069,000) breakthrough science laboratory for her school from the Cold Spring Harbor Laboratory.

For her first entry last year about the “Feynman’s Path Integrals,” Andales emerged as the special awardee of the Breakthrough Junior Challenge Popular Vote that brought her straight to the finals and won her school a \$100,000 state-of-the-art DNA molecular-biology laboratory.

Andales expressed her gratitude to the award-giving body as it has allowed her to become a rising star with even bigger dreams.

“May this inspire more young people, especially my dear Filipinos, to look up and become scientists themselves — the stars we should all look up to,” Andales said.

Andales also received the “Mga Bagong Rizal: Pag-Asa ng Bayan” award for her strong advocacy for Science, Technology, Engineering, and Math education and awareness. Mga Bagong Rizal: Pag-Asa ng Bayan is a biennial search for young Filipinos who demonstrate extraordinary abilities and gifts in various fields while exemplifying love for country, reflective of the national hero Dr. Jose Rizal’s virtues.

Organized by the Breakthrough Prize Organization, Breakthrough Junior Challenge, considered the “Oscars” in the world of science, is an annual global competition for students ages 13 to 18 from countries across the globe to inspire creative thinking about science. The students are invited to create and submit a three-minute original video that brings to life a concept or theory in the life sciences, physics, or mathematics.

Science tourism program kicks off in Los Baños, Laguna

By Jasmin Joyce P. Sevilla, DOST-STII

Photo by Gerardo G. Palad, DOST-STII



(Seated, L-R:) LBSCFI President and DOST IV-A Regional Director Dr. Alexander R. Madrigal, DOT CALABARZON Regional Director Rebecca V. Labit, and DepEd CALABARZON Public School District Supervisor Dr. Allan G. Hostalero present the signed memorandum of agreement during the launching of the Science Tourism Program in Los Baños.

To further promote tourism in the municipality of Los Baños, Laguna, the Los Baños Science Community Foundation, Inc. (LBSCFI) launched the Science Tourism Program in Los Baños on December 6, 2017 at the Department of Science and Technology (DOST)-Philippine Council for Agriculture, Aquatic and Natural Resources Research and Development, Innovation and Technology Center.

This two-year project is a collaboration among the 22 member-agencies of LBSCFI, Department of Tourism (DOT)-CALABARZON, and the Department of Education (DepEd)-CALABARZON.

Dubbed as the “Special Science and Nature City of the Philippines,” the town of Los Baños serves as a hub for local and international research institutions to collaborate for the advancement of research and development in the Philippines and its neighboring countries.

In addition, Dr. Alexander R. Madrigal, LBSCFI president and DOST-CALABARZON

regional director, proudly shared during the program launching that Los Baños is one of the most active science communities in the Philippines due to the town’s committed involvement in science endeavors.

“We have to promote science at a deeper level so that the students, the public, and private entities would realize that there is something more beyond these technology courses,” said Dr. Madrigal.

Aside from promoting science and technology (S&T), the LBSCFI developed the science tourism branding to help increase the number of tourists visiting Los Baños. As emphasized by Director Roberto P. Cereno, chair of LBSCFI Tourism Committee, the said science tourism branding is the first of its kind in the region and in the country so it is a huge step forward for the municipality of Los Baños and the whole of CALABARZON as well.

Cereno also discussed the strategic action plan for the development of the Science Tourism Program. Generally, they’re eyeing

to promote science-based tourism products in the area such as the famous *buko* pie and chocolate milk, science-oriented travel or visits in Los Baños’ heritage sites such as the Mount Makiling Forest Reserve, and science tourism events like the SyenSaya, their local adaptation of the National Science and Technology Week celebrated annually.

Present also in the event was DOT-CALABARZON Regional Director Rebecca V. Labit, who said that boosting the tourism in Los Baños through this program would not only promote S&T in the region but more importantly, it would create jobs and opportunities for the locals in the area.

The program launching ended with the signing of a memorandum of agreement to formalize the partnership among LBSCFI, headed by Dr. Madrigal, DOT-CALABARZON, represented by Director Labit, and DepEd-CALABARZON represented by Public School District Supervisor Dr. Allan G. Hostalero, in lieu of Regional Director Dr. Diosdado M. San Antonio.



Department of Science and Technology Secretary Fortunato T. de la Peña emphasized the important role of the Philippine Space Agency in strengthening the services of various industries and government agencies.

Creation of space agency ideal for the Philippines—DOST

By **Allan Mauro V. Marfal**, *DOST-STII*
 Photo by **Gerardo G. Palad**, *DOST-STII*

The establishment of a strong space technology development program can provide several benefits to the agriculture and transportation sectors, can help in protecting our territories, and has practical applications during times of calamities.

This is why the creation of a Philippine Space Agency (PhilSA) is quite timely for a country like the Philippines, said Department of Science and Technology (DOST) Secretary Fortunato T. de la Peña during the recently concluded S&T Legislative Forum that ran on December 18-19, 2017 at Momarco Resort and Hotel in Tanay, Rizal.

“Admittedly, we know that we need large amounts of money to support this kind of program (space technology development), yet it can possibly bring lifelong benefits to our fellow Filipinos,” Sec. de la Peña said.

The creation of PhilSA is one of the proposed bills that are being supported by DOST. As of writing, the said bill is already in the third reading in the Lower House and in the Senate. Its principal authors in the House of Representatives are Rep. Erico Aristotle T. Aumentado of the second district of Bohol and Rep. Seth Frederick R. Jalosjos of the first district of Zamboanga del Norte; and in the Senate the main author is Sen. Paolo Benigno “Bam” Aquino IV.

Sec. de la Peña further explained that through the PhilSA, more microsattellites can be

developed to provide information to our farmers, like when is the most appropriate season to plant and harvest. The microsattellite can also provide data as basis to come up with effective and timely methods to ease traffic congestion in the country.

He added that the PhilSA will likewise play an important role in creating a program that will show the capacity of space technology in guarding the territories of the country, as well as provide critical information on approaching natural disasters.

Dr. Rogel Mari D. Sese, focal person of the Philippine Space Science Education Program of DOST-Science Education Institute, agrees that high resolution images from the satellite will help the country’s military forces to guard and protect our seas from those who want to invade it.

Dr. Sese also explained that when a strong typhoon hits, destroys different kinds of infrastructure, and disrupts communication lines, satellite based connectivity will be the only means to determine places that were extremely affected by the disaster.

Aside from the creation of PhilSA, other proposed bills supported by DOST that were tackled in the S&T Legislative Forum include the Balik-Scientist Pogram, strengthening of Provincial S&T Centers, and creation of the National Metrology Institute and the Philippine Nuclear Regulatory Commission.

ABOUT US

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DOST honors exemplary agencies, employees & Pisay studes for 2017

By **Jasmin Joyce P. Sevilla**, DOST-STII
Photo by **Gerardo G. Palad**, DOST-STII

Amidst the festivities on the annual holiday celebration of the Department of Science and Technology (DOST), seven DOST-attached agencies, eight DOST employees, and nine Philippine Science High School (PSHS) students received recognition from their utmost contribution in various areas of science and technology this year. The awarding ceremony was held on December 12, 2017 at the DOST grounds.

DOST Secretary Fortunato T. de la Peña led the awarding to the following DOST agencies: DOST-Food and Nutrition Research Institute (DOST-FNRI) (NAST's Best Institute Award); DOST-NCR (Gold Anvil Award); DOST-IX (Development Academy of the Philippines' Government Best Practice Recognition 2017); DOST-Science and Technology Information Institute's STARBOOKS (Gold Anvil Award); DOST-Industrial Technology and Development Institute (DOST-ITDI) and DOST regional offices (Benita & Catalino Yap Foundation [BCYF] Innovation Award for Government Service); DOST-Philippine Nuclear Research Institute (DOST-PNRI) Research Team (2017 Excellent Research Team of the Year Award of Japan-based Forum for Nuclear Cooperation in Asia); and DOST-FNRI and DOST-XI (Outstanding Government Workers Award [PAGASA Award]).

On the other hand, the DOST employees who received recognition were: Ana Marie P. Alo from DOST-Philippine Council for Agriculture, Aquatic and Natural Resources Research and Development (DOST-PCAARRD) (2017 PhILEASNET Outstanding Extension Project Award); Fernando B. Aurigue from DOST-PNRI (conferred Scientist I under the Scientific Career System); Glenda Obra from DOST-PNRI (conferred Scientist I in the Scientific Career System); Dr. Annabelle V. Briones from DOST-ITDI (NRCP's Achievement Award for Chemical Sciences; and conferred Scientist I in the Scientific Career



Among the awardees during the year-end celebration of DOST were DOST-ITDI Director Dr. Maria Patricia V. Azanza (left) and Undersecretary for Regional Operations Brenda L. Nazareth-Manzano (right). With much pride, DOST Sec. de la Peña (middle) presents the award to DOST-ITDI and DOST regional offices to recognize their continuous innovations and initiatives that surpass customer requirement.

System); Dr. Rosalinda C. Torres from DOST-ITDI (conferred Scientist I in the Scientific Career System); Dr. Marissa A. Paglicawan from DOST-ITDI (conferred Scientist I under the Scientific Career System); Dr. Maria Patricia V. Azanza from DOST-ITDI (Gregorio Y. Zara Award, Julian Banzon Outstanding R&D Award; and DOST International Publication Award); and Dr. Alexander R. Madrigal from DOST-PCAARRD (GAWAD KALASAG Award – [National Level] of the Regional Disaster Risk Reduction and Management Council).

Sec. de la Peña also proudly presented certificates of recognition to selected PSHS students who excelled in prestigious science competitions, namely: Maria Janine L. Juachon from PSHS-Central Luzon Campus (CLC) (Bronze Medal in the 11th International Earth Science Olympiad); Charles Jerome R. Bartolo from PSHS-CLC and Arthur Reiner V. De Belen from PSHS-Main Campus (MC) (Bronze Medal in the 2017 International Chemistry Olympiad); Philippe Gene Bungabong, Maded Batara III, and Justine Marcus Ofulencia from PSHS-MC (Silver Medal in the 2017 Clean Tech Competition); Kyle Patrick Dulay from PSHS-MC (Silver Medal in the 58th International Mathematical Olympiad); Mikhail

Angel C. Torio from PSHS-MC (Silver Medal in the 11th International Earth Science Olympiad); Eugene Fajardo Torribio from PSHS-Bicol Region Campus (BRC) (Silver Medal in the 11th International Earth Science Olympiad); Dann Lawrence Llabore from PSHS-Southern Mindanao Campus (Bronze Medal in the 14th International Geography Olympiad); Mikhail Angel Torio from PSHS MC, Eugene Fajardo Torribio from PSHS-BRC and Maria Janine L. Juachon from PSHS-CLC (Gold Medal in the 11th International Earth Science Olympiad); and Hillary Diane Andales from PSHS-Eastern Visayas Campus (Grand Prize winner in the 2017 Breakthrough Junior Challenge).

In addition, two DOST executives on a secondment status were given due distinction for their exemplary service to DOST. DOST-ITDI Director Dr. Maria Patricia V. Azanza and DOST-Philippine Council for Industry, Energy and Emerging Technology Research and Development Executive Director Dr. Carlos Primo C. David were both professors at the University of the Philippines Diliman before they were appointed to their corresponding agencies in 2014 and 2015, respectively. By January 2018, they will resume their teaching profession in UP Diliman.



Department of Science and Technology (DOST) Secretary Fortunato T. de la Peña gives his keynote message during the closing ceremony of the OneLab Networking Forum held at the Microtel, UP-Ayala Land Technohub, Commonwealth Avenue Diliman, Quezon City on December 15, 2017. With the theme "Analytical Testing Laboratories: Responding to New Challenges and Opportunities of Economic Globalization," the event was attended by representatives from various DOST regional offices, including the new laboratory members of the OneLab network. In his speech, Sec. de la Peña assured the participants in the forum that DOST will continue to provide assistance in this project to better serve the public.

