

## DLSU IS PHL'S TOP-RANKED UNIVERSITY IN FIVE DISCIPLINES

DE LA SALLE UNIVERSITY HAS BEEN RANKED IN FIVE DISCIPLINES in the recently released 2021 Times Higher Education World University Rankings by Subject, namely: Business & Economics, Computer Science, Engineering & Technology, Physical Sciences, and Social Sciences.

DLSU is the only Philippine university that is included in the Business & Economics ranking, and is the country's top HEI in the Computer Science, Engineering, Physical Sciences, and Social Sciences subject areas.

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The rankings apply the same rigorous performance indicators as the overall World University Rankings, but have been adjusted to suit specific fields. The list only includes research-intensive HEIs, and the criteria used put a premium on research resources, global outlook, productivity, and impact.

This year, 1,512 institutions met the criteria to be included in the subject rankings.

“Our recent recognition as a research institution of international standing is the fruit of seeds planted in 1975, when De La Salle College became De La Salle University. As we approach the 50th anniversary of that historic transition, DLSU is poised to contribute to nation-building through both quality education and knowledge creation,” said Vice Chancellor for Research and Innovation Dr. Raymond Tan.

DLSU President Br. Raymundo Suplido FSC congratulated the academic community for this milestone. “As one Lasallian family, let us continue to strive for excellence, fueled by the spirit of *communitas*, or sense of community.”

## Research team pioneers computer program for COVID-19 antivirals allocation

**A TEAM OF DE LA SALLE UNIVERSITY RESEARCHERS DEVELOPED A COMPUTER-AIDED PROGRAM** that can assist the government as well as decision makers from NGOs in the proper distribution of COVID-19 antivirals once these become available.

The highlights of the research were presented in a webinar titled “How to distribute COVID-19 antivirals” held on October 22. The online event was organized by the DLSU Data Science Institute and DLSU Animo Labs Foundation, Inc.

Leading the multidisciplinary research group are Industrial Engineering Associate Professor Dr. Charle Sy and Chemical Engineering Full Professor Dr. Kathleen Aviso.

The team’s other members are Dr. Ador Torneo, Dr. Anthony FS Chiu, Dr. John Frederick Tapia, Dr. Aristotle Ubando, Dr. Raymond Tan, Christina Caymanda, Dr. Luis Razon, Dr. Rochelle Lucas, Dr. Derrick Yu, and Dr. Michael Promentilla.

Sy explained that the team was encouraged to start the project when they saw how the government and hospitals were overwhelmed with the surging COVID-19 cases. The study was made in anticipation of the problem of supplying antivirals once these become available.

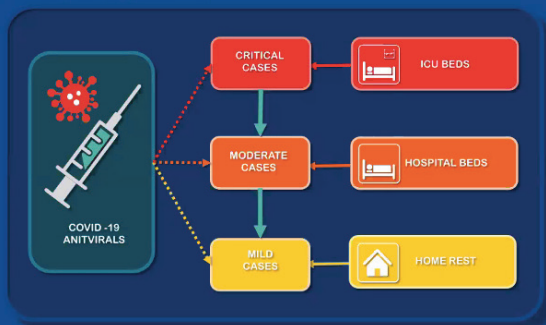
To address these challenges, the researchers developed a linear programming model which can provide valuable decision support for the optimal allocation of COVID-19 drugs. Their model considers patient fatalities, drug efficiency, and hospital capacity constraints.

The team also presented simulated scenarios which depict that an optimal allocation plan is more superior to simple ad hoc distribution of drugs.

Moving forward, the researchers are now working on developing an optimization model for the allocation of vaccines. This new model will look into integrating factors such as contact rate, infection rate, and vaccine efficiency in identifying the allocation strategy. Furthermore, the team plans to engage with government agencies, pharmaceutical companies, and other partners to share their findings and to identify opportunities for collaboration. Moreover, the team also intends to convert their computer aided program into freeware to make it more accessible.

The article, entitled “Process integration for emerging challenges: optimal allocation of antivirals under resource constraints,” was published in the peer-reviewed journal *Clean Technologies and Environmental Policy* last May as part of a special coverage on COVID-19. For the full research, visit: <https://doi.org/10.1007/s10098-020-01876-1>.

### Model Structure





# DLSU LAGUNA CAMPUS UPDATES

## Laguna campus gets wind tunnel equipment

**DE LA SALLE UNIVERSITY HAS RECENTLY ACQUIRED A WIND TUNNEL EQUIPMENT FROM WESTENBERG ENGINEERING**, a known producer of wind tunnels in Germany. The equipment was delivered to the Richard L. Lee Engineering and Technology Block on DLSU Laguna Campus last October 26.

The Eiffel-type wind tunnel has a test section of 500 mm x 500 mm and can deliver wind speeds of up to 60 m/s.

Initiated by former DLSU Chancellor Dr. Gerardo Janairo, the testing laboratory was established to support studies related to building aerodynamics, instrument calibration, and flow visualization.

This newly established wind tunnel laboratory is part of the Central Instrumentation Facility (CIF) of the Office of the Vice Chancellor for Research and Innovation.

*Source: DLSU Central Instrumentation Facility on FB*

## University leads capacity-building program for research on natural products

**DE LA SALLE UNIVERSITY** recently launched the initial phase of a capacity-building program of the Department of Science and Technology-Philippine Council for Health Research and Development (DOST-PCHRD) in the field of natural products research.

Led by Chemistry Department Full Professor Dr. Drexel Camacho, the "Tuklas Lunas Fellowship on Natural Products Research" runs from October 2020 to February 2021. It is participated in by 15 representatives from universities across the country.

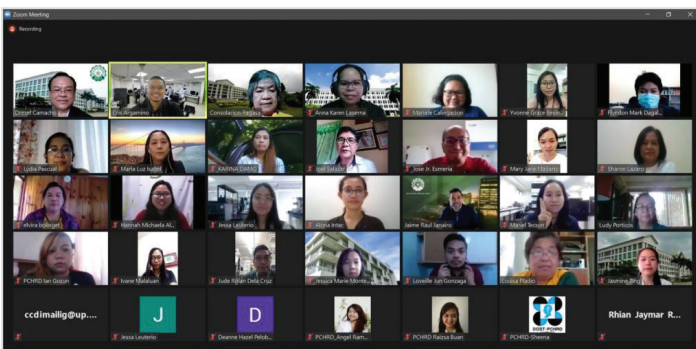
DOST-PCHRD established Tuklas Lunas to pursue drug discovery and development by leveraging on the country's very own biodiversity. With the fellowship program, it aims to support selected researchers from Tuklas Lunas Implementing Agencies (TLIAs) across the country.

As the lead institution for the project, DLSU provides the experts and instruments to support the TLIAs in their research, particularly in the conduct of molecular structure elucidation. The topics include the chemistry of natural products, NMR (nuclear magnetic resonance) spectroscopy, and chromatographic techniques.

The University's learning system, AnimoSpace, will be used to conduct

the online lecture sessions, online laboratory activities, and individual mentoring sessions. Its faculty experts will also expose the participants to DLSU's vast collection of journals and online subscriptions, and provide training on accessing SciFinder.

The Fellowship Program was officially launched on October 19 by DLSU and DOST-PCHRD via Zoom. The selected Tuklas Lunas fellows and designated mentors were introduced in the said event. The fellows were also oriented on what to expect during the four-month engagement in the program.





## ARAW Outstanding Research of the Year

**DLSU STUDENTS BAGGED THE OUTSTANDING RESEARCH OF THE YEAR,** the highest recognition given in the 13th Annual Research Awards (ARAW) hosted by the Polytechnic University of the Philippines (PUP) in collaboration with the Department of Science and Technology last October 28.

With the theme “Facing the Challenges of Industry 4.0 through Science and Technology,” the ARAW awards gave recognition to outstanding researches in three categories: scientific, innovation, and commercialization.

The DLSU team initially won in the Innovation Research Category for their research, “Remote Controlled Surface Vehicle for Lab-Lab Algae Harvesting with DSP Assisted Navigation.” Among the winners of the three categories, DLSU was chosen to take the top prize.

The team is composed of Nathaniel Dela Cruz, Aaron Clyde Dublin, Maxine Louise Genchez, and Johannes Christian Geronimo, who worked under the mentorship of Dr. Edwin Sybingco and Engr. Jose Martin Maningo, faculty members the Electronics and Communications Engineering Department, and University Fellow and Academician Dr. Alvin Culaba of the Mechanical Engineering Department.



## International tax competition 1st runner-up

**FROM MORE THAN 3,500 STUDENTS FROM 25 UNIVERSITIES IN ARGENTINA, INDIA, AND THE PHILIPPINES,** DLSU student Jillian Rae Chua was declared 1st runner-up of the Young Tax Professional of the Year 2020 (YTPY) in an awarding ceremony held last October 21.

Organized by the Ernst & Young Global Delivery Services (EY GDS), the international tax competition is designed to recognize and foster the next generation of tax leaders from different EY GDS locations. It gives participants the opportunity to share experiences with people from a range of backgrounds, cultures, and undergraduate business disciplines.

Serving as her mentors were Dr. Florenz Tugas and Dr. Joy Rabo, faculty members of the Accountancy Department. Tugas also served as the external competitions head.

## DLSU faculty members provide learning sessions on SDGs for Philippine HEIs



**TWO DLSU FACULTY MEMBERS WERE INVITED AS MAIN SPEAKERS** during the “Orientation on the Study in the Philippines Program: Focusing on the Localization of SDGs,” a webinar session organized and hosted by the Commission on Higher Education’s International Affairs Office last October 26.

The speakers, Dr. Francisco Magno, associate professor of the Political Science Department, and Norby Salonga, assistant professorial lecturer of Decision Sciences and Innovation Department, are currently leading the efforts of DLSU in the UN Sustainable Development Goals (SDGs) localization through the SDG Hub and Lasallian Social Enterprise for Economic Development (LSEED), respectively.

Magno discussed the role of UN SDGs in research and knowledge partnerships. He presented the framework of his proposed SDG City

in partnership with the City of Manila and how it can help promote democratic governance in achieving the SDGs. He also pointed out the need to focus on both the demand and supply sides of governance and ensure that the necessary structures are built upon the framework of the SDGs.

On the other hand, Salonga shared some localization strategies and the practical applications of SDGs in the areas of social engagement and internationalization in the academe. Specifically, he shared his experiences and insights in developing and implementing LSEED and #WeCAN International Boot Camp and Research Colloquium. He also emphasized on the transformational roles of HEIs in building an inclusive ecosystem of social enterprises promoting and localizing SDGs.

DLSU is the first university in the country to undertake both institutional and national efforts on the localization of the SDGs.

## Collaborative research with Ehime University

**THE DLSU CENTER FOR NATURAL SCIENCES AND ENVIRONMENTAL RESEARCH (CENSER)** through the Biological Control Research Unit and Ehime University's Academia in Marine and Environment Pollution Research (LaMeR) and the Research Unit for Environmental and Health Studies in Southeast Asia organized an international symposium, titled "Research collaboration: Usable science resulting in impact," last November 4-5.

The first day of the webinar focused on health and medical issues, with Dr. Hidemitsu Uno, executive director and vice president of Research and Environment at Ehime University, delivering the welcome remarks. Dr. Kozo Watanabe, unit head of the Research Unit for Environmental and Health Studies in Southeast Asia, gave the opening message.

From Ehime University, the speakers included Dr. Satoru Suzuki, who gave a talk on "Ecological perspective of dissemination of antibiotic resistance genes in marine environment"; Dr. Yasutsugu Suzuki, who shared his study on "Endogenous viral elements and their role in antiviral immunity in mosquitoes"; and Dr. Thaddeus Carvajal, who delivered a lecture on "The status of biological control approaches against Aedes-borne disease: How far are we in effectively controlling this mosquito vector?"

DLSU's Dr. Ma. Luisa Enriquez talked about "Bioassays for natural product research—strategies and methods in the search for anti-cancer activity", while Prof. Maria Nilda Muñoz focused on "Traditional medicine and modern medicine from natural products: That was then, this is now".

During day two of the event, the topics centered on agriculture/ biodiversity. LaMer Director Dr. Hisato Iwata introduced ecotoxicology research from Iwata's lab.

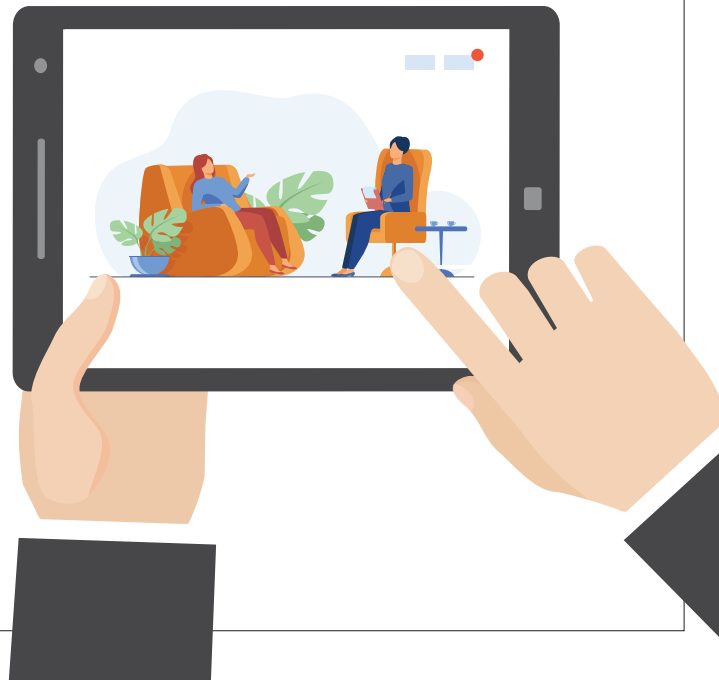
The following were the DLSU speakers and their topics: Dr. Lilia Fernando, "Nanobiosensors for agricultural and environmental applications;" Dr. Alberto Barrion, "Farming landscape and farmer's agronomic practices: Key drivers in cacao insect pests regulation;" Dr. Jose Isagani Janairo, "Monitoring and mitigating microplastic through research;" and Dr. Billy Joel Almarinez, "Biological control of the coconut scale insect, *Aspidiotus rigidus*: Research impacting coconut pest management policy in the Philippines."

## University holds webinar on resiliency and wellbeing for scholars

**THE OFFICE OF COUNSELING AND CAREER SERVICES** in collaboration with Student Affairs Scholar's Support Group and Lundbeck Philippines held a webinar on "Reshaping University Scholar's Resiliency and Wellbeing in the New Normal" last September 25.

This Mental Health webinar was designed primarily for DLSU undergraduate scholars in response to their expressed needs in this time of pandemic. The activity sought to discuss the mental health challenges of DLSU undergraduate scholars in the new normal and the sudden shift to online learning. It also sought to present ways by which the scholars could better deal with these challenges through evidence based strategies.

The speaker was Dr. Constantine Della, a leading figure in the field of psychiatry, recipient of numerous awards and active in academe, training programs, community-based programs, research, and clinical practice.



“Be assured that the more you devote yourself to prayer, the more you will also do well in your work.”

*De La Salle*

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DE LA SALLE UNIVERSITY

## ENGAGEMENT THROUGH SERVICE LEARNING (eSL)

Term 3, AY 2019-2020

**140** eSL webinar participants

**984** Undergraduate and graduate student participants of eSL

**243** eSL community-based projects

**24** Partner communities and organizations-beneficiaries of eSL projects

**19** Faculty members with eSL courses



Source: Center for Social Concern and Action (COSCA)



2401 (twen'te fôr'ô, wun) is a landmark number along Taft Avenue. It is the location ID of De La Salle University, home to outstanding faculty and students, and birthplace of luminaries in business, public service, education, the arts, and science. And 2401 is the name of the official newsletter of DLSU, featuring developments and stories of interest about the University.

2401 is published bi-weekly by the Office for Strategic Communications (AH-21F, intercom 144). Editorial deadline is 3 p.m. Tuesdays. Contributions should include the name, office and signature of the sender. Materials may be edited for clarity or space.

2401 may be accessed online through the URL: <http://www.dlsu.edu.ph>.

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