



University of the Philippines Los Baños

HORIZON



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Public service headlines UPLB 115th Foundation Day celebration

Responding to UP President Angelo Jimenez's call for "honor and excellence in the service of the nation," the 115th UPLB Foundation Day highlights the importance of, and UPLB's staunch commitment to, public service.

Bearing the theme "Expanding Horizons through Impactful Public Service," the celebration will revolve around how UPLB's programs, initiatives, and collaborations have allowed it to extend its reach and capacitate and empower more groups and communities.

The UPLB Museum of Natural History will be debuting the MNH Museum on Wheels. This mobile museum aims to promote biodiversity conservation and

education by bringing the experience of visiting a natural history museum to private and public school students. The MNH Museum on Wheels will be at the Baker Hall parking area from March 6 to 8.

The Interdisciplinary Studies Center for Organic Agriculture (IDSC-OA) and the Agricultural Systems Institute of the College of Agriculture and Food Science (CAFS-ASI) will be holding the second Organic Agriculture Fair at the Organic Agriculture Research, Development, and Extension Center on March 6. The day-long event aims to increase public awareness on organic agriculture. It will feature activities such as farm tours, cooking demos, exhibits, and "OA sa Galing: Voices from OA Advocates" sessions.

As UPLB's founding college, CAFS has a number of activities lined up for this year's Foundation Day celebration, beginning with the CAFS Recognition Day on March 1. This will be followed by the CAFS Field Day on March 4 to 6, the 1st Philippine Agriculture Education Leadership Summit, Milk Fun Day, and the UPLB Campus Heritage Walk on March 5, and the UPLB Agri Stakeholders' Fair from March 6 to 8. CAFS will also have a Family Day and will be launching a book on duck egg production and processing on March 6. They will host a Research Symposium on March 7, and an Extension Forum on March 8.

The UPLB Technology Transfer and Business Development Office (UPLB-

TTBDO) will launch the UPLB brand in a program on March 8 at Baker Hall.

The UPLB Foundation Day Commemoration Ceremony will be held on March 6 at the Pook Pinagtatagan. Recipients of outstanding personnel and team awards in administration, extension, research, and instruction will be recognized at the UPLB Convocation and Awarding Ceremony on March 7. For 2024, UPLB will be awarding 7 individuals and 1 group in the administrative category, 4 individuals and 2 groups in research and extension, and 11 outstanding teachers of some colleges. (Albert Geoffred B. Peralta)

CSC Chair Nograles is UPLB Foundation Day celebration keynote speaker

Hon. Karlo Alexei Nograles, chairperson of the Civil Service Commission (CSC), is the keynote speaker at UPLB's 115th Foundation Day anniversary on March 7, 2024.

Nograles was appointed to the CSC on June 30, 2022. He concurrently serves as the ex officio chairperson of the Scientific Career Council, and the Public Sector Labor-Management Council, and a member of the Foreign Service Institute Board and the Constitutional Fiscal Autonomy Group.

Nograles served three consecutive terms in the House of Representatives, in the 15th, 16th, and 17th Congress. He was instrumental

in passing significant laws, among which is the Universal Access to Quality Tertiary Education Act.

Nograles was conferred the Order of Lakandula with the Rank of Grand Cross (Bayani), one of the highest civilian orders of the Philippines. He also received the TESDA Kabalikat Award in 2013 and 2015, Golden Globe Awards for Excellence in Public Service in 2015 and 2016, and Outstanding Congressman in 2012 and 2015 by Superbrands Marketing International.

As CSC chairperson, Nograles leads the CSC in empowering individuals and organizations in human resource and organizational development. CSC aims to

upgrade service delivery through digitalization and by equipping the workforce with the skills necessary to adapt to online technologies. (Josephine M. Bo)



NOGRALES
Photo courtesy of CSC

Exemplars of Public Service: The UPLB Outstanding Administrative Personnel



LACAP
Outstanding
Professional Staff

Engr. Arnel M. Lacap, Engineer III of the University Planning and Maintenance Office (UPMO), is a familiar name when it comes to electrical supply on campus. This is probably because his name is on everybody's contacts for easy access when a problem with such a vital utility as electricity comes up.

He supervises the maintenance of UPLB's electrical system to keep it in excellent working condition. He also leads the work to upgrade the campus electrical distribution system and to propose electrical projects to future-proof the university.

As lead project inspection coordinator and electrical works inspector, he has contributed to UPLB's infrastructure projects, having supervised 54 projects and completed 59 electrical design plans. Through his expertise as an electrical engineer, he has helped put in place innovations that have reduced the university's electrical expenses and resulted in fewer power interruptions on campus.

His remarkable work ethic and commitment to public service have earned him outstanding evaluations and praise from his colleagues who call him a good team leader and a team player. This has earned him the recognition as the Most Outstanding UPMO Personnel under the professional category in 2021 and 2023.

Known as the UPLB Graduate School's "go-to guy," **Leslie G. Bolaños**, student records evaluator, has a solid reputation for innovation, problem-solving, and getting things done.

Bolaños' tech savvy and forward-thinking led to several innovations at the Graduate School. He designed and implemented the GS Online Document Submission System, the GS Quality Management System, GS electronic forms, and the GS Document Tracking and Filing System. He also spearheaded the online migration of the GS core systems and facilitated its work-from-home setup during the pandemic.

It was no surprise then that Bolaños was tapped to be the UPLB Digital Transformation (DX) program leader. He has been at the forefront of various digital transformation projects such as the Output Reporting System, Executive Information System, and Identity and Access Management System. These projects are designed to streamline operations,

increase efficiency, and improve overall effectiveness within UPLB.

One of Bolaños' notable accomplishments is spearheading the development and implementation of the UPLB Academic Management Information System and the UPLB Faculty Merit Promotion Application. These have revolutionized the management of academic information, providing significant benefits to students and faculty members across the university.

With his unwavering commitment to innovation, leadership, and service excellence, Bolaños has left an indelible mark on the Graduate School and the wider UPLB community.

The Institute of Plant Breeding (IPB) has an established tradition of excellence, passion, and committed public service. **Anthony P. Vicencio**, farm supervisor at IPB's Vegetable and Legume Crops Section, embodies these traits so well. In the eight years that he has been with IPB, Vicencio rapidly became one of the institute's most valued members.

He was instrumental in developing and registering 14 new vegetable varieties and two genetic stocks, displaying his proficiency and profound grasp of the complex and multiple facets and processes in plant breeding. He facilitated the production of over 200 kilos of breeder seeds, impacting the lives of 5000 farmers nationwide and showing his dedication to agricultural development and farmer welfare.

Vicencio is recognized for his problem-solving skills as he is able to produce exceptional results with limited funding, human resource, and equipment. He has ensured his section's peak operational performance through efficient staff deployment, judicious equipment maintenance, and meticulous quality control and implementation of research activities.

During the COVID-19 pandemic, he coordinated efforts to distribute vegetable seeds and seedlings to communities in Bay, Los Baños, and Cabuyao even amid the restrictions of the lockdowns.

His outstanding and exceptional work garnered him the 2023 IPB Outstanding Administrative Personnel in the supervisor category.

Due to the rapid advance of technology, it became necessary for libraries to have a solid online presence and digital accessibility. Fortunately for UPLB's University Library, **Edwardo S. Barrera, Jr.** has proven to be more than up to the challenge.

Barrera began working at the University Library in 2017 as an Administrative Aide VI. His exceptional dedication, passion, and technical proficiency readily became apparent, resulting in his promotion to Administrative Assistant II in 2020. When the library was reorganized, he led the Information Technology Services Section, which developed the library's digital and online services.

One of his major accomplishments was the design and development of the Koha Integrated Library System, a groundbreaking replacement for the iLib Integrated Library System. Koha has since been adopted by other UP constituent universities.

He redeveloped the Library User Monitoring System (UMS) for efficient service delivery and redesigned the University Library Website to significantly improve user experience.

Barrera is instrumental in modernizing and optimizing the University Library's internal processes and workflow through the design and implementation of the Library Property/Equipment Inventory System and the Library Material Inventory System.

Barrera is certainly a force for the University Library's digital transformation.

Mark Efraim M. Gironella, laboratory technician at the Institute of Computer Science (ICS), has been recognized as Outstanding Administrative Personnel (laboratory technician category) for his exceptional dedication and contributions to the institute.

One of Mark's notable achievements is the streamlined operating system update process in the institute's computer laboratory rooms that ensured that all labs are updated with the latest software.

Mark also made valuable contributions to the faculty and administrative offices. He created a printer resetter that not only fixes errors but also saves money and reduces downtimes.

In addition to his regular duties, Mark is an active member of the Bids and Awards

Committee Technical Working Group. He has played a crucial role in improving the procurement process by reviewing and rectifying item specifications and budgets.

Mark conducts thorough inspections and has implemented a three-stage inspection process for network rehabilitation projects, ensuring compliance and quality.

Mark's innovative and efficient work attitude has led to significant cost savings in equipment acquisition and has prevented delays through timely outputs. His dedication and perseverance in carrying out his duties have transformed operations in his organization.

Overall, Mark's contributions as a laboratory technician have been invaluable to the ICS.

IPB's white corn breeding program has achieved much success over the years, partly due to the vital services of **Marvin M. Obando**, administrative aide at the IPB Cereal Crops Section.

Obando was a pivotal member of the group that developed IPB Var 6—the groundbreaking variety of white flint corn with elevated protein content—to respond to the country's food security and malnutrition issues. He was also instrumental in the seed generation and characterization of PVA Cn 5, a high-beta carotene accession of corn.

He worked on DA- and DOST-funded corn projects to improve grain quality, increase resilience to environmental challenges, and to promote nutrition-sensitive agriculture. His membership in these projects highlights his expertise and experience in corn breeding.

Obando's commitment to professional development, lifelong learning, and excellence in agriculture is reflected in his consistent and active participation in seminars and workshops and in his service as a resource person for classes in plant breeding.

He was part of the UPLB-IPB's Cereals Breeding Group when it won the Regional CSC Lingkod Bayan Award, group category, of the 2023 Search for Outstanding Government Worker. He was one of the recipients of the IPB Outstanding Administrative Personnel Award in 2023. (*Juan Paolo A. Aquino, Kristine E. Araguas, Albert Geoffred B. Peralta*)



YESO
Dangal ng Pamantasan

For 17 years, **Florencio C. Yeso** has served above and beyond as a handy asset of the University Health Service (UHS).

Need transport to the hospital? Yeso's on it. Got broken tiles, faulty circuits, or gloomy walls in need of fresh paint? Yeso's here with his tools. Need a new cabinet for hospital files or a ladder for the emergency exit? No problem, Yeso is on his way!

Without complaint or compromise, Yeso has continuously stepped up to

ensure that the UHS remains safe and comfortable for its patients, visitors, and staff. He has also shown initiative to learn new skills to support the UHS medical team in learning CPR or cardio-pulmonary resuscitation and has become one of UHS' emergency responders.

His dedication to service and willingness to help shines through amidst difficult times, such as when he continued to drive COVID-19 patients and transport swab specimens to the UPLB COVID-19

Molecular Diagnostic Laboratory despite prevalent fears of infection.

In selflessly sharing his wide range of skills to serve UPLB constituents and the community surrounding the University, he has earned the recognition of being UPLB's Outstanding Administrative Personnel. (*Jessa Jael S. Arana*)

The College Outstanding Teachers



Asst. Prof. Jason F. Pozon
CAS Outstanding Teacher



Assoc. Prof. Felisa L. Malabayabas
CFNR Outstanding Teacher



Assoc. Prof. Jenielyn T. Padrones
CFNR Outstanding Teacher



Asst. Prof. Arthur Glenn A. Umali
CFNR Outstanding Teacher



Asst. Prof. Renen Szilardo C. De Guzman
CEM Outstanding Teacher



Engineering Services and Motorpool Unit

Outstanding Administrative Support Team

The **Engineering Services and Motor Pool Unit** (ESMU) of the National Institute of Molecular Biology and Biotechnology (BIOTECH) has been providing support services to BIOTECH and the UPLB community. The ESMU team is composed of engineers, technical staff, mechanics, and other personnel.

ESMU initiated the establishment of the BIOTECH Water Station to help supply deionized water for instruments and experiments, as well as purified drinking water for staff and visitors. Deionized water is used in biological research and food processing, and is safe to use with sensitive instruments and chemical compounds.

This initiative, launched in 2022, provided a practical solution in the in-house testing operations of BIOTECH's Philippine National Collection of Microorganisms (PNCM) Laboratory and ensured the quality and safety of the water that they use. By doing this, ESMU ensures uninterrupted laboratory productivity while promoting public health.

ESMU provided continuous water and electrical supply to sustain critical projects. It also provides reliable transportation service for its staff.

Beyond providing support and service to ensure the accomplishment of BIOTECH's mandate, ESMU has also served on the front lines during the COVID-19 pandemic, ensuring transportation, water supply, and electrical services, and even assisting during the construction of the UPLB COVID-19 Molecular Diagnostic Laboratory. *(Kristine E. Araguas)*

Blazing Trails and Empowering Communities:

The UPLB AGORA Outstanding Research and Extension Personnel and Projects



NAVASERO
Outstanding Extension Personnel

Marcela M. Navasero, recipient of the 2024 UPLB AGORA Outstanding Extension Personnel Award, is a Scientist II at the National Crop Protection Center (NCPC).

She is a key member of the NCPC Quick Response Team (QRT), which provides technical assistance in crop protection all over the country. Her expertise and dedication have earned her a prominent place in the field, reflecting the university's commitment to agricultural research.

Navasero's notable research achievements include investigating the red-striped soft scale, a new pest affecting sugarcane at the Sugar Regulatory Administration-Luzon Agricultural Research and Extension Center. In response to concerns about unidentified insect pests

in sugarcane crops, Navasero and her team conducted field visits, collected samples, and performed morphological and molecular identification. The pest was identified as *Pulvinaria tenuivalvata* (Newstead). Identification is crucial to pest management and control.

Another significant research accomplishment of Navasero is addressing the *Brontispa longissima* pest problem in coconut trees in Luzon. This invasive pest poses a severe threat to coconut trees, causing scarring and potential death. Navasero successfully implemented biological control measures by releasing predatory earwigs in Nagcarlan, Laguna. Biological control of pests helps in reducing the use of harmful chemical pesticides. The project's outcomes,

including publications and educational materials, have been widely shared, and ongoing inspections continue to monitor infestations.

Navasero's research also includes the discovery of biological control agents against the onion armyworm in Luzon and addressing the recent pest problem of corn in the Philippines, specifically the fall armyworm. She provides technical assistance to farmers, students, government agencies, and private practitioners.

This award is just one of the recognitions given to Navasero in recognition for her exceptional contributions in her field. *(Juan Paolo A. Aquino)*

UPLB BIDANI

Outstanding Extension Project

For 45 years, the Barangay Integrated Development Approach for Nutrition Improvement (BIDANI) Network Program has significantly contributed to the overall health and vitality of people in seven regions in the country.

BIDANI is well-known for its three innovative strategies: the Barangay Integrated Development Approach (BIDA) focusing on awareness, empowerment, and capacitating the community to participate in planning, implementation, monitoring, and evaluation of local development projects; the Barangay Management Information System (BMIS), involving the identification of barangay nutrition needs, development planning, designing, implementation, monitoring, evaluation, and the promotion of capacity development of municipal and barangay leaders in e-governance; and the Participative Nutrition Enhancement Approach (PNEA), which uses a participative

strategy in preventing malnutrition through the lifecycle approach and the food promotion production and market-driven activities at the household level.

UPLB BIDANI serves as the national program coordinator, fostering a sense of ownership and collective responsibility for the nutritional well-being of over 647 barangays, 32 municipalities, 6 cities, 11 provinces, and 8 regions in the country. Through the results of the impact assessments conducted in 2023, its seven partner state universities and colleges (SUCs), revealed very high satisfaction with UPLB-BIDANI's overall management of the program and service delivery.

BIDANI has also published research papers proving the vital role of the program in community development and nutrition improvement as an academe-led extension program.



With BIDANI's innovative strategies, dedicated personnel, community impact in nation-building, and program effectiveness, this extension project has accomplished the vital key thrusts of the UPLB AGORA, or Accelerating Growth

through One Research & Extension in Action, specifically Future Communities and Institutions, Resilience and Sustainability, and One Health. *(Kristine E. Araguas)*



Asst. Prof. Marife B. Dapito
CHE Outstanding Teacher



Asst. Prof. Kristina SA. Cordero-Bailey
CHE Outstanding Teacher



Assoc. Prof. Marison Felicidad R. Dy
CHE Outstanding Teacher



Assoc. Prof. Angelina R. Bustos
CHE Outstanding Teacher



Prof. Roger A. Luyun, Jr.
CEAT Outstanding Teacher



Asst. Prof. John Paolo A. Ramoso
CEAT Outstanding Teacher



Asst. Prof. Maria Kristina G. Alinsunurin
CPAf Outstanding Teacher



Banana Bunchy Top Virus Omics Project

Outstanding Research Project

The **Banana Bunchy Top Virus (BBTV) Omics Project** is a culmination of collaborative innovation in crop biotechnology and plant breeding research at UPLB that embodies interdisciplinary excellence under the IPB Banana Varietal Improvement Program (BVIP) framework. Bananas are a staple food and a major economic crop in many parts of the world. BBTV is a serious threat to banana cultivation as well as to food security and agricultural livelihoods.

This project has strengthened the country's banana biotechnology research, from safeguarding local banana genetic

diversity to BBTV host resistance screening with advanced omics techniques. It is a comprehensive approach to banana production constraints that has made extensive developments in combating banana BBTV. It has also been successful in developing DNA markers to detect gene expressions associated with resistance and susceptibility in bananas and allele-specific markers for resistance genes in bananas against BBTV.

The BBTV Omics project employed state-of-the-art molecular profiling which enabled the identification of genetic markers associated with BBTV resistance

for marker-assisted breeding. The project also had the Philippines' first banana hybridization breeding block, a significant leap in banana breeding, as it offers new genomic resources and enhances the Philippine banana genetic diversity. It integrated transcriptomics in the breeding program to create a holistic understanding of the plant's response mechanisms to BBTV infection.

The project developed two patentable technologies: one is the 1K SNP panel, designed for targeted genotyping-by-sequencing in bananas and another one whose patent is pending with IPOPhil.

This second technology is a recipient of the Invention Disclosure Award from the UP System in 2023. The award shows the project's commitment to advancing banana cultivation and research.

The BBTV Omics Project has produced and published research papers that earned 13 prestigious awards from various scientific conferences and award-giving bodies. It has contributed significantly to the focus area of Food Security and Sovereignty concern of the UPLB AGORA, by addressing critical challenges in future-proofing the country's banana industry. *(Kristine E. Araguas)*



DUMANDAN
Outstanding Junior Researcher



MALABRIGO
Outstanding Researcher
(Senior Faculty)



NEPOMUCENO
Outstanding Senior Researcher

Nico Dumandan, the 2024 UPLB AGORA Outstanding Researcher (Junior REPS), is a university researcher at the National Institute of Molecular Biology and Biotechnology (BIOTECH). His accomplishments in biotechnology, from research breakthroughs in two laboratories that he heads—Feeds and Specialty Products Lab and Oils and Fats Lab—to commercializing technologies, are groundbreaking.

They showcase how technological innovation fosters food security, sustainable resource use, and inclusive growth, which are crucial to attaining the UN Sustainable Development Goals (SDGs).

Dumandan contributed to the development of a bioprocess system to produce Protein Enriched Copra Meal (PECM®), making it a viable and cheaper alternative to imported soybean meal.

He also led in the market study and commercialization of ImmunoDefense® Animal Probiotics by developing a high-cell concentration cultivation process that addresses the limitations of the production and maintenance costs associated with probiotics.

Dumandan spearheaded the discovery of Microbead, a refinement of BIOTECH's existing animal probiotics for use in aquaculture. This technology contributes significantly to advancing the sustainability and diversification of aquaculture farming.

His commitment to holistic approaches that consider the interconnectedness of human, animal, and environmental health under the One Health focus area of UPLB AGORA is exhibited in his work to harness natural antioxidants from sugarcane phenolics, using pili pulp oil in food, cosmeceuticals, and pharmaceuticals, and in multi-omic studies on dietary feed inputs that affect animal growth, immunostimulation, and disease resistance.

He partly accomplished these through collaborations with various sectors, which

helped BIOTECH acquire cutting-edge analytical laboratory equipment.

Dumandan's groundbreaking research and the successful commercialization of his innovative products have advanced the frontiers of biotechnology, bringing life-changing innovations that help the agri- and aquaculture sectors.

Advocates of forest conservation have found an ally in **Prof. Pastor L. Malabrigo, Jr.** of the Department of Forest Biological Sciences under the College of Forestry and Natural Resources.

Dr. Malabrigo's explorations and studies of Philippine forests have contributed significant scientific knowledge that has helped protect biodiversity-rich areas and indigenous culture. Among his significant achievements are the discovery of three new plant species and the development of the Biodiversity Assessment and Monitoring System (BAMS) that has been adopted by the Biodiversity Management Bureau as a standard protocol for monitoring the diversity of species in protected areas.

A true advocate for Philippine biodiversity, Dr. Malabrigo led the development of the UP Sierra Madre Nature Conservation Reserve as a research and tourist destination where more people and future generations of researchers can come to appreciate the beauty and importance of forests. This has also turned the forest reserve into an income-generating asset for the University.

A prolific researcher, an enthusiastic mentor, and an inspiring administrator, Dr. Malabrigo is the 2024 UPLB AGORA Outstanding Researcher Awardee in Natural Sciences.

Robert A. Nepomuceno, university researcher at the National Institute of Molecular Biology and Biotechnology (BIOTECH), is a specialist in microbial biotechnology. His groundbreaking research and achievements have

established him as an exceptional researcher in agricultural science.

One notable contribution of Nepomuceno is the genetic modification of rice to enhance leaf architecture, resulting in closer vein spacing. This breakthrough has significant implications for increasing crop yields and resilience, particularly in regions where rice is a staple crop.

His studies on plant-microbe interactions, including the use of biofertilizers and biopesticides, provide environmentally friendly alternatives to conventional chemical fertilizers and pesticides that reduce agricultural pollution and promote soil health, and offer sustainable farming practices.

Nepomuceno's expertise in identifying and managing plant diseases plays a vital role in safeguarding crop health and ensuring stable yields, which are crucial for local economies and global food supplies.

Nepomuceno's pioneering research in developing microbial inoculants, such as Oryzinc, Maizinc, K-SolB, and Bioplasma improve crop yields and nutritional content and also promote sustainable and eco-friendly farming practices. These efforts align with the institution's commitment to contribute to the United Nations' SDGs.

His research "Oryzinc® bioinoculant reduces crop nitrogen and zinc fertilizer requirement by 50%" received recognition from the Hitachi Global Foundation Asia Innovation Award for its contribution to UN Sustainable Development Goal 6 on Clean Water and Sanitation. This technology reduces the need for harmful and costly chemical fertilizers by fixing nitrogen in the atmosphere and solubilizing zinc in the soil.

Nepomuceno's broad range of interests and competencies, spanning from experimental research to project management, highlights his multidisciplinary expertise and ability to contribute to agricultural science. *(Juan Paolo A. Aquino, Jessa Jael S. Arana, Josephine M. Bo)*



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