





### **UPLB** highlights partnerships on 113<sup>th</sup> Foundation Day anniv

More than a century after the first classroom tents were pitched at the foothills of Mt. Makiling, UPLB's dedication to education, research, and development remains strong. On its 113th founding anniversary, UPLB will be holding activities that will serve as groundwork for more robust and relevant initiatives that address societal needs.

With the theme, "Fortifying collaborations with industry and communities," this year's foundation day celebration will have UPLB building linkages and strengthening its partnerships to achieve common goals for development.

Small businesses and industries usher in the celebration at the Foundation Trade Fair from Feb. 28 to Mar. 11 at the College of Development Communication parking lot.

Mar. 4 marks the day of the festivities, beginning with the inauguration of the new University Health Service Emergency Facility, a product of combined efforts of UPLB and UP Alumni.

Another event that will be held is the opening of the Accelerating Growth through One Research and Extension in Action (AGORA) Hub and Exhibit, which will be highlighting its four thematic areas of food security and sovereignty, resilience and sustainability, future communities and institutions, and One Health.

This will be followed by the Awarding Ceremonies for the Retirees and the 2022 UPLB Outstanding Personnel at the Charles Fuller Baker Hall where UPLB will be honoring 12 individuals and a research and an extension team.

In the afternoon, UPLB will honor Her Excellency Saskia de Lang, Ambassador of the Kingdom of Netherlands in the Philippines, with a new Hibiscus rosa-sinensis hybrid developed at the Institute of Plant Breeding under the new Women in Diplomacy gumamela series.

Afterwards, further improvements in campus connectivity and linkages will be marked with the groundbreaking ceremony of the UPLB Fiber Optic Network (Phase 3) and a tour of

the Agro-Industrial and Information Technology Park at the UPLB Special Economic Zone.

Mar. 5 opens with a new partnership opportunity with the Department of Agriculture (DA), through a signing of a memorandum of understanding with Agriculture Secretary William D. Dar.

UPLB will be celebrating the exact date of its foundation with a short virtual program on Mar. 6, which will be live streamed through the UPLB and College of Agriculture and Food Science Facebook Pages and YouTube Channels.

The whole celebration will be concluded on Mar. 7 with the Virtual Grand Launch of UPLB AGORA. Audiences may watch the launch through the Facebook Pages and YouTube Channels of UPLB and the Office of the Vice Chancellor for Research and Extension. (Jessa Jael S. Arana)

### **Dutch Ambassador is UPLB's 2022 Foundation Day guest speaker**

Serving as the guest speaker for UPLB's 113th Foundation Day is the ambassador of the Kingdom of the Netherlands in the Philippines, Her Excellency Saskia de Lang.

Ambassador de Lang lent her support and participation in various online activities with local partners aimed at promoting gender equality and addressing various related themes as



Ambassador de Lang is currently serving as the ambassador of the Kingdom of the Netherlands in the Philippines, Micronesia, Palau and the Marshall Islands, a position she has held since 2019. Prior to that, she served as ambassador of the European Union to the Republic of Congo and head of delegation in Brazzaville.

Under the Ministry of Foreign Affairs of the Kingdom of the Netherlands, she has also done missions to Tunisia, Qatar, Rwanda, and Luxemburg, and served as Special Envoy for Energy and Energy Security, and Interim and Restructuring Manager.

She has also served as ambassador of her country to Mali and Uganda.

the 2021 EU Gender Champion in the Philippines.

The Kingdom of the Netherlands and the Philippines have enjoyed 70 years of diplomatic relations and over 150 years of consular relations, with the former being an important trading partner and one of the consistent top sources of foreign direct investments in the Philippines.

UPLB officials visited the Dutch embassy on Feb. 14 to explore collaborations in instruction, research, and campus development.

A new *Hibiscus rosa-sinensis* hybrid will be named in honor of Ambassador de Lang. The flower belongs to the new Women in Diplomacy hibiscus hybrids series. (Albert Geoffred B. Peralta)

## **Providers of Selfless Frontline and Essential Service**

The Outstanding Administrative Awardees



TRINIDAD



VALENCIA



**Dr. Randolph Trinidad**, recipient of the 2022 UPLB Outstanding Administrative Personnel Award (professional personnel category), has been serving as medical doctor at the University Health Service (UHS) since 2010. He is the chief of clinics and infection control officer, and chair of the Diabetes and Wellness Clinic.

This award is one of two recent affirmations of his dedication to his work. In November 2021, he was awarded as the "Natatanging Kawani ng OVCCA."

He is a member of the Philippine Medical Association; Philippine Academy of Physicians in School Health, Inc. or (PÁPSHI), an exclusive organization of physicians specializing in the field of school health; and the Philippine Academy of Family Physicians.

Dr. Trinidad provided vital service as trainor of the UHS staff on using personal protective equipment. He also served as a post-vaccination screener physician in the community vaccination drive.

He participated in *Oplan Hatid* and *Oplan Sundo*, which UPLB conducted to ensure that students are safely brought to their respective homes amid the difficulties of travel during the pandemic.

He has been providing blood sugar screening and diabetes multidisciplinary consultation for UPLB and nearby communities since April 2012; telemedicine service "Chat with Dr. Papshi" through the Committee on Online Health Inquiry and Screening of PAPSHI during the start of the pandemic, all for free.

He spearheaded donation drives for Taal eruption victims, participating as a volunteer physician in several medical missions, and serving as a resource speaker in seminars. Truly, Dr. Trinidad has a heart for public service inside and outside the university.

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His exemplary public service as Nurse IV at the UHS made **Eugene D. Valencia** garner the 2022 UPLB Outstanding Office

Šupervisor Award.

Valencia performs duties at the Out-patient Department, Dispensary, Emergency Room, Medical Arts Building, and Operating Room complex of UHS.

**GENOSA** 

He has been indispensable in the fight against COVID-19 as he worked to ensure continuous adherence to protocols by hospital staff since its onset.

He implements RT-PCR mechanisms, from scheduling and priming, to the releasing of official RT-PCR results during office hours and even on weekends. He responds promptly and efficiently to all queries and concerns of clients about COVID-19 test mechanisms and processes.

Valencia is also a member of various hospital committees, supervising and overseeing the overall work performance of nurses

He volunteered to serve in Oplan Hatid to repatriate UPLB students during the series of COVID-19 lockdowns, in Operation Tuli during the summer season, and as a surgical team member of the St. Ezekiel Medical, Surgical, Dental, and Prayer Mission Group since May 2010.

He consistently displays passion for his work by handling tasks efficiently and managing people professionally. He finished his MS degree at the Philippine College of Health Sciences, Inc. in Manila.

Otoniel Genosa, recipient of the Outstanding Administrative Personnel Award (office supervisor catergory), is an embodiment of the university frontliner. Amidst the COVID-19 pandemic in 2020, Genosa was one of the first to volunteer for different UPLB initiatives to provide for the needs of the stranded students inside and outside the campus.

He was assigned to head the OVCSA's Oplan Lingap, a program that provided food and material aid to the stranded students in on-campus and off-campus residences

He was also one of the first volunteers of Oplan Kawingan, a food assistance program



for off-campus students affected by the Enhanced Community Quarantine.

During the Oplan Hatid implementation,

he helped process travel requirements of students living in UPLB-managed

For *Oplan Kumustahan*, he was one of the personnel who visited students who

Pre-COVID, Otoniel initiated a provision

of free dorm accommodation outside the campus for nine UPLB students in 2018

He was also one of the authors of the research paper entitled "UPLB OSA's

for One ASEAN Community," which was presented during the Philippine

Best Practices: Moving Toward Efficiency

Association of Administrators of Student

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Records Section, **Tricia Irynn T. Tamisin**, recipient of the 2022 UPLB Outstanding

Administrative Personnel Award (office

Tamisin conceptualized and developed

the UHS e-Desk, a portal for patients to encode, create, and update their

personal information. It allows proper collection and ensures the security of

She also introduced the Out-Patient Consultations and Follow-up platform using an official Facebook Page to serve

She helped conceptualize and develop

the UPLB Online Health Monitoring System (OHMS), a contact tracing tool

As HIV counselor, Tamisin helped set up the UHS HIV clinic in 2019 to provide

HIV screening and counseling sessions. Tamisin also assisted in the UHS Mental

Health Clinic by connecting students

that aims to prevent the spread of COVID-19 infection in the University.

UHS patients during the pandemic.

personnel category), helped elevate

Affairs Annual National Convention at

Siliman University in Dumaguete City.

As the head of the UHS Medical

performance standards through innovative protocols and procedures to

efficiently serve its stakeholders.

patients' information.

needed special attention because of

mental health concerns.

and 2019.

dormitories and coordinated health assessments of students to the UHS.

**TAMISIN** 



**CASTILLO** 



VILLA

to psychiatrists during the course of online consultation.

Tamisin's innovative thinking helped the University adapt to the challenges brought about by the pandemic. She has contributed much to innovations introduced at the UHS and in the university.

The Analytical Service Laboratory (ASL) performs a variety of support services at the Institute of Plant Breeding.

Anyone visiting it will be met with the kindness and professionalism of Elenita R. Castillo, Laboratory Technician II and recipient of the 2022 UPLB Outstanding Administrative Personnel Award (technician/craftsman category).

Castillo conducts chemical and biochemical assays related to nutritional and functional properties of crops, prepares samples and chemical reagents, and assists in supervising laboratory operations such as receiving samples, scheduling, and equipment and laboratory maintenance and repair.

She has contributed to the production of high quality research outputs since 2018. She is acknowledged for her part in the smooth conduct of experiments leading to four publications in ISI/Scopus papers.

Her dedication to her work was such that when ASL was without a supervising academic staff, she took responsibility for that work from 2013 to 2016.

Students who conducted experiments at ASL benefited from her hands-on guidance and instruction, as the many thesis acknowledgement pages thanking 'Tita Leni' can attest to.

Throughout her 43 years of service to IPB, Castillo's love and loyalty to her work is evident in her consistent outstanding performance ratings.

Her recognition as a two-time recipient of the IPB Outstanding Personnel Award shows that the love is very much returned.

There are approximately 600 streetlights scattered throughout the UPLB campus. Their installation and upkeep lies in the hands of Arlen O. Villa, Administrative Aide VI and UPLB's 2022 Outstanding Administrative Personnel (blue collar category).

Villa is a core member of the Electrical Services Section of the University Planning and Maintenance Office, and is the reliable "right hand man" of UPLB's head lineman.



# Nicanor Balahadia, an agroforestry champion

**Outstanding Extension Personnel** 

For. Nicasio M. Balahadia, University Extension Associate II, has been serving UPLB for 38 years. He has been involved in various extension projects within and outside the Mount Makiling Forest Reserve ASEAN Heritage Park (MMFR AHP).

Balahadia is acknowledged by the Department of Agriculture-Bureau of Agricultural Research (DA-BAR) as one of UPLB's experts on rubber production. DA-BAR asked him to become part of the committee that drafted the IRR of the Republic Act 10089 known as the Philippine

Rubber Research Institute (PRRI) Act of 2010.

An advocate of agroforestry and rubber plantation production, Balahadia was involved in the establishment of the Southern Tagalog Rubber Producers Cooperative until it became a sustainable business enterprise.

His involvement in the establishment of the Organic Cacao and High-Value Crops Planter Association (OCHPA) in 2017 was instrumental in making farmers adopt the practice of agroforestry, which resulted in better farm productivity.

Balahadia helped generate about PhP11 million worth of approved extension projects for the University from 2018 to 2020.

He is deeply involved in the conservation and development of the MMFR AHP through the introduction of alternative livelihood activities of informal settlers in the area.

He handled the Environmental Education Program for communities and helped them in creating school mini-forest parks.

He also conducted health and safety measures activities during the height of the COVID-19 pandemic to lessen the impact of the pandemic on the community. (Kristine E. Araguas)

Their team is responsible for maintaining the entirety of UPLB's electrical system – 4 substátions, 526 electrical póles, 254 transformers all spread out over the 568-ha campus.

The University has experienced fewer power interruptions due to innovations that Villa has helped implement, such as clustering of power supply, insulating electrical wires that are too close to trees to prevent fires, and transferring the power line from Animal Science to the Dairy Training and Research Institute pasture area.

When brownouts occur, Villa is always ready to troubleshoot and restore power immediately even beyond office hours, during weekends and holidays, and even in the middle of natural calamities.

Villa is also an upstanding citizen and member of the community, serving as a volunteer electrician, plumber, and member of the Barangay Response Team at his home community of Brgy. Tuntungin-Putho.

He was thrice recognized with the UPMO Most Outstanding Permanent Staff Award in 2018, 2020, and 2021.

(Kristine E. Araguas, Juan Paolo A. Aquino, Albert Geoffred B. Peralta, and John Glen S. Sarol)

# Working in multiple fronts to address low sugar productivity

#### **Sugarcane Crop Improvement Program**

The Outstanding Research Program



As of April 2021, statista.com ranked sugar and sugar confectionery as the 10th top agricultural export, earning almost 100 million USD for the country.

This, despite challenges the industry is facing, among which is low productivity, itself caused by many factors such as the use of low yielding varieties, pests and diseases, and climate change.

The Sugarcane Crop Improvement Program (SCIP) of the Institute of Plant Breeding (IPB) and Institute of Crop Science (ICropS), both units under the College of Agriculture and Food Science has accomplished much to address this problem, earning for them the 2022 UPLB Outstanding Research Program Award. SCIP works on multiple fronts plant breeding, plant pathology, plant physiology, and plant genetic conservation—to produce sugarcane cultivars that are high yielding and have high resistance and tolerance to biotic and abiotic stresses.

It took a tedious and long process for the plant breeding group under Dr. Antonio G. Lalusin of ICropS, to develop advanced sugarcane hybrids that are now under field trial with support from the Sugar Regulatory Administration-Sugar Industry Development Act project.

The team of Dr. Fe dela Cueva, plant pathologist and director of IPB, identified the causes of some sugarcane diseases and screened sugarcane varieties and genotypes to investigate how they react to diseases.

They also developed a standard protocol for acquiring foreign sugarcane varieties and trained their counterparts from seven countries in using the protocol.

SCIP plant physiologist Dr. Evelyn Delfin led her team in using cuttingedge digital imaging and Nearinfrared spectroscopy to identify promising high-yielding, droughtresistant, and waterlogging-tolerant sugarcane genotypes. This will pave the way for developing varieties with these traits.

SCIP produced planting materials of promising sugarcane varieties and hybrids applying a micropropagation protocol developed by the sugarcane *in vitro* team of the National Plant Genetic Resources Laboratory (NPGRL) of IPB.

The team developed and optimized *in vitro* techniques for an efficient and cost-effective strategy to conserve and produce disease-free planting materials. The NPGRL team led by Dr. Olivia Damasco maintains around 200 sugarcane accessions as part of sugarcane breeding and conservation efforts.

SCIP has also helped sugarcane planters through rapid production and distribution of disease-free quality seed/ planting materials.

SCIP is truly ahead in doing its part to elevate the sugar industry in the country. (Josephine M. Bo)

# Helping communities produce their own food

**Edible Landscaping Team of UPLB** The Outstanding Extension Team



When the pandemic began in 2020, the team distributed 20,000 EL kits to communities in urban areas and city outskirts amidst rising food security problems during the lockdowns.

Aside from training sessions, the Edible Landscaping Team disseminated knowledge about edible landscaping by publishing their findings and progress in reputable journals so that it can be formally studied and be adopted by more communities.

The Edible Landscaping Program based at the Institute of Crop Science under the College of Agriculture and Food Science is addressing food security, starting with the garden spaces in Filipino households.

Pioneered in 1999 by the late Dr. Leonido R. Naranja of the then Crop Science Cluster of the College of Agriculture, the project has persisted throughout the decades in pursuit of the vision that "No Filipino should be hungry."

The Edible Landscaping Program leads integrated research and extension

activities, and trains and encourages people to grow vegetables, fruits, herbs, and medicinal plants in place of ornamental plants.

The team brought the technology to schools, barangays, partner government agencies, and even abroad, creating communities that have access to safe and nutritious food.

These benefits are beautifully displayed in their demo-gardens in multiple locations, including the Ornamental Crops Nursery in UPLB, The Valley Cathedral Christian Church in Surigao del Norte, the Department of Agriculture-Bureau of Agriculture Research (DA-BAR) Office and the DA Central Office in Quezon City, among other locations.

The Edible Landscaping Team has also exhibited their edible designs in public events inside and outside the university.

To encourage more people to try edible landscaping, they created the EL starter kit which contains information materials, sample seeds, and basic gardening tools. Beginners who might be new to gardening can start their own edible landscape garden using the EL kit. Now led by Dr. Fernando C. Sanchez, Jr. as project leader, the Program continues to propagate edible landscaping technology to communities and are empowering more individuals to grow their own food while brightening up their environment.

Part of the team are co-project leaders, Maria Charito E. Balladares and Asst. Prof. Rowena P. de Guzman, and their research and technical staff Asst. Prof. Norma G. Medina, Asst. Prof. Ryan Rodrigo P. Tayobong, Asst. Prof. Bryan V. Apacionado, Remuel O. Torres, Melanie C. Ilang-Ilang, John Bryan E. Lawas, and Alessandro Alfred E. Perez. (Jessa Jael S. Arana)

## **Pushing the Frontiers of Science**

#### The Outstanding Researchers



BRILLO

BUOT JR.



SAPIN



**SISON** Posthumous award



MATEO

Research is one of the most important<br/>work being done in UPLB and its<br/>researchers and scientists are among<br/>its valued resources. Giving UPLB<br/>researchers the recognition they deserve<br/>is a time-honored tradition done<br/>every time UPLB commemorates its<br/>Foundation Day. Five scientists, one to<br/>be awarded posthumously, are the latest<br/>to be added to our gallery of honorees.CPI is a localized<br/>strategy, which is<br/>Philippine Counc<br/>and Natural Reso<br/>Development (PC<br/>Dr. Buot is currer<br/>PCAARRD-funder<br/>threatened indig<br/>forests over lime

**Dr. Bing Baltazar C. Brillo** is a professor of political science and development studies at the Institute for Governance and Rural Development of the College of Public Affairs and Development.

Dr. Brillo has written 41 journal articles of which 27 are published in ISI/Scopusindexed journals, 12 in refereed journals, and 2 under review by ISI/Scopus journals.

Of this, he is sole author of 31 and coauthor of 10 with 9 having him as lead author. He has published with the likes of Springer, Taylor & Francis, Elsevier. Wiley, Inderscience Publisher, and IOS Press.

Dr. Brillo's research outputs are novel contributions to social science studies on small lakes, lake governance, small-scale tourism in lower-class municipalities, and the closed fishing season policy.

He is clearly among the most productive in research work and has securely led scholarship in lake governance and development in the country.

Dr. Brillo's abiding dedication to research has consistently earned for him the UP Scientist Award since 2015, the UP International Publication Award since 2014, and other grants and awards from UP and other reputable R&D institutions.

The most recent recognition given to Dr. Brillo is the 2022 UPLB Outstanding Researcher Award, senior faculty/social sciences category.

Dr. Inocencio E. Buot Jr., recipient of

CPI is a localized biodiversity conservation strategy, which is recognized by the Philippine Council for Agriculture, Aquatic, and Natural Resources Research and Development (PCAARRD).

Dr. Buot is currently conducting a PCAARRD-funded project to conserve threatened indigenous plant species in forests over limestone in Samar Island using CPI.

Dr. Buot has collaboratively written with his colleagues and graduate students more than 200 papers from his nine projects on ecology, taxonomy, and conservation biology, 65 of which were published in the last three years. These projects address the UN Sustainable Development Goals on clean water, climate action, and partnership, among others.

He has earned six recognitions from his research work since 2019, including among others, the 2021 CAS Outstanding Senior Researcher. Earlier he was honored with a plant named after him, the *Hoya buotii* Kloppenburg.

Waste to wow! This sums up **Arsenia B. Sapin**'s recent work which earned for her the 2022 UPLB Outstanding Senior Researcher Award.

Sapin, a chemistry and biotechnology expert, with BIOTECH colleague Teresita Ramirez, harnessed bioactive components of agricultural wastes and turned these into products that are beneficial to health and well-being.

One of these is registered under the trade name PhenoFera, a phenolic powder from mango peel and seed wastes.

Phenofera can be used in personal care products to help prevent skin damage and as a whitening and anti-ageing agent. It can put up a defense against Grampositive and -negative common skin pathogens and dandruff-causing fungus.

She recently discovered phenolic powder from mango branches to have anti-diabetic properties comparable to commercial anti-diabetic products. a pectin and co-developed a dietary fiber for which she has an on-going patent application. She is also one of the inventors of the Salmonella DASTM kit that is used for rapid detection of Salmonella in animal feed and food products.

Sapin, a well-published author and a multi-awarded researcher, is pushing the frontiers of science for the environment and to help improve farmers' incomes.

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**Dr. Maria Luz J. Sison** was an expert in host plant resistance to major insect pests of various economically important crops like fruits, cereals, vegetables and vegetable legumes, plantain, ornamentals, and coconut.

She also worked extensively on other crops like wheat, ipil-ipil, and cotton, and contributed to insect transmission studies of pathogens like 'namamarako' in ampalaya, banana bunchy top virus disease, and banana streak virus.

Dr. Sison was a homegrown researcher who finished BS Agriculture (Entomology), MS Entomology (minor in Plant Breeding), and PhD in Entomology (minor in Genetics).

In 2021, she was awarded the IPB Outstanding Senior Researcher Award due to her excellent research outputs as shown by her high-impact publications, developed technologies, and project outputs.

She was also recognized as Leopoldo Uichanco Awardee by the Philippine Association of Entomologists during the Annual Scientific Conference of the Pest Management Council of the Philippines in July 2021.

Just recently, she was given the title of Scientist 1 under the Scientific Career System of the Civil Service Commission and Department of Science and Technology.

The University posthumously recognizes her as one of the recipients of the 2022 UPLB Outstanding Researcher Award as a senior researcher in the natural sciences. John Marty C. Mateo, university researcher at the Institute of Plant Breeding of the College of Agriculture and Food Science (CAFS), provides an invaluable contribution to the University through the chemical and nutritional characterization of different crop germplasm.

For this, he is going to receive the 2022 UPLB Outstanding Junior Researcher Award.

His research work involves the selection of plant genotypes with superior nutritional qualities that can be developed as functional foods. He also studies the role of chemicals in addressing crop resistance to pests and diseases.

These have been instrumental for plant breeders to select superior genotypes used in varietal development.

This resulted in 22 varieties and genetic stocks registered with the Germplasm and Technology Registration and Release Office and two varieties with the National Seed Industry Council for which Mateo is one of the inventors.

In addition, two of his publications earned the UP International Publication Award and one publication was recognized as Outstanding Scientific Paper by the National Academy of Science and Technology of the Philippines.

Since 2016, he has published seven ISI/Scopus indexed journals and coauthored a monograph that translated his work in the chemical characterization of various crop germplasm.

Mateo is involved in 12 IPB interdisciplinary projects, some as project or as study leader.

He has headed the Analytical Services Laboratory Section since 2018. He was also elected as business manager of the UPREPSS from 2019 to 2021 and currently serves as a board member of the Crop Science Society of the Philippines.

the Outstanding Researcher Award for senior faculty/natural sciences category, is a botanist who specializes in ecology and taxonomy.

His work in biodiversity science elucidating floristics and dynamics of vegetation in disturbed landscapes led to the crafting of the Conservation Priority Index or CPI. Aside from their nutraceutical and cosmeceutical values, these products help reduce agricultural waste and could augment farmers' livelihoods.

Setting her sights on another agricultural waste, cacao pod husk, Sapin produced

Dr. Sison who passed away last Dec. 31 is a great loss to the Institute of Plant Breeding, UPLB, and most of all, to agriculture research. A chemist by profession, Mateo is an advocate of science, technology, engineering and mathematics education, and progressive agriculture.

(Kristine E. Araguas and Juan Paolo A. Aquino)

## HORIZON

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