THE PHILIPPINE - AMERICAN Academy of Science & Engineering

PHILIPPINE-AMERICAN ACADEMY OF SCIENCE AND ENGINEERING

PAASE Monthly Newsletter

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***PAASE** Women in STEM: Breaking Barriers, Building Legacies*

In celebration of National Women's Month, we honor remarkable PAASE women leaders whose resilience, leadership, and passion are shaping a brighter future. From groundbreaking scientists to dedicated mentors, their inspiring journeys encourage the next generation to overcome challenges and reach new heights. Let's discover their stories.

As a pioneering scientist and leader in STEAM, Dr. Gisela Concepcion champions research excellence, mentorship, and the advancement of STEM initiatives in the Philippines, working to create better opportunities for future generations of scientists and researchers.

Find and live your IKIGAI through STEAM—balance pursuit of what you are good at (talents), with what interests and excites you (passion), with what you want to do to benefit others (mission), and with what will sustain you to live a comfortable, healthy life (finances).

— Dr. Gisela P. Concepcion

Dr. Gisela P. Concepcion: Advancing Science with Purpose and Mentorship

What sparked your interest in science, was there a particular moment or person that solidified your path?

As a child, I liked numbers, math, quantitation, and exactness. I did not find it in biology or social studies, in the way they were taught at that time in the 60s . I found it in chemistry. We were the first high school batch in my school, the Assumption Convent in Herran, that was taught a year-long chemistry course. My chemistry teacher Mrs. Angeles Torres inspired me and she recognized my talent in chemistry. I loved our chemistry book, including its glossy pages, the explanations in the text, figures and tables, I liked solving the problems at the end of each chapter, and I remember the fragrant scent of the book! I understood atomic structure, I understood the trends of physico-chemical properties in the periodic table, both through vertical groups and horizontal periods. I loved balancing equations and counting electrons in redox reactions, and computing no. of moles and concentrations of solutions, e.g., molarity, molality, and the no. of molecules or particles based on Avogadro's number, as basis for colligative properties; the gas laws, Charles' Law, Boyle's Law, Henry's Law, and pV=nRT, fascinated me. I found quantitation in the science of chemistry which I believe to this day to be the most important fundamental science, since this is a material world. Matter interacts and changes based on energetics/thermodynamics and kinetics. Matter and energy transitions through the solid, liquid and gaseous phases, and through chemical transformations, involving covalent or noncovalent binding, are the core, the subject, of chemistry and biochemistry, which eventually became my area of research. The unseen, (then) "invisible" molecular world unified and explained all phenomena of Nature that I was intrigued about.

As a past president of PAASE and a leader in STEAM, what were the biggest challenges you faced as a woman in your field, and how did you overcome them?
My development as a female scientist and science advocate was greatly influenced by my personal circumstances. I came from a family of nonscientists, many in my family were/are doctors and lawyers, and I almost pursued medicine, and life might have been less challenging for me if I did! :)

An academic career was not the normal path among family members, but my father encouraged me to pursue this path as he witnessed my interests, and I listened to him being my only parent, as I had lost my mother when I was 5 years old. I am the first scientist in my family. My father had no choice but to let me study in UP because I got an NSDB scholarship, as I was encouraged by my HS teacher Mrs. Torres to take the NSDB exam, and major in chemistry in college. After graduating BS Chem in UP Diliman, and teaching in UPLB and UPD for a short period, I got married and started raising a family which delayed my Masters and PhD studies. I began my research with guidance from my mentors NS Lourdes Cruz and NS Edgardo Gomez at UPMSI. Dr. Gomez gave me half-a-lab in MSI because I was a part-time researcher. I went through all the difficulties of doing research and running a lab in the 90's and that is why I wanted to make conditions much better for the faculty, researchers and students who came after me.

How have you used your position and influence to support and uplift the next generation of women in STEAM, both in the Philippines and globally?
In the second stage of my research career, I was introduced to Drs. Chris Ireland and Toto Olivera of the Univ. of Utah, and Dr. Ed Padlan of the US NIH, and they became my strongest research mentors and collaborators. With them, I received local and foreign grants which grew my research program and local collaborations in UPD.

Dr. Padlan recruited me to PAASE in the early 2000s. In 2006, local and foreign-based PAASE members led by me went on a massive campaign in Congress (House of Representatives and the Senate) to increase gov't funding for S&T in the country, culminating in an E.O. signed by Pres. Gloria Macapagal-Arroyo to establish the National Science Complex in UP Diliman. We were brought to Malacanang by PAASE's strongest champion Cong. Luis Villafuerte.

From then on, I resolved to continue championing STEM or STEAM in various ways, e.g., I ran the PhilStar Thursday column STAR SCIENCE for over ten years, soliciting articles mostly from PAASE members, and I co-founded a journal with Dr. Padlan which eventually became PAASE's official journal SciEnggJ (I coined the name and designed the logo), as a science training journal that would feature the work of our young researchers as first authors. Always I got help from persons who were like-minded and believed in what I was doing, like Richmon Pancho.

What unique strengths do women bring to leadership roles in STEAM, and how can institutions foster a more inclusive and empowering environment for women professionals and researchers?
Females are by nature multi-taskers; we have had this role throughout evolution, we are tasked to be principally responsible for the continuity of the human race (this extends to the entire animal and plant kingdoms), with a larger contribution than the parent males to begin with, by virtue of carrying the offspring for months, with the female's physical and mental health epigenetically contributing to the infant's health. Women continue to lead in the Nurture of offspring, weaving it into Nature, through epigenetics, education, training and

conditioning, teaching and learning, as earliest teachers and mentors through childhood and youth. This role of "mothering" extends to academia and universitas, where we find the leaders and guardians of human knowledge, cultures and civilizations. Women have the great potential to nurture nonbiological or academic children, year in and year out, caring for each student and researcher in a personalized way, as they would their biological children, recognizing the unique talents, strengths, as well as areas of improvement, of individual students. Women also tend to ask holistic or multifaceted scientific questions; it is natural for women to be complex and not simplistic thinkers and actors/doers, in daily family life, as in scientific endeavors. And so research projects and scientific problem-solving strategies and output of women scientists also tend to be rich and complex. Women are also generally open to interacting and collaborating with others, tend to have a strong community spirit, and so pursuing scientific collaborations is quite natural to women scientists. While many more men have excelled as scientists and scientific mentors throughout history, given much better conditions today for women to pursue research careers after postgraduate studies, the number of women excelling as scientists will continue to grow.

What advice would you give to young women aspiring to pursue careers in STEAM, especially in overcoming gender biases and making meaningful contributions to their respective fields?
Reflect on your unique strengths and interests as a female human being in STEAM, think of how STEAM is the meaning and purpose of your life. Find and live your IKIGAI through STEAM - balance pursuit of what you are good at (talents), with what interests and excites you (passion), with what you want to do to benefit others (mission), and with what will sustain you to live a comfortable, healthy life (finances).

If you had unlimited resources, what research question would you pursue, and why is it important to you?
Too many research questions continue to fill my mind. At this point, I would like to live my IKIGAI and maintain a work-life (family and friends) balance, maintain my mental, emotional and physical health. I would like to know how long I will keep going and how long I will live.

Dr. Kathleen B. Aviso: Leading with Innovation

What sparked your interest in science, was there a particular moment or person that solidified your path?
Even when I was young, I always performed better and was more inclined in STEM subjects. This made me pursue an engineering degree after graduating from high school. There was no single person that influence me into taking STEM. It was really just my inclination.

As a past president of PAASE and a leader in STEAM, what were the biggest challenges you faced as a woman in your field, and how did you overcome them?
One of the biggest challenges, not just for women in STEAM but for any woman trying to pursue a career, is navigating cultural expectations and stereotypes. In the Philippines for example, women are expected to do most of the housework even when women now need to go to work to help support one's family. This leaves less time for women to focus on how to progress in their careers. Overcoming this requires a strong support network—mentors who provide guidance, colleagues who foster collaboration, and family members who offer encouragement. I was fortunate that I had those.

How have you used your position and influence to support and uplift the next generation of women in STEAM, both in the Philippines and globally?
I feel fortunate to have the opportunity to mentor the next generation of women in STEAM through my profession. Through mentorship, I hope to inspire a love for STEAM and show them that a fulfilling career in this field is within reach. Beyond mentoring, I actively use my position to create opportunities for women to thrive—whether by organizing forums where they can showcase their work or encouraging them to pursue growth and recognition. I believe that what the next generation needs most are role models who give them the confidence to chase their dreams.

What unique strengths do women bring to leadership roles in STEAM, and how can institutions foster a more inclusive and empowering environment for women professionals and researchers?
Women tend to be highly organized and detail-oriented, bringing valuable perspectives and diverse dimensions to scientific research. Their strong sense of empathy and intuition enhances their ability to connect scientific advancements with real-world societal impact, fostering more holistic and impactful innovations.

What advice would you give to young women aspiring to pursue careers in STEAM, especially in overcoming gender biases and making meaningful contributions to their respective fields?
My advice is to keep pursuing what they love and what inspires them. It's essential to recognize that each of us has the power to explore, innovate, and contribute to new knowledge—regardless of gender. Progress happens because of those who never stop learning, challenge norms, and push boundaries. Society evolves when individuals dare to think differently and take risks.

If you had unlimited resources, what research question would you pursue, and why is it important to you?
I continue to try and address the question of how we can use technology or develop technology to create a more sustainable world. While we have made progress in this direction, there is still much more to be done. I firmly believe that sustainability should be a shared concern for everyone, as we have only one planet to protect.

Dr. Tolosa Croucher has dedicated her career to translational sciences and biomedical research. She highlights the importance of nurturing young scientists, ensuring that future generations have the resources and support to succeed.

"Empathy and understanding are essential in leadership, women bring these strengths to the table, fostering diverse and inclusive innovation."

— Dr. Leah Tolosa Croucher

Dr. Leah Tolosa Croucher: Pushing Scientific Boundaries

What sparked your interest in science, was there a particular moment or person that solidified your path?
My father was an elementary school teacher and his way of educating us was to expose us to as many things as possible and show curiosity and creativity by example. It is not easy summarizing his influence on my path to science but the one encompassing picture is that knowing or learning must lead to something tangible and useful. Thus, I find myself in probably the last leg of my career at the National Center for Advancing Translational Science doing exactly what I have always wanted to do.

Another person that I have to mention is my academic mentor, Fortunato Sevilla III. Fortune, as he is lovingly called, was my adviser in both my undergraduate and Masters theses. Through the years our mentorship-mentee relationship has evolved into a close friendship. I did one Balik Scientist stint in 2008 with him as my host. Whenever I am in the Philippines, I would visit him. He always encouraged me and as with my father, he has shown the way through example.

As a past president of PAASE and a leader in STEAM, what were the biggest challenges you faced as a woman in your field, and how did you overcome them?
When PAASE was founded in 1980, science and engineering were a man's world. The men were the leaders and their wives were the social support. By social support, this means they organize the parties, cook the food, do the reception work during APAMS and so on. There was no question that PAASE gatherings were fun, and much camaraderie was developed because of the social support. When I became PAASE President in 2008, I was single and a woman. Therefore, I didn't have the social support of a spouse. As a woman, I was expected to provide the leadership and then more. It was not easy, and I got some push back on the social front. I do not think I overcame this challenge. But PAASE eventually did, particularly when Dr. Giselle Concepcion became president. We suddenly had a woman president who was a leader and then more. On the other hand, before I became President, I had more success as PAASE Secretary. Being a woman and a secretary do not defy expectations and so I did well. Note that there has never been a male PAASE secretary. Or Treasurer. Why is that?

Today, we have more women members, although, I would guess we are still outnumbered by men. The same with the Lectureship Award. This is mirrored in the science and engineering fields not just PAASE. Perhaps the numbers will improve as time goes on.
In my field, the same challenges exist. In the academic groups that I have joined, they are both dominated by men. Although, I contribute just as much to the research, I am expected to organize the parties. This is not a complaint, I enjoy parties. There are other instances where being a woman certainly cramped my success. I accepted some and refused some, that is how one survives.

How have you used your position and influence to support and uplift the next generation of women in STEAM, both in the Philippines and globally?
Before I joined the US federal government, I was a professor of Biochemical Engineering at the University of Maryland Baltimore County. While there, I hosted several students and postdocs from the Philippines, all women, to do their research in my lab. There was also one professor from UP Diliman, Dr. Evangeline Amor, who spent several months in my lab. When she returned to the Philippines, I added her as a supplement to my R01 grant through the NIH Fogarty International Program. I also tried my best to help the Filipino graduate students who came to UMBC get settled, feel at home and just be supported.

What unique strengths do women bring to leadership roles in STEAM, and how can institutions foster a more inclusive and empowering environment for women professionals and researchers?
Women are generally nurturers and, from my experience, are especially able to deal better with 'problem' students or employees. Most of these 'problem' students and employees tend to not be real problems, they are mostly misunderstood. Empathy and understanding tend to be a better approach in guiding these people to success, which are strong suits in women. Inclusivity requires overcoming perceived differences, which again require empathy and understanding. It befits institutions to promote women as leaders since they are naturally wired to be open to diversity of opinions and cultures.

What advice would you give to young women aspiring to pursue careers in STEAM, especially in overcoming gender biases and making meaningful contributions to their respective fields?
Women today have more opportunities open to them. There is less discrimination and more acceptance. In fact, most of our young people today are blind to the biases of our generation. In this instance, we the older generation instead of giving advice should emulate their openness. On the other hand, our generation should show through example that meaningful contributions are only possible through hard work, persistence and grit.

If you had unlimited resources, what research question would you pursue, and why is it important to you?
If I have unlimited resources, I would like to see all the discoveries in natural products from the natural riches of the Philippines be translated into drugs that can cure diseases today and perhaps tomorrow. The discovery of active components in a plant or animal should not stop at isolating small amounts. Enough must be produced to test experimentally in the lab in cells, tissues, animals and then clinically in people. Eventually, the drug will have to be manufactured in very large amounts to be commercially viable. If we must produce these from the natural sources, we might end up depleting those sources. Thus, it is necessary to find a synthetic route for production. Sadly, synthetic chemistry will never be able to surpass the synthetic biology of organisms. Many natural products have very complex structures that are beyond our current knowledge and practice of organic chemistry. Synthetic biology where circuits of genes are utilized in an organized manner as in the organism is the only way to go. This field has seen leaps and bounds in the last decade. With the advent of AI, it becomes even more possible to design gene circuits in cells or in cell-free expression systems to produce natural products that are beyond the reach of organic chemistry today. If I have unlimited resources, this is the field I would like to see into fruition in the Philippines and in the US.

Dr. Tigno champions policies that support women scientists, ensuring equitable opportunities in research and academia. Her work addresses barriers such as caregiving responsibilities, advocating for a more inclusive STEM community.

"Women are natural team players, and in today's world of interdisciplinary research, collaboration is the key to success."

— Dr. Xenia Tigno

Dr. Xenia Tigno: Advocating for Women in Science

What sparked my interest in science?
I went to the U.P. Preparatory School, the high school in the UP system designed to offer a rigorous science curriculum as a preparation for college. Its curriculum differed from most of the country's high schools and was not the same as the UP High School. UP Prep preceded the Phil. Science High School System by at least 10 years, and its first Valedictorian was Baldomero Olivera, who you probably know. Many of our teachers had PhDs or at least a Master's degree. So, the school's culture somehow inculcated in us that we were expected to go into a science field. I first wanted to pursue a degree in Math, but my brother convinced me to study something less abstract, that is Physics. That is why I ended up with a B.S. degree in Physics. My first job was at the European Organization for Nuclear Research (CERN) in Geneva. At that time the field of Biophysics was emerging, and since the research I did at CERN was on Radiobiology, it made sense to pursue something which merged physics and biology. When I returned to the Philippines, I taught a few courses at the UP Department of Physics while also enrolled in the Master's Program in both Physics and Physiology. That was when I met Dr. Ed Padlan, a biophysicist who was visiting his alma mater, and I was inspired by him. So you might say one PAASE President inspired another.

What is the biggest challenge as a woman in my field?
As a graduate student in Germany, with no family nor support group but with two little kids, it was extremely challenging to do my 8-hour rat experiment while navigating caregiving and the household chores. In a way this experience prepared me for my current job, which is to identify barriers to women's careers in the STEAM workforce. Caregiving is not that much of a problem in the Philippines because we have family support and household help, but it certainly is a huge problem for women scientists in the US. I can say without reservation that I owe my PhD to my Filipina yaya, who I illegally smuggled into Germany to help me take care of my two daughters.

In my current position, I feel very privileged to impact the careers of women scientists across the US, since the policies and funding opportunities that we craft in my office and under my purview (as Associate Director for Careers at the Office of Research on Women's Health) are designed to address the issues that women in science face, including providing grant supplements for those experiencing critical life events, like childbirth, adoption, caregiving, and sexual harassment.

The policies and initiatives we implement are designed to level the playing field for women, from early career scientists to even tenured faculty, especially those most disadvantaged. As to the global impact, I am frequently invited by the National Academies to serve as a subject matter expert, particularly when they have an ongoing International Visitors Leadership Program, where the Department of State invites women leaders in STEMM across the world to interact with their US counterparts (who serve as resources). We also work with the Gates Foundation to generate innovative strategies and opportunities to strengthen the female scientific workforce.

Unique strengths of women.
Most women are better Team players than their male counterparts, and this can be very important at a time when most science projects require an interdisciplinary perspective. Women are also more adept at multitasking and thinking ahead because that is their default mode. Judging from women leaders across the globe, I think women are also more thoughtful and judicious in decision-making and more financially prudent.

Academic and research institutions, and even industry, can play a role in empowering women and ensuring their full participation in the STEAMM workforce by providing on-site child-care facilities, factoring caregiving, childbearing, and elder care when setting the tenure clock, adopting family-friendly policies, and being gender-blind when considering promotions.

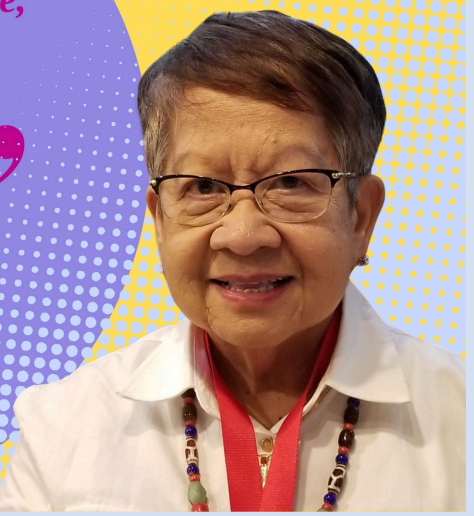
What advice would you give to young women aspiring to pursue careers in STEAM, especially in overcoming gender biases and making meaningful contributions to their respective fields?
pursue your passion and stay the course, despite the odds.

Current passion and research topic.
Incorporating the science of sex differences in all fundamental biology courses, from Pre-K to advanced graduate programs in science, including in continuing education courses for health professionals. Also, to make the next generation of STEMM workforce more resilient and responsive to the needs of the time, consider alternative pathways to training, using an interdisciplinary, multi-sectoral approach that includes immersive experiences in different science sectors, including industry, government, not-for profit organizations, science communications, and community- based research.

Dr. Abellera's journey, from growing up with hardworking parents who instilled the value of education, to earning a doctorate in Zoology, reflects the power of determination. She continues to use her expertise in environmental science to drive meaningful change.

"Our greatest inheritance is not wealth, but knowledge, resilience, and an unbreakable faith in the future."

— Dr. Victoria Abellera



Dr. Victoria Abellera: A Legacy of Perseverance

My Inay and Itay, homemaker and PAL employee respectively, inculcated in their three daughters the significance of the following values for a life well lived: education and self-actualization, self-reliance and sacrifice, hard work, critical thinking, and faith in God. They would tell us as we were growing up that they had already given us our inheritance -- not material wealth or land which they did not have, but trust in God's providence and everything we were already carrying on our shoulders. Neither of them obtained a college degree but their curiosity and love of reading and learning have greatly inspired us.

Long after their passing, our parents continue to be our role models. Inay worked tirelessly each day, preparing our meals, taking us to and picking us up from school on foot. She introduced us to the wonders of nature, often taking us to the nearby ocean and park near Colorado St. where we lived in the section for the poor and the lower middle class, adjacent to the houses of the middle class and wealthy. On that street, Inay was the arbularyo, alleviating primarily the suffering of convulsive babies and children through her expert ministrations which often made the convulsions cease and thereby eliminating the need to bring the children to the doctor whose clinic was kilometers away. Inay was not only our dear friend and confidant but also our inspiration to seek scientific, medical, and humanistic knowledge and skills to benefit humanity.

As a PAL employee, Itay was referred to as "Major" for his street smarts and was called whenever there was a problem to be solved. From Itay I learned to love gardening and the art and science of pest and pollution control. Through cash advances from his meager salary, Itay ensured that his three daughters always had the money for college matriculation and books. Praise God that everything Inay and Itay wished for their three daughters came to fruition. My older sister Milagros obtained her doctorate in History at the University of Michigan at Ann Arbor, I obtained a doctorate in Zoology at Howard University in Washington, D.C., and my younger sister Isabel obtained her medical degree at the U.P. College of Medicine as the first Rosendo Llamas scholar.

From 1964 to 1966 I worked for National Research Scientist, Dr. Carmen Velasquez, from whom I learned to do the rigorous and meticulous work of a laboratory technician. Another woman who greatly contributed to my success is Dr. Dionisia A. Rola who will be 105 in November this year. In 1968, Dr. Rola hired me to teach biology at U.P. College Baguio (now the University of the Philippines Baguio, an autonomous unit of the University of the Philippines System), and gave me the responsibility of being the assistant college secretary. These appointments were only for a year since I was sitting on an item whose owner was coming back after her graduate studies.

I left for the U.S. in 1969 with $150 in my pocket but with a free PAL flight ticket, thanks to my Itay's job. After obtaining my doctorate in Zoology at Howard University in 1975, I began teaching at the University of the District of Columbia (then called Washington Technical Institute) courses in Botany, Zoology, Wildlife Management, and Environmental Science. In December 1999 there was a massive RIF (reduction in force) retrenchment. I was one of around two hundred faculty members forced to retire. I was, however, allowed to finish up my research work on the Rock Creek Oil Spill and on Vegetation Monitoring at Kenilworth Marsh Year Three (U.S. Environmental Protection Agency -- Chesapeake Bay ($50,567). I thank God I was RIFed because ***this circumstance*** proved to be a blessing since it gave me the time and opportunity to take care of my ailing Itay who needed me much more than I needed my teaching job.

From 2000 to 2005, I was an adjunct professor at Howard University and Trinity University and a consultant at the USDA Forest Service. At USDA, the unity leader gave me the assignment of evaluating agriculture and forestry research proposals for possible grants as well as researches already being undertaken. The proposals and final reports of university professors from Historically Black Colleges and Universities were severely lacking in content, with some containing just a paragraph or two but requesting continuance of the research. For such shoddy research work, I recommended the withholding of funds until research competence and integrity could be established. I was hopeful that a permanent job would open up, and when it actually did I applied for it but did not get it. My report must have been considered a case of whistle-blowing. I wrote the Secretary of Agriculture to ask why my application was denied and was informed that the civil suit I filed to contest my being RIFed by the University of the District of Columbia made me ineligible for permanent appointment by a federal agency.

Personal Experiences in Navigating the Professional Sphere

In celebration of Women's Month, the Philippine American Academy of Science and Engineering (PAASE), Central Mindanao University (CMU), and the Institute of Chemistry at UPLB organized a webinar titled ***"Women Leaders in Science: Personal Experiences in Navigating the Professional Sphere."*** The event featured accomplished women in STEM who shared their experiences, challenges, and successes in their respective fields.

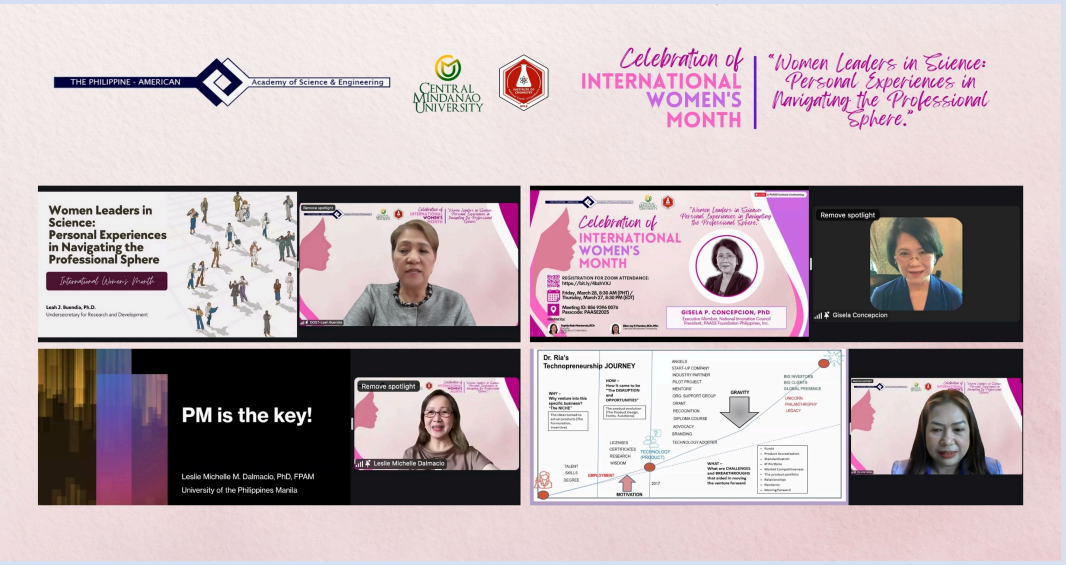
Dr. Leah J. Buendia, Undersecretary for Research and Development at the Department of Science and Technology (DOST), shared her personal journey as a woman in science, highlighting the progress made in gender equality in the field. She describes her experience at the Department of Science and Technology, where she was judged on merit and given opportunities based on her hard work. Usec. Buendia emphasizes three key lessons for aspiring women scientists: success is not a solo journey, courage matters more than confidence, and leadership involves paving the way for others. She encourages mentorship, support, and advocacy for fair policies to improve women's representation in science.

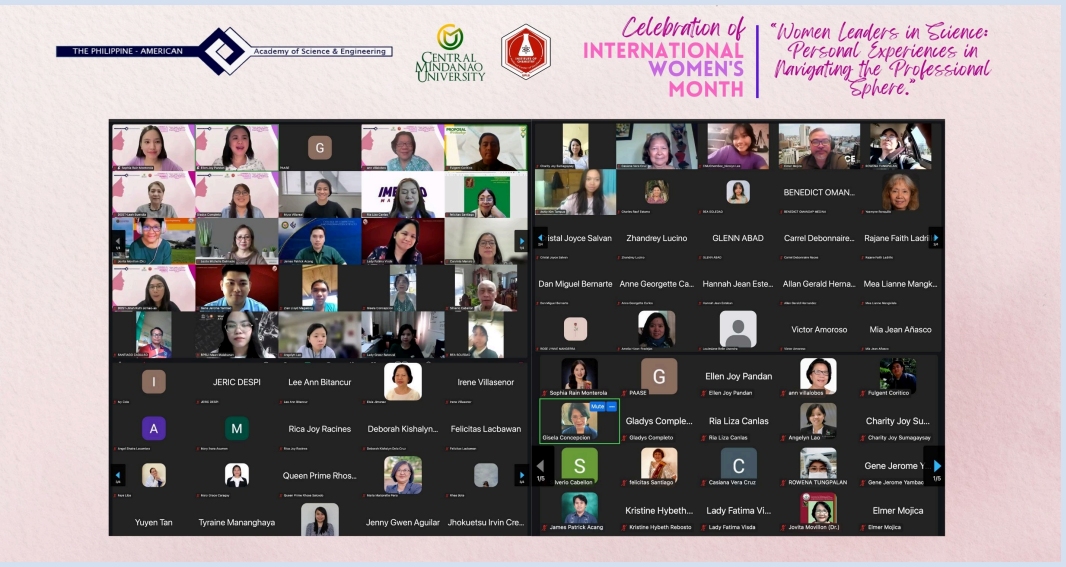
Dr. Gisela P. Concepcion, an executive member of the National Innovation Council, shared er personal journey as a scientist, emphasizing the importance of nature and nurture, cooperation and competition, and humility and pride in scientific pursuits. She discusses her background in biochemistry and her work at the Marine Science Institute, highlighting the significance of mentorship, collaboration, and balancing family life with a scientific career. Dr. Concepcion also mentions her recent research on marine compounds for cancer treatment and antibiotics, emphasizing the importance of moving from in vitro to in vivo studies. She concludes by expressing gratitude for her mentors and students, who have been a source of inspiration throughout her career.

Dr. Leslie Michelle Dalmacio, Vice Chancellor for Research at UP Manila, discussed her research journey, starting at the University of the Philippines, Las Banos, where she took her BS in Biology. Her interest in research began with the biology of small things, particularly molecular and microorganisms. She worked on the *Bt* research at the International Rice Research Institute and later on, hepatitis viruses. She also mentioned her involvement in diagnostic studies on Zika, Dengue, and Chikungunya, which established international collaborations. She then ventured into metagenomics, studying probiotic bacteria on Philippine fermented food and microbial communities. Dr. Dalmacio also shared her experience as a mentor to undergraduate, graduate, and MD/PhD students. Now, she focuses on creating a strong research environment at UP Manila and mentoring young scientists.

Eng. Dr. Ria Liza Canlas, an executive member of the National Innovation Council, talked about her experiences in engineering and innovation. She recalled facing gender inequality in the construction industry, which motivated her to start her own company at 23. She developed an innovative construction product and founded Polylite Technology Inc. She emphasized the importance of perseverance, mentorship, and continuous learning. She also helps other inventors and innovators, particularly women, and hopes to make a lasting impact in her field.

The webinar showed the resilience and leadership of women in science and technology. The speakers' stories highlighted the importance of mentorship, collaboration, and determination. They continue to break barriers and inspire the next generation of women scientists and innovators. Events like this help create a more inclusive and supportive environment for women pursuing careers in STEM.





PAASE celebrates National Women's Month

Babae sa Lahat ng Sektor, Aangat ang Bukas sa Bagong Pilipinas!

This National Women's Month, we honor the brilliant women of the **Philippine-American Academy of Science and Engineering (PAASE)** whose leadership, dedication, and expertise continue to drive progress in science and engineering.

We celebrate:
👩‍🔬 **Our past and present PAASE Presidents**, whose visionary leadership has paved the way for groundbreaking advancements.
👩‍🔬 **Our current PAASE Officers and Board of Directors (BOD)**, actively fostering innovation and collaboration.
👩‍🔬 **Our past BOD members**, whose commitment has strengthened our mission and community.
👩‍🔬 **Our esteemed Severino & Paz Koh Lectureship Awardees**, pioneers and trailblazers in their respective fields.

Their remarkable contributions inspire future generations to break barriers and create a brighter, more inclusive future. Let us continue to champion women in STEM and celebrate their invaluable impact!

#WomenInSTEM #PAASE #NationalWomensMonth 💜


Victoria Guerrero-Abellera, PhD
PAASE President, 1998
Sevilla Detera-Wadleigh, PhD
PAASE President, 1999-2000
Marjorie B. Medina, PhD
PAASE President, 2001
Leah Tolosa-Croucher, PhD
PAASE President, 2008
Happy
WOMEN'S
MONTH
Xenia Tigno, PhD
PAASE President, 2016
Kathleen Aviso, PhD
PAASE President, 2019
Gisela Concepcion, PhD
PAASE President, 2011 2020-2021
Gladys Completo, PhD
PAASE President, 2024-2025


Gladys Completo, PhD
PAASE President, 2024-2025
Maria Marjorette Peña, PhD
PAASE Vice-President & President-Elect
Lourdes Herold, PhD
PAASE Secretary
Maria Luisa Virata, PhD
PAASE Treasurer
Happy
WOMEN'S
MONTH
Angelyn Lao, PhD
PAASE BOD Member
Edna Co, PhD
PAASE BOD Member
Carmen Ablan Lagman PhD
PAASE BOD Member
PAASE
OFFICERS &
BOD MEMBERS


Xenia Tigno, PhD
Past BOD Member
Kathleen Aviso, PhD
Past BOD Member
Happy
WOMEN'S
MONTH
Maria Marjorette Peña, PhD
Past BOD Member
Irene Villaseñor, PhD
Past BOD Member
Christina Binag, PhD
Past BOD Member
PAASE
PAST
BOD MEMBERS


Gisela Concepcion, PhD
Science Awardee, 2009
Ma. Corazon De Ungria, PhD
Science Awardee, 2016
Sevilla Detera-Wadleigh, PhD
Science Awardee, 2016
Happy
WOMEN'S
MONTH
Diana Aga, PhD
Science Awardee, 2019
Kathleen Aviso, PhD
Engineering Awardee, 2021
Rosalina C.M. Simmen, PhD
Science Awardee, 2022
Annabelle Villalobos PhD
Science Awardee, 2023
PAASE
SEVERINO & PAZ KOH
LECTURESHIP
AWARDEES

PAASE STEAM Career Orientations

We are inviting everyone to join us in the upcoming **PAASE STEAM Career Month** this April 2025. This is part of PAASE's foundation month celebration.

The goal of the PAASE STEAM Career Month is to provide students at the high school level particularly those in Grades 11 and 12, with valuable insights on the different STEAM fields so that they are equipped with the knowledge, resources, and inspiration to make well-informed decisions for pursuing careers in science, technology, engineering, arts, and mathematics. Throughout the month-long event, students will engage in interactive sessions and discussions led by accomplished professionals, experts and leaders in their respective STEAM fields.

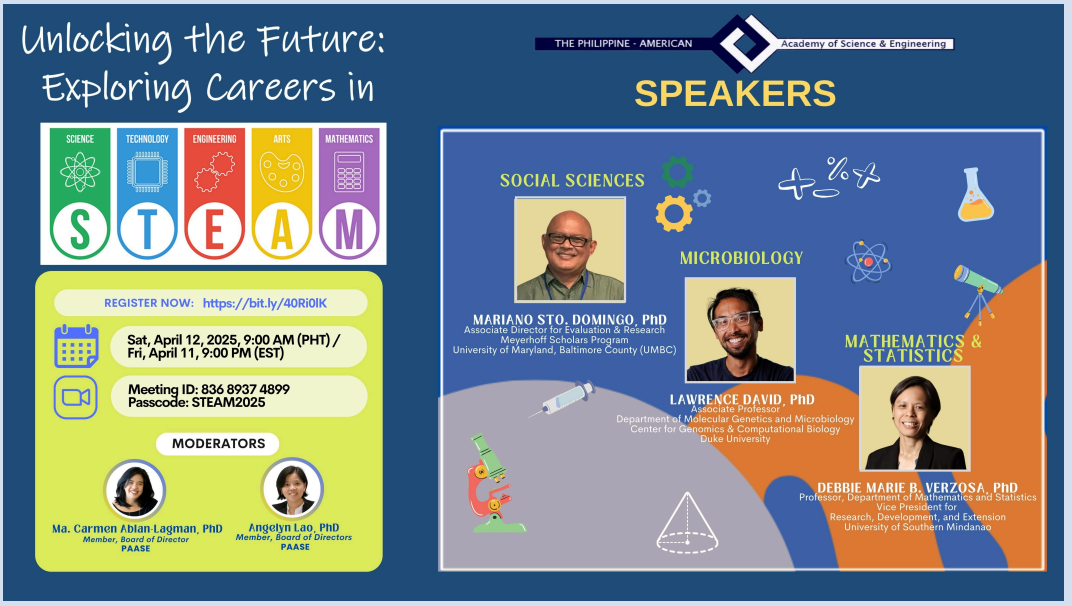
Event Details

Dates:
April 5, 12, 26 (Saturdays, 9-11 AM), Online via Zoom Platform
Zoom Meeting ID: 836 8937 4899
Passcode: STEAM2025
Zoom Registration: **https://bit.ly/40Ri0IK**

Themes:

- April 5: Engineering, Data Science, Physics, Information Technology
- April 12: Health Sciences, Chemistry, Marine Science, Agriculture
- April 26: Careers in Academia, Industry, Government, and Innovation (Start-ups)

Kindly share this event invite to colleagues and highschools that might be interested to attend. Thank you very much.



APAMS 2025

APAMS 2025 CALL FOR ABSTRACTS!

Join us in celebrating PAASE@45 at the 2025 Annual PAASE Meeting & Symposium at the University of South Carolina, USA!

We invite submissions for oral and poster presentations for the Online REC Symposium and Poster Competition (July 14-15, 2025, US) and In-Person Meeting (July 19-20, 2025, US).

Abstract Submission Deadline: May 15, 2025

Submit here: https://bit.ly/40O9Tqb
Be part of shaping the future of research, discoveries, and innovations in science and engineering!

For inquiries, email apams.paase@gmail.com.
#APAMS2025 #CallForAbstracts #PAASE45

APAMS 2025 CALL FOR GRADUATE FELLOWS APPLICATION!

Join us in celebrating PAASE@45 at the 2025 Annual PAASE Meeting & Symposium!

We invite submissions for the Graduate Fellows Application.

Application Deadline: May 15, 2025

Submit here: https://bit.ly/4hx3O6S
Be part of shaping the future of research, discoveries, and innovations in science and engineering!

For inquiries, email apams.paase@gmail.com.
#APAMS2025 #PAASE45

APAMS 2025 POSTER COMPETITION!

Join us in celebrating PAASE@45 at the 2025 Annual PAASE Meeting & Symposium at the University of South Carolina, USA!

Online REC Symposium & Poster Competition: July 14-15, 2025 (US) | July 15-16, 2025 (PH)

In-Person Meeting: July 19-20, 2025 | University of South Carolina

Poster Competition with Cash Prizes!

Top 10 posters will be chosen for the Rapid Fire Competition (3-minute talk + 2-minute Q&A).

Submit your abstract by May 15, 2025!

Submit here: https://forms.gle/D23ofhpX7swfbVAdA
For inquiries, email apams.paase@gmail.com.
#APAMS2025 #PAASE

Congratulations, Dr. Advincula

We are thrilled to announce that Dr. Rigoberto "Gobet" Advincula has been awarded as 2025 Fellow by the JMaterials Research Society (MRS).

This recognition is a proof to Dr. Advincula's outstanding contributions to research on advanced polymers and nanostructured materials and leadership in the frontiers of research, scholarly communication, and education in materials

Congratulations, Dr. Advincula! Your dedication and hard work inspire us all!

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Thank you for your continued support and participation in PAASE.
We appreciate your dedication and commitment to our organization.

Gladys Cherisse J. Completo
Technical Editor

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Philippine-American Academy of Science & Engineering
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