



Genomics for a better Philippines

STRATEGIC PLAN 2019-2025

University of the Philippines Philippine Genome Center





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THE PHILIPPINE **GENOME CENTER**

is a multidisciplinary research and service unit of the University of the Philippines for health, agriculture, biodiversity, and the environment.

The Center serves as the catalyst for the advancement of genomics research and applications in the Philippines through collaborative initiatives and multi-sectoral partnerships.



Its main headquarters is located at A. Ma. Regidor Street, University of the Philippines Diliman, Quezon City. Visit www.pgc.up.edu.ph for more information about the Center, its services and activities.



Message from the President

On behalf of the University of the Philippines, I commend the UP Philippine Genome Center on the publication of its strategic plan, a sound guide and touchstone for the continued evolution of this vital national research institution

That this strategic plan has been finalized in the year 2020, the year a global pandemic has all but shut down the world, is even more significant. Even before the UP PGC's formal launching on November 28, 2011, the founders and pioneers of the UP PGC had already foreseen the critical role a national center for genomics research will play in studying, treating and halting the spread of infectious diseases such as dengue, SARS, H1N1, and now COVID-19 throughout the country. This year, the UP PGC's scientists, researchers and staff have demonstrated the power of genomics research and what the UP PGC can do to promote public health in the country and to save the lives of Filipinos, earning the gratitude of a nation in the process.

Moreover, the five stated goals of the UP PGC-social responsibility, or responding to the needs of Filipino scientists and researchers; genomics appreciation, or raising awareness and appreciation of genomics among the public; operational efficiency; social entrepreneurship; and establishing linkages-are all well aligned with the vision and mission of the University of the Philippines. UP is mandated to perform its unique and distinctive leadership in higher education and development, at both a regional and global level. We in UP aim to contribute to national development through knowledge creation and public service, guided by the principles of honor and excellence. When it comes to genomics research and interconnected fields such as health, medicine, agriculture, biodiversity, forensics and ethnicity, and environmental science, the UP PGC's objective is the same.

Again, I commend the UP PGC's strategic plan, and I pledge my administration's full support for each of your goals and strategic endeavors now and in the future.



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As part of a research-intensive university, the Philippine Genome Center (PGC) aims to use its research to connect scientists with society by developing novel solutions in areas of national need namely health; agriculture, livestock, fisheries and forestry; biodiversity, ethnicity and forensics; and computational genomics and systems biology. It provides an environment that makes state-of-the art tools for genomic research and bioinformatics easily accessible.

In recent months, this has become of even greater importance as we face a global health crisis and a major turning point in history. Using its own facilities, PGC was able to release viral genome sequences of the SARS-CoV-2 from COVID-19 cases in Metro Manila, revealing to the global community key findings on the origin of the infections.



Likewise, its Clinical Genomics Laboratory is an accredited COVID-19 testing facility, employing the rRT-PCR detection kit fully developed at the University of the Philippines. Indeed, PGC's response to the COVID-19 pandemic not only further solidifies its leading position in cutting-edge research in the country but also demonstrates its commitment and readiness to use science and technology to help meet the most pressing human needs and societal challenges.

Since its formal launch in 2011, PGC has built a critical network that seeks to make research useful to society. As outlined in this strategic plan, PGC will keep moving in this direction. Through its different programs, PGC will continue to recognize the importance of working with other scientists and experts, training future scientists and practitioners as well as engaging with government, academia, industry and the public to ensure that it translates knowledge into practice, one that helps improve social, economic and environmental conditions for Filipinos and the rest of humanity.

It is our distinct privilege to be the home of a valuable research center in the service of the Filipino people and humanity.



Message from the VP for Academic Affairs

Message from the Executive Director

The inception of the Philippine Genome Center 10 years ago envisioned a research, training and service facility that would enable our local researchers access to Next-Generation DNA sequencing technologies and serve as a hub for genomics research in health, agriculture, and biodiversity in the country. In advancing this mission, it was imperative to train a new generation of scientists and bioinformaticians to advance the frontiers of knowledge in genomics as a response to the need of Philippine society for personalized medicine, better crops with desirable traits and for better biosurveillance mechanisms to respond to the threats of emerging and reemerging infections affecting animal and human health.

On the occasion of its 10th year, the Philippine Genome Center is taking the opportunity to plan for its strategic priorities in the next six (6) years fully cognizant of the challenges and opportunities open to it with its unique position in the country: the PGC is in the University of the Philippines System but its reach goes beyond UP. The PGC Strategic Plan 2019-2025 is a product of consultations and a series of meetings with program directors, faculty and researchers, administrative personnel, and various stakeholders as we strive for operational efficiency and excellence in our research and delivery of products and innovative services that are timely and impactful to Philippine society.

By 2025, research in the Philippine Genome Center will prioritize the following: 1) social responsibility to address to society's needs such as personalized and Filipinized medicine ("Nararapat na Gamot sa Bawat Filipino"); 2) social entrepreneurship where knowledge of genomics is utilized to generate innovative ideas, explore new business models, and maximize existing ones for resource generation; and 3) genomics appreciation where engagement of the academe, government planners and decision makers, the private sector, and the general public are endeavored to advance knowledge in human health, improve food safety, conserve biodiversity, and enhance agricultural production.

We believe in the strength of our people. We will continue to invest in their growth and professional development and actively strive to expand the talent pool in genomics and bioinformatics in the country.

To be truly transformative, PGC needs to be engaged in genomics research and services that respond to society's needs. A priority is the Filipinome Project, an initiative to study the landscape of the Filipino genome by sequencing the genomes of thousands of Filipinos representing different regions of the country. This will form the baseline information by which we can infer the genetic variations and similarities in our people.

To achieve what we have set out to do in the next five years, active engagements with partners and collaborators, both public and private will be pursued and strategic institutional linkages both local and foreign will be strengthened. Emphasizing the interdisciplinary nature of our work in genomics, PGC will continue to pursue multicenter projects drawing on the strengths and expertise of partners and collaborators as we strive to harness **"Genomics for a Better Philippines."**

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CYNTHIA P. SALOMA PHD Executive Director, Philippine Genome Center University of the Philippines

Executive Summary

Genomics is a transformative technology

that can take on challenges that society is currently facing in virtually all aspects of human life - health, industry, agriculture, culture, and the environment. It has made valuable contributions in research, the translation of which can be applied in the needs of the Philippines, including management of patient healthcare by introducing approaches that are personalized, preventive, and cost-effective.

With a growing reputation as the country's leader in genomic research and the principal provider of sequencing services, the Philippine Genome Center of the University of the Philippines System (UP PGC), positions itself as the catalyst for genomics research in the country that is responsive to the needs of society. Equipped with state-of-the-art facilities and complemented by expertly trained staff with relevant backgrounds, UP PGC continually develops innovations that are responsive to the needs of Filipinos. The first 10 years have been an unwavering collective and collaborative effort to transform the quality and quantity of genomics research in the country.

To further explore the immense potential of genomics in bringing about relevant applications of 'omics research, we present the UP PGC's Strategic Plan for 2019-2025. This will allow PGC to move ahead towards nationwide expansion, operational efficiency, and financial sustainability plans, pushing the agenda to improve the accessibility of genomics technology in the country. We have already looked back at our past and identified the lessons learned. As we begin our next six years, we are now poised to transform current and future challenges into opportunities to transform the Philippine landscape in genomics research.

Our strategic management objectives for 2019-2025 are as follows:

- + To position the PGC as an industry leader in big data analytics involving genomics research in the Philippines
- To increase recognition and stakeholder appreciation of genomics
- To ensure operational efficiency as a research unit and service provider
- To explore new business models and maximize existing ones for resource generation and program continuity
- To establish new linkages and maintain collaborations with local and international institutions

Each objective will be supported by a series of interlocking activities and initiatives that will ensure its attainment. Key actions include active engagement in the applications for large-scale research projects, holding capacity building activities, extensive public outreach and communication with key stakeholders, and partnership building with key local and international research and development organizations.

PGC's Strategic Direction

MISSION

The Philippine Genome Center is the country's leading institution for omics-driven technologies and customized services. We therefore aim to:

- train and provide growth opportunities to our scientists, collaborators, and partners while embracing diversity and inclusivity;
- commit to the highest level of ethical standards on institutional governance and financial management of allocated resources; and
- contribute to the macroeconomic growth of the country by continuously seeking new knowledge and innovations in the field of multi-omics sciences.

VISION

To be the premier institution on relevant translational multi-omics research and services in the country that is responsive to the needs of the Filipinos and the society by 2025.

VALUES

The PGC aims to improve the quality of life of the Filipinos. With the slogan, "Genomics for a better Philippines," all members and affiliates of the Center exemplify the following core values:

EXCELLENCE We aspire for excellence in the way we do things

QUALITY We ensure quality in our output

H INTEGRITY We conduct ourselves with the highest level of integrity

ETHICS

 We abide by the ethical standards in all that we do



PGC's history is a myriad of colors, personal dynamics and challenges, yet, one thing is given - all those connected to PGC, past and present, wish this center to realize its vision, mission, and institutional mantra...

Genomics for a better Philippines abla b

Carmencita D. Padilla MD, MAHPS Executive Director (2011-2016), Philippine Genome Center Chancellor, University of the Philippines Manila

PGC VISAYAS

STRATEGIC PLAN 2019-2025

At a Glance



Establish new linkages and maintain collaborations with local and international institutions

Goal 🖌

OPERATIONAL EFFICIENCY

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Goal 3

Ensure operational efficiency as a research unit and service provider





Goal 1 **SOCIAL RESPONSIBILITY**



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Position the PGC as an industry leader in big data analytics involving genomics research in the Philippines

With its modern sequencers housed within its state-of-the-art facilities, UP PGC has the genomic research capacity to respond to the needs of Filipino scientists and researchers. UP PGC will ensure the advancement of genomics research in the country through the following strategies:

STRATEGIES

Conduct impactful research and scholarly activities towards improving the quality of life in the Philippines

UP PGC recognizes the value of big data analytics as an enabling platform for human resource and knowledge-based capacity building in the scientific disciplines, including the life sciences. The plan is thus to provide the necessary platform for multi-omics data generation, curation, storage, and analysis as well as to provide avenues to tap big 'omics' data analytics expertise to entice and empower local researchers to fully engage in multi-omics sciences with a view on improving the quality of life for Filipinos.

Develop and expand existing programs to capacitate Filipino researchers in genomic studies

UP PGC aims to become the training ground for next generation scientists and experts in the country. As such, UP PGC will continue to deepen the talent pool of Filipino genomics and bioinformatics researchers through capacity-building initiatives that will also welcome collaborations and potential partnerships within the community.





The creation of the Philippine Genome Center in 2009 was anchored on the recognition that genomics and its offshoot technologies was criitical in our University's and country's efforts to enable our Filipino scientists and students to pursue cutting-edge research in health, agriculture, biodiversity, and ethnicity..







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Goal **2** GENOMICS APPRECIATION



Increase stakeholders' recognition and appreciation of genomics

UP PGC recognizes the gap between the general public and technical aspects of genomics. To leverage genomics appreciation in the Philippines, UP PGC will employ effective science communication strategies to raise awareness and encourage deeper understanding of genomics.

STRATEGIES

Increase institutional exposure and representation with key stakeholders

Utilizing tangible strategies to address specified goals, UP PGC works toward promoting and strenghtening the representation of PGC as a multidisciplinary institute catering to the sequencing and bioinformatics requisites of genomics stakeholders in the Philippines.

Strengthen communication channels and engagement with target audience by leveraging various social media strategies

UP PGC's "online" approach in broadening reach among target audience and leveraging genomics appreciation in the country focuses on utilizing available online platforms in the current trend of digital marketing. UP PGC will produce digital assets and communication materials that are visually compelling and understandable to various stakeholders.

STAKEHOLDER ENGAGEMENT

We go beyond the promotion of our technical services.

We connect and empower people for research collaboration. By fulfilling the mandates of PGC, we find opportunities to convene researchers to share how Next Generation Sequencing and Bioinformatics can support pursuits in cutting-edge genomics studies.





Bridging the gap between scientists and the general public is also one of our main priorities towards a better appreciation of science and technology's pivotal role in providing data-driven and fact-based solutions to address issues in agriculture, health and diseases, biodiversity, forensics, and ethnicity.

We convey our core messages and value proposition through target-specific communication materials and activities. More than promoting our capabilities and services, we advocate the significance of our science to school children, high school students, undergraduate and graduate students, and seasoned scientists.







Ensure operational efficiency as a research unit and service provider

Delivering services of excellent quality requires operational efficiency at all levels of an organization. UP PGC will employ the following strategies to embody cost-effectivess in providing its services, products, and support:

STRATEGIES

Implement effective policies and processes to ensure efficiency of operations at all levels by 2020

UP PGC will firm up its standard operating procedures that will serve as an operational guide in ensuring operational efficiency, safety and security, and waste management of the facility.

Employ an efficient human resource management by the end of 2021

UP PGC's human resource management will encompass the career and continuing professional development of the staff as well as the operations management of the organization to identify proper work allocation and human resource needs.

Develop and implement an internal budget monitoring and grant management system by the end of 2021

Operating under the Office of the Vice President for Academic Affairs, UP PGC follows the procedures of the University of the Philippines System. The Research and Grant Office (RGO) will be guided by these processes and oversee the monitoring of research grants and service revenue as well as proper allocation of resourcers for appropriate utilization.



r Strategic Plan 2019-2025 REPORTSAN SUBMIT

SOCIAL ENTREPRENEURSHIP

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Goal **4** SOCIAL ENTREPRENEURSHIP



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Explore new business models and maximize existing ones for resource generation and program continuity

UP PGC will ensure financial sustainability while continuing to deliver high-quality services and pioneering new technologies and techniques in serving the needs of the country in terms of molecular research and diagnostics.

STRATEGIES

Launch the Clinical Genomics Laboratory as a commercial service venture for the UP PGC by mid-2020

> Genomics has a vital role in the delivery and advancement of healthcare systems. Genomic information of individuals can provide a more accurate diagnosis for a personalized course of treatment. Through the Clinical Genomics Laboratory, UP PGC will implement an organized approach in applying genomics in the field of public health and medicine for Filipinos.

Establish and develop a program overseeing the translation of genomic technologies by the end of 2020

> Beyond the discoveries in large-scale research, UP PGC will also set its eyes on taking part in the translation, innovation, and commercialization of genomics for the direct benefit of the public and relevant industries.

Secure market position in the industry as the principal provider of sequencing service in the country by the end of the term

> UP PGC strives to be recognized as the principal provider of sequencing services in the Philippines to protect the genomic and genetic information of biological subjects found in the country. This will also position DNA sequencing as a sustainable research endeavor in the country.



Clinical Genomics Laboratory

Genome Center has embarked on the establishment of the cutting-edge molecular diagnostics for precision medicine molecular tests that can help clinicians and patients understand disease from a genetic standpoint, identifying best-course treatment options or clinical outcomes. Molecular diagnostics have implications in the fields of cancer, infectious diseases, community health, and newborn screening, among others. Through this translation of scientific Laboratory of the Philippine Genome Center aims to provide world-class molecular diagnostics for a healthier Philippines.

discoveries, new and lasting collaborations, continuing inclusive service and education, and channel for technology transfer. Down the line, I hope that every Filipino would benefit from this investment, directly or indirectly.







Philippine Genome Center Strategic Plan 2019-2025

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Goal **5** LINKAGES



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Establish new linkages and maintain collaborations with local and international institutions.

Complementing the first strategic goal of UP PGC to position itself as the industry leader in big data analytics involving Philippine genomics research, UP PGC will build new partnerships and strengthen existing collaborations to extend its impact to different industrial sectors and regions of the Philippines. This will open more opportunities for knowledge exchange and capacity building within the country and with international experts.

STRATEGIES

Promote and develop nationwide and interlocal genomics research

UP PGC will expand its reach to Visayas and Mindanao to cater to the needs of researchers in the regions. As a convener and mentor, UP PGC will optimize its diverse expertise and resources through the establishment of satellite facilities and genomics consortia in the regions for subsequent research collaborations.

Establish sustained partnerships with identified stakeholders in key sectors

In line with UP's mandate to lead as a regional and global university, UP PGC will strengthen and expand its local and international networks with multi-sectoral industries by implementing genomics network programs and conducting roundtable discussions with relevant key players including legislators.

SATELITE

At the Philippine Genome Center Visayas Satellite Facility, we believe that beyond the University of the Philippines, it is the SUCs, HEIs, and other research institutions who are at the frontlines of regional development and progress. We therefore strive to capacitate our partners in the Visayas and beyond by serving as a hub and conduit for researchers, in partnership with the government and industry, to generate relevant and responsive omics-based solutions for the needs of society. By forging lasting partnerships, the PGC VSF-led Visayas Genomics Consortium commits itself to our shared mandate to utilize the benefits of science for the Filipino.

What makes PGC's work even more relevant is its promotion of stronger ties with the government and industry to determine the needs of society and bridge the gap between knowledge generation and application.

Maria Cynthia Rose Banzon-Bautista PHD esident for Academic Affairs (20 sity of the Philippines System



Program Leader, PGC Mindanao Satellite Facility

PGC MSF is introducing a revolutionary R&D technology to improve understanding and resource utilization in Mindanao. Key to its success is the strong engagement of all sectors - academe, government, private industries, and civil society- and a clear public understanding of omics and its benefits. To umpstart our operations, PGC MSF has taken the initiative to promote omics research and organize trainings with the goal of deepening the understanding of omics, enabling the scientific community, and expanding our reach. Central to these is establishing a Mindanao Genomics Consortium which will be our key partner in advancing omics research in Mindanao.



Program Leader, PGC Visayas Satellite Facility

PGC MINDANAO SATELLITE FACILITY

SATELLITE FACILIT



The Process

To establish the strategic initiatives that will set the direction of the Philippine Genome Center for the next six years, UP PGC held a vision and mission workshop and conducted a series of brainstorming meetings, and SWOT analysis of the operations of its core facilities and programs.











UP PGC's strategic plan for 2019-2025 serves as the blueprint of its development as a research unit and service facility. These strategic goals reflect UP PGC's commitment to improve its standing as a multidisciplinary institution, to leverage genomics research in the Philippines, and ultimately, to bring social and economic benefits to the country.



Over the last 10 years, UP PGC has gained the necessary knowledge and experience to respond to the societal needs of the country through genomics and bioinformatics. The Department of Science and Technology (DOST), Commission on Higher Education (CHED), Department of Agriculture (DA), and the University of the Philippines (UP) are among the government agencies that have provided notable funding support to UP-PGC in engaging in 'omics research, forging strategic partnerships, promoting genomics appreciation, and providing employment to Filipinos. UP PGC strives to continue in doing so as it fulfills its mission of utilizing Genomics for a Better Philippines.





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TIMELINE LEGEND	╹╻╹┓╹┓╹┓╹┓╹┓╹┓╹┓╹┓╹┓╹	וייין אין אין אין אין אין אין אין אין אין
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Action Plan 2019 • 2025

	STRATEGIC INITIATIVE	KEY ACTION	CHAMPION LEAD	· · ·	TIMELI	<u>IE</u>				
	Conduct impactful	Engage in multi-disciplinary research programs and projects that can generate and publish 'omics' data for public use, and where products, services, and innovative technologies could be derived	Executive Committee / In-house Researchers	•						
	research and scholarly activities towards	Publish at least two (2) scientific papers in journal articles per program every year	Executive Committee / In-house Researchers	11 11	11 1	1 11				
	improving the quality of life in the Philippines	Develop a publicly available online platform for hosting, accessing, and analyzing multi-omics data	CFB Director							
		Share expertise by serving as resource persons in trainings, workshops, and conferences at least once per semester	Executive Committee / In-house Researchers	11 11	11 1	1 11	11		<u> </u>	
nn		Institutionalize the annual conference on genomics and bioinformatics to facilitate networking of researchers from different institutions	Executive Committee / CFB Director	11 1	11	1 1 1				
		Host a series of lectures, talks, and/or seminars open to the research community at least once a month	Executive Committee						ISIBI	
			Core Facility Directors					١	PON	
	Develop and expand	Provide basic molecular biology and bioinformatics training for high school students, teachers, and/or young professionals	DSCF Director					(RES	
	existing programs to capacitate Filipino	Implement a bioinformatics-tailored internship for undergraduates	CFB Director						CIAL	
	researchers in genomic studies	Offer customized trainings on introduction to next generation sequencing	Core Facility Directors						S 0(
		Conduct echo-trainings for researchers in the different regions of the Philippines	Satellite Facility Directors							
		at least once a year 					• •			
		semester, provided that the topic is on bioinformatics and genomics, or related to a PGC project Acquire accreditation for training programs offered by the end of 2020		•••		• • •				
		Conduct regular training on introduction to bioinformatics and	Core Facility Directors			_		\longrightarrow		
		Next generation sequencing at least twice per year	Core Facility Directors	•••						
		Hold a seminar or lecture on the scientific advances of genomics at least once per month	Communications Team		*****	www	•••••			
e de l		Institutionalize an annual conference on genomics and bioinformatics to increase engagement among key players in the field of genomics in the country 	Administrative Office	111						
		Formulate an ad hoc committee to conceptualize a framework for facility tours geared towards genomics appreciation for various stakeholders	Executive Committee							
	Increase institutional exposure and	Facilitate the development of core facility-driven internship program	Core Facility Directors		111 1	u 111			NOI.	
	representation with key stakeholders	Develop a general communication manual to be adhered to by the satellite facilities, core facilities, and projects by the end of 2020	Communications Team						CIAT	
		Generate and disseminate a manual for answering frequently asked questions about PGC including the general services of the core facilities by 2020	Communications Team / Core Facilities						PRE	
		Participate in at least one scientific conference in the form of an exhibitor's booth, poster presentation, or resource speaker per year	Administrative Office / Core Facilities / R&D Programs	1 1	1			/	S AP	
		Develop an intensive marketing strategy to promote the PGC brand	Administrative Office / Resource Utilization						MIC	
		Conduct institutional outreach activities and roadshows in the different regions	Administrative Office /						ENO	
		Establish a social media and website management system through the practice	Administrative Office /						5	
	Strengthen communication channels	of proper content curation and implementation of a content calendar ————————————————————————————————————	Communications Team							
	and engagement with target audience by									
	leveraging various social media strategies	planning to discuss implementation and feasibility by mid-2020 Ensure a proper technical and responsible reply system is established								
		Implement a laboratory information management system to effectively manage samples	Corro Equility Directors /					\longrightarrow		
	Implement effective	and relevant associated information by 2020	Biobank Core Facility							
	policies and processes to ensure efficiency of	formulate regulatory frameworks on emergencies, potential risks and hazards in the facilities by 2020	Administrative Office							
	2020	Initiate an energy efficiency potential study of all facilities by mid-2020	Administrative Office							
		Develop and use appropriate training/competence development programs and associated materials to understand, adopt, and implement biorisk management strategies	Administrative Office						NCY	
<u> 229</u>		Identify current and future human resource needs considering all aspects of operations within UP PGC by the end of 2019 	Executive Committee							
		Establish an internal recruitment system to ensure employment of qualified and competent personnel by the end of 2020	Human Resources						E	
	Employ an efficient human resource management by	Provide relevant training programs and opportunities to ensure continuing professional development among staff	Executive Committee					(
	mid-2020	Set up incentive programs and reward systems to boost employee satisfaction and retention	Executive Committee					(
		Implement employee assessment methods to identify core areas for growth and improvement by the end of 2020	Human Resource						OPEF	
		Automate tracking and management of administrative expenses and revenue by the end of 2020	Administrative Office							
		Enhance the human resource information system (HRIS) by adding more functions to simplify	Administrative Office							
	Develop and implement	Establish a Research and Grant Office (RGO) that will oversee the monitoring	Resource Utilization and Business							
	internal budget monitoring and grant	Establish standard operating procedures for research grants	Resource Utilization and Business							
	management system by the end of 2021	Spearhead trainings and workshops for project assistants handling grants	Resource Utilization and Business							
		and procurement processes Acquire accreditation for local regulatory requirements prior	Development Team					$-\!$		
	Launch the Clinical	to launch of services of the laboratory ————————————————————————————————————								
	Genomics laboratory as a commercial service	and reputation by the end of the first year of operation Focus on sequencing-based diagnostic services in oncology for the initial year of operations, before	DNA Sequencing Core Facilities / Clinical Genomics Team							
	mid-2020	expanding to core services in cardiovascular health, diabetes and metabolism, pharmacokinetics, and mental health throughout the succeeding years of operation Train and develop key personnel, specifically clinical genomicists and								
- Chri		molecular pathologists, to lead the center and its operations	Clinical Genomics Team						SHIP	
	Establish and develop a	and generate potential revenue-generating technologies from each core facility	Development Team						EUR	
	program overseeing the translation of genomic	for development per year	Development Team	11 11		1 11	11		REN	
	2020	Launch at least one technological product from the identified potential technology platforms every year	Resource Utilization and Business Development Team	1 1	II		1	/		
		Strengthen institutional ties with UP-system technology transfer offices to facilitate patent generation and product marketability	Resource Utilization and Business Development Team						ENJ	
		Develop aggressive brand portfolio to raise awareness with target end-users/customers in market using "tri-media" approach by 2019 (i.e. radio/tv, print, website/social media)	Communications Team						CIAL	
	Secure market position in	Conduct a market analysis study to determine consumer needs and barriers to access of sequencing services, to be completed by mid-2020	Resource Utilization and Business Development Team						SO	
	principal provider of sequencing service in the	Implement waste-reduction strategies to maximize price competitiveness to target a product and service range comparable to international competitors by the end of 2022	Resource Utilization and Business Development Team							
	country by the end of 2025	Build customer service capacity of laboratory personnel to provide consultant advisory service and improve communication	Administrative Office							
		Develop a mechanism to provide real-time service quotations for clients by mid-2020	Core Facilities							
		Establish satellite facilities in Visayas and Mindanao by end of fiscal year 2019	Executive Director /					\neg		
	Promote and develop	Establish the genomics consortium network to facilitate basic regional genomics services by the end of fiscal year 2019	Satellite Facilities							
	nationwide and interlocal genomics research	Strengthen and expand existing local and international linkages through	Agriculture, Livestock, Fisheries &						Ś	
NT2		Engage in collaborative research with consortium members through	Forestry Program						AGE	
AN X		Identify and tap key members of legislation who can champion policies that will help						(LINK	
	Establish sustained partnerships with	secure the PGC's efforts in establishing its research goals and objectives Obtain international funding sources to foster one collaborative research								
	identified stakeholders in key sectors	with an international institution per year 								
		to increase local and international collaborations	Executive Committee							



Directory

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RESEARCH INTERESTS development biology, neuroscience



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RESEARCH INTERESTS molecular phylogenetics, genomics of Philippine endemics



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RESEARCH INTERESTS natural products, immunopharmacology



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RESEARCH INTERESTS virology, zoonosis, antivirals, molecular biodiversity



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