



SLSU - OFFICE OF RESEARCH SERVICES

ACCOMPLISHMENT REPORT



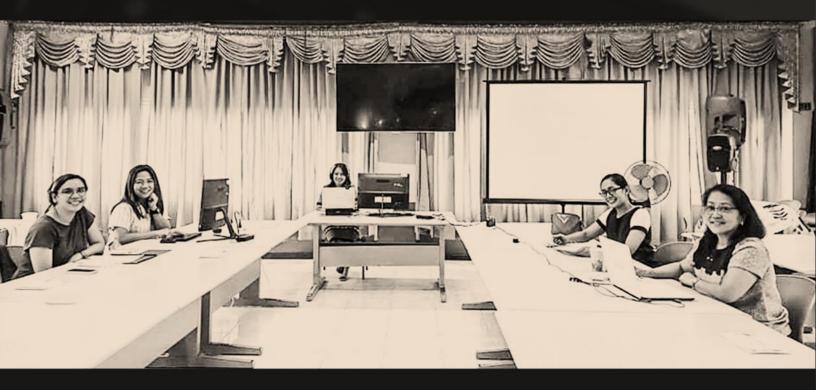
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ACCOMPLISHMENT REPORT





EXECUTIVE SUMMARY

As stipulated in the Research, Extension, Production, Development, and Innovation (REPDI) Manual, the Office of Research Services (ORS) supports the University by providing a meaningful institutional research and development agenda in instruction, research, extension, and production. The research and development initiatives are in line with the SLSU Harmonized Research and Development Agenda (HRDA) that primarily focuses on programs that will produce significant impact on the region's socioeconomic development. Specifically, the HRDA include the following thematic areas:

- 1. Agri-Innovation, Value Addition, and Marketing System
- 2. Environmental Protection and Management
- 3. Health Systems
- 4. Smart Analytics, Engineering Innovations, and Green Technology
- 5. Education Systems
- 6. Cross-cutting concerns

For this year's call for proposals for institutional funding, there were twenty-five (25) proposals subjected to a series of screenings. As a result, a total of 18 research projects successfully passed the whole evaluation process and eventually gained the SLSU Board of Regents' implementation approval with a total funding amounting to Php 2,802,455,00.

At present, there are eight (8) SLSU funded projects that are near completion, while thirteen (13) were reported as completed, with only five (5) of which have pending terminal report submission.

The SLSU faculty researchers also crafted several proposals that were submitted for evaluation under external funding. To date, there are ten (10) proposals submitted for initial evaluation, three (3) have ongoing implementation, and one (1) commissioned research was already completely implemented.

Research projects have not just ended with implementations. Presentations to local, regional, and international fora and conferences; publication to SCOPUS and other referred/indexed journals; research citations; and patenting of technology and inventions are the outputs that have significantly contributed to the University's improved performance in terms of research.

Undeniably, the percentage of plantilla faculty members who are actively engaged in research increased from 32.9% in the 1st quarter of 2021 to 38.98% in the last quarter of the same year. This may be attributed to the SLSU administration's effort to strengthen the research culture in SLSU. And for the part of ORS, it strives to contribute to the said end goal by initiating activities to equip and retool it pool of researchers. In 2021, the ORS team facilitated peer-mentoring and coaching through the Institutional Research Evaluation Committee (IREC) Pre-screening of Proposals, Agency In-House Review of Proposed and Completed Research Projects, and RDE Writeshop for Satellite Campuses. Moreover, the ORS virtually hosted a university-wide writeshop on crafting funding worthy proposals and a workshop on pursuing research publication. The former aimed at encouraging faculty members with no recent research engagements to submit proposals to ORS for funding, while the latter sought to enjoin the proponents of completed projects and those nearing completion to write articles for journal publication.

In addition, the various laboratory and resources under the ORS umbrella also contributed to the fulfillment of its targets. These units include the Microbiology Research and Testing Laboratory (MRTL), Tissue Culture Laboratory (TCL), and the Center for Hazard and Environmental Resource Mapping (CHERM). All the said facilities became committed in providing excellent services to their clienteles, including the researchers. Furthermore, the designated Research Coordinators' active participation in ORS undertakings contributed largely to the effective implementation of the R&D projects and activities.

Little by little, the university is getting closer to its vision of becoming a premier research university despite the existing challenges brought by the pandemic. Apparently, behind the realization of all the RDE accomplishments is the concerted effort of the SLSU researchers and the whole ORS team, led by the undersigned, who gained the full support and backing of the Vice President for REPDI, Dr. Marissa C. Esperal, and the University President, Dr. Doracie B. Zoleta-Nantes. Hence, we dedicate this 2021 ORS Annual Report to all the individuals who worked hard and smart to accomplish commendable outputs to remind them on how well they performed this year, and at a same time, motivate them to aim a notch higher next fiscal year.

DELIA R. BABILONIA, PhD Director, Office of Research Services Southern Luzon State University

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ORS Team

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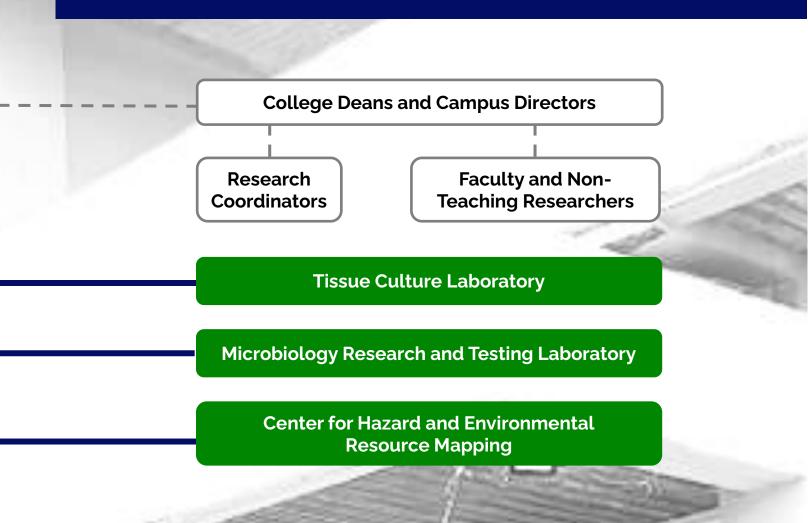


Research Services

Research and Extension Council (REC)

The SLSU Office of Research Services (ORS) is one of the offices under the supervision of the Vice President for Research, Extension, Production, Development, and Innovation (VP-REPDI). The ORS Director is responsible for its smooth operation, as well as the implementation of its programs and services.

In 2021, additional workforce were hired under the ORS, the Accounting Clerk and the Project Development Assistant. The Accounting Clerk directly reports to the ORS Director, but the scope of her tasks includes monitoring of the disbursements and other financial components of the projects under REPDI. The Project Development Assistant, on the other hand, shall monitor the project implementation of research projects and the attainment of the expected outputs for



Research Coordinators

For each college and external campus of SLSU, there is a designated Research Coordinator. The Research Coordinators facilitate the conduct of research and development projects at the college/campus level in coordination They ensure the prompt with the ORS. submission of quarterly accomplishment reports of their college/campus in relation to research. They also assist ORS in mobilizing the project proponents to submit quarterly Progress Reports and copies of Terminal Report. Most importantly, they serve as the helping hand of ORS in the aim to boost the research culture in the university.

For 2021, the ORS expresses its gratefulness to the following Research Coordinators for a job well-done:



Jennifer Edytha E. Japor (College of Administration, Business, Hospitality, and Accountancy



Artemio Rajie M. Villenas (College of Agriculture)



Fritzie L. Azogue (College of Allied Medicine)



Editha E. de Jesus (College of Arts and Sciences)



Pitz Gerald G. Lagrazon (College of Engineering)



Aurita A. Laguador (College of Industrial Technology)



Antonio Romana (College of Teacher Education)



Roberto L. Sulit (SLSU Alabat)



Francis B. Laguardia (formerly for SLSU Catanauan)



Razel C. Tulod (SLSU Catanauan) (formerly for SLSU Lucena)



Harlene L. Dimailig (SLSU Gumaca)



Violeto N. Coronacion (SLSU Infanta)



Cherry C. Favor (SLSU JGE Tagkawayan)



Luis Joel T. Palamiano, Jr. (SLSU Lucena)



Ethel Q. Quesea (SLSU Polillo)



Michelle C. Villanueva (SLSU Tayabas)



Jesus C. Duma (SLSU Tiaong)

Laboratory/Center Heads

TISSUE CULTURE LABORATORY

The SLSU Tissue Culture Laboratory aims to provide the students, farmers, and other community members with knowledge on how to improve their lives and the agricultural industry through tissue culture technology. At present, the laboratory works on producing viable Makapuno plantlets that are healthy and free of contaminants through embryo culturing and rescuing techniques. The plantlets are also available for sale.

While the post of a Laboratory Head is yet to be filled, there are three dedicated personnel that ensure the continuous operation of the laboratory.



Rose Ann M. Martinez Laboratory Technician II



Jamaicah R. Rosales Laboratory Aide II



Roland Oblenida Administrative Aide

MICROBIOLOGY RESEARCH AND TESTING LABORATORY

The Microbiology Research and Testing Laboratory or MRTL is committed to constantly produce high-impact research outputs and consistently provide our clients with the highest quality of research and testing services that are anchored on international procedures and standards. It offers services such as water and food analysis.

A faculty member from the Department of Mathematics and Natural Sciences of the SLSU College of Arts and Sciences manages the MRTL with the assistance of one competent staff.



Maria Luisa A. Enal Head, MRTL



Darlene Faye B. Cadao Laboratory Analyst

CENTER FOR HAZARD AND ENVIRONMENTAL RESOURCE MAPPING

The Center for Hazard and Environmental Resource Mapping or CHERM aims to strengthen collaborative efforts of mapping agencies and stakeholders in the provision of geospatial data and services; capacitate LGUs, SUCs, line agencies, and other interested parties on the utilization of geospatial data and other derivative products; and, provide research-based authoritative geospatial data and services in all the stages of the Disaster Risk Reduction and Environmental Management Cycle, natural resource mapping, and other developmental concerns.

Mr. Ronald Garcia of the College of Agriculture in SLSU Lucban, used to serve as the Center Manager. But, in the latter part of 2021, the supervision was transferred to a faculty member in SLSU Lucena where the center is stationed.



Luis Joel T. Palamiano, Jr. Research Manager, CHERM



PROPOSALS FOR SLSU FUNDING

There are **18** research proposals for SLSU-funding that gained the endorsement of both the Finance Committee and the Academic Committee of the Board of Regents

(BOR). The proposals amounting to **PhP 2,802,455.00** were approved by virtue of Board Resolution No. 58, series of 2021., for implementation in FY 2022.

Table 1.1 Research Proposals for implementation in 2022 under institutional funding

	Proposed Title	Proponent/s	Proposed Budget	Duration in mos.	Thematic Area
1	Acceptability of establishing teleradiology in Southern Luzon State University	Manuel P. delos Santos Brainerd Aldrin Lopez	100,760	12	Health Systems
2	Midwives' spiritual care competency: Basis for spirituality workplace plan	Lorna L. Cano Sandra D. Elma Roylan Almacen	132.165	8	Health Systems
3	Online learning and mental health of college students during the Covid-19 pandemic	Helene D. Daya	41,800	6	Health Systems
4	Techno-Psych Serv: Technology-based psychological services applied to male and female adolescents and adults with special needs	Marissa C. Esperal Michelle V. Ramirez	200,000	24	Health Systems
5	Challenges and resiliency of older adults amidst Covid-19 pandemic	Ana Violeta D. Cruz Maria Luisa E. Barretto Jessica A. Sabas	89,672	12	Health Systems
6	Acceptance of Covid-19 vaccine: A challenge in the Tagkawayan community	Melanie D. Salumbides Cristina D. Nicolas Wilma L. Comia Felix Lampos, Jr.	97,900	12	Health Systems
7	Productivity, profitability and quality of honey, pollen and propolis of stingless bees in various beehive materials	Ma. Isabel V. Caringal Roy S. Dayo Joana Marie P. Del Rio	199.544	18	Agri- Innovation, Value Addition, & Marketing Systems
8	Development of madre de agua (<i>Trichanthera gi- gantea</i>) and Girdled Horn Snail (<i>Cerithidea cingula- ta</i>) pelleted feeds for na- tive pigs	Imelda A. Tangalin Veronica Aurea A. Rufo Manirose S. Lucban	387,145	36	Agri- Innovation, Value Addition, & Marketing Systems
9	Development of langkawas (<i>Alpinia</i> <i>galangal</i> L.) enhanced dilis (<i>Stolephorus</i> <i>commersonii</i>) bagoong	Reydante P. Gordula Veronica Aurea A. Rufo Maripaz T. Lampos	186,000	36	Agri- Innovation, Value Addition, & Marketing Systems

10	Product optimization of DNipa Sweeteners Shared Service Facility (SSF) project in SLSU Infanta Campus	Violeto N. Coronacion Wendy C. Nombrefia Roldan D. Jallorina Mira O. Reyes	199,800	12	Agri- Innovation, Value Addition, & Marketing Systems
11	IoT Soil Nutrient Detecting Device using color sensor and LoRa Technology for rice field	Arvin N. Natividad	198,800	24	Agri- Innovation, Value Addition, & Marketing Systems
12	Level of stress, coping mechanism, and job satisfaction of SLSU faculty amidst Covid-19 pandemic	Ethel Queddeng-Quesea Marites P. De Leon Jericho L. Marasigan	84,700	6	Education Systems
13	Awareness on data privacy vis-à-vis data management practices in Southern Luzon State University	Richard Veluz Leomar C. Miano Aurora L. Sumague	74,800	6	Education Systems
14	Learning challenges encountered by the graduating students amidst pandemic: The case of Southern Luzon State University- Catanauan	Aileen V. Elarco Francis B. Laguardia Kasandra Camille A. Ho	13,200	9	Education Systems
15	Distribution, phyto- chemical screening and biological activities of selected <i>Zingiber</i> Species in Mount Bana- haw de Lucban	Editha E. De Jesus Julieta A. Lindo Riggs Rondilla	366,400	30	Environmental Protection and Management
16	Environmental literacy: A way forward for Climate Change Adaptation	Cherry C. Favor Felix B. Lampos Imelda A. Tangalin Zenaida C. Angeles	157,900	18	Environmental Protection and Management
17	Assessment of COVID-19's impact on Small and Medium Enterprises in Quezon Province through business health check	Jennifer Edytha E. Japor Leomar C. Miano Patrice Grace A. Caneo	161,484	12	Cross-cutting Concerns
18	Behind the tattered fishing net: A story of resilience of the fishing community	Jay-ar C. Recto Esmeraldo G. Arat Cherry C. Favor Rebecca D. Jason	108,900	12	Cross-cutting Concerns

OTHER CRAFTED RESEARCH PROPOSALS

Table 1.2	Other Research Proposals with pending approval
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	Proposed Title	Proponent/s	Proposed Budget	Duration in mos.	Target Funding Agency	Remarks
1	Order Magnoliales trees in the mid-successional forest of Mt. Banahaw de Lucban	Dennis E. Pulan Eraldwin A. Dimailig Ronald C. Garcia	190,990	12	SLSU	On- going revision

2	Product of different varieties of dwarf coconuts for coconut farmers of Quezon ProvinceMoses T. Macalinao Reymar A. Ortega Michelle B. Villanueva Geraldine B. Advincula		_	36	SLSU	Ongoing revision
3	Solid waste management strategic review in the municipality of Gumaca, Quezon	Krish Bernadette P. Palay Harlene L. Dimailig Kristina N. Manalo	75,000	18	SLSU	For initial review
4	Developing and piloting community-based farming systems in Quezon: The role of Systematic Economic Engagement on Depressed Sitios (SEEDS)	Salvo O. Salvacion Ma. Isabel V. Caringal Angelito L. Mangubat	214,500	24	SLSU	Deferred (Project Leader applied for study leave)
5	Time-series forecasting of Covid-19 cases using ensemble machine learning	Renato R. Maaliw, III Dhenalyn A. Dejelo Ma. Genevieve L. Cuarto	180,000	12	SLSU	Pursued under personal funding
6	SHAPE-Mo (Self-Health Assessment for Pregnant and Expecting Mothers Mobile Application)	Evangeline Mecija Mirasol Manlapaz	60,000	12	SLSU	For initial review
7	Competence performance and visibility of SLSU faculty	Rosalinda Abuy 50,000 1		12	SLSU	For initial review
8	Development of an Automated Charcoal Briquetting Machine	Cerfred A. Alcantara Francis B. Laguardia Aileen V. Elarco	_	24	SLSU	For initial review
9	Automated solar energy powered fish dome dryer	Luis Joel Palamiano, Jr.	_	12	SLSU	For initial review
10	The presence of microplastics in SLSU- JGE brackishwater fishpond	Wilma L. Comia Cherry C. Favor Manirose S. Lucban	_	24	SLSU	For initial review
11	Level of information and education campaign on solid waste management in Gumaca, Quezon	Harlene L. Dimailig Krish Bernadette P. Palay	97,900	24	SLSU	For initial review
12	Smart hydroponics monitoring system (IoT- based Projects)	Jobert G. Lomboy Manuel S. Valderama Robert L. Sulit Lyn M. Vargas	103,000	24	SLSU	For initial review
13	Ethnobotanical identification and characterization of indigenous vegetable native to Agta Tribe of General Nakar, Quezon, Philippines	Jose Arnel Sarmiento	_	_	SLSU	For initial review
14	Barriers to online learning and academic perfor- mance of college stu- dents: A mixed-method study	Jan Marie P. Lubuguin Alexis C. Villaflor Jay M. de Loreto Gian Carlo B. Avellaneda	_	6	SLSU	For initial review
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15	SLSU Mushroom Hub: Generating new technology for oyster mushroom	Salvo O. Salvacion Rosie C. Dulay		24	SLSU	For initial review
16	Coastal communities in Tayabas Bay: A propose promotion and risk management program towards health empowerment	Dhenalyn Dejelo Fritzie Azogue Brainerd Aldrin Lopez Monette Suarez	2,000,000	24-36	PCAARRD	Submitted 2nd revision
17	Stock Profiling and Biological Characterization of Pistol Snapping Shrimp (<i>Alpheus</i> spp.) in the Southern Tagalog Region, Philippines: A Baseline for Sustainable Collection of the Community (<i>Project</i>)	Delia R. Babilonia	—	24	PCAARRD	For initial evaluation
	<i>Study Component:</i> Population Ecology of the Snapping Shrimp (<i>Alpheus</i> spp.) in the Southern Tagalog Region					
18	Extent of orientation and Knowledge on GAD advocacies and programs: A basis for GAD training program on mental health	Susana Salvacion Thelma Babia Rodela Baslan	_	_	DOST (CRADLE)	For initial evaluation
19	Assessment of the health status of vulnerable population group towards development of holistic health care and wellness program	Ana Violeta Cruz Dhenalyn Dejelo Melena Quintos	_	_	DOST (CRADLE)	For initial evaluation
20	Valuing Paete's Wood Carving Industry through Cultural and Environmental Conservation <i>(Program)</i>	Kathreena G. Engay- Gutierrez	7,528,078.5	30	DOST NRCP	For initial evaluation
21	Valuing the Art of Carving Wood Behind the Utilization of Native Tree Species (<i>Project</i> <i>Component</i>)	Kathreena E. Gutierrez Mary Ann R. Agudilla Zaldy O. Luna Felino J. Gutierrez, Jr.	_	24	DOST- NRCP	For initial evaluation
22	The Culture of <i>Paet</i> and <i>Ukit</i> : Participation, skills and knowledge transfer of woodcarving tradition in Paete, Laguna (<i>Project Component</i>)	Gino A. Cabrera Doracie B. Zoleta- Nantes Geri Mae A. Tolentino Maybriel O. Tobias	_	24	DOST- NRCP	For initial evaluation
23	Income-generating project toward sustainable community along Tayabas Bay: A livelihoods analysis approach	Jennifer Edytha E. Japor Loretta P. Arroyo May Anne C. Calubayan Maria Concepcion E. Natividad	3,96,1000	12	PCAARRD	For initial evaluation

24	'Plantdemic': Policy implementation and the effects of tourism activities on Mt. Banahaw Biodiversity	Angelo Shan E. Mendoza	567,376	12	PCAARRD	For initial evaluation
24	<i>Plantitos</i> and <i>Plantitas</i> an emerging threat to Mt. Banahaw biodiversity: Basis for enhanced environmental protection measures	Sherwin R. Pernia	680,284	12	PCAARRD	For initial evaluation

2021 Ongoing Research

ONGOING SLSU-FUNDED PROJECTS

Among the **18** ongoing SLSU-funded research projects, **one** is being implemented according to the originally approved work plan

and **seven** are approved for extension. There are also **five** projects with pending Terminal Report submission.

	Proponent/s	College/ Campus	Research Title	Budget	Duration in mos.	Remarks
1	Eriberto A. Casino	САВНА	Partnership between the Management Board of Mt. Banahaw-San Cristobal Protected Landscape (MBSCPL) and Southern Luzon State University towards Multilevel Environment Governance of Mt. Banahaw de Lucban	80,000	12 (July 2018– June 2019)	Approved for extension Expected completion date: December 2021
2	Melvin D. Cadao Dhenalyn A. Dejelo Fritzie L. Azogue	CAM	Teaching strategies for professional nursing education in Southern Luzon State University	130,000	18 (July 2019- Nov. 2020)	Approved for extension Expected completion date: December 2021
3	Maria Luisa A. Enal Darlene Faye B. Cadao	CAS	Southern Luzon State University (SLSU) Nipa Sugar: Product specification, storage stability and comparative quality against other palm sugars	351,250	18 (July 2019– Nov. 2020)	Approved for extension Expected completion date: December 2021
4	Maurine C. Panergo Pitz Gerald G. Lagrazon	CEn	SMAWA: Smart Water Sensor for contamination level	146,000	12 (July 2019– June 2020)	Approved for extension Expected completion date: December 2021

5	Antonio V. Romana Rizaide A. Salayo Maria Lavina E. Fetalino	CTE	Culture of research task value in Southern Luzon State University: An assessment	47,300	7 (Sep. 2020 – May, 2021)	Approved for extension Expected completion date: December 2021
6	Celio P. Seco Edgardo E. Cedeño Razel C. Tulod	Lucena Campus	Development of GSM -controlled bamboo cutter using Arduino	78,000	12 (Sep. 2020 – Aug. 2021)	Approved for extension Expected completion date: December 2021
7	Roland A. Calderon Edgardo E. Cedeño Razel C. Tulod	Lucena Campus	Design and development of automated coconut dehusking machine using Raspberry pi	82,000	12 (Sep. 2020 – Sep. 2021)	Approved for extension Expected completion date: December 2021
8	Rizalina C. Lopez Felix B. Lampos Jr. Wilma L. Comia Editha D. Buenaventura	SLSU JGE Tagka- wayan	Participatory Development communication analysis on extension development programs of SLSU Extension Services	119,999	18 (Sep.2020– Dec. 2021)	Ongoing

Table 1.4 SLSU-funded research projects for Terminal Report submission

	Proponent/s	College/ Campus	Research Title	Budget	Duration in mos.
1	Delia O. Evangelista Carla May C. Ceribo	CEn	Local water governance and water-related events inventory in General Luna, Quezon in database information system	50,000	24 (July 2019– June 2021)
2	Lourdes A. Quevada Luis Miguel P. Saludez	Cen/CTE	Area Specific Action Plan (ASAP) for selected Municipalities of Tayabas area in environmental governance: A basis for intervention program of barangay development plan	180,000	18 (July 2019– Dec. 2020)
3	Jobert G. Lomboy	SLSU Alabat	Biomass and Carbon stocks estimation of Mangrove Forest in Alabat Island using LANDSAT ETM+ and SRTM elevation data	299,580	12 (July 2018 –June 2019)
4	Wenceslao S. Durante	CAg	Response of selected Pole Siato (Vigna unguiculate L.) varieties to fermented chicken manure application under Lucban, Quezon Condition	50,000	12 (July 2017 – June 2018)
5	Shiela M. Manzanilla Mary Jane S. Camarador Khristalyn Fraginal Princess L. Pabellano	CAS	Empowering women in the academia: A study on the position, participation and representation of women in tertiary academic institutions	87,200	12 (June 2016 –May 2017)

ONGOING EXTERNALLY FUNDED PROJECTS

There are **six** ongoing externally funded research projects. Among those projects, **three** are being implemented according to the approved work plan, while **one** has pending Terminal Report submission to the SLSU ORS.

	Proponent/s	College/ Campus	Research Title	Budget	Funding Agency	Duration in mos.	Remarks
1	Leomar C. Miano Gino A. Cabrera Claire Ann M. Yao Chona V. Cayabat Aurita A. Laguador	CABHA, CAS, & CIT	Community- Based Enterprise Development in the AMIA Villages in San Francisco, Quezon	736,859	DA Regional Field Office IVA	7 (June 2021- Dec. 2021)	Ongoing
2	Amalia E. Almazol Ronald C. Garcia Francisco Beltran Eraldwin Dimailig Dennis E. Pulan	CAg	Inventory and assessment of flora and fauna, and macrofungi in Mt. Banahaw de Lucban	5,000,000	DOST- PCAARR D	24 (Dec. 2020- Dec. 2022)	Ongoing
3	Glemechille S. Maestro Geri Mae A. Tolentino	CAg	Cacao Bench- marking Study and Documenta- tion of Success Stories in Quezon Province	1,000,000	DOST- PRDP	8 (Jan. 2021- Sep. 2021)	Ongoing

 Table 1.5
 Ongoing externally funded research projects in 2021

Table 1.6 Externallyfunded research projects for Terminal Report submission

	Proponent/s	College/ Campus	Research Title	Budget	Funding Agency	Duration in mos.
1	Mary Jane A. Lee Shiela S. Manzanilla et.al.	CAS	Development of a coffee table book on the lives and culture of indigenous people in Region IV-A CALABARZON	2,000,000	Sen, Loren Legarda	12 (2016)

Within three months after project completion, proponents are required to submit their Terminal Reports. Since January 2021, the ORS already received **seven** Terminal Reports for completed SLSU-funded research and **three** for externally-funded projects. Most of the reports received were on-time submissions.

COMPLETED SLSU-FUNDED PROJECTS

Table 1.7 Completed SLSU-funded research projects in 2021

	Proponents	College/ Campus	Research Title	Budget	Duration in mos.
1	Marissa C. Esperal Ma. Elna R. Cosejo Mari Jane A. Lee Rene P. Zubieto	CAS	Kulayan mo ang puso ko sa panahon ng pandemya: Drawing themes as indicators of socio-emotional well-being of selected children under home quarantine	38,500	3
2	Helene D. Daya Gino A. Cabrera	CAS	Predictive cross-sectional analysis of mental health threats and copings of university students and personnel during COVID-19 pandemic	35,200	5
3	Karen Anne C. Quing Jomar Saif P. Baudin	CAS	The roles of internal locus of control and grit in managing the academic stress of senior high school students in Southern Luzon State University	45,100	7
4	Nicanor Guinto, Shiela Manzanilla, Brian Villaverde	CAS	Discourse error analysis of selected high school students' compositions: Basis for a textbook in purposive communication	165,800	12
5	Rene Zubieto Aurelio D. Maguyon	CAS	Eating habits and food preferences of selected urban and rural residents in Quezon Province	50,000	12
6	Gino A. Cabrera Noreen P. Echague	CAS	Multi-site evaluation of the <i>Katatagan Kontra Droga sa</i> <i>Komunidad</i> as a jail-based drug rehabilitation program in Quezon Province	113,300	12
7	Aileen V. Elarco Manuel P. de Los Santos Francis B. Laguardia	SLSU Catanauan	The SLSU Catanauan journey of development	15,620	18
8	Susana A. Salvacion Lorna L. Cano Charito Lilibeth A. Dator	CAM	Acceptability of donor breast milk banking in Quezon Province	100,000	12

The proponents of the SLSU-funded projects who were able to complete their research according to the approved workplan received the Research Completion Certificate and Research Completion Award amounting to PhP 10,000 pesos per team. The awarding ceremony was held during the 2021 Agency In-House Review of Completed Research.

COMPLETED EXTERNALLY-FUNDED PROJECTS

	Proponents	College/ Campus	Research Title	Budget	Duration in mos.	Funding Agency
1	Alma J. Caringal Salvo O. Salvacion	SLSU Tiaong	SLSU Mushroom Hub: Product development and commercialization of mushroom in Quezon Province (*Mushroom Chili Appetizer, *Mazapan Con Mushroom, *Mushroom Oat Cookies)	1,909,380	12 (Completed last year but the Terminal Report was submitted in 2021)	DA-BAR
2	Violeto Coronacion	SLSU Infanta	Quality assurance of <i>lambanog</i> and <i>nipanog</i> for consumer safety and sustainable industry	4,960,547	24 (Sept. 2017- Aug. 2019) (Completed in the previous years but the Terminal Report was submitted in 2021)	DOST- PCIEERD
3	Esmeraldo G. Arat Imelda A. Tangalin Cherry C. Favor Jay-Ar C. Recto Rebecca D. Jason Agnes P. Valenzuela	SLSU JGE Tagka- wayan	#TK sa BAKUNA: Tagkawayan Societal Acceptance and Base- line Assessment of Knowledge in COVID- 19 Vaccine towards National Immunization Advocacy	212,000	2	LGU Tagka- wayan

Table 1.8 Completed externally funded research projects in 2021





Among the expected outputs of research projects are paper presentations and publications in the local and international avenues. Hence, the SLSU Office of Research Services provides financial support and monetary incentives to the group of researchers who will successfully present or publish the findings of their research. In 2021, SLSU researchers showed enthusiasm in their research activities as manifested in the report of presentations, publications, and citations. These engagements resulted to an increased percentage of SLSU faculty members who are actively engaging in research, which is now at **38.98%** (*See Table 2.8*).

2021 Research Presentations

Table 2.1	2021 presentations in local fora/conference
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	Presenters	College/ Campus	Research Title	Research Conference	Organizer/ Date	Awards Received
1	Victoria M. Noble, Sherrlyn U. Magdame Jofren R. Moreno	SLSU JGE Tagka- wayan	Refinement of mussel transplantation tech- niques for developing mussel farming in- dustry in Quezon	2021 Virtual Agency In- House Review or Completed Research	SLSU/ (Via Zoom) Sept. 13-14, 2021	Best Develop- ment Paper
2	Maripaz T. Lampos Reydante P. Gordula Veronica Aurea P. Rufo Nemia C. Pelayo	SLSU JGE Tagka- wayan	Promotion of mud crab fattening and crab meat processing technologies	Projects of SLSU		2 nd Best Develop- ment Paper
3	Veronica Aurea A. Rufo Dorris N. Gatus Catherine R. Gonzalvo Melanie D. Salumbides	SLSU JGE Tagka- wayan	Market exploration and commercializa- tion of native pig products in selected municipalities in Quezon Province			3 rd Best Develop- ment Paper
4	Karen Anne C. Quing Jomar Saif P. Baudin	CAS	The roles of internal locus of control and grit in managing the academic stress of Senior High School students in Southern Luzon State University			Best Re- search Paper
5	Helene D. Daya & Gino A. Cabrera	CAS	Predictive cross- sectional analysis of mental health threats and copings of university students and personnel during Covid-19 pandemic			2nd Best Research Paper
6	Jed Frank S. Marqueses Charly R. Lacorte	CAS	Cities and municipali- ties competitiveness index survey			3 rd Best Research Paper
7	Dorris N. Gatus Cristina D. Nicolas Melanie D. Salumbides Nemia C. Pelayo	SLSU JGE Tagka- wayan	Improvement and commercialization of developed herbal products of SLSU JGE Tagkawayan, Quezon			

8	Aileen V. Elarco Manuel P. delos Santos Francis B. Laguardia	SLSU Cata- nauan	The SLSU Catanauan journey of develop- ment	2021 Virtual Agency In- House Review or	SLSU/ (Via Zoom) Sept. 13-14, 2021	
9	Marissa C. Esperal Ma. Elna R. Cosejo Mari Jane A. Lee Rene P. Zubieto	CAS	Kulayan mo ang puso ko sa panahon ng pandemya: Drawing themes as indicators of socio- emotional well- being of selected children under home quarantine	Completed Research Projects of SLSU		
10	Helene D. Daya Gino A. Cabrera	CAS	Predictive cross- sectional analysis of mental health threats and copings of university students and personnel during Covid-19 pandemic			
11	Nicanor L. Guinto Shiela M. Manzanilla Brian D. Villaverde	CAS	Discourse error analysis of selected high school students' composition: Basis for a textbook in purposive communication			
12	Shiela M. Manzanilla Mari Jane A. Lee et al.	CAS	Development of Coffee Table Book on the lives and culture of indigenous people in the Region IVA CALABARZON			

Table 2.2 2021 presentations in regional fora/conference

	Presenters	College/ Campus	Research Title	Research Conference	Organizer/ Date	Awards Received
1	Pitz Gerald G. Lagrazon	CEn	Palay (<i>Oryza sativa</i>) Leaf Nitrogen Meter	2021 Regional Invention Contest and Exhibits (RICE)	DOST-TAPI September 27-29, 2021	LIKHA Award (Outstanding Privately- Funded Project)
2	Cherry C. Favor	SLSU JGE Tagka- wayan	Student's learning preferences during pandemic: Input for development of learning module	6th Regional and 1st International Research Forum	CBSUA San Jose Pili, Camarines/ Via Zoom (April 28- 30, 2021)	
3	Delia R. Babilonia Sarah Joy L. Zoleta Jobert G. Lomboy Joel T. Altez Adrian C. Servando	Cag/ SLSU Alabat	Mangrove crab (Scylla serrata) production in Alabat Island, Quezon Province Using an Aquasilvi- culture System	Regional Symposium on Research, Development and Extension Highlights (RSRDEH)	STAARRDE C/ Via Zoom (April 28- 30, 2021)	

Table 2.3 2021 presentations in national fora/conference

	Presenters	College/ Campus	Research Title	Research Conference	Organizer/ Date	Awards Received
1	Delia R. Babilonia Sarah Joy L. Zoleta Jobert G. Lomboy Joel T. Altez Adrian C. Servando	Cag/ SLSU Alabat	Mangrove conservation cum livelihood promotion of aquasilviculture of mangrove crab in Alabat Island, Quezon Province	2021 Virtual PhilEASTNET Biennial AFFNR Extension Symposium	PhilEAST- NET/ Via Zoom (October 14-15, 2021)	Outstanding Research Paper on Extension Award
2	Jed Frank S. Marqueses Charly R. Lacorte	CAS	SULONG QUEZON: Comparative analysis of 2019 and 2020 cities and municipalities of Quezon Province	3rd Cities and Municipalities Competitive- ness Index Academic Symposium	DTI – Competi- tiveness Bureau/ Via Zoom (2021)	2nd Place
4	Leomar C. Miano	САВНА	Relationship of organizational culture on soft skills of faculty members of state university in the Philippines	BASC 1st National Research & Development Conference: Shaping the Future of Research and Development: Emerging from the COVID-19 Pandemic	BASC/ Via Zoom (April 8, 2021)	
5	Gino A. Cabrera	CAS	Preliminary program evaluation of a church- initiated drug reformist formation center: The Volunteer- Facilitators' perspectives	2021 Research Forum on Drug Abuse Prevention and Control Dangerous Drugs Board	Via Zoom (June 18, 2021)	
6	Marissa C. Esperal Ma. Elna R. Cosejo Mari Jane A. Lee Rene P. Zubieto	CAS	Kulayan mo ang puso ko: Mga tema ng pagguhit ng mga batang naka-Home Quarantine sa panahon ng pandemya	UP Psych Serve at Pambansang Samahan sa Sikolohiyang Pilipino kasama ang Amicus KOI Solutions	Via Zoom (July 1-3, 2021)	
7	Gino A. Cabrera	CAS	Preliminary program evaluation of a church initiated drug reformist formation center: The Reformists' perspectives	2021 Research Forum on Drug Abuse Prevention and Control Dangerous Drugs Board	Via Zoom/ (July 26, 2021)	

8	Marissa C. Esperal Ma. Elna R. Cosejo Mari Jane A. Lee Rene P. Zubieto	CAS	Drawing themes of chil- dren under home quaran- tine	57th PAP Conven- tion: Recalibrating Philippine Psychology: Towards a more responsive discipline in the challenging times Psychological Association of the Philippines (PAP)	PAP/ Via Zoom (September 20 - October 2, 2021)	
9	Gino A. Cabrera	CAg/ SLSU Alabat	SMART Project: Strengthening mental health awareness and resiliency dur- ing the time of pandemic	4th Colleges and Universities Public Service Confer- ence	UP Public Service Office/ Via Zoom (October 21-22, 2021)	

Table 2.4 2021 presentations in international fora/conference

	Presenters	Col- lege/ Campus	Research Title	Research Conference	Organizer/ Date	Awards Received
1	Renato R. Maaliw III Zoren P. Mabunga Frederick T. Villa	CEn	Time-series forecasting of COVID-19 cases using stacked long short-term memory networks	2021 IEEE International Conference on Innovation and Intelligence for Informatics, Computing, and Technologies (3ICT)	IEEE/ Via Zoom (October 27-30, 2021)	Best Paper
2	Renato R. Maaliw III Melvin A. Ballera Zoren P. Mabunga Aubee T. Mahusay Dhenalyn A. Dejelo Mariebeth P. Seño	CEn/ CAM	An ensemble machine learn- ing approach for time-series fore- casting of COVID-19 cases	2021 IEEE 12th Annual Infor- mation Techno- logy, Electronics and Mobile Communication Conference	r- Via Zoom nno- (October onics 27-30, 2021)	Best Paper
3	Maurine C. Panergo Renato R. Maaliw, III Febus Reidj G. Cruz	CEn	A circuit design of a sensor amplifier for improving blood pressure measurement in telehealth system	(IEMCON)		Best Presenta- tion
4	Helene D. Daya Gino A. Cabrera	CAS	Predictors of Coronavirus anxiety among State University employees during the Luzon-wide Enhanced Community Quarantine	3rd DLSA International Multidisciplinary Research Conference De La Salle Araneta	DLSU/ Via Microsoft Teams (January 22-23, 2021)	

5	Leomar C. Miano	CABHA	An initial assessment of soft skills integration in emergency remote learning during COVID- 19 pandemic: A learners' perspective	8th Technium Conference	Technium/ Via Zoom (March 27, 2021)	
6	Gino A. Cabrera	CAS	Fear of missing out and social media as predictors of problematic internet use among students	SEAMEO Congress 2021	SEAMEO/ Via Zoom (April 28-29, 2021)	
7	Cherry C. Favor	SLSU JGE Tagka- wayan	Student's learning preferences during pandemic: Input for development of learning module	6th Regional and 1st International Research Forum	CBSUA San Jose Pili, Camarines/ Via Zoom (April 28- 30, 2021)	
8	Myra T. Querijero	CABHA	Disruption in human resource during pandemic: Managing changes and addressing challenges	1st International Research Summit: PACSB 48th Annual National Conference Globally Positioning Business Education in the New Digital Era	PACSB/ Via Zoom (May 1, 2021)	
9	Cherry C. Favor Dorris N. Gatus Veronica Aurea A. Rufo Cynthia U. Nataño Bangelita C. Balanay Rebecca O. Rufo	SLSU JGE Tagka- wayan	Indigenous knowledge on kalumpit (<i>Terminalia</i> <i>microcarpa</i> Decne) uses: Input toward sustainable use of product developed from its fruits	9th Annual International Conference on Environmental Science (ACES)	PSUA/ Via Zoom (May 3–4, 2021)	
10	Renato R. Maaliw, III	CEn	Early prediction of electronics engineering licensure examination performance using random forest	2021 IEEE World Al loT Conference	IEE/ Via Zoom (May 10-13, 2021	

11	Loretta P. Arroyo	САВНА	Organizational commitment and workplace challenges of elderly faculty among State Universities in Region IV-A, Philippines	1st International Virtual Conference on Multi-disciplinary Research and Innovation	SDSSU/ Via Zoom (June 30, 2021)	
12	Resty P. Umali	САВНА	Determinants of financial performance of banks in the Philip- pines	1st International Virtual Conference on Multi-disciplinary Research and Innovation	SDSSU/ Via Zoom (June 30, 2021)	
13	Reydante P. Gordula Felix B. Lampos, Jr. Cherry D. Favor	SLSU JGE Tagka- wayan	Socio-ecological assessment of slipper lobster (<i>Thenus</i> <i>orientalis</i> , Lund 1973) fishery in Ragay Gulf	PAMS 16th National Symposium in Marine Science	PAMS/ Online (July 22-24, 2021)	
14	Wilfredo B. Barrera, Jr.	CAS	Relative gene ex- pression of OsHMA2 and OsHMA3 genes in select rice geno- types at the seedling stage	1st International Agriculture, Bio-systems, and Technology Conference	TAU/ Via Zoom (July 22-23, 2021)	
15	Zoren P. Mabunga Renato R. Maaliw, III Jennifer C. dela Cruz Angelica C. Samortin	CEn	Utilization of different wireless techno- logies' RSSI for indoor environment classification sing support vector machine	2021 IEEE 12th Control and System Graduate Research Colloquium (ICSGRC 2021)	IEEE/ Via Zoom (August 7, 2021)	
16	Zoren P. Mabunga Angelica Cordero- Samortin Jennifer Dela Cruz	CEn	The optimization of a 5G inset-fed patch antenna using the machine learning algorithm surrogate model assisted differential evolution for antenna synthesis	2021 IEEE 4th International Conference on Computer and Communication Engineering Technology (CCET)	IEEE/ Via Zoom (August 13-15, 2021)	
17	Victoria M. Noble Cherry C. Favor Erlinda O. Panganiban	SLSU JGE Tagka- wayan	Level of toxicity in hypoglycemic activity of <i>Andrographis</i> <i>paniculate</i> crude extract	2nd International Conference on Education Environment and Agriculture (ICEEA 2021)	ICEEEA/ Via Zoom (August 24 -25, 2021)	
18	Gino A. Cabrera Noreen P. Echague	CAS	Life Experiences of Visual and Literary Artists: Influences and Challenges Bantula	International Conference on Culture-base Education	NCCA/ Via Zoom (October 14 -15, 2021)	
19	Leomar C. Miano	САВНА	Relationship of organizational culture and citizenship behavior on soft skills as mediated by transformational leadership: The case of Philippine State Universities	8th International Scholars Conference	Univer- sitas Klabat, Airmadidi, Indonesia (October 26 -27, 2021)	

20	Victoria M. Noble Sherrlyn U. Magdame Jofren R. Moreno Maria Johanna L. Segarra Manirose S. Lucban Jofren R. Moreno	SLSU JGE Tagka- wayan SLSU JGE Tagka-	Refinement of mussel transplanta- tion techniques for developing mussel farming industry in Quezon Growth performance of transplanted green mussel (<i>Perna</i>	6th International Conference for Fisheries and Aquatic Scienc- es (ICFAS 6) and Asian Fisheries Social Science Research Net- work Forum One (AFSSRN F1)	UP Visayas / Via Zoom (Novem- ber 24-26, 2021)	
		wayan	<i>viridis</i>) using modified long line method			
22	Cherry C. Favor	SLSU JGE Tagka- wayan	A review on the nutritive value of <i>dilis</i> (<i>Encrasicholina</i> <i>oligobranchus</i> , <i>Wongratana</i> , 1983) powder and Malungga (<i>Moringa</i> <i>oleifera</i> Lam.) leaves powder, as potential food supplement			
23	Jofren R. Moreno Reynalyn C. Bacay Edmar A. Driz	SLSU JGE Tagka- wayan	Gleaning of macro- benthic invertebrate fishery in Kabibihan River System			
24	Felix B. Lampos, Jr Cherry C. Favor Reydante P. Gordula	SLSU JGE Tagka- wayan	Economic signifi- cance of slipper lobster (<i>Thenus</i> <i>orentales</i> , Lund, 1793) among fisherfolks in selected municipali- ties of Ragay Gulf			
25	Jofren R. Moreno Benedick I. Lim	SLSU JGE Tagka- wayan	Tilapia (<i>Oreochromis</i> <i>niloticus</i>) Fish Nuggets with Partial Replacement of Soy (Glycine Max) Flour			
26	Jennifer Edytha E. Japor Glemechille D. Maestro Jed Frank S. Marqueses	CABHA, CAg,& CAS	Greener and healthi- er sustainable food solution: A market survey of organic <i>pinakbet</i> vegetables in Quezon Province	5th International Research, Development, and Extension (RDE) Manage- ment Congress	PHILARM (Decem- ber 9-10, 2021)	
27	Prof. Esmeraldo G. Arat Dr. Imelda A. Tangalin Dr. Cherry C. Favor Dr. Jay-ar C. Recto Ms. Rebecca D. Jason Ms. Agnes P. Valenzuela	SLSU JGE Tagka- wayan	#TK sa Bakuna: TAGkawayan Socie- tal Acceptance and Baseline Assessment of Knowledge in COVID-19 Vaccina- tion towards National Immunization Advocacy	International Research Conference in Higher Education 2021	IRCHE 2021 (Decem- ber 13-16, 2021)	
28	Dr. Imelda A. Tangalin Dr. Victoria M. Noble Dr. Melanie D. Salum- bides	SLSU JGE Tagka- wayan	Marketing Strategy for Daranghita Nectar			

2021 Research Publications

Table 2.6Published research in 2021

	Title of Research	Author(s)	Book/Journal Publication	Type of Publication
1	Roles of internal locus of control and grit in managing the academic stress of Senior High School Students in a State University in the Philippines	Karen Anne C. Quing Jomar Saif Baudin	Journal of Education, Management, and Development Studies, Vol 1, 1-9 (June 1, 2021)	Local
2	I am a Survivor: Experiences, impacts and coping mechanisms of Filipino victims	Karen Anne C. Quing	Sexual Violence Journal of Education, Management and Development Studies, Vol 1, 50-65 (June 1, 2021)	Local
	Exploring the teacher's utilization of ICT resources in schools and their student's competence in basic computer applications	Richard E. Nepomuceno Imelda A. Tangalin	IOP Publishing	Local
4	Organizational career growth: Literature review and future agenda	Jennifer Edytha E. Japor	International Journal of Business and Administra- tive Studies, Vol. 7, Issue 1, 12 (pp.12-24) (February 26, 2021)	International
5	Prevalence and host specificity of bat flies (<i>Streblidae</i>) from selected caves in Unisan, Quezon, Philippines	Maria Camila N. Obdianela Ma. Patricia Venice V. Guanlao Essex Vladimer E. Samaniego Kathleen O. Pornobi	Acta Parasitologica, Vol 66 (3), 983-988 . (March 26, 2021)	International
6	Development of sanitary landfill's carbon dioxide concentration models using machine learning algorithm	Zoren P. Mabunga Jennifer Dela Cruz Glenn Magwili Angelica Samortin	IEEE, DOI: 10.1109/ HNICEM51456. 2020. 9400030 ISBN: 978-1- 6654-2997-9 (April 26, 2021)	International
7	Development of sanitary landfill's groundwater contamination de- tection model based on machine learning algorithm	Zoren P. Mabunga Jennifer Dela Cruz Glenn Magwili Angelica Samortin	IEEE, DOI: 10.1109/ HNICEM51456. 2020. 9400030 ISBN: 978-1- 6654-2997-9 (April 26, 2021)	International
8	Research and Extension Completed and On-going Registered Programs Data Base System (RECORDS)	Frederick T. Villa Arvin P. Natividad	Linguistics and Culture Review, 5(S1), 214-222 (July 2021)	International
9	Early prediction of electronics engineering licensure examination performance using random forest	Renato R. Maaliw III	Proceeding of the 2021 IEEE World Al loT Conference, ISBN: 978-1- 6654-3568-0 (June 2021)	International
10	Looking through the arts: Examining children's feelings expressed in drawings made while under Home Quarantine	Marissa C. Esperal	Journal of Psychology & Psychotherapy: Open Access, Vol 11, Issue 6, No. 1000411	International

11	Utilization of different wireless technologies' RSSI for indoor environment classification using support vector machine	Zoren P. Mabunga Renato R. Maaliw III Jennifer C. dela Cruz Angelica C. Samortin	2021 IEEE 12th Control and System Graduate Research Colloquium (ICSGRC 2021, 5 (2021)	International
12	Time-series forecasting of Covid-19 cases using stacked long short-term memory net- works	Renato R. Maaliw III Zoren P. Mabunga Frederick T. Villa	2021 IEEE International Conference on Innovation and Intelligence for Informatics, Computing, and Technologies (3ICT), 8 (2021)	International
13	The optimization of a 5G inset-fed patch antenna using the machine learning algorithm surrogate model assisted differential evolution for antenna synthesis	Zoren P. Mabunga Renato R. Maaliw III Jennifer C. dela Cruz Angelica C. Samortin	2021 IEEE 4th International Conference on Computer and Communication Engineering Technology (CCET), 6 (2021)	International

 Table 2.6
 2021 Research citation report

	Title of Research	Researcher(s)	Author(s) Who Cited the Research	Article Where the Research Was Cited	Journal Where the Article Was Published
1	Ethnobotany of Plants in Tagka- wayan: Input for information com- munication media on medicinal uses of plants	Cherry C Favor	Nafisah M. Abdulrachman Aisha M. Ali Hanifa M. Maurac Annabella G. Villarino	Ethnomedicinal Knowledge among the M'ranaos in Baloi, Lanao Del Norte, Philippines	International Journal of Science and Management Studies, Volume 2 Issue No. 4, pgs. 38-44 (August 2019). Science Research Publication
2	A culture review of unique traditional uses of plants in Quezon Province, Philippines	Cherry C. Favor	Lyn Dela Rosa Paraguison Danilo Niem Tandang Grecebio Jonathan Duran Alejandro	Medicinal Plants used by the Manobo Tribe of Prosperidad, Agusan Del Sur, Philippinesan Ethnobotanical Survey	Asian Journal of Biological and Life Sciences, Volume 9 Issue No. 3, pgs. 326- 333 (Sept-Dec, 2020). Pharmaceutical and Biological Society
3	A review on the nutritive value of dilis (Encrasicholina oligobranchus, Wongratana, 1983) powder and Malungay (Moringa oleifera Lam.) leaves powder, as potential food supplement	Cherry C. Favor	Hjm Alsammarraie Nak Khan R. Mahmud	Formulation, Evaluation and in VivoAnti- Inflamatory and Anti-Athritic Activities of Moringa Granules	International Journal of Applied Pharmaceutics, Volume 13 Issue No. 3, pgs 112-120 (February , 2021). Innovare Academic Sciences Pvt Ltd
4	Biodiversity Assessment of Mt. Banahaw de Dolores	Cecilia N. Gascon Ronald C. Garcia Francisco N. Beltran Wilfredo C. Faller Mary Ann R. Agudilla	Jason Parlucha Janine Kaycee Soriano Milbrenne Del-amen Yabes Edwin R. Tadiosa	Species and functional diversity of macrofungi from protected areas in mountain forest ecosytems of Sourthern Luzon, Philippines	Tropical Ecology, 62 (5): 1-9 DOI: 10.1007/ s42965-021-00152-7 (March 2021)

5			Melanie S. Subilla Zenaida Baoanan	<i>Lithocarpus jordanae</i> (Laguna) Rehder Fagaceae	Book: Ethnobotany of the Mountain Regions of Southeast Asia, 619 -623 DOI: 10.1007/ 978-3-030-38389- 3_198 (January 2021)
6	Land Use/Land Cover Change Detection and Urban Sprawl Analysis in the Mount Makiling Forest Reserve Watersheds and	Merlyn Soriano Noba Hilvano Ronald Garcia Aldin Alegre Cristino Tiburan, Jr.	Nova D. Doyog Ian C. Roscinto, Lumbres Zenaida Baonan	Monitoring of Land Use and Land cover changes in Mt. Pulag National Park using Landsat and Sentinel Imageries	Philippine Journal of Science, 150 (4): 723- 734 (September 2021)
7	Watersheds and Buffer Zone, Philippines		Gihen Rym Abdaoui, Tabet Ahmed Amine, Bouaicha Foued, Salah Bouchemal	Sprawl, Specificity and Dynamics of Inter-Municipal Ur- ban Agglomera- tions of the Spuf Valley (South East Algeria): Using GIS Techniques	International Journal of Innovation and Ap- plied Studies, 29:991- 1014 (July 2020)
8			Ailene Alcala, Mar- jorie Delos Ange- les, Inocencio E. Buot, Jr.	Fern Species diver- sity across various land use types of Mt. Makiling, Luzon Island, Philippines	Biodiversitas Journal of Biological Diversity, 20(9): 2437-2445 (September 2019)
9			Ailene Alcala, Mar- jorie Delos Ange- les, Inocencio E. Buot, Jr.	Fern Species diver- sity across various land use types of Mt. Makiling, Luzon Island, Philippines	Biodiversitas Journal of Biological Diversity, 20(9): 2437-2445 (September 2019)

2021 Inventions

Table 2.7 2021 Report on patenting of inventions from conducted research projects

	Invention	Patent Number
1	Multi-Functional Agricultural Robot for Cucurbits Growing	1 /2021/ 050338 'July 22, 2021 (filling date)
2	Soil Nutrient Detector Powered by Solar Energy	2 /2021/ 051091 (application no.)
3	Movable Lemongrass Essential Oil Extraction System	2 /2020/ 050869 (application no.)

Among the 295 Plantilla Faculty Members of SLSU, **115** or **38.98%** are actively engaging in research in 2021. A faculty

Active SLSU Researchers

member was considered active when s/he submitted a proposal, have an ongoing research, or recently completed a research.

 Table 2.8
 Plantilla Faculty Members actively engaged in institutional or externally-funded research in 2021

	Name of Faculty Member	Proposed	Ongoing	Completed
	College of Administration, Business, Hospitality, & Accountancy			
1.	Chona V. Cayabat		1	
2.	Eriberto A. Casino		1	
3.	Loretta P. Arroyo	1		
4.	Leomar C. Miano	2	1	
5.	Claire Ann M. Yao		1	
6.	Patrice Grace A. Caneo	1		
7.	Jennifer Edytha E. Japor	2		
8.	Richard M. Veluz	1		
9.	Angelo Shan E. Mendoza	1		
10.	Sherwin R. Pernia	1		
11.	May Anne C. Calubayan	1		
12.	Maria Concepcion E. Natividad	1		
	College of Agriculture			
1.	Glemechille D. Maestro		1	
2.	Geri Mae A. Tolentino		1	
3.	Amalia E. Almazol		1	
4.	Eraldwin A. Dimailig		1	
5.	Ronald C. Garcia		1	
6.	Francisco N. Beltran		1	
	College of Allied Medicine			
1.	Rosalinda Abuy	1		
2.	Fritzie L. Azogue	1	1	
3.	Thelma Babia	1		
4.	Maria Luisa Barretto	1		
5.	Rodela Baslan	1		
6.	Melvin Cadao		1	
7.	Dr. Lorna Cano	1		1
8.	Dr. Anna Violeta Cruz	3		
9.	Charito Lilibeth Dator			1
10.	Dhenalyn A. Dejelo	2	1	
11.	Sandra Elma	1		
12.	Manuel Delos Santos	1		
13.	Mirasol Manlapaz	1		
14.	Evangeline Mecija	1		
15.	Aldrin Lopez	2		
16.	Melena Quintos	1	1	
17.	Jessica Sabas	1		
18.	Susana Salvacion	1		1
19.	Monette Suarez	1		1
	College of Arts and Sciences			
1.	Aurelio D. Maguyon			1
1. 2.	Brian Villaverde			1
2. 3.	Charly R. Lacorte		+	1
	Editha E. De Jesus	1		
4.				

5.	Gino A. Cabrera			2
5. 6.	Helene D. Daya	1		1
0. 7.	Jed Frank S. Marqueses	1 I		1
7. 8.	Jomar Saif P. Baudin			1
	Julieta A. Lindo	1		L
9.		1		1
10.	Karen Ann C. Quing			1
11.	Khristalyn Fraginal		1	
12.	Ma. Elna R. Cosejo			1
13.	Mari Jane A. Lee		1	1
14.	Maria Luisa A. Enal		1	_
15.	Marissa C. Esperal	1		1
16.	Mary Jane S. Camarador		1	
17.	Michelle V. Ramirez	1		
18.	Nicanor Guinto			1
19.	Noreen P. Echague	 		1
20.	Princess L. Pabellano	 	1	
21.	Rene P. Zubieto			2
22.	Riggs Rondilla	1		
23.	Shiela Manzanilla		1	
	College of Engineering			
1.	Renato R. Maaliw III			2
2.	Pitz Gerald G. Lagrazon		1	
З.	Maurine C. Panergo		1	
4.	Lourdes A. Quevada		1	
5.	Zoren P. Mabunga			4
6.	Delia O. Evangelista		1	
7.	Carla C. Ceribo		1	
	College of Industrial Technology			
1.	Arvin N. Natividad*	1		
2.	Aurita A. Laguador	1		
	College of Teacher Education			
1.	Antonio V. Romana		1	
2.	Rizaide A. Salayo		1	
3.	Maria Lavinia E. Fetalino		1	
4.	Luis Miguel P. Saludez		1	
	Alabat Campus			
1.	Jobert G. Lomboy		1	
2.	Lyn V. Tapan		1	
З.	Roberto L. Sulit		1	
	Catanauan Campus			
1.	Francis B. Laguardia	1		1
2.	Aileen V. Elarco	1		1
З.	Razel C. Tulod		2	
	Gumaca Campus			
1.	Harlene L. Dimailig	1		
2.	Krish Bernadette P. Palay	1		
	Infanta Campus			
1.	Violeto N. Coronacion	1		

2.	Wendy C. Nombrefia	1		
3.	Roldan D. Jallorina	1		
	JGE Tagkawayan Campus			
1.	Felix B. Lampos	2	2	
2.	Imelda A. Tangalin	2		
3.	Cherry C. Favor	2		
4.	Melanie D. Salumbides	1		
5.	Zenaida C. Angeles	1		
6.	Veronica Aurea A. Rufo	2		
7.	Esmeraldo G. Arat	1		1
8.	Cristina D. Nicolas	1		
9.	Editha D. Buenaventura		1	
10.	Rizalina C. Lopez		1	
11.	Maripaz T. Lampos	1		
12.	Wilma L. Comia	1	1	
13.	Reydante P. Gordula	1		
14.	Jay-Ar C. Recto	1		1
15.	Lerma V. Rufo			1
	Lucena Campus			
1.	Roland A. Calderon		1	
2.	Edgardo E. Cedeno		2	
3.	Celio P. Seco		1	
	Polillo Campus			
1.	Ethel Queddeng-Quesea	1		
2.	Marites P. De Leon	1		
	Tayabas Campus			
1.	Moses T. Macalinao	1		
2.	Reymar A. Ortega	1		
3.	Michelle Villanueva	1		
4.	Geraldine Advincula	1		
	Tiaong Campus			
1.	Angelito L. Mangubat	1		
2.	Salvo O. Salvacion	1		
З.	Ma. Isabel V. Caringal	2		
4.	Joanna Marie P. Del Rio	1		
5.	Roy S. Dayo	1		
6.	Alma J. Caringal	1		1

 Table 2.9
 COSI/Non-teaching actively engaged in SLSU-funded or externally-funded research in 2021

	Name (College/Campus/ Office)	Employment Status	Proposed	Ongoing	Completed
1.	Roylan Almacen (CAM)	COSI	1		
2.	Manirose S. Lucban (SLSU- JGE Tagkawayan)	Administrative Aide IV	1		
3.	Jofren R. Moreno	COSI			1
4.	Rebecca D. Jason	Guidance Counselor III	1		
5.	Jericho L. Marasigan	COSI	1		

College/Campus	Plantilla Faculty Members	Plantilla Faculty Members engaged in Research	% of Faculty members engaged in Research
College of Administration, Business, Hospitality, & Accountancy	27	12	44.4
College of Agriculture	23	6	26.0
College of Allied Medicine	24	19	79.0
College of Arts and Sciences	57	23	40.4
College of Engineering	26	7	26.9
College of Industrial Technology	12	2	16.6
College of Teacher Education	28	4	14.0
Institute of Human Kinetics	7	0	0
Laboratory School	3	0	0
Alabat Campus	4	3	75.0
Catanauan Campus	4	3	75.0
Gumaca Campus	4	2	50.0
Infanta Campus	12	3	25.0
JGE-Tagkawayan	28	15	53.6
Lucena Campus	15	4	26.7
Polillo Campus	3	2	66.7
Tayabas Campus	6	4	66.7
Tiaong Campus	12	6	50.0
TOTAL	295	115	38.98%

Table 2.10 Percentage of Faculty Members actively engaged in research

PHOTO DOCUMENTATION



2021 OUTSTADING RESEARCH PAPER ON EXTENSION by PHILEASNET: Mangrove conservation cum livelihood promotion through Aquasilviculture of Mangrove Crab in Alabat Island, Quezon Province



ONGOING PROJECT: Cacao benchmarking study and documentation of success stories in Quezon Province







College of Administration, Business, Hospitality, and Accountancy (CABHA) and Mr. Reymar Ortega of SLSU Tayabas Campus.

R&D

Chenry and Missoure, Ca Institute Alan Campos, Inc. awards this Best Research Paper

Best Development Paper

Research Category 1st Place

Centella asiatica (L.) Whole Plant Ethanolic Extract in the Prevention of Dopaminergic Neuronal Degeneration and Preservation Mechanosensation Response on Parkinson's **Disease Model with CAT-2 Overexpression in Caenorhabditis**

> Jury Rex V. Flor*, Princess Anniedelle H. Subeldia, Editha E. de Jesus

> > Southern Luzon State University



Development Category 2nd Place

Fresh and Boiled Sun-dried Alocasia macrorrhiza (L.) G.Don (Giant taro) Corm Formulated as an Additional **Chicken Feed Ingredient**

Janine Q. Sevilla, Angel Lou D. Sinuhin, Winnie N.Camigla

Southern Luzon State University



SLSU reps won in STAARRDEC's 1st Virtual Regional **Research and Development Students' Congress**

(sites.google.com/view/slsuors/home

SLSU ORS

researchser@slsu.edu.ph



Institutional Research Evaluation Committee (IREC) Pre-Screening



A faculty member or employee who would like to conduct institutional research shall submit a capsule proposal in line with the ORS' priority areas in its Call for Proposals. The ORS shall endorse the submitted capsule proposals to ITSSO for Originality Checking. If it passed the checking, the proponents shall be notified to proceed with the writing of the full proposal for submission on the date to be set by the ORS. However, in case of failure to meet the minimum passing rate, the proponents shall receive recommendations from ITSSO as bases for revision of capsule proposals for resubmission to ORS.

The submitted full proposals shall be subjected to preliminary screening by the Institutional Research Evaluation Committee (IREC) constituted as follows:

Chairperson: Marissa C. Esperal, PhD Vice-Chairperson: Delia R. Babilonia, PhD

Members:

- Gondelina A. Radovan, PhD
- Frederick T. Villa, DT
- Aprillette C. Devanadera, PhD
- Mr. Rene P. Zubieto
- Ms. Maria Luisa A. Enal
- Mr. Charly R. Lacorte
- Ms. Geri Mae A. Tolentino

In 2021, the IREC pre-screening of research proposals was held via ZOOM Video

Conference on April 7-8, 2021. There were 24 proposals presented to the members of the committee that were evaluated based on the following criteria:

Criteria	Max	Min
 CONTENT Relevance to HRDA Contribution to knowledge/ S&T advancement 	20 20	12 12
 PRE-SCREENING Mastery of the content Effectiveness of presentation skills and delivery Organization of presentation Response in Q&A 	8 7 5 10	4.5 4.5 3 6
ACTION SHEET	15	9
WRITE-UPClarity and styleCogency and logic	10 5	6 3
TOTAL	100	60

After the IREC Screening, the ORS forwarded an Action Sheet to proponents for their compliance and submission together with the revised proposals. Out of the 24 presented proposals, 20 met 60 points or higher. The number of qualifying proposals was 125% higher than last year despite the circumstances brought by the pandemic.

Agency In-House Review (AIHR) of Research Proposals



The ORS invited the proponents of the qualified proposals to present in the Agency In-House Review (AIHR) wherein an external panel from the Southern Tagalog Agriculture, Aquatic, and Resources Research. Development, and Extension Consortium Pool (STAARRDEC) of Experts served as evaluators. The invited evaluators lauded SLSU researchers for the novel and timely proposals presented during the two-day AIHR, June 10-11, 2021.

In general, the evaluators commended the proponents for coming up with very relevant and responsive research proposals. The evaluators also praised the SLSU's Institutional Research Evaluation Committee (IREC) for doing an excellent job in providing useful inputs during the pre-screening of proposals before its presentation in the AIHR.

SLSU researchers presented a total of 21 proposals. For the seven proposals under the Innovation and Development Category, Dr. Rosenda A. Bronce, the Director for Research and Development of Batangas State University, served as the lead evaluator. Dr. Loreto A. Novicio, the Chair of the Program/ Project/Technology Evaluation Monitoring Committee of the Department of Science and Technology - Forest Products Research and Development Institute (DOST-FPRDI), evaluated the four proposals under the Environmental Science and Natural Sciences Category. Dr. Nelia C. Cresino, a retired Professor 6 at the Cavite State University, examined the ten proposals under the Social Sciences and Education Category.

The proponents who complied with the experts' suggestions qualified for presentation to the Research and Extension Council and to the Academic/Finance Committee of the SLSU the Board of Regents (BOR), respectively, to gain the bodies' endorsement to the BOR.



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1st RDE Writeshop Series for Satellite Campuses



The office of the Vice President Production, for Research, Extension, (VP-REPDI) Development, and Innovation spearheaded the 1st RDE Proposal Writeshop for Satellite Campuses. The office of the VP-REPDI, together with the Office of Research Services (ORS), the Office of Extension Services (OES), the Office of Production Services (OPS), and the Innovation and Technology Support Services (ITSSO), conceptualized and implemented the said writeshop series with the theme: "One SLSU: Adapt and Thrive in Research and Extension for Development in the New Normal." The series of writeshops were scheduled with the following clustering:

June 7-8: SLSU Alabat, SLSU Gumaca, and SLSU Catanauan June 14-15: SLSU Infanta and SLSU Polillo June 21-22: SLSU Tayabas, SLSU Lucena, and SLSU Tiaong June 30-July 1 : SLSU JGE Tagkawayan

The topics hereunder were discussed in the writeshop:

- Challenges in Research and Extension for Development in the New Normal
- Doing SLSU-Funded Research, The Right Way
- Extension Managers at Work
- Writing Production Proposal
- Protecting University Intellectual Property Towards Commercialization

By mentoring participants on the appropriate steps to take, the organizers aim to encourage the generation of fundable research, extension, and production proposals that reflect the University's priority research and development agenda and align with the emerging needs. Further, it is expected that budding researchers and extension managers shall be guided in writing publishable and fundable REPDI projects that are aligned with the SLSU RDE priority areas for funding.

The Faculty and Staff Development Program of the Human Resource Management Office augmented the needed expenses for the implementation of the whole writeshop series conducted in both physical and virtual modes.

The RDE proposals produced from the writeshop were submitted to the Secretariat for possible institutional funding.



1st Virtual Celebration of the Science and Technology Week



Dr. Marissa C. Eperal, the SLSU Vice President for REPDI, spearheaded the coordination of the 1st virtual celebration of the 2021 Science and Technology Week with the theme dubbed "Agham at Teknolohiya: Tugon sa Hamon ng Panahon."

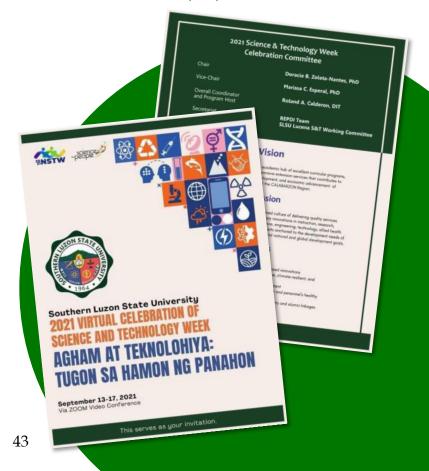
SLSU Lucena was selected as this year's event host, while the REPDI Offices provided assistance through the implementation of its programs and activities during the weeklong celebration, September 13-17, 2021.

The ORS Director, Dr. Delia R. Babilonia, and the Director of the Office of Extension Services, Engr. Lourdes A. Quevada, pushed the conduct of the Joint Virtual Agency In-House Review of completed research projects. The ORS also scheduled its hosting of the 1st Virtual Intercollegiate Research Conference (IRC) to be participated remotely by SLSU student researchers.

Dr. Melanie Cadao, the Director of the Office of Production Services, rolled out the conduct of promotional, while the office of Ms. Geri Mae A. Tolentino, the Director of the Innovation and Technology Support Services Office, hosted a seminar on Patent Drafting.

The opening program of the Virtual S&T Celebration was graced with the keynote message of the Regional Director of the Department of Science and Technology (DOST) CALABARZON, Ms. Emelita R. Bagsit, who encouraged the university researchers to pursue proposal submissions under their agency's Science for Change Program (S4CP).

The best papers during the presentations in the Joint AIHR and the IRC were properly recognized in the closing program of the celebration and were awarded with cash incentives, plaques, and certificates.



Agency In-House Review (AIHR) of Completed Research



The ORS spearheaded the 2nd Virtual Agency In-House Review (AIHR) of Completed Research Projects and the 1st Virtual Intercollegiate Research Conference (IRC) in line with the S&T Celebration. The events were held via Zoom last September 13-14 and September 15-16, respectively.

Dr. Merdelyn Caasi-Lit, the Vice Chancellor for Research and Extension of the University of the Philippines - Los Banos, graced the occasion with her presence as keynote speaker in the AIHR of completed research. The invited AIHR evaluators were:

• Dr. Cleofas R. Cervancia

Professor Emeritus, Institute of Biological Sciences, University of the Philippines, Los Banos

- **Dr. Josefina T. Dizon** Professor 12, College of Public Affairs and Development, University of the Philippines, Los Banos
- A/Prof. Christian Paul P. dela Cruz Director for Research and Development Laguna State Polytechnic University

After the presentations, the papers identified hereafter were hailed as best among the AIHR-evaluated papers. The winning authors in the received certificates and cash awards.

2nd Virtual AIHR: Research Category

1st **Best:** The Roles of Internal Locus of Control and Grit in Managing the Academic Stress of Senior High Schoool Students in Southern Luzon State University *(Karen Anne C. Quing & Jomar Saif P. Baudin)*

2nd Best: Multi-Site Evaluation of the *Katatagan Kontra Droga sa Komunidad* as a Jail-Based Drug Rehabilitation Program in Quezon Province (*Gino A. Cabrera & Noreen P. Echague*)

3rd Best: Cities and Municipalities Competitiveness Index Survey (*Jed Frank S. Marqueses and Charly R. Lacorte*)

2nd Virtual AIHR: Development Category

1st Best: Refinement of Mussel Transplantation techniques for Developing Mussel Farming Industry in Quezon (*Victoria M. Noble, Sherrlyn U. Magdame, & Jofren R, Moreno*)

2nd Best: Promotion of Mud Crab Fattening and Crab Meat Technologies (Maripaz T. Lampos, Reydante P. Gordula, & Nemia C. Pelayo)

1st Virtual Intercollegiate Research Conference (IRC)



3rd Best: Market Exploration and Commercialization of Native Pig Products in Selected Municipalities in Quezon Province (Felix B. Lampos. Veronica Aurea A. Rufo, Editha D. Buenaventura, & Melanie D. Salumbides)

The faculty members who presented their completed SLSU-funded research in the AIHR also received Research Completion Certificate and Research Completion Award amounting to PhP 10,000 per research group. On the other hand, for the IRC, the following student papers received cash awards and plaque of recognition.

1st Virtual IRC: Research Category

1st Best: Growth Performance of Transplanted Green Mussel (Perna viridis) Using Modified Long Line Method (Ela P. Clemeno, Vincent D. Majan, & Maricar T. Pita)

2nd Best: Cost and Return Analysis of Green Mussel (Perna viridis) Farming of SLSU JGE Tagkawayan (Bhejay R. Montenegro & Gemmalyn M. Mendoza)

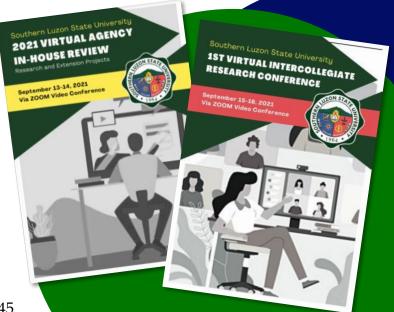
3rd Best: Exploring the Challenges in the Leadership and Management Roles of Nursing Service Administrators Amidst Covid-19 Pandemic (Viene Angeli L. Dedace)

1st Virtual IRC: Development Category

1st Best: Voice to Sign Language Learning Kiosk (Gavien Nathaniel Tarrega, Fritz Emmanuel Flores, & *Re Anne Soronel)*

2nd Best: Web-Based Inventory Management System for Physical Plant and Facilities of SLSU Lucena (Romela V. Ella & Jonelle V. Padillo)

3rd Best: Learning Styles of Laboratory High School Students in Physical Science Education: Input for Developing Teaching Materials (Mary Grace A. Conti & Ma. Theresa L. Gamilla)



Writeshop on Crafting Funding-Worthy Proposals



In order to improve the generation of relevant research projects in Southern Luzon State University, the Office of Research Services spearheaded a Virtual Writeshop on Crafting Funding-worthy Proposals with the theme "SLSU Towards Becoming a Premiere Research University," last November 9, 2021 via ZOOM video conference.

The Virtual Writeshop was actively attended by the faculty members and employees from the different campuses of SLSU. The University President, Dr. Doracie B. Zoleta-Nantes, also attended virtually and expressed her gratitude to the resource speakers and the organizers of the activity. Dr. Delia R. Babilonia, Office of Research Services Director, started the discussion with the presentation on how to do SLSU-funded research the right way. Other speakers were also invited to discuss relevant topics such as:

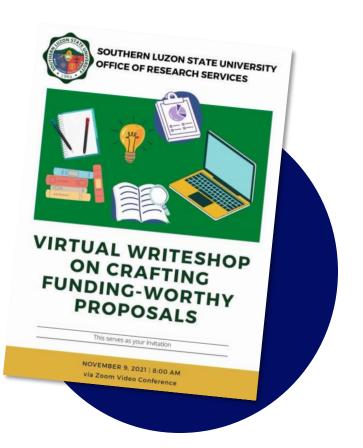
 GAD as a Cross-Cutting Concern: Gaps to be addressed

> **Dr. Susana A. Salvacion** Head of the SLSU Gender and Development

• Utilizing the Harmonized Gender and Development Guidelines (HGDG) Tool in Your Research

Dr. Nelia C. Cresino Certified National GAD Resource Pool of Philippine Commission on Women Writing a 'Good' Literature Review
 Dr. Nicanor L. Guinto
 Head of the SLSU Department of
 Languages, Literature, and
 Humanities

Moreover, the ORS announced its 2022 Call for Proposals and discussed the identified priority areas that the proponents must address.



Workshop on Pursuing Research Publication



One of the ultimate goals in conducting research is to have it published in reputable journals for it to be contributory to the body of knowledge in the scientific community. However, there is a low number of SLSU researchers who published the result of their funded research. Further, some who were able to pursue publication were not often noticed by other researchers as evidenced by the citation reports submitted to the ORS.

Thus, the ORS conducted a workshop to motivate researchers to pursue publication and to increase citation counts last November 18, 2020 via Zoom video conference. The following topics were discussed by the invited resource persons:

 Research as a Key Performance and Output Indicator
 Engr. Maribelle Gaytano
 Directors of SLSU Planning and

Development Office

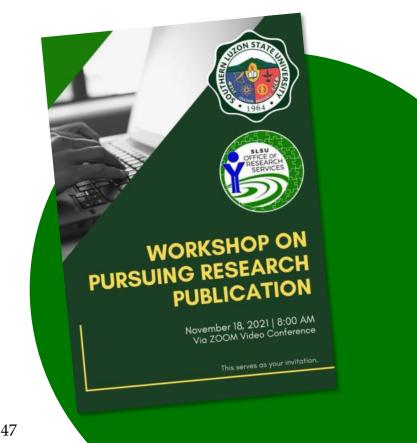
- Guide to Authors: Literature Mapping, Paraphrasing, and Citation
 A.Prof Garry Jay S. Montemayor Faculty Member, College of Development Communication, UPLB
- How to Get Your Research Published and Then Noticed: The Experts Point-of-View Doracie B. Zoleta-Nantes, PhD University President, SLSU

Renato R. Maaliw, III Dean, College of Engineering SLSU Lucban, Quezon

Aprillette C. Devanadera

Program Chair, MA in Applied Linguistics, SLSU Lucban, Quezon

Few days after the workshop, the ORS release its Call for Papers for the 2022 Issue of the SIYASIG Journal.



OTHER ACTIVITIES

ORS CONSULTS RESEARCH COORDINATORS



As part of the planning and implementation of the ORS activities for Fiscal Year 2021 and to address pressing concerns, the office decided to consult with the Research Coordinators of SLSU colleges and campuses through a virtual meeting via Google Meet on January 13, 2021.

ORS Director Dr. Delia R. Babilonia presented to the attendees the proposed revisions in the Research Manual. The SLSU Research and Extension Council and the SLSU Board of Regents (BOR) Academic Committee already scrutinized the draft that is already for endorsement to the BOR; yet, the ORS opted to present it again to the coordinators to gather their feedback on the recommendations of the said bodies. Dr. Babilonia noted all the suggestions and committed to discuss all the matters raised with Dr. Marissa C. Esperal, the SLSU Vice President for Research, Extension, Production, Development, and Innovation (VP-REPDI)

As part of the other matters for discussion, Dr. Babilonia mentioned the status of the SIYASIG Journal of SLSU. She asked the attendees for the strategies that may be adopted to ensure that there will be a regular publication of the said journal. It shall be one of the initial steps to be taken for it to be accredited by the Commission on Higher Education.

ORS HEADS UP WITH RESEARCHERS

To ensure project completion within the allowed time frame, the ORS called a meeting with the proponents of on-going institutional research projects of SLSU on January 14, 2021, via Google Meet. The ORS presented the status of SLSUfunded research with emphasis on the ongoing projects. Dr. Delia R. Babilonia, the ORS Director, asked the project leaders for updates on their research implementation, including the challenges they are experiencing at present. Then, Dr. Babilonia and Vice President for REPDI, Dr. Marissa C. Esperal, properly addressed the concerns and took down the matters for clarification later with the procurement and finance offices.



Dr. Babilonia also requested the attendees to provide their insights and suggestions with the plan to revive SIYASIG, the official journal of SLSU. In general, the researchers expressed their support to achieve the accreditation and pursue the publication of SIYASIG, which shall the university and its researchers.

ASSISTANCE TO SLSU TAYABAS STUDENTS



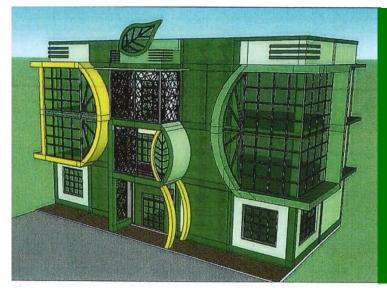
Last January 28, SLSU Tayabas tapped ORS to provide panel members to critique students' research proposals. Some of the proposals include the SLSU Tayabas Dwarf Coconut Demo Farm as study site. Engr. Moses Macalinao, the Campus Director, gave the ORS a chance to see the commendable developments in the said site.



Dr. Esperal and Dr. Babilonia visited the DOST-funded project on makapuno in Alabat Island to monitor the developments and challenges currently encountered in the plantation sites in Alabat, Perez, and Quezon, Quezon. The project is in partnership with the LGUs in Alabat Island, DA-RFO CALABARZON, PCA, PCRDF, and SLSU. || July 2021



Dr. Esperal, Dr. Babilonia, A.Prof Glemechille Maestro, Ms. Rose Ann Martinez, and the engineers from the SLSU Planning and Development Office visited the East-West Seed Company, Inc. to benchmark its Tissue Culture Laboratory. The result of the benchmarking activity shall be used for the improvement of the SLSU Tissue Culture Laboratory which was granted a budget of PhP 5,000,000 under the FY 2022 GAA. || November 2021



The construction of the Mt. Banahaw R&D Center is now on its way. The project was approved and granted with the budget amounting to PhP 16,000,000.00.

The center is intended provide facilities for generation of research related to protection, conservation, and utilization of Mt. Banahaw. The 600 sq.m. three-storey facility shall contain a museum, laboratory, GIS room, researchers' space, conference area, and guest rooms.

The facility is located at the SLSU College of Agriculture, Barangay Ayuti, Lucban, Quezon.



CALL FOR PROPOSALS **2022**



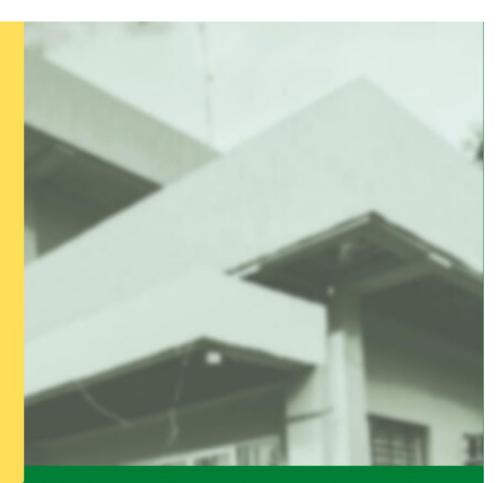
Capsule Proposal Submission Deadline: December 15, 2021





Contact us at (042) 540-8506

Please see ORS Memo 13, s. 2021 for more details.



PRIORITY AREAS:

SLSU HARMONIZED RESEARCH & DEVELOPMENT AGENDA

- Smart Analytics, Engineering Innovations, & Green Technology
- Cross-Cutting Concerns
- Environmental Protection and Management
- Education Systems
- Agri-Innovation, Value Addition, & Marketing Systems
- Health Systems

CALABARZON RDRA URGENT RESEARCH STUDIES

- High Value Commercial Crops
- Health and Nutrition
- Disaster Risk Reduction
- Poverty

STAARRDEC COMMODITY THRUSTS

- Rubber
- Bamboo
- Coconut
- Cacao
- Vegetables
- Native Pigs
 Mussel
- Watershed
- Climate Change

OTHER PROPOSED RESEARCH AREAS

- Glycemic Index of Alabat Coconut Sugar
- Mandanas Ruling

SIYASIG

The Official Journal of Southern Luzon State University

CALL FOR PAPERS

Paper submisiion deadline: December 10, 2021



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