## THE PRESIDENT'S REPORT FISCAL YEARS 2015-2017



## UST Research & Endowment Foundation Incorporated

An Accredited Organization by the Philippine Council for NGO Certification



## INTRODUCTION

The UST Research and Endowment Foundation, Inc. was duly organized in December 1991, with the following purposes:

- To encourage, undertake or underwrite pure and applied research or creative work through the research chair or research program in the physical, biological, social or developmental sciences and humanities;
- To establish, create, provide, maintain, seek or devise ways and means of providing or maintaining practical training, educational/cultural research facilities and other essential services for the Foundation and the University;
- To extend technical, scientific, assistance training and instruction, financial aid/grants and to complement these by/through means of extensive and in-depth research works/studies or the extension or lending of technical assistance to similar institutions engaged in research.

The Office for Grants, Endowments and Partnerships in Higher Education (formerly Office for Grants and Endowment) is the link between the University and the Foundation. It is placed under the Office of the Rector and is supported by Foundation funds. The Office likewise provides and maintains the ways and means for attaining the objectives of the Foundation.

The support extended by the Foundation to the University includes the awarding of **Professorial Chairs**; **Grants for Research**, **Thesis/Dissertation**, **Travel**, and **Scholarship**; and financial assistance for **Institutional and Community Development Projects**.

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## PRESIDENT'S MESSAGE

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It is a fact that higher learning institutions have a vital role to play in the production of new knowledge. Gone are those days when a university was simply known for the kind of instruction that it provides its students. This actually belonged to a time in the past when the teaching staff was merely concerned about their teaching strategies and how these strategies translate into effective learning modes for students. Although these are still important today, the trajectory traversed by both local and foreign universities has put premium on intellectual endeavors and accomplishments which have ranked high in an educational institution's priorities. It is not enough that academics simply do well inside the classroom; it is now a must for them to earn graduate degrees, do post-



doctoral work, engage in research, hone their scholarship potential, go out of their comfort zones to engage in cutting-edge work, engage intellectually with their local and foreign counterparts, and push the boundaries of knowledge production. But this is easier said than done. Academics today are very much aware of the fact that they should be knowledge producers and trailblazers in their respective disciplines, and the good news is they are willing to go the extra mile to accomplish this. But this would not be all possible without any kind institutional support. This is precisely the reason why the UST Research and Endowment Foundation, Inc. (UST-REFI) which was established in 1991 continues to provide numerous opportunities for academics and students to engage in notable research projects, creative projects, and other intellectual undertakings. The University provides them with financial support to help them finish their degrees, present papers locally and internationally, and contribute significantly to their area of specialization.

This report covers two fiscal years: 2015-2016 and 2016-2017. During these academic years, the UST Research and Endowment Foundation, Inc. (REFI) has taken the research agenda of the university to a whole new level for it was able to obtain accreditation from the Philippine Council for NGO Certification (PCNC) and the Department of Social Welfare and Development (DSWD) which extends further the scope and function of the UST-REFI in terms of networking, collaboration and service to underprivileged members of society. This report presents the support accorded to faculty members by the university which come in the form of Thesis/Dissertation Grants, Travel Grants, Institutional Development Assistance, Scholarship Grants, and Professorial Chairs and Research Grants. This volume features via colorful and vivid photographs the university's benefactors doing research, a Directory of Funds, and it likewise contains the abstracts of studies awarded with Dissertation Grants. With the kind of intellectual energy and rigor the university's teaching force continue to exhibit, there is no doubt that the research culture in the university will continue to thrive and flourish especially now that the research has already become a mindset and an academic conviction, and this significant endeavor the University of Santo Tomas will continue to encourage and support.

REV. FR. HERMINIO

**REV. FR. HERMINIO V. DAGOHOY, OP** President UST Research and Endowment Foundation, Inc.

## **DIRECTOR'S NOTE**

It is with pleasure that we formally announce that the UST Research and Endowment Foundation, Inc. (UST REFI) is now an accredited organization by the Philippine Council for NGO Certification (PCNC). This has allowed the Foundation to gain its "donee status" with the Bureau of Internal Revenue, which gives the Foundation's donors the option to apply tax deductibility for their donations.



Aside from the PCNC accreditation, the Department of Social Welfare and Development has also included the UST REFI

in its official registry of accredited organizations that efficiently aid underprivileged Filipinos.

In this issue of the President's Report, we provide you a summary of activities and projects, which were supported by the UST REFI within two fiscal years: 2015–2016 and 2016–2017. Details of donations to the Foundation are in this report.

During those years, the Foundation received donations from a number of alumni and a partner government agency totaling to an amount of **PHP10,145,330.78** and **USD2,340.00**. Our gratitude to our generous donors!

During this period, the Foundation assisted twenty-five (25) faculty members with thesis/dissertation grants, twenty-one (21) researchers with travel grants, and forty-two (42) Thomasian students with scholarship grants. The Foundation funded three institutional development projects; two of which were conducted in partnership with the National Commission for Culture and the Arts. One esteemed professor of the University was honored with a professorial chair.

In all, in the past two years, the Foundation had **eighty-nine (89) direct beneficiaries** and **three (3) special projects** with significant impact on both institutional and national levels.

We fervently hope that our good donors will continue to help us in our projects as we aim to further increase the number of beneficiaries of the UST REFI.

**REV. FR. JESUS M. MIRANDA, JR., OP** Director Office for Grants, Endowments and Partnerships in Higher Education

## **BOARD OF TRUSTEES**

## **VERY REV. FR. HERMINIO V. DAGOHOY, O.P.** *President*

## REV. FR. RICHARD G. ANG, O.P.

Vice-President

## **REV. FR. ROLANDO M. CASTRO, O.P.**

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Corp<mark>orate</mark> Secretary and Director of the Office for Grants, Endowments and Partnerships in Higher Education

## PROF. CHERYL R. PERALTA, DrPH

Member

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**REV. FR. RODEL E. ALIGAN, O.P.** *Member* 

**REV. FR. MANUEL F. ROUX, O.P.** *Member* 

MS. CECILIA FUGOSO CHAN Member

# ACCREDITATIONS

In its bid to further professionalize and improve its efficiency as an organization, the UST Research and Endowment Foundation, Inc. (UST REFI) has applied

for accreditations from the Philippine Council for NGO Certification (PCNC) and the Department of Social Welfare and Development (DSWD); both of which the Foundation successfully attained.

The PCNC is a private voluntary, non-stock, non-profit corporation, duly authorized by the Philippine Government to certify the compliance of non-profit organizations with the criteria for financial management and accountability of entities that serve underprivileged Filipinos.





On Sept. 5, 2017, the Philippine Council for NGO Certification (PCNC) accreditation panel visited the University to evaluate the policies, procedures and projects of the UST Research and Endowment Foundation, Inc. (UST REFI). On Sept. 28 of the same year, the UST REFI was awarded a three-year accreditation after passing the «impartial scrutiny and verification with the PCNC standards of good governance, management, and accountability.»

The photo shows the PCNC accreditation panel—composed of San Beda College Vice-President Dr. Tita Evasco-Branzuela, Tan Yan kee Foundation head Mr. Philip C. Sing, and Ms. Michelle P. Tuazon, PCNC Representative—with University of Santo Tomas administrators and UST Research and Endowment Foundation, Inc. trustees—Rev. Fr. Herminio V. Dagohoy, OP, Rector; Rev. Fr. Richard G. Ang, OP, Vice Rector; Rev. Fr. Jesus M. Miranda, Jr., OP, Secretary General and Director of the Office for Grants, Endowments and Partnerships in Higher Education (OGEP); Prof. Maribel G. Nonato, Ph.D., Vice Rector for Research and Innovation; and Mr. Levine Lao, OGEP Executive Assistant. the PCNC, the UST REFI and its donors can now avail of tax incentives, which are classified under the Comprehensive Tax Reform Program of the Bureau of Internal Revenue in the country.



Rev. Fr. Jesus M. Miranda, Jr., OP, Director of the UST Office for Grants, Endowments, and Partnerships in Higher Education, formally received the Certificate of Registration of the UST Research and Endowment Foundation, Inc. from Ms. Jacel Paguio, Assistant Regional Director for Operations of the Department of Social Welfare and Development-National Capital Region. The ceremony was held on March 27, 2017 at the DSWD-NCR Office in Sampaloc, Manila.

Meanwhile, the accreditation with the DWSD certifies that the UST REFI effectively functions in accordance with the principles with which it was founded. Also, it has afforded the UST REFI to be included in the agency's active NGO network in the National Capital Region. Representatives of the network meet quarterly to discuss possible ways of collaboration in alleviating povertystricken communities in the region.



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## FUNDS RAISED IN ACADEMIC YEARS 2015-2016 AND 2016-2017

Scholarship Fund/Foundation	Donor	Amount Provided	Date
	AY 2015-2016		
Manuela L. Evangelista Fund	Manuela L. Evangelista Fund Representatives	РНР 9,000,000.00	Sept. 2, 2015
Thomasian Chemistry Alumni Association Scholarship Fund	Mr. Rudy Chua	PHP 57,940.00	Sept. 22, 2015
National Commission for Culture and the Arts Fund	National Commission for the Culture and the Arts	PHP 74,645.00	September 14, 2015
UST Alumni Association Wisconsin Scholarship Fund	UST Alumni Association Wisconsin	PHP 38,100.78	Jan. 15, 2016
Paulino and Caridad Sevilla Memorial Scholarship Fund	Dr. Ramon Z. Sevilla	PHP 50,000.00	Jan. 20, 2016
Ms. Josefina Z. Sevilla-Gardinier	PHP 100,000.00	Jan. 20, 2016	
David and Josefina Gardinier Scholarship Fund	Ms. Josefina Z. Sevilla-Gardinier	PHP 100,000.00	Jan. 22, 2016
Paulino and Caridad Sevilla Memorial Scholarship Fund	Ms. Susana Sevilla Suarez/Sr. Caritas de St. Paul Sevilla	PHP 100,000.00	February 22, 2016

Representing the UST Research and Endowment Foundation, Inc., Rev. Fr. Jesus M. Miranda, Jr. OP have also been reaching out to Thomasian alumni, speaking with them during Alumni Homecoming events in the University to raise funds for research and scholarships.



	AY 2016-2017						
National Commission for Culture and the Arts Fund			September 30, 2016				
David and Josefina Gardinier Scholarship Fund	Ms. Josefina Z. Sevilla- Gardinier	PHP 100,000.00	October 18, 2016				
David and Josefina Gardinier Scholarship Fund			October 21, 2016				
	Ms. Josefina Z. Sevilla-	PHP 100,000.00					
David and Josefina Gardinier Scholarship Fund	Gardinier	USD 500.00	January 19, 2017				
Scholarship Fullu		USD 840.00					
National Commission for Culture and the Arts Fund	National Commission for Culture and the Arts	PHP 299, 645.00 (First Tranche of a PHP1,000,000.00 Grant)	May 10, 2017				

## TOTAL: PHP 10,145,330.78 USD 2,340.00

# GRANTS DISBURSED IN Academic year 2015-2016

## I. Faculty Assistance as Thesis / Dissertation Grants

Grantee	College / Faculty / Institute	Thesis/Dissertation Title	Amount Granted
Stephanie Ann Balid	College of Rehabilitation Sciences	Dissertation Title: "The Development of the Philippine Implementation Model for a Multidisciplinary Pain Management Program for Patients with Chronic Pain"	PHP 30,000.00
Antonio P. Africa	Conservatory of Music	<b>Dissertation Title:</b> "Making film Filipino: The Tagalog Sarswela and Kundiman in Early Films in the Philippines (1939-1959)"	РНР 30,000.00
Imelda T. Angeles	College of Commerce and Business Administration	Dissertation Title: "Measuring the Impact of Financial Intermediation on the Growth of Urban and Rural Microenterprises in the Philippines: A Structural Equation Model"	PHP 30,000.00
Franelyne P. Casuga	Faculty of Pharmacy	Dissertation Title: "Cytotoxicity of Broussonetia luzonica (Moraceaee) Blanco Leaf Extracts Against HepG2 Cell Lines and Its Formulated Hepatoprotective Oral Solution"	PHP 30,000.00

Gina C. Castro	Faculty of Pharmacy	Dissertation Title: "Non-Steroid Topical Preparation with Virgin Coconut Oil for Management of Mild to Moderate Atopic Dermatitis: Formulation Design, Clinical Evaluation and Cost Analysis"	РНР 30,000.00
Paulin Grace Morato	College of Rehabilitation Sciences	Dissertation Title: "Teachers as Therapeutic Agents Following Typhoon Haiyan: The Effects of Play Therapy on Child Behavior and Functioning'	рнр 30,000.00
Melanie D. Turingan	Faculty of Arts and Letters	Dissertation Title: "Ang Historiograpiya sa Kasaysayan na Nananalaytay sa Mga Piling Obra Ni Carlos 'Botong' Francisco"	PHP 30,000.00
Joselito D. delos Reyes	Faculty of Arts and Letters	<b>Dissertation Title:</b> "Teo T. Antonio: Isang Tulambuhay"	PHP 30,000.00
T	OTAL	PHP240,000.00	

## II. Faculty Assistance as Travel Grants

Grantee	College / Faculty / Institute	Purpose of Travel	Amount Granted
Milagros Arrevillaga	Faculty of Arts and Letters	Paper Presentation "Basic Ecclesial Communities (BEC) Involvement and its Relation to the Spiritual Growth of the Urban Youth" Event: International COMIUCAP Conference 2015 on Civil Society and Human Formation: Philosophy's Role in a Renewed Understanding of the Meaning of Education on July 20-22, 2015 in Melbourne, Australia	PHP 24,521.00
Mr. Joel C. Sagut	Ecclesiastical Faculties	Paper Presentation "Fidelity to a Religious Tradition and the Question of Moral Agency" Event: XXI World Congress of the International Association for the History of Religions at Erfurt, Germany on August 23-29, 2015	USD 350.00 (PHP 15,865.50 July 23, 2015 exchange rate)

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		Paper Presentation	
Ms. Jenneth G. Capule	Miguel de Benavides Library	"Towards a Geriatric-Friendly Library: a Q Methodology" Event: 2015 International Conference on Library and Information Science at Osaka, Japan on August 23-25, 2015	PHP 15,114.00
Prof. Consuelo G. Suarez	College of Rehabilitation Sciences	Paper Presentation"The Diagnostic Accuracy ofMusculoskeletal Ultrasoundin Determining LateralEpicondylalgia"Event: 4 <sup>th</sup> International FascialResearch Conference at Reston,Virginia on September 21, 2015	PHP 32,685.75
Asst. Prof. Valentin Dones, III	College of Rehabilitation Sciences	Paper Presentation "Fascia: The Missing Link in the Diagnosis and Treatment of Lateral Epicondylalgia" Event: 4 <sup>th</sup> International Fascial Research Conference at Reston, Virgina on September 21, 2015	PHP 20,000.00
Prof. Mafel C. Ysrael	Faculty of Pharmacy	Paper Presentation "A New Iridoid Glycoside Isolated from Scyphiphora hydrophyllacea C.F. Gaertn. (Rubiaceae) Bark Extract with a-glucosidase Inhibition" Poster Presentation "Analgesic Effect of Scyphiphora hydrophyllacea C.F. Gaertn. (Rubiaceae) Bark Extract in Mice" Event: Inaugural Symposium of the Phytochemical Society of Asia (ISPSA 2015) at Tokushima Bunri Unviersity on August 30, 2015 to Sept. 2, 2015	PHP 15,284.25
Assoc. Prof. Reynaldo A. Reyes	Faculty of Arts and Letters	Paper Presentation "Aquinas: On the Metaphysical Assumptions of the Infused and Acquired Virtues" Event: 5 <sup>th</sup> International Conference on the Virtuous Life at the Thomas Institut Te Utrecht Tilburg University, Netherlands from December 16-19, 2015	РНР 27,135.00
Т	OTAL		

Grantee	College / Faculty / Institute	Funding Source(s)	Project	Amount	
Fr. Angel Aparicio, O.P.	Miguel de Benavides Library	Antonio Vivencio Del Rosario-UST Heritage Library Fund	Payment for the postage fee for the book requested by Mr. Ignacio Mantecon Mazuelas of Palencia, Spain	PHP 1,685.00	
Serman Cooperative	Miguel de Benavides Library	Antonio Vivencio Del Rosario-UST Heritage Library Fund	Payment for the casual employees of the library from August 1-15, 2015	PHP 38,297.14	
Miguel de Serman Cooperative Benavides Library		Antonio Vivencio Del Rosario-UST Heritage Library Fund	Payment for the casual employees of the library from April 4, 2015 to June 30, 2015, July 1-15, 2015 and July 16-31, 2015	PHP 78,090.83	
The Varsitarian	N/A	National Commission for Culture and the Arts Fund	2015 J. Elizalde Navarro National Workshop on the Criticism of tha Arts and Culture Heritage Studies	PHP 449,290.00	
тот	AL	PHP567,362.97			

## III. Institutional Development as Special Projects

## **IV. Scholarship Grants**

College / Faculty / Institute	Funding Source	Grantee	Description	Amount 1 <sup>st</sup> Term (2015-2016)	Description	Amount 2 <sup>nd</sup> Term (2015-2016)
Faculty of Arts and Letters	Dr. Ernesto Medina Cue, et. al. Scholarship Fund	Galisanao, Jonalyn L.	Full Scholarship	PHP 48,019.00	Full Scholarship	PHP 46,139.00
Institute of Information and Computing Sciences	UST Scholarship Fund	Dela Cruz, Reginald	Partial Scholarship	РНР 30,000.00	Partial Scholarship	PHP 35,000.00
College of Education	UST Scholarship Fund	Torres, Angelo Lance Arionday	Full Scholarship	PHP 44,899.00	Full Scholarship	PHP 49,677.00

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College of Education	UST Alumni Association Wisconsin Scholarship Fund	Nicoyco, Carla Remedios M.	Full Scholarship	PHP 38,021.00	Full Scholarship	PHP 38,176.00
College of Science	UST Thomasian Chemistry Alumni Association Scholarship Fund	Flores, Jeric M.	Partial Scholarship	PHP 57,940.00	N/A	N/A
UST Junior High School	PCSO Scholarship Fund	Ibañez <i>,</i> Ryle T.	Partial Scholarship	PHP 18,628.99	N/A	N/A
College of Education	Paulino and Caridad Sevilla Memorial Scholarship Fund	Raguin, Renalyne C.	N/A	N/A	Full Scholarship	49,749.00
Graduate School	Henry Jackson and Maria Gonzales Goolsby Scholarship Fund	Espinosa, Jamaika Joy O.	N/A	N/A	Full Scholarship	PHP 24,116.00
	Chemistry Periodic	Castro, Sarleen G.	N/A	N/A	Full Scholarship	PHP 38,577.00
College of Science	Table Fundraiser Scholarship Fund	Rañola, Regina Louise S.	N/A	N/A	Full Scholarship	PHP 42,513.00
Conservatory of Music	Mercedes S. Macaranas Scholarship Fund	Pacis, Jan Christine N.	N/A	N/A	Full Scholarship	PHP 28,186.00
College of Education	Paulino and Caridad Sevilla Memorial Scholarship Fund	Raguin, Renalyne C.	N/A	N/A	Full Scholarship	PHP 49,749.00
		Balunes, Ma. Rachella Jasmine	N/A	N/A	Full Scholarship	PHP 30,810.00
Conservatory of Music		Enginco, Aemilio Cecilio	N/A	N/A	Full Scholarship	PHP 42,664.00
	Fund	Esmele, Roi Vincent	N/A	N/A	Full Scholarship	PHP 54,660.00

Conservatory Ma of Music Coju School	Jose Jr. and Margarita	Manalo, Jeff Enerson	N/A	N/A	Full Scholarship	PHP 49,224.00
	Cojuangco Scholarship Fund	Mendoza, Fernando Jr. S.	N/A	N/A	Full Scholarship	PHP 46,893.00
College of Education	Paulino and Caridad Sevilla Memorial Scholarship Fund	Raguin, Renalyne C.	Full Scholarship		PHP 1	7,316.00

College / Faculty / Institute	Funding Source(s)	Grantee	Description	Amount AY 2015-2016 (Down payment)	Amount 1st Grading Period	Amount 2nd Grading Period	Amount 3rd Grading Period	Amount 4th Grading Period	
	UST Junior High School School School Foundation, Inc. Scholarship Fund	Pariño, Gabriellea B.	Full Scholarship	PHP 44,100.00	PHP 13,300.00	PHP 13,300.00	PHP 13,300.00	PHP 4,110.00	
LIST Junior		Revilla, Angela Clarrise R.	Full Scholarship	PHP 44,100.00	PHP 13,300.00	PHP 13,300.00	HP 13,300.00	PHP 4,110.00	
High		Urquico, Allysa Veronica L.	Partial Scholarship	PHP 44,300.00	N/A	N/A	N/A	N/A	
		Trinidad, Kyla Maegan	Full Scholarship	PHP 44,300.00	PHP 13,300.00	PHP 13,300.00	PHP 13,300.00	PHP 4,205.00	
		Argao, Christian John	Partial Scholarship	PHP 17,821.00	N/A	N/A	N/A	N/A	
	TOTAL			PHP1,190,386.99					

## V. Professorial Chair

Grantee	College / Faculty	Professorial Lecture/ Publication	Date and Venue	Funding Source(s)	Amount
Prof. Alfredo P. Co, PH.D.	Faculty of Arts and Letters	"The University of Santo Tomas and the Birthing of Philosophy in the Philippines"	March 2, 2016 Civil Law Auditorium, Main Building May 25, 2016 Thomas Aquinas Research Center	Oscar Picazo Professorial Chair in the Social Sciences and Humanities	РНР 80,000.00

# IV.

## **GRANTS DISBURSED IN ACADEMIC YEAR 2016-2017**

## I. Faculty Assistance as Thesis / Dissertation Grants

Grantee	College / Faculty / Institute	Thesis/Dissertation Title	Amount Granted
Allan A. Basas	Institute of Religion	Dissertation Title: "Filipino Concept of Bayanihan as Pagkakaisang-Loob: A Locus for the Inculturation of the Church as Envisioned by PCP II,"	PHP 30,000.00
Ma. Sheila M. de Jesus	College of Science	Dissertation Title: "Suppression of Transcription of Human Immunodeficiency Virus by Natural Spiroindole Alkaloids"	PHP 20,000.00
Fr. Paul Koku Dogba	Ecclesiastical Faculties	<b>Dissertation Title: "</b> <i>Trokosi</i> Practice Among the Ewes of Ghana: Cultural-Moral Evaluation of Women and Children's Right"	PHP 30,000.00
Wennielyn F. Fajilan	College of Education	<b>Dissertation Title:</b> "Ang Tagasalin Bilang Manlilikha: Panunuri sa mga Saling Pambata ni Rene Villanueva"	РНР 30,000.00
Emmanuel C. de Leon	Emmanuel C. de Leon Faculty of Arts and Letters		PHP 25,000.00

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Emmanuel D. Batoon	Faculty of Arts and Letters	Dissertation Title: "Socialization to Religious Priesthood as a Negotiated Conversion: A View from a Religious Mendicant Studium"	PHP 30,000.00
Ryan Rhay P. Vicerra	Faculty of Engineering	<b>Dissertation Title:</b> "Swarm Intelligence Development Environment and Underwater Swarm Robotics Platform"	PHP 30,000.00
Marie Cicelie C. Ng	Faculty of Pharmacy	Dissertation Title: "Betwixt and Between: Understanding Professional Identity, Adjustment and Professionalism as Liminal Currere in Pharmacy Education"	PHP 30,000.00
Susan N. Maravilla	College of Nursing	Dissertation Title: "Moral Sensitivity, Moral Courage, Distress and Job Performance Among Nurse Educators of Selected Public and Private Tertiary Institutions Towards Enhancement of Values Education Program"	PHP 30,000.00
Ma. Socorro S. Guan Hing	College of Nursing	Dissertation Title: "Employability Skills, Competence and Work Performance of Newly Employed Staff Nurses: Towards the Development of a Learning Model for Nursing"	PHP 30,000.00
Maria Corazon S. Olayres	College of Nursing	Dissertation Title: "Perceived Competency and Level of Preparedness on Disaster among Household Members in Selected Communities in Bulacan: Input to Training Development Program "	PHP 30,000.00
Elizabeth Vivien S. Magbata	College of Commerce and Business Administration	Dissertation Title: "Development of a Financial Counseling Framework for Overseas Filipino Workers"	РНР 30,000.00
Cynthia C. Afable	Conservatory of Music	<b>Dissertation Title:</b> "Poetics of Paawitan in a Tagalog Community in the Province of Quezon, Philippines"	PHP 30,000.00
Revenendo R. Vargas	Institute of Religion	<b>Dissertation Title: "</b> The Institution of Marriage: A Way to Holiness"	PHP 30,000.00
Chito M. Sawit	Institute of Religion	<b>Dissertation Title:</b> "Mission in the City Today: Challenges and Opportunities"	PHP 30,000.00

Gian Carlo S. Torres	College of Nursing	Dissertation Title: "Factors Affecting Patient Readiness and Surgical Outcomes in Preoperative Patients: A Model Testing Study"	PHP 30,000.00
John Michael S. Abrera	Faculty of Engineering	Thesis Title: "Academic Training System for Power Quality Assessment of Electrical System for Reliability Improvement"	PHP 20,000.00
Т	OTAL	PHP485,000.00	

## II. Faculty Assistance as Travel Grants

Grantee	College / Faculty / Institute	Purpose of Travel	Amount Granted
Anna Marie S. Bautista	College of Fine Arts and Design	Paper Presentation "Hard Edges: Challenges in Preserving the Cultural Landscape of UST Manila" & "Connecting the Dots: Shaping the Cultural Landscape of San Fernando City, Pampanga" Event: 16 <sup>th</sup> Annual UMAC (University Museums and Collections) Symposium during 24 <sup>th</sup> International Council of Museums (ICOM) General Conference in Milan, Italy from July 3-9, 2016	PHP 25,000.00
Maria Belinda S. Mandigma	College of Commerce and Business Administration	Plenary Speaker "A Model Social Profit and Loss Account as a Measurement Tool for Social Sustainability of Community Development Programs" "The Role of Academics in Sustainable Global Research" Event: 6 <sup>th</sup> International Conference on Education, Research and Innovation (ICERI 2016) August 6-8, 2016 Beijing, China 2 <sup>nd</sup> International Conference on IT and Education Innovations (ICIEI 2016) August 6-8, 2016 Beijing, China 2 <sup>nd</sup> International Conference on Education, Learning and Training (ICELT 2016) August 6-8, 2016	PHP 15,765.00

lan Raymond B. Pacquing	Faculty of Arts and Letters	Paper Presentation "Neoliberalism, Transference, and the Filipino Culture" Event: International Psychoanalytic University Berlin, Erich Fromm Institute Tuebingen September 28, 2016 to October 1, 2016	РНР 25,327.50	
Ma. Carlota B. Decena College of Science		Paper Presentation "Forecasting Analysis of the Distribution of Leptospirosis Incidence in the National Capital Region (NCR), Philippines" Event: 3rd Innovation and Analytics Conference and Exhibition (IACE 2016) at Universiti Utara Malaysia, Kedah, Malaysia on October 30 to November 1, 2016	PHP 11,337.00	
Eugenia Ramirez-Zhuo	Institute of Information and Computing Sciences	Paper Presentation "Web-based Power Board using Raspberry PI" Event: 2016 IEEE International Conference on Integrated Circuits and Microsystems (ICICM 2016) from November 23-25, 2016	РНР 8,405.00	
Susana F. Baldia	College of Science	Paper Presentation "Phytoplankton Diversity and its Ecological Importance in Three Tropical Lakes: Paoay, Mojicap, and Taal (Luzon Island, Philippines)" Event: 2016 IEEE International Conference on Integrated Circuits and Microsystems (ICICM 2016) from November 23-25, 2016	PHP 9,734.00	
Alejandro S. Bernardo	Faculty of Arts and Letters	Paper Presentation "Philippine English in the ESL Classrooms: A Much Closer Look" Event: 2017 Hawaii TESOL Conference at the University of Hawaii at Hilo, in Hilo, Hawaii on February 18, 2017	РНР 24,213.10	
Rosalyn G. Mirasol	Faculty of Arts and Letters	Paper Presentation "Determining the Reading Attitudes of Foreign Language Learners in Print and Digital Settings" Event: 12 <sup>th</sup> International Conference in Interdisciplinary Social Sciences at International Conference Center Hiroshima, Japan on July 26-28, 2017	PHP 7,543.65	

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Marella Ada V. Mancenido-Bolaños	Faculty of Arts and Letters	Training Event: Summer Workshop on Philosophy for Children by the Institute for the Advancement of Philosophy for Children (IAPC) at the St. Marguerite's Retreat House, Mendham, New Jersey, USA on August 5 to August 12, 2017	PHP 33,235.40
Renato B. Lucas	Conservatory of Music	<b>Conductor</b> <b>Event:</b> Concert of Hanoi Philharmonic Orchestra on May 13, 2017 in Hanoi, Vietnam	PHP 11,460.60
Joyce L. Arriola	Plane   Paper Presentation     Pola   Faculty of Arts and Letters     Faculty of Arts and Letters   Event: AS-in-Asia Conference 2017     On Asia in Motion: Beyond Border   and Boundaries at the Korea     University in Seoul, South Korea   University in Seoul, South Korea		РНР 10,770.00
Maria Luisa Reyes	Graduate School	Paper Presentation "Hybrid Modernity in Philippine Literary and Cultural Criticism during the Pre-Pacific War" Event: AS-in-Asia Conference 2017 on Asia in Motion: Beyond Border and Boundaries at the Korea University in Seoul, South Korea on June 24-27, 2017	РНР 10,770.00
Fr. Delfo C. Canceran, OP	Ecclesiastical Faculties	Paper Presentation "Populism: Regression of Democracy?" Event: Inter-Asia Cultural Studies Conference "Wordling: Asia Beyond/After Globalization" at SungKongHoe University on July 28-30, 2017	PHP 15,506.10
Jove Jim Aguas Faculty of Arts and Letters		Keynote Speaker "Self-Criticism as Response to the Challenge of Secularization to Religious Values" Event: Religion in a Secular Society, Challenges and Perspectives at Ovidius University in Constanta, Romania on June 19-20, 2017	PHP 44,976.60
	OTAL		

## III. Institutional Development as Special Projects

[	Grantee	Funding Source(s)	Amount	
	Center for the Conservation of Cultural Properties and the Environment in the Tropics	National Commission for Culture and the Arts Fund	PHP299,645.00	

## **IV. Scholarship Grant**

College / Faculty / Institute	Funding Source(s)	Grantee	Description	Amount 1 <sup>st</sup> Term	Description	Amount 2 <sup>nd</sup> Term
Institute of Information and Computing Sciences	UST Scholarship Fund	Dela Cruz, Reginald	Partial Scholarship	PHP 35,000.00	Partial Scholarship	PHP 32,352.00
Conservatory of Music	Mercedes S. Macaranas Scholarship Fund	Pacis, Jan Christine N.	Full Scholarship	PHP 31,552.00	Full Scholarship	PHP 31,464.00
College of	Paulino and Caridad	Raguin, Renalyne C.	Full Scholarship	PHP 38,999.00	Full Scholarship	PHP 31,066.00
College of Education	Sevilla Memorial Scholarship Fund	Alapit, Llewelyn S.	Full Scholarship	PHP 58,371.00	Full Scholarship	PHP 53,225.00
Faculty of Arts and Letters		Galisanao, Jonalyn L.	Full Scholarship	PHP 52,358.00	Full Scholarship	PHP 52,358.00
College of Education	Henry Jackson and Maria Gonzales	Torres, Angelo Lance A.	Full Scholarship	PHP 56,548.00	Full Scholarship	PHP 47,956.00
Graduate	Goolsby Scholarship Fund	Espinosa, Jamaika Joy O.	Full Scholarship	PHP 37,464.00	Full Scholarship	PHP 31,290.00
School		Aquino, Mark Christian	Full Scholarship	PHP 24,116.00	N/A	N/A
College of Fine Arts and Design	Henry Jackson and Maria Gonzales Goolsby Scholarship Fund	Miranda, Genesis Luiz	Partial Scholarship	PHP 46,988.00	N/A	N/A

## THE PRESIDENT'S REPORT

College of	Chemistry Periodic Table	Mora, Eyah Ranela P.	Partial Scholarship	PHP 31,004.00	N/A	N/A
Science	e Fundraiser Scholarship Fund	Plantilla, Ryan Gabriel G.	Partial Scholarship	PHP 31,004.00	N/A	N/A
UST Junior High School	Tan Yan Kee Foundation Scholarship Fund	lbañez, Ryle T.	Partial Scholarship	PHP 20,353.00	N/A	N/A

College / Faculty / Institute	Funding Source(s)	Grantee	Description	Amount AY 2016-2017 (Down payment)	Amount 1st Grading Period	Amount 2nd Grading Period	Amount 3rd Grading Period	Amount 4th Grading Period	
		Pariño, Gabriellea B.	Full Scholarship	PHP 46,800.00	PHP 14,100.00	PHP 14,100.00	PHP 14,100.00	PHP 4,439.00	
	UST High School Alumni Alliance Foundation, Inc. Scholarship	Revilla, Angela Clarrise R.	Full Scholarship	PHP 46,800.00	PHP 14,100.00	PHP 14,100.00	PHP 14,100.00	PHP 4,439.00	
		Campilla, Arron	Full Scholarship	PHP 46,800.00	PHP 14,100.00	PHP 14,100.00	PHP 14,100.00	PHP 4,439.00	
UST Junior High School		Urquico, Allysa Veronica L.	Full Scholarship	PHP 44,100.00	PHP 13,300.00	PHP 13,300.00	PHP 13,300.00	PHP 4,110.00	
	Fund	Trinidad, Kyla Maegan	Full Scholarship	PHP 44,100.00	PHP 13,300.00	PHP 13,300.00	PHP 13,300.00	PHP 4,110.00	
		Castillo, Johann Louise	Full Scholarship	PHP 44,100.00	PHP 13,300.00	PHP 13,300.00	PHP 13,300.00	PHP 4,086.00	
TOTAL				PHP736,548.00					

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## V.

## **BENEFICIARIES DOING RESEARCH**

Award Recipient of the Oscar Picazo Professorial Chair in the Social Sciences and Humanities (AY 2015-2016)

## Prof. Em. Alfredo P. Co, PhD

In his recent research, Professor Emeritus Alfredo Co addressed the question: What is Filipino philosophy?

With his lectures, "Streams and Shapes of Filipino Consciousness" and "The University of Santo Tomas and the Birthing of Philosophy in the Philippines," he probed the philosophical outputs that Filipino scholars have so far created.

"If there is anything we can call 'Filipino Philosophy,' this can only be the product of the hard work of Filipino philosophers and scholars," he said, stressing that many academics who search for an indigenous philosophy seem to forget that many Filipino scholars have already made their contribution to philosophy through their publications.

Co added that this body of literature "now makes a new philosophical landscape in Southeast Asia."

For him, the inception of Filipino Philosophy kindled when the Filipino scholars started publishing that resulted in the shift of consciousness, from colonial to Filipino. It began between the mid-'50s to the '80s, he said.

The lectures were a part of the outputs of Dr. Co's research project as holder of the Oscar Picazo Professorial Chair in the Social Sciences and the Humanities at UST.



Doing Philosophy in the Philippine The Thomasian Collection

...in the first half of the 20<sup>th</sup> century, in the University of Santo Tomas, Philosophy was





## Towards a Geriatric-friendly Library: a Q Methodology

### Jenneth Gomez Capule

**Event:** 2015 International Conference on Library and Information Science at Osaka, Japan on August 23-25, 2015

## THE PRESIDENT'S REPORT



Fidelity to a Religious Tradition and the Question of Moral Agency

### Joel C. Sagut

**Event:** XXI World Congress of the International Association for the History of Religions at Erfurt, Germany on August 23-29, 2015



## Forecasting Analysis of the Distribution of Leptospirosis Incidence in the NCR

Kenneth R. Aguilar, John Joel F. Defeo, and Ma. Carlota B. Decena

Event: 3rd Innovation and Analytics Conference and Exhibition (IACE 2016) at Universiti Utara Malaysia, Kedah, Malaysia on October 30 to November 1, 2016

Philippine English in the ESL Classrooms: A Much Closer Look

Alejandro S. Bernardo, Ph.D.

**Event:** 2017 Hawaii TESOL Conference at the University of Hawaii at Hilo, in Hilo, Hawaii on February 18, 2017





Phytoplankton diversity and its ecological importance in three tropical lakes: Paoay, Mojicap, and Taal Lakes (Luzon Is., Philippines)

### Susana Baldia, Rey Donne Papa and Kelsey Ann P. Sambitan

Event: 9th Asia Pacific Conference on Algal Biotechnology (APCAB) in Bangkok, Thailand from November 15-18, 2016



Partial Characterization of  $\beta$ -Galactosidase Extracted from Pediococcus sp. as Potential Source of Probiotics for Treating Lactose Intolerance

### R. Alpay, E. M. Pangan, M. K. Devanadera, M. Santiago

Event: American Society for Microbiology (ASM) Microbe Convention 2016 in Boston, Massachusetts, USA from June 16-20, 2016



The Quiapo Leap: A Philosophical Reading of the Religious Experience of the Black Nazarene Popular Devotion in Quiapo, Manila, Philippines

### Rhochie Avelino E. Matienzo

Event: Inter-Religious and Inter-Cultural Dialogue in a Pluralistic World, Philosophical and Theological Perspectives in Constanta, Romania on June 1 to 2, 2016

## **VI.** Directory of funds

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## A. FACULTY OF ARTS & LETTERS

FR. VALENTIN MARIN, OP PROFESSORIAL CHAIR IN MASS COMMUNICATION TEODORO VALENCIA PROFESSORIAL CHAIR IN JOURNALISM METROBANK PROFESSORIAL CHAIR IN ECONOMICS PCIB PROFESSORIAL CHAIR IN LEGAL MANAGEMENT JAKA FOUNDATION PROFESSORIAL CHAIR IN LITERATURE & JOURNALISM OSCAR PICAZO PROFESSORIAL CHAIR IN THE SOCIAL SCIENCES AND HUMANITIES

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## G. HIGH SCHOOL

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NURSING EDUCATIONAL FOUNDATION

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#### L. RECTOR'S OFFICE

UST THESIS GRANT TRUST FUND JIMENEZ-RIEL SCHOLARSHIP FUND PAGCOR SCHOLARSHIP PCSO SCHOLARSHIP FUND ANN HONG WON SCHOLARSHIP FUND DR. ERNESTO MEDINA-CUE ROSARIO MOTA MEDINA CUE & MA. PAZ MOTA SCHOLARSHIP FUND CLAUDIO F. VALLEDOR SCHOLARSHIP FOUNDATION

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#### N. CENTRAL SEMINARY

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UST PHARMACY FOUNDATION USTPMTBBAA, INC. GRANT FOR GRADUATE THESIS/DISSERTATION OF THE ACADEMIC PERSONNEL OF THE FACULTY OF PHARMACY

#### L. RECTOR'S OFFICE

UST CENTRAL LIBRARY TRUST FUND UST SPORTS DEVELOPMENT TRUST FUND MEDICAL MISSIONS INC COMPUTER FACULTY DEVELOPMENT ASSISTANCE TRUST FUND UST PROJECT HASIK NICANOR & ARSENIA GUEVARRA FUND LINDA & DEXTER GREY ENDOWMENT FUND

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THE PRESIDENT'S REPORT

# VI. Appendix

### **ABSTRACTS OF STUDIES AWARDED WITH DISSERTATION GRANTS**

#### BIOAVAILABILITY OF ANTIOXIDANT DIETARY FIBER FROM DEFATTED PILI (Canarium ovatum Engl.) PULP MEAL RESIDUE: AN IN VITRO AND HUMAN IN VIVO ASSESSMENT

#### **Elizabeth Hashim Arenas**

Pili (Canarium ovatum Engl.) is an indigenous crop in the Philippines. Defatted pili pulp meal residue (DPPMR) is the solid waste residue of pili pulp oil processing which consists of peel and fibrous pulp. DPPMR was characterized, safety assessed and evaluated, in terms of bioavailability in vitro and in vivo. DPPMR contained 5.1% protein, 9.8% ash; 0.1% fat and 85% carbohydrates. Major minerals determined were potassium 2242.2 ± 35.75 mg/100g and calcium 1607.7 ± 1.94 mg/100g. DPPMR exhibited moderate hydration properties but low oil retention capacity. It was also found rich in dietary fiber (79.1 + 0.07 g/100g). Fermentation of this dietary fiber yielded short chain fatty acids, acetate (40.08 ± 0.43 mg/g) and propionate (13.31 + 0.27 mg/g). DPMMR likewise showed remarkably high polyphenol content (84.61 + 1.49 mg GAE/100g) and significant amounts of total flavonoids (347.68 ± 12.60 mg CE/g), condensed tannins (103.04 ± 1.19 mg CE/g) and total monomeric anthocyanins  $(2.69 + 0.10 \text{ mg C}_3\text{G}/2)$ . Both extractable and non-extractable phenolics contributed to its potent antioxidant capacity as determined by DPPH (615.9  $\pm$  4.02  $\mu$ mol TE/g). ABTS (844.6 + 12.14 µmol TE/g), and FRAP (371.6 + 10.64 µmol TE/g) assays. Heavy metals and microbiological profile of DPPMR fall within acceptable limits for botanical ingredients defined by regulatory authorities. Qualitative phytochemical investigation detected the presence of bioactive compounds. Acute oral toxicity recorded no mortalities in mice over the 14-day observation period. Phenolic antioxidants in DPPMR are potentially available for absorption as reflected in the results of the *in vitro* simulated digestion. Moreover, recoveries were highest during the gastric phase of digestion. A single dose (130 ml) of phenolic-rich pili pomace drink increased plasma antioxidant capacity and polyphenol levels in ten healthy human volunteers. This short-term human study indicated that pili polyphenols are rapidly absorbed to yield active metabolites which are thought to be accountable for the *in vivo* antioxidant effect. Overall, findings suggest that DPPMR is a promising source of dietary fiber and bioavailable phenolic antioxidants that can play a crucial role in human nutrition.

#### • GENETIC POLYMORPHISM AND ALLEGENICITY OF rBlo t 5 IN A HOUSE DUST MITE ALLERGIC FILIPINO POPULATION

#### Loida R. Medina

Blo t 5, a major allergen from the house dust mite Blomia tropicalis had been identified as an important trigger of allergic diseases. Effects of sequence variations to the IgE binding activity of Blo t 5 remain unclear. The study determined gene polymorphisms of Blo t 5, expressed the recombinant Blo t 5 allergen in E. coli system and determined its IgE reactivity in house dust mite allergic Filipino patients. Gene polymorphism was determined using Polymerase Chain Reaction and DNA sequencing. Recombinant Blo t 5 was expressed as a GST-fusion protein in E. coli and purified by affinity chromatography. IgE-binding activity of 230 age- and sex-matched allergic and non-allergic subjects was subjected to Enzymelinked Immunosorbent Assay and Western blot analysis. Five polymorphic variants of Blo t 5 were identified with 26 DNA base and 12 amino acid substitutions thus implying a high degree of sequence diversity. Of the 115 cases, 68.70% and 59.13% showed reactivity to Blo t extract and rBlo t 5 respectively. Total and specific IgE levels of allergic and non-allergic subjects differ significantly (p<0.0001). Blo t 5 gene exhibits polymorphic variants with predicted amino acid sequences resulting to changes in its IgE epitopes. These polymorphisms may suggest variability of allergenic properties of Blo t 5. The incorporation of the Blo t 5 variants in the panel of diagnostic allergens and immunotherapy is highly recommended.

# • Making Film Filipino: The Tagalog Sarswela and Kundiman in Early Films in the Philippines (1939-1959)

#### Antonio P. Africa

The aural and the visual aspects of Tagalog films create impressions of local culture, values, and tradition. They are expressions of a community, aptly reflecting its life ways and environment. The fifteen Tagalog films selected for the study highlight the impact of sarswela and kundiman music in sound, images, and imagination.

The study aims to understand the music, visuals, text, and extra-musical meanings of sarswela and kundiman, and how these elements create an "ethnie" imaginary in the Tagalog films from 1939 to 1959, before, during, and after World War II, when the Filipino nation was at the crossroads of change. Film musical and melodrama are highly appreciated Tagalog film genres produced since the beginning of feature film production in 1919, and continued well up to the present in the Philippines. These films have similarities in pattern and concept parallel to the Tagalog sarswela and kundiman.

The kundiman, through its extra musical meaning awa at pag-asa (mercy and hope), serves as a metaphor for the plot, script, and characters of a Tagalog melodrama. The staged Tagalog sarswela, which manifests the sentiments of nationalist playwrights at the turn of the century, later on exhibited the concept of lungsod at rayon (city and countryside) signifying a society in transformation, when it turned to film as the new medium during the Philippine Commonwealth and after the proclamation of independence.

The fifteen films covered in the study all came out during a period when there was a revival of the arts that reached its pinnacle in the fifties. Virgilio Almario labels this episode in Philippine cultural history as balagtasismo, a move to preserve Filipino traditions in a period of change brought about by the Americanization of local culture. Thus, I make an argument that film producers and directors were predisposed to use traditional theater and folk music as part of, and mold for, a film narrative.

Balagtasismo, awa at pagasa, and lungsod at nayon are concepts that concur with loob, a Filipino philosophy that involves introspection leading to selfunderstanding, acceptance, and hope. Loob, with its principles based on the Tagalog experience, brings forth depth to expressions of imaginary in film.

#### POETICS OF PAAWITAN IN A TAGALOG COMMUNITY IN THE PROVINCE OF QUEZON, PHILIPPINES

#### Cynthia C. Afable

This study discusses the Tayabas Tagalog paawitan as an arena of communicative freedom in a joyous social manner. *Paawitan* is an event marked by the confluence of drinking from a common roving glass (*tagay*) of the local vodka (*lambanog*) and singing of poetic songs called *awit* usually accompanied by the guitar and dancing. It is performed in various occasions such as baptisms, birthdays, courtship, pre-marriage ceremonies (*pamamanhikan* and *pasilungan*), weddings, and social meetings. Here, tradition continues as a lively interaction especially among mostly senior citizens who exchange repartees and sallies utilizing poetic lyrics in dodecasyllabic lines in couplets, quatrains, and sestets. Themes of *awit* include personal beliefs, ideas, goals and experiences, public and private attitudes and actuations, customs and traditions as well as relational values rendered in mostly humorous fashion. As ideas and concepts multiply and crisscross in the jousting, their threads weave themselves into the framework of discourse by equivalencies, complementarities, or oppositions. *Paawitan* is dialogism that works on vocality and heightens the listeners' understanding from its performance.

#### ANG INTELEKTUWAL NA PAMANA NG MGA PANGUNAHING TOMASINONG PILOSOPER SA KASAYSAYAN NG PAMIMILIPSOPIYANG FILIPINO: QUITO, MERCADO, TIMBREZA, ABULAD, AT CO

#### **Emmanuel C. De Leon**

This dissertation reports the primary discourses and significant contributions of six leading Thomasian philosophers: Emerita Quito, Leonardo Mercado, Florentino Hornedo, Florentino Timbreza, Romualdo

Abulad, and Alfredo Co. The study likewise aims to promote the importance of recognizing the said local philosophical discourses in the development of Filipino philosophy. It suggests that the underdevelopment of Filipino Philosophy may be attributed to the supposed absence of written history of philosophy in the Philippines. Using F.P.A. Demeterio's taxonomy of Filipino Philosophy, this research explores and analyses the primary texts written by the aforementioned Thomasian philosophers. The findings delineate, these philosophers' eleven discourses that can contribute to the enrichment-of philosophical traditions in the country: (1) exposition of a foreign system; (2) philosophizing using the Filipino language; (3) interpretation of the Filipino worldview; (4) critical philosophy; (5) appropriation of folk philosophy; (6) research on Filipino values and ethics; (7) appropriation of foreign system; (8) application of phenomenology, existentialism, and hermeneutics; (9) identification

of the presuppositions and implications of the Filipino worldview; (10) study on the Filipino philosophical luminaries; and (11) research on the history of philosophy in the Philippines. This dissertation begins with a brief history of philosophy in the University of Santo Tomas, the first university in the country to offer a degree program in philosophy. The succeeding chapters present the fundamental tenets of the Thomasian philosophers' philosophical enterprise that center on the discussion of their respective intellectual biographies, philosophical tasks, and philosophical methods, which were viewed in the present study as by-products of their material context. The last section of this dissertation summarizes the salient findings of the study, concludes with an explication on the relevance of a strong local Philosophical tradition before venturing into foreign systems, and recommends related topics about Filipino philosophy for future research undertakings.

#### • Teo T. Antonio: Tulambuhay Mananaliksik

#### Joselito D. Delos Reyes

Nilalaman ng disertasyong ito ang topograpiya at landas na tinahak ng pagsulat ng biyograpiya ng sang makatang maituturing na muhon ng kasaysayang pampanitikan sa bansa, si Teo T. Antonio. Bukod sa mismong Tulambuhay, binigyang diin ang dahilan kung bakit dapat pasimulan ang proyektong Popular Biography; kung bakit dapat pang sumulat ng biyograpiya sa malawak na pagtanaw sa mundo ng panitikan at pagsulat; ang paraan kung paano lalandasin ang biyograpiya bilang babasahing popular at pampanitikan; at ang mungkahing proseso sa pagsulat at pakikipagniig sa proyekto ng mananaliksik.

lnilalahad ng mananaliksik ang paglalapat ng iniakmang metodolohiya o pamamaraang ipinapanukala nina Edel Leon (1973) sa larang ng Literary Biography bagamat binigyan ng pag-akma ng mananaliksik upang lumapat sa kontekstong Filipino, at Bienvenido Lumbera (1997) sa konteksto naman ng lokal na pagsulat ng biyograpiyang pampanitikang may tuon sa pag-humanize sa paksa, o mas tiyak: mas malalim na pagkilala sa iba't ibang pwersang sikolohikal at panlipunan na pinaglulunsaran ng manlilikha. Buhay ng manlilikhang hindi dapat ipagkait a pamayanang akademiya, sa mga karaniwang mambabasa, at tumatangkilik sa panitikan sa ating bansa sa kabuuan tungo sa malapit na hinaharap.

#### • Historyograpiyang Nakapaloob sa mga Obrang Historikal ni Carlos "Botong" Francisco

#### **Melanie D. Turingan**

Maliban sa pagiging isang mahusay na pintor at Pambansang Alagad ng Sining, nakilala rin si Carlos "Botong" Francisco sa paggawa ng mga historikal na obra hango sa isang masinsinang pananaliksik sa bawat kabanata ng ating nakaraan. Sa kanyang paglusob sa larangan ng kasaysayan, hindi niya namalayang lumusob rin siya sa iba't ibang historyograpiyang humugis sa mga diskurso ng mga historyador na kabilang sa kanyang mga naging sanggunian, pati na rin sa historyograpiyang humugis sa kanyang adhikain bilang isang biswal na historyador.

Labinlima ang pangunahing historikal na obra ni Botong. Sa papel na ito, hinati ang mga nasabing obra sa tatlong pangunahing terra o paksa: relihiyoso-historikal, kultural-historikal, at politikal-historikal. Ginawa ang paghahating ito upang siyasatin ang kalibre ng pagiging biswal na historyador ni Botong at mapag-aralan ang mga historyograpiyang Hegelyano, Oryentalismo at Post-kolonyal na malinaw na lumulutang sa kanyang mga historikal na obra. Bukod sa nabanggit, may isang komprehensibong pagtalakay rin sa pisikal na anyo, angkop at hindi angkop na elemento at detalye sa bawat obrang kabilang sa tatlong mahahalagang seksiyon sa pag-aaral.

### • Swarm Intelligence Development Environment and Underwater Swarm Robotics Platform

#### **Ryan Rhay P. Vicerra**

The main objective of this research is to show that swarm intelligence and underwater swarm robotics is a possible technology for underwater wireless data communication, which up to present time is very challenging. Underwater wireless communication is similar to terrestrial communication having the worst parameters. This research paper is divided into two major components. First is the design, development, testing and validation of a Swarm Intelligence Development Environment and 3 different swarm intelligence for data communications. Second is the design, development testing and validation of an underwater swarm robotics platform. These two major components are necessary in order to successfully meet the objective. The three swarm intelligence designed are slime mold, trophallaxis and pheromone based swarm intelligence. Slime mold is based on the social amoeba called Dictyostelium discoideum. Trophallaxis is based on the behavior of bees. Pheromone is based on the behavior of ants. The three swarm intelligence are designed, developed and tested using the Swarm Intelligence Development Environment coded by the author. The underwater warm robotics platform is composed of six robots. All robots are design by the author using mechanical and electronics engineering principles. Codes are also designed by the author. The

swarm behaviors are embedded in the system. Testing and validation are performed in a swimming pool. The testing and validation results support the objective of the researcher. The simulation results show the performance of the three swarm behaviors. It can be seen that their performance parameters are affected by which behavior is used and how many robots are used. The underwater swarm robotics platform is able to show swarm behavior and supports the overall success of the research.

#### • Cytotoxicity Against HepG2 Cell Line of the Methanolic Extract from Broussonetia Blanco (Moraceae) Leaves and Its Formulated Hepatoprotective Oral Solution

#### Franelyne P. Casuga

Broussonetia luzonica (Moraceae) Blanco is a Philippine endemic vegetable tree whose leaves and flowers are eaten by villagers in the northern provinces and is available year round. Various biological activities of available edible plants are being explored today because of the need to address alarming health problems. This study dealt with the determination of the plant's potential in targeting certain aspects of carcinogenesis which can make it an option for chemoprevention. The investigation involves characterization of the leaves of the plant, powdered sample and the different leaf extracts. Crude extracts were obtained by selective sequential extraction using solvents of increasing polarity namely, n-hexane, ethyl acetate and methanol. Cytotoxicy using MTT assay was also conducted to determine which among the three leaf extracts is the most cytotoxic against hepatocellular carcinoma cell lines (HepG2) but not adversely affecting normal human dermal fibroblasts obtained from neonates cell lines (HDFn). The methanolic leaf extract, which exhibited the most promising cytotoxic effect was subjected to toxicity and preformulation studies before it underwent formulation to an oral solution. The hepatoprotective effect of the formulated oral solution was determined in diethylnitrosamine treated rats. In addition, the inhibitory property of the oral solution against TNF- $\alpha$  and IL-17A was investigated in the same rat models.

MTT assay revealed that the methanolic leaf extract exhibited the most promising cytotoxic effect with IC<sub>50</sub> of 1.865 µg/mL ( $\Box$ =0.001) against HepG2 cell lines as compared to Doxorubicin (IC<sub>50</sub>= 5.068 µg/mL). In addition methanolic extract showed an IC<sub>50</sub> of 118.44 µg/mL against HDFn which is considered not lethal to cells as compared to the control (IC<sub>50</sub>=4.5 µg/mL). This is based on the criteria of United States National Cancer Institute on cytotoxicity of compounds having an IC<sub>50</sub> of <20 µg/mL.

The approximate LD<sub>50</sub> of the methanolic leaf extract is greater than 2000 mg/ Kg based on toxicity studies. Preformulation studies showed that the extract is photosensitive and hygroscopic and should be stored in light resistant and tightly sealed containers at a temperature not exceeding 30°C. DSC analysis revealed that methanol extract is compatible with methyl paraben, propyl paraben, sodium phosphate and carboxymethylcellulose. These are the excipients used in the formulation of an oral solution. At a dose of 1000 mg/Kg, the oral solution showed significant hepatoprotective effect and inhibitory property against Interleukin-17a and  $TNF-\alpha$ .

The methanolic extract of the leaves of *B. luzonica* was proven to target few aspects of carcinogenesis and has the potential to be used as chemopreventive agent.

#### • BAYANIHAN AS INTER-SUBJECTIVITY: AN INCULTURATION TOOL FOR THE PCP II'S CHURCH IN THE PHILIPPINES

#### Allan A. Basas

The dissertation investigates the Filipino concept of *Bayanihan* as a tool that inculturates PCP II's concept of Renewed Church as Discipleship in Community. It focuses on three intersecting points, namely: inculturation, bayanihan, and Discipleship in Community.

The dissertation is divided into four parts: Part One discusses inculturation as a process that aids in the communication of the Gospel message in the living tradition of the people. Through the method known as dynamic equivalence, inculturation investigates the culture in question in order to discover its meanings or intended impact that have equal expressions in the Gospel message. Part Two explores *bayanihan* as an aspect of culture, which expresses the inter-subjectivity of the Filipino people. The major themes of *bayanihan*, namely: unity, interdependence, and compassion are treated as inculturation tool. Part three studies the key concepts of the Discipleship in Community that express the PCP II vision of Renewed Church. The major themes of Discipleship in Community emphasize the call to radical communion and participation. Finally, Part Four highlights how *bayanihan* incarnates the PCP II concept of the Church as Discipleship in Community. This part weaves together components of *bayanihan* and major themes of Discipleship in Community that has dynamic equivalence.

Looking at the inter-subjective components of *bayanihan* and the major themes of the Discipleship in Community, it can be fairly argued that there is dynamic equivalence between the two. Thus, by concluding that *bayanihan* can be used as a tool to inculturate the Discipleship in Community, this study arrives at a new way of looking at or understanding the Church in the Philippines that is endemic to the Filipino culture.

#### • ASSESSING THE LEVEL OF IMPORTANCE OF EMPLOYABILITY SKILLS AND THE COMPETENCE IN THE PERFORMANCE OF EMPLOYABILITY SKILLS IN THE WORKPLACE OF NEWLY HIRED STAFF NURSES TOWARDS A PROPOSED INTERFACE MODEL IN NURSING EDUCATION

#### Ma. Socorro Sanchez Guan Hing

Today's workforce in any field is characterized by increasing competition for jobs. This poses a challenge for the higher education institutions to develop among its student's graduate attributes, personal skills and experiences in preparation for a workforce that satisfies the labour market and its clientele.

This descriptive comparative study was conducted using 2 survey questionnaires administered to 58 newly hired staff nurses and 58 head nurses in selected public and private hospitals in Metro Manila. This study sought information regarding the hard and soft employability skills considered as important in the workplace and the staff nurses' competence in performing these employability skills, as self-assessed by the newly hired staff nurses and by the head nurses in their area of assignment in public and private hospitals. The assessments of these 2 groups of respondents were compared. From this, the employability skills were prioritized by the staff nurses and head nurses in terms of the need for curriculum enhancement using Borich needs assessment model. The data showed that the employability hard and soft skills brought into the workplace by the nursing graduates were adequate and are valuable in the performance of their tasks and functions as staff nurses. There were significant differences in the self assessments by the newly hired staff nurses and assessments by the head nurses in selected public and private hospitals on the employability skills considered as important as well as the competence of the newly hired staff nurses in the employability skills. There were gaps between the importance of these skills and the expected and actual performance of the newly hired staff nurses which are identified in this study as skills in need of curriculum enhancement. In need of enhancement are the technical skills, skills in problem solving, critical thinking, decision making, communication, collaboration, interpersonal skills and time management. Inferential analysis revealed that there is a significant difference in the employability skills prioritized by staff nurses and head nurses in terms of need for curriculum enhancement. An Interface Model in Nursing education is proposed as a guide to improve nursing education for educational outcome to be relevant to the needs of the industry.

#### • PERCEIVED COMPETENCY AND LEVEL OF PREPAREDNESS ON DISASTER AMONG HOUSEHOLD MEMBERS IN SELECTED COMMUNITIES IN BULACAN:INPUT TO TRAINING DEVELOPMENT

#### **Maria Corazon Sison-Olayres**

Disaster as defined by American Heritage Dictionary (2011) is a suddenly occurring event causing great loss of life, health problems, damage to properties and livelihood, social and economic disruptions. It can be due to naturally occurring physical phenomena (natural disaster) or technological (man-made). In the Philippines, natural disaster is a common occurrence because it is situated in the pacific ring of fire and along the storm pathway. Recognizing the past incidences and risk of natural disasters in the Philippines, various efforts have been made to reduce the country's risk and vulnerability. Thus, the paradigm shift from an emphasis on disaster response to actively reducing disaster risks by disaster preparedness. More often than not, awareness on, disaster preparedness through training and seminars were conducted in urban and sub urban areas but the community particularly the household members were overlooked. For that reason, preparedness should begin at home and a household member must plan until crisis passes. Hence, it is deemed necessary for the researcher to evaluate the disaster preparedness of the community particularly the household members.

The study used descriptive correlational design. It determined the perceived competency of the household member on disaster preparedness and their level of preparedness on disasters like storm /flood, earthquake and fire. It described the relationship between the household member respondents' perceived competency on disaster preparedness and their level of preparedness. A self made questionnaire was distributed to 145 household members in Barangay Lambakin and Barangay Sta Rosa of Marilao Bulacan.

The data were analyzed using the following statistical treatment: percentage to determine the demographic profile of the respondents, average / mean to determine the perceived competency and level of preparedness, T test and ANOVA to determine the significant difference and Pearson R to determine cant relationship.

The result of the study revealed that the perceived competency of the household member respondents in terms of knowledge, attitude and motivation are very good but showed fair in terms of barrier. Likewise, the level of preparedness of the household member respondents on storm / flood and fire are very good while the level of preparedness on earthquake is good.

In conclusion, the study showed that there is no significant difference in the perceived knowledge, attitude, motivation and barrier on disaster preparedness of the household member when their gender, age and educational attainment was taken as test factor. Likewise there is no significant difference in the level of preparedness of the household member respondents on storm/flood, earthquake when their age, gender and educational attainment was taken as test factor. But there is a significant difference in the level of preparedness on fire when their gender was taken as test factor. It revealed that women are more prepared on fire than men. The study also revealed that there is a significant relationship between the perceived competency of the household member respondents and their level of preparedness. This indicates that if the perceived competency of the household members on disaster preparedness is very good then the level of preparedness of the household members on disaster is also be very good.

Based on the result of the study, it is recommended that the sample size of the study be increased and the local of the study should extend to other barangays both in urban and rural areas. It is also recommended that disaster training program be tailored to the specific needs of the community.

#### • MORAL SENSITIVITY, MORAL COURAGE AND MORAL DISTRESS AS CORRELATES OF JOB PERFORMANCE AMONG NURSE EDUCATORS OF SELECTED PUBLIC AND PRIVATE HIGHER EDUCATION INSTITUTIONS TOWARD VALUES ENHANCEMENT

#### Susan N. Maravilla

In this era wherein much emphasis is placed in research proficiency, globalization of education and innovative teaching strategies, the affective culture within the academe has been put aside most of the time. Hence, addressing and understanding moral sensitivity and moral courage among nurse educators is important because it can strengthen the affective organizational climate leading to absence of moral distress, increase job satisfaction and better job performance.

It is hoped that results of this study will help in, the development of a more holistic and effective faculty enhancement program wherein the values of moral sensitivity and moral courage are given importance and emphasis to help avoid moral distress, promote faculty job satisfaction and consequently improve job performance.

This study utilized a non-experimental descriptive correlational research design to identify the relationships among the different variables. This study explored and examined which among the variables of moral sensitivity, moral courage and moral distress have an effect on job performance among nurse educators in Luzon.

To analyze and correlate the results in the study, the researcher utilized the following statistical tests:

Descriptive Statistics particularly the frequency distribution and percentage were used to determine each variable in the socio-demographic profile specifically, number of years teaching, religion and type of institution.

Moreover, to determine the self-assessment of respondents in terms of their level of moral sensitivity, moral courage, moral distress and job performance, the researcher used weighted mean formula.

For inferential statistics, One-way ANOVA (F-test), Independent T-test and Pearson r were used.

It is concluded that the moral sensitivity of nurse educator respondents in private institutions was rated as Very Good compared to their counterparts in public institutions who rated themselves only as Good in terms of moral sensitivity. However, both groups of respondents rated themselves as Very Good in terms of moral courage. It shows that nurse educators take their role as advocates seriously, whether for patients, students, colleagues or even for one's institution. Findings showed that morally distressing situations:' although occasionally encountered, are a reality in the academe and that they elicit mild distress among nurse ethicators. Despite the presence of morally distressing situations in the academe, nurse educators are still able to give Very Good level of job performance. This supports the results that there is no significant relationship between moral distress and job performance since morally distressing situations are encountered only occasionally and the magnitude of distress it elicited is only mild, therefore not enough to affect one's job performance. However, findings pointed out that despite no significant relationship, there is an inverse relationship for both frequency and magnitude of moral distress with regards to job performance: as moral distress increase both in frequency and magnitude, job performance of nurse educator respondents decreases. Thus, to strengthen the affective organizational climate, nurse educators must therefore be assisted on how to handle and deal with morally distressing situations by addressing moral sensitivity and moral courage.

It is therefore recommended that nurse leaders be proactive to prevent escalation of moral distress in the academe, thus, the development of the Values Enhancement Program for faculty wherein the concepts of moral sensitivity and moral courage are given importance and emphasis to help prevent escalation of moral distress in the academe and subsequently maintain/lead to better job performance.

### **ABSTRACTS OF LECTURES AWARDED WITH TRAVEL GRANTS**

• HeMatic: An Automated Leukemia Detector with Separation of Overlapping Blood Cells through Image Processing and Genetic Algorithm

#### ACULA, Donata D.; CABRERA, Reymond Joseph A.; LEGASPI, Criselle Amor P.; PAPA, ERIKA JASMINE; and SAMONTE, Reden D.

**Event:** International Conference on Applied System Innovation (ICASI 2016) in Okinawa, Japan on May 28 to June 1, 2016

Health is one of the priorities of the people. Better health is essential, for it also makes a relevant contribution to the economic progress as people who live longer tend to be more productive. Threats to health, however, are rampant. According to the National Cancer Institute (NCI), Leukemia is one of the overall killer diseases in the world. One of the keys to solving this problem is by early detection, and softwares are being developed for this purpose.

Image processing in the medical field mainly involves microscopic and morphological imaging. It is used to generate images of human body parts for diagnosis and examination purposes. Thus, it plays a vital role in clinical analysis and medical intervention. Image Processing is widely used in the field of medicine and since health is the factor being considered, it must be vigilantly done.

This study applied the different techniques of Image Processing and Genetic Algorithm in automating the detection of Leukemia. The Image Processing techniques that were used are as follows: Color Extraction, Binarization, Mathematical Morphology and Overlapping Cells Separation. The benchmarks in detecting Leukemia that are being used by the medical experts on a blood sample structure are taken into account. The researchers created a system that accepts a blood image that undergoes selecting, counting, and acquiring the size and Nucleus-Cytoplasm Ratio of White Blood Cells (WBCs) using Image Processing procedures. In an occurrence of overlapping cells, a pair of cells is separated in order to get a more accurate detection. Genetic Algorithm's selection, crossover and mutation methods are utilized in producing optimal patterns of WBCs. Naïve Bayes Classifier is added to calculate the likelihood that a blood image is Leukemic or not.

The researchers gathered three (3) medical experts to evaluate the system, each one of them tested a total of a 100 blood images and determined whether each blood cells image is a candidate for Leukemia or not. The result of the system on the same blood images was then compared to the evaluations of the medical experts. The system achieved a detection rate of 90.33%. • MarkToLock: An Image Masking Security Application via Insertion of InvisibleWatermark Using Steganography and Advanced Encryption Standard (AES) Algorithm

### Christian C. Cirineo, Roberto Q. Escaro Jr., Christian Deiniel Y. Silerio, Jasper Bryan B. Teotico, and Donata D. Acula

**Event:** International Conference on Applied System Innovation (ICASI 2016) in Okinawa, Japan on May 28 to June 1, 2016

This study aims to create system that will use the Advanced Encryption Standards together with Least Significant Bit Steganography to encrypt and hide digital watermarks such as image, and text files in a cover image, and evaluate its performance in terms of speed, file utilization, and accuracy of the original image, and the image that will be produced by the system. The system will take a digital watermark and a cover image as input, use Advance Encryption Standard for encryption, and then use Least Significant Bit algorithm to hide the watermark in the cover image. The system will be evaluated to identify possible improvements in the performance of the schema.

### • Basic Ecclesial Communities (BEC) Involvement and Its Relation to the Spiritual Growth of Urban Youth

#### Milagros Cortez-Arrevillaga, Ph.D.

**Event:** International COMIUCAP Conference 2015 on Civil Society and Human Formation: Philosophy's Role in a Renewed Understanding of the Meaning of Education on July 20-22, 2015 in Melbourne, Australia

This research endeavors to describe the involvement of a selected group of Catholic Filipino youth in Basic Ecclesial Communities (BECs) and how such involvement contributes to their spiritual growth. The BEC has been integrated by some of the parishes in Metro Manila Area in their respective systems to mobilize manpower and enhance people involvement through the grassroot-level of evangelization. Utilizing the purposive sampling method, the researcher worked with the youth of Sagrada Familia Parish (Caloocan City), Sta. Quiteria Parish (Novaliches City) and San Jose Agudo Parish (Quezon City). Youth involvement was measured based on the length of membership in the BEC. Indicators of spiritual growth were incorporated in the survey questionnaires, with subscales on thoughts, feelings, and behaviors. The researcher-made instrument was contentvalidated by an expert in the BEC. It was also pre-tested and shown to have a correlation coefficient of 0.824. Results of the survey indicate that involvement of the youth in BEC has a weak correlation to their spiritual growth. Benefits gained from community involvement, areas for improvement, and recommendations were threshed out in a Focus Group Discussion conducted for the three (3) represented communities.

#### • Web-based Power Board using Raspberry Pi

### Zhuo, Eugenia R.; Calugay, Ace Anacleto P. III; Tolentino, Rolando T. II; Santos, Gilan Daniel R.; and Santos, Josemaria Israel S.

**Event:** 2016 IEEE International Conference on Integrated Circuits and Microsystems (ICICM 2016) from November 23-25, 2016

Considered as one of the major catastrophes, fire caused by unattended outlets that may spread quickly to neighboring building structures can inflict substantial losses. Converging wireless and mobile technology, a new device is designed to be used for monitoring and controlling the custom-built power board that can prevent accidents from happening, mitigating their consequences and increasing public safety and awareness to efficient energy consumption is presented in this paper. The device is design using a Raspberry Pi, contactor, relay board, custom-built power strip, USB Wi-Fi Adapter, SD Card and required peripherals.

### • The Quiapo Leap: A Philosophical Reading of the Religious Experience of the Black Nazarene Popular Devotion in Quiapo, Manila, Philippines

#### **Rhochie Avelino E. Matienzo**

**Event:** Inter-Religious and Inter-Cultural Dialogue in a Pluralistic World, Philosophical and Theological Perspectives in Constanta, Romania on June 1 to 2, 2016

In 1521, the Spanish conquistadores brought Christian faith to the Philippine islands. Through centuries, this faith is infused with the indigenous culture of the people paving way to what is known today as "Filipino popular devotion". One of the most famous (and perhaps, infamous) among its rituals is the annual Traslacion ("the passage") devotion in honor of the Black Nazarene in Quiapo, Manila. The ritual is a procession first held in 1787 from a small Augustinian church in Intramuros, Manila to its present Basilica in Quiapo District. Since then, countless accounts of "miracles" has been claimed by devotees which attracted not only the local but the international media as well.

From 2004-2014, a 4,000% increase of participants has been recorded who joined the cult. Within the devotee is a personal "panata" (sacred vow) one promises to keep for a lifetime. However, the same practice of faith recorded more than eight thousand injuries and eleven fatalities since 2004. Hence, the widespread criticisms

of fanaticism, radicalism, irrationality, idolatry, and paganism became synonymous emblems of the annual feast.

In recent decades, there has been a vast measure of literature on this religious phenomenon. However, most of them are either written by social scientists or religious experts and very seldom (perhaps none) explored in a philosophical manner. This study aims to reflect on the religious experience of the Black Nazarene popular devotion in order to provide a philosophical appreciation of this unique Filipino faith in particular, and to provide avenue towards a deeper understanding between indigenous culture and Christian faith. In meeting this aim, the study invokes Soren Kierkegaard's existentialism and its discussion on "faith" illustrated in two of his renowned works **Fear and Trembling** and **Concluding Unscientific Postscript**, in particular, his notions of "faith by virtue of the absurd" and the "double movement of faith."

#### • Philippine English in the ESL Classrooms: A Much Closer Look

#### Alejandro S. Bernardo, Ph.D.

**Event:** 2017 Hawaii TESOL Conference at the University of Hawaii at Hilo, in Hilo, Hawaii on February 18, 2017

This paper primarily points out Philippine English (PhE) manifestations and structures in curricular elements and evaluates whether pedagogical practices in the English as Second Language (ESL) classrooms in the Philippines are adherent to the World Englishes (WE) paradigm. It aims at 'finding' PhE in three critical areas of English language instruction: (1) in the current state-prescribed English Language Teaching and Learning (ELTL) curriculum, (2) in teacher-student classroom interactions, and (3) in the tests administered by teachers to learners. Put in another way, the objective is to examine if PhE has made inroads into the ESL instructional backbone and pedagogical practices and if, to a certain extent, it has been mentioned or spoken about in ESL classrooms and promoted as a (or the or one of the) pedagogical model(s) in teaching English courses. This paper argues that for PhE to fully and to successfully reach endonormative stabilization, its presence should be evident in what teachers teach (content), in classroom conversations (actual classroom use), and in the assessment tools teachers employ (test construction). In the end, a pedagogical strategy for making the teaching of English in the Philippine ESL classrooms PhE- and WE-inspired is forwarded.

### HARD EDGES: CHALLENGES IN PRESERVING THE CULTURAL LANDSCAPE OF UST MANILA

#### Isidro C. Abaño, Anna Marie H. Bautista

**Event:** 16th Annual UMAC (University Museums and Collections) Symposium during 24th International Council of Museums (ICOM) General Conference in Milan, Italy from July 3-9, 2016

The University of Santo Tomas Manila campus, which was a declared a historical landmark in 2011 by the National Historical Commission of the Philippines, and identified as a prime tourist destination in the City of Manila by the Philippine Department of Tourism, is a popular campus not only to its students, faculty and alumni but also to the residents of the City of Manila and from other cities and provinces.

One of the most important titles that UST holds in its 400 years of existence is the declaration of its 4 major spaces in the campus as NATIONAL CULTURAL TREASURE by the National Museum of the Philippines in 2010, the first educational institution to be bestowed such title.

Part of the responsibility of UST for the four spaces declared national treasure is to protect the campus. The UST Museum takes the lead role in ensuring that these spaces are protected, safeguarded, well-kept and maintained. In spite of the efforts extended by the UST Museum, several challenges come up every so often risking to a certain extent the environmental fabric of its cultural landscape. This papers hopes to present the limits we encounter and how we address such challenges.

# • CONNECTING THE DOTS: SHAPING THE CULTURAL LANDSCAPE OF SAN FERNANDO CITY, PAMPANGA

#### Anna Marie H. Bautista and Edgardo Mar A. Castro

**Event:** 16th Annual UMAC (University Museums and Collections) Symposium during 24th International Council of Museums (ICOM) General Conference in Milan, Italy from July 3-9, 2016

Pampanga, situated in Central Luzon, Philippines has always been synonymous to rich and meticulously prepared cuisine and of the annual Giant Lantern Festival held every December which draws thousands of people from all walks of life. The key player in this title is its capital - San Fernando. San Fernando has emerged as a major city in Pampanga through the years since its creation in 1754. Being a colonial town, it was named after one of the honorable Kings of Spain and who later became a Saint of the Catholic Church. Presently, the City has been focusing in achieving its new vision of becoming a Center of the Kapampangan culture and be a preferred tourist destination. This paper aims to highlight how the UST Museum outreach program has been instrumental in assisting, facilitating and training the locals in identifying, mapping and appreciating their cultural resources. The cultural landscape of San Fernando City is so diverse that apart from its cuisine and traditional making and celebration of the giant lanterns, there are more cultural and heritage assets that can be promoted to further boost it tourism industry. The designation of a Heritage District, documentation of its numerous built heritage, annual heritage lectures and workshops are just some of the initiatives that the local government has undertaken and are still being implemented.

### • A model social profit and loss account as a measurement tool for social sustainability of community development programs

#### Ma. Belinda S. Mandigma

**Event:** 2nd International Conference on IT and Education Innovations (ICIEI 2016) August 6-8, 2016 Beijing, China

At present, we still have to see a concrete game plan on how social sustainability reporting will be harnessed and provide comparability among community development programs. Here, we offer a model Social Profit and Loss account designed to measure social sustainability of the community development projects of a Philippine Comprehensive University and elicited feedbacks from select business students on its usefulness. The findings of this study, based on 510 respondents, indicate that the model together with the suggested metrics, would make an important contribution to the social sustainability reporting of institutions with community development programs.

Index Terms— community development programs, social sustainability reporting, social profit & loss account

#### • The Role of Academics in Sustainable Global Research

#### Ma. Belinda S. Mandigma, Ph.D., CPA

**Event:** 6th International Conference on Education, Research and Innovation (ICERI 2016) August 6-8, 2016 Beijing, China

This article discusses the role of academics as a result of several converging trends in global research. Within the literature, there were a number of deliberations focusing on these trends. The purpose of this article is to add a level of depth and breadth to this debate. To accomplish this task, the author presents the article in three sections. First, she provides relevant information on global research. Second, she pursues an in-depth consideration of research universities. Finally, using the previous two-part discussions, she outlines the role of academics in sustained global research.

#### • Neoliberal Economy, Transference, and the Filipino Culture

#### Ian Raymond B. Pacquing

Seminar: International Psychoanalytic University Berlin, Erich Fromm Institute Tuebingen September 28, 2016 to October 1, 2016

I argue in this paper that the impact of neoliberal economy upon the western bureaucratic models which Filipinos integrate into their socio-political lives create inner schisms. Filipinos have to adapt and assimilate their social and political environment-the government, military, schools, media, and the church - all of which are exogenously imposed. In order to achieve the nation's goals, these models have to tie up with the demands of neoliberal agenda. The Filipino adaptation and assimilation must conform to these western bureaucracies in order to survive and to be recognized. Further, as Filipinos adjust and integrate their lives unto these models, they in return form networks of co-optation that fortify neoliberal paradigm. On the other hand, the very foundation of the Filipino life is nurtured by the traditional values which the community of Filipinos cherished most. Their desire to express one's sense of identity and, the creativity that figures such identity come along with the very values where the Filipino individual cherishes most. Here, the cultural atmosphere becomes the locus of one's social and individual identity. It is here where traditional values remains to be the frame of orientation in human relationship and identification. However, since the western bureaucratic models under neoliberal structures are forces to reckon with, the cherished traditional Filipino values are subsumed and categorized into these systems. Values such as pakikisama, utang-na-loob, and padrino system which are ethnosocial structures are dissuaded and instead used as tools to respond to the legal and commercial aspects dictated by these western paradigms. In order to survive and become recognize as a Filipino, these values must conform into the pattern of these exogenous bureaucracies. Consequently, Filipinos unconsciously live their lives in bipolarity. One, they express their collective emotions and sentiments in unity with those cherished traditional values and at the same time, they practice the same from the vantage point of these western models. There arises duality in living life. Unconsciously, the bipolarity of life leads to the ripping of the inner self and as such, there is incongruence on how they live life in accordance to the Filipino way. Moreover, this bipolarity of living builds insecurity and anxiety since one's social identity becomes precarious. Filipinos are no longer in control of the

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very foundation of their collective existential drive. They become alienated so as to follow the western mainstream as a matter of survival and recognition yet expressing themselves through those traditional values. In this sense, inner turmoil in the form of insecurity and helplessness happens. Psychoanalytically speaking, the phenomenon of transference materializes. Filipinos need somebody to assure that in spite of the western social forces, they are still in control of their lives and of their environment. They now submit themselves and create for themselves idols either in the form of the state, institutions, organizations, or groups from which they feel a sense of security, belongingness and relatedness. In this sense, symbiotic dependency is developed and those cherished values such as pakikisama, padrino, utang-na-loob become trappings to fortify the grip of this type of social behavior. In this case then, I argue that the cyclical nature of symbiotic dependency is nurtured from which the Filipino collective consciousness becomes hobbled and reeled.

#### • Towards a Geriatric-friendly Library: a Q Methodology

#### Jenneth Gomez Capule

**Event:** 2015 International Conference on Library and Information Science at Osaka, Japan on August 23-25, 2015

While library efforts are geared toward the provision of free and low-cost services aimed at addressing the information of the public, the fact still remains that very few attempts have been made to serve the needs of the aging population. In the Philippines alone, a clear-cut library program intended for geriatric people is virtually non-existent. The overall intent of this Q-methodological inquiry was purported to ascertain the information needs of 15 geriatric Filipino citizens from various educational backgrounds, with a view to structuring a library program responsive to the distinct and ever-increasing information needs of the overlooked sector in society. Preliminarily, the 15 participants (P-set) were asked to arrange 42 statements (Q-set) derived from initial interviews. With the use of the PQ method version 2.11 software, five interesting profiles emerged via the by-person factor analysis. These include the (i) Classic and People-Oriented; (ii) Gregarious Geriatric, (iii) Cautious Architect; (iv) Soulful Reader; and (v) Trendy and People-Oriented. Their information needs vary from profile to profile and are geared toward library collection and physical facilities. The identified profile characterizations are valuable inputs in crafting a library program that can be labeled as a geriatric-friendly library.

THE PRESIDENT'S REPORT

#### Fidelity to a Religious Tradition and the Question of Moral Agency

#### Joel C. Sagut

**Event:** XXI World Congress of the International Association for the History of Religions at Erfurt, Germany on August 23-29, 2015

The paper will discuss the issue of moral agency vis-a-vis one's fidelity to a religious tradition. This will respond to James Rachels' problematization of the concepts of moral agency and worship when he argued that worship is "a submission to the 'worshipped being' that totally dominates the worshipper's life," while moral agency means the capacity to make autonomous choices - a tension that is echoed in modern liberal understanding of freedom. The response to Rachels' question will recourse to Alasdair MacIntyre's understanding of the virtuous life which theorizes on the possibility of maintaining both the virtue of fidelity and autonomous choice. The paper will examine the legislation of the Philippine Reproductive Health Law as basket-case for this tension. It will then argue that any believer remains reasonably free even if he exercises fidelity to a tradition. In fact, it is this fidelity to one's tradition that makes our decisions truly rational.

#### • Forecasting Analysis of the Distribution of Leptospirosis Incidence in the NCR

#### Kenneth R. Aguilar, John Joel F. Defeo, and Ma. Carlota B. Decena

**Event:** 3rd Innovation and Analytics Conference and Exhibition (IACE 2016) at Universiti Utara Malaysia, Kedah, Malaysia on October 30 to November 1, 2016

Leptospirosis is a disease transmitted by contact with infected animal urine or by the urine-contaminated environments such as water and soil. Leptospirosis in the Philippines occurs mostly during the rainy season specifically from the months of June to October. Leptospirosis outbreaks were recorded in the NCR in the year 2012 and 2013.

This study focuses on the cases of leptospirosis in the NCR. This study observes the effect of climate variables such as the minimum, maximum, and mean temperature and the amount of rainfall to the trend of leptospirosis cases. This study aims to forecast the possible number of leptospirosis cases in the NCR in the next five years. Seasonal Autoregressive Integrated Moving Average (SARIMA) model is done in predicting the values of the variables. The forecasted number of leptospirosis cases shows a decreasing trend. Multiple Time Regression Analysis was done through the expert modeler in SPSS and its results show that the amount of rainfall is the only significant variable with the number of leptospirosis cases.

#### • Analgesic Effect of Scyphiphora hydrophyllacea C. F. Gaertn. (Rubiaceae) Bark Extract in mice

#### Regina Belen P. Callantal, Mafel C. Ysrael

**Event:** Inaugural Symposium of the Phytochemical Society of Asia (ISPSA 2015) at Tokushima Bunri University on August 30, 2015 to Sept. 2, 2015

Pain is described as a complicated group of unpleasant sensory, emotional and cognitive experiences caused by real or perceived tissue damage and manifested by certain autonomic, psychological and behavioural reactions. Scyphiphora hydrophyllacea possess cytotoxic, anti-gelatinase and anti-microbial activity. It is also used by the local communities in Romblon, Philippines as an herbal medicine for treatment of stomachache. The analgesic potential of S. hydrophyllacea was evaluated using hot plate method and acetic acid-induced writhing test in mice. The analgesic property of S. hydrophyllacea bark extract (SHBE) by hot plate test showed that the Percent Maximum Possible Effect (%MPE) of SHBE doses (200, 400 and 800 mg/kg BW) decrease as the time after administration increases, whereas the %MPE of Indomethacin increases as the time after administration increases. Moreover, SHBE doses showed reduced number of writhes compared to the control by acetic acid-induced writhing test and had an ED50=686.27 mg/kg BW.

The %MPE by hot plate reaction in mice indicates that SHBE is not a good centrally acting analgesic drug. However, the pronounced inhibition of writhes by the SHBE suggests that its effect may be peripherally-mediated via the inhibition of synthesis and/or release of prostaglandins. This study validates the use of the expressed juice from the bark extract of S. hydrophyllacea as treatment for stomachache.

#### • A New Iridoid Glycoside Isolated from Scyphiphora hydrophyllacea C. F. Gaertn. (Rubiaceae) Bark Extract with α-glucosidase Inhibition

#### Mafel C. Ysrael, Maria Cristina R. Ramos, Mario A. Tan, Fatima Mae B. Barateta, Maria Patricia H. Diño, Caryl Joy C. Obaña, Monique Anne T. Ong, Patrizia Philline A. Sumabat, and Regina Belen P. Callanta

**Event:** Inaugural Symposium of the Phytochemical Society of Asia (ISPSA 2015) at Tokushima Bunri University on August 30, 2015 to Sept. 2, 2015

Alpha-glucosidase is an enzyme that acts upon  $\alpha$ -1, 4-bonds to release a single  $\alpha$ -glucose molecule, wherein inhibitors are utilized to prevent the occurrence of postprandial hyperglycemia by modulating the glucose absorption in the body. S. hydrophyllacea possess cytotoxic, anti-gelatinase and anti-microbial activity. The anti- $\alpha$ -glucosidase activity of S. hydrophyllacea was investigated and its correlation

to in vivo postprandial glucose effects was determined. The  $IC_{50}$  of the expressed juice from the bark of S hydrophyllaea was shown to be at 1,570 µg/mL while the positive control, 1-Deoxynojirimycin, had an 1050=200 pg/mL. Results show that administration of extract at the dose of 200 mg/kg BW significantly prevented the drastic increase in blood glucose level, with a percent total time course curve glycemic response reduction of 38.46%.

Expressed juice from the bark of S. hydrophyllacea was partitioned in solvents of increasing polarity based on Kupchan extraction method. A new iridoid glyoside was isolated from the butanol fraction. The new iridoid glycoside gave an inhibition against  $\alpha$ -glucosidase with an 1050=2.40 1.1g/mL.

#### Partial Characterization of β-Galactosidase Extracted from Pediococcus sp. as Potential Source of Probiotics for Treating Lactose Intolerance

#### R. Alpay, E. M. Pangan, M. K. Devanadera, M. Santiago

**Event:** American Society for Microbiology (ASM) Microbe Convention 2016 in Boston, Massachusetts, USA from June 16-20, 2016

Lactose intolerance is prevalent among people especially the elderly. Lactose intolerance occurs when the body is incapable of producing  $\beta$ -galactosidase – the enzyme that hydrolyzes lactose. Improper digestion of lactose causes a lot of symptoms like bloating, diarrhea, and abdominal pain. This study aims characterize  $\beta$ -galactosidase from *Pediococcus* sp. as a potential source of probiotics for treating lactose intolerance.

**Methods:** The strains used were *Pediococcus pentosaceus* K3A2-2, *Pediococcus acidilactici* K2A2-5, K2A2-1, and K2A1-1. The crude enzyme was extracted via sonication for 15 minutes in 3 minutes intervals at maximum volume. Microplate based Bradford assay was performed to measure the protein content of the crude extract and ONPG assay for the enzyme activity. The enzyme activities were measured according to three parameters: substrate, substrate concentration and pH. MRS Broth supplied with 1% glucose or lactose was used to compare which substrate gave the highest value of enzyme activity. MRS Broths at different pH (4.8, 6.8 and 8.8) and different substrate concentrations (1%, 5%, and 10%) were used to determine which value gives the highest enzyme activity.

**Results:** K3A2-2 had the highest enzyme activity of 3.6x10-4 U/ml in MRS Broth supplied with 1% glucose while K2A2-5, K2A2-1, and K2A1-1 had the highest value of 4.3x10-4 U/ml, 4.9x10-4 U/ml, and 4.2x10-4 U/ml respectively in MRS Broth supplied with 1% lactose. K3A2-2, K2A2-5, K2A2-1, and K2A1-1, the highest activity of 2.4x10-3 U/ml, 2.6x10-3 U/ml, 2.4x10-3 U/ml, and 2.5x10-3 U/ml were obtained from media

supplied with 10% lactose. K3A2-2 has the highest activity of 2.7x10-3 U/ml at pH 8.8 while K2A2-5, K2A2-1, and K2A1-1 had the highest activity of 5.1x10-3 U/ml at pH 4.8, 2.8x10-3 U/ml and 2.7x10-3 U/ml at pH 8.8 respectively.

**Conclusion:** The best conditions for optimum production of  $\beta$ -galactosidase in *Pediococcus* species were 10% lactose as substrate at pH 8.8. *Pediococcus* species could be a potential source of probiotic that could help treat lactose intolerance. However, the enzyme activity is quite low thus optimization parameters such as incubation temperature and time must still be done on the bacterial strains to achieve maximum yield.

#### • Purification of Bile Salt Hydrolase from Philippine Cocowater Kefir Lactic Acid Bacteria

#### E. Pangan, R. Alpay, M. Devanadera, M. Santiago

**Event:** American Society for Microbiology (ASM) Microbe Convention 2016 in Boston, Massachusetts, USA from June 16-20, 2016

Bile salt hydrolase (BSH) is an enzyme produced by lactic acid bacteria that holds promise in lowering cholesterol levels, consequently decreasing the risk of cardiovascular diseases, with its presence having been correlated to hypocholesterolemic effects of food rich in probiotic bacteria, such as in kefir. In this study, lactic acid bacteria (LAB) isolates from cocowater kefir were screened for BSH activity, followed by the extraction and purification of the enzyme. The isolates were screened by observing the precipitation of deconjugated bile salts in a specific media. Purification was done via ammonium salt precipitation and size exclusion gel chromatography using Sephadex G-100. The crude and purified extracts were then assayed for protein content, using Bradford's assay, and for BSH activity. Determination of BSH activity was done by measuring the amount of glycine liberated from the deconjugation of the bile salt glycocholic acid. Four isolates, preliminary identified as bacteria isolates I002, I004, J006 and K001 upon isolation from cocowater kefir, were subjected to the purification process and the improvement of enzyme activity was analyzed. Additionally, genomic DNA extraction was performed on the four isolates for identification of the BSH-producing bacteria. The initial enzyme activities of the crude enzyme extracts from the isolates were found to be 1.33x10-4 U/mg, 1.28x10-4 U/mg, 1.25x10-4 U/mg and 1.13x10-4 U/mg, respectively. After salt precipitation, the enzyme activities increased to 4.35x10-4 U/mg, 5.41x10-4 U/mg, 4.25x10-4 U/mg and 5.20x10-4 U/mg, respectively. Finally, after gel chromatography, the eluates were assayed, and peak enzyme activities were determined to be at 7.23x10-4 U/mg from I002, 1.98x10-3 U/mg from I004, 3.55x10-4 U/mg from J006 and 2.50x10-4 U/mg from K001. From the results gathered, enzyme activity was observed

to increase with every purification step for bacteria isolates IOO2 and IOO4, with the gel chromatography filtrates producing the highest enzyme activity per milligram of protein. The decrease in activity observed in isolates JOO6 and KOO1 could possibly be due to the elution conditions, thus requiring adjustments for the two isolates. Additionally, it was determined that bacteria isolate IOO4 expressed the highest enzyme activity, suggesting that the isolate could potentially be a good source of BSH.

## • Determining the Reading Attitudes of Foreign Language Learners in Print and Digital Settings

#### Rosalyn G Mirasol, Ph.D and Eunji Kimb

**Event:** 12th International Conference in Interdisciplinary Social Sciences at International Conference Center Hiroshima, Japan on July 26-28, 2017

This study investigated the reading attitudes of Korean students in terms of reading academically in print and digital settings' and reading recreationally in print and digital settings. The respondents were selected Koreans studying in the Philippines whose ages are ranging from 15-18 years old. Results revealed that the respondents are somewhat positive in digital settings both in academic and recreational; however, respondents were neutral/indifferent in their attitudes toward reading in print setting both in academic and recreational. It was also found out that female respondents are more inclined with reading text in digital setting than in print setting while male respondents prefer reading recreationally in digital setting. Lastly, it was found that the females have more positive attitude towards reading both in print and digital settings.

#### • Phytoplankton diversity and its ecological importance in three tropical lakes: Paoay, Mojicap, and Taal Lakes (Luzon Is., Philippines)

#### Susana Baldia, Rey Donne Papa and Kelsey Ann P. Sambitan

**Event:** 9th Asia Pacific Conference on Algal Biotechnology (APCAB) in Bangkok, Thailand from November 15-18, 2016

In freshwater ecosysteins, phytoplankton community serves as a measure of productivity, energy flow and fish yield, and likewise of the trophic status of lakes. They are also known to be biological indicators of changes in the aquatic environment. Results of regular monitoring for a period of one year in three tropical lakes of the Philippines such as Paoay, Mojicap, and Taal, established the relationship of abiotic factors with phytoplankton abundance and species composition. Updates of phytoplankton taxonomy on the three lakes resulted to a total of 42 genera of phytoplankton for Lake Paoay, and 49 genera for Lake Mojicap, of which 17 genera are new records. On the other hand, there were 30 genera observed in Taal Lake. Both Paoay Lake and Mojicap Lake experienced unusual algal blooms of *Ceratium* and *Anabaena* for Paoay Lake, while *Chroococcus, Glenodinium*, and *Peridinium* for Lake Mojicap. The phytoplankton abundance and composition are supported by the results of sediment characterization, and the Simpson's diversity and ShannonWiener diversity indices for both Lake Paoay and Lake Mojicap. A low diversity and lack of seasonality occurrences in Taal Lake all throughout the year was demonstrated, but the most abundant genera was the Cyanophyte *Chroococcus*.

#### • AQUINAS: On the Metaphysical Assumptions of Infused and Acquired Virtues

#### **Reynaldo A. Reyes**

**Event:** 5th International Conference on the Virtuous Life at the Thomas Institut Te Utrecht Tilburg University, Netherlands from December 16-19, 2015

GOD loves us, not because we are good, but that we are good because He loves us. He especially manifests His Love with the gift of Grace. And grace, with infused theological and moral virtues, inclines and moves man instinctively as if it were to God as his supernatural end.

Infused Grace elevates man to higher dignity, which far exceeds even the good of the whole universe.

In Theology, we find grace and its consequent infused virtues—almost exhaustively explained or, attempted to. Infused virtues are really distinct from acquired moral virtues. However, they are essentially inseparable because of Charity. But, then Charity is infused with Grace. This is the theological nature of Moral Virtues—the theme of this year's Conference.

However, this paper does not deal directly with the Theological nature of Moral Virtues discussed fully well by other speakers—rather it deals with its assumptions.

