



## UP Cebu research office starts year with research presentation

Central Visayas Studies Center hosted a research presentation for 4 faculty members of UP Cebu last January 20, 2016, at the university's Audio Visual Room 1.

The research presentation is one of CVSC's core activities to support UP Cebu's vision to become the leading Research University in the region.

The presentation serves as a venue for faculty members to share additional knowledge of their research outputs.

Research presenters were Atty. Francis Michael Abad from the Social Sciences Cluster, Dr. Tiffany Adelaine Tan and Dr. Leahlizbeth Sia from the Business Management Cluster, and Mr. Gregg Lloren from the Arts and Humanities Cluster.

Topics include a textual analysis of Machiavellian principles in the Philippine presidency, a paper that examines the relation of demographic variables and customer's complaint behavior, a description of sari-sari store owners' buying behavior, a study on the relationship between organizational justice and job satisfaction of hotel employees, and an analysis on the grammar of visual language of Bench's 2011 undergarment billboards featuring the Volcano Philippine Rugby Team as models.

The activity concluded with comments from panelists including Dr. Mary Gretchen Chaves, Dr. Belinda Espiritu, and Dr. Weena Jade Gera.



*Presenters, panel members, and participants of CVSC's first research presentation for 2016.*

## Researches and Creative Works Summary 1st Quarter 2016

International Publication Award	
IPA	1
<b>TOTAL</b>	<b>1</b>

Publications	
Other Publication	1
Poems and Short Stories	1
<b>TOTAL</b>	<b>2</b>

Research Presentations	
International	1
National/Local	5
Creative Work	1
Poster (international)	1
<b>TOTAL</b>	<b>8</b>

Other Accomplishments*	
Conference Proceedings	1
Case Study	1
Teaching Note	1
<b>TOTAL</b>	<b>3</b>

*\*accomplished 2015 but reported on January 2016*

<b>Researches Completed</b>	<b>1</b>
<b>TOTAL</b>	<b>1</b>

Submitted Proposals	
Faculty Grant	10
UP Cebu Research and Creative Work Grant	2
Researches supported by API Funding	2
<b>TOTAL</b>	<b>14</b>

**On the bifurcations and multiple endemic states  
of a single strain HIV Model  
An IPA of Dr. Lorna Almocera**

**Abstract**

The dynamics of a single strain HIV model is studied. The basic reproduction number  $R_0$  used as a bifurcation parameter shows that the system undergoes transcritical and saddle-node bifurcations. The usual threshold unit value of  $R_0$  does not completely determine the eradication of the disease in an HIV infected person. In particular, a sub-threshold value  $R_c$  is established which determines the system's number of endemic states: multiple if  $R_c < R_0 < 1$ , only one if  $R_c = R_0 = 1$ , and none if  $R_0 < R_c < 1$ .

*The paper was published in the ISI journal, Acta Mathematicae Applicatae Sinica, English Series, 30 (4): 913-930.*

**An Integrated Framework on Alumni Tracking,  
Individual Profiling for Automated Data Analytics and Engagement  
A Publication of Prof. Nelia Ereno  
with Prof. Kurt Junshean Espinosa and Mr. Ryan Ciriaco Dulaca**

**Abstract**

Alumni profiling is vital in an educational institution. The bottleneck lies in gathering complete and real-time information for better engagement with the alumni. The data gathering and analysis are usually two separate processes. In this paper, we present a system that integrates these two processes enabling real-time analysis crucial to providing better alumni engagement. The system was implemented as an integrated web application framework using CodeIgniter and Google Visualization API. We recommend that the system be made available as a web service for access to decision-makers of educational institutions and as an open-source project to further enhance its features.

*The paper was published in International Journal of Computer Systems Volume 3 Issue 1, January, 2016.*

**Within Places**  
**A Publication of Prof. Charmaine Carreon**

*Poems are published in Banwa Series A Vol. 11 (2015): 1-4.*

**Bodies on Water**

*After Raymund Fernandez's "By Water"*

Though we mostly fly now, nothing compares to  
moving by water, floating on it

inside a defined principle of physics. "Any object,  
immersed is buoyed up by a force..." Archimedes  
stepping into his tub and seeing the water level  
rise as he settles in. The relationship between  
buoyancy and displacement. Volume and weight of water.  
Screaming his mirth, he runs all over town, stark naked.  
Paper in hand and, above him, foams of clouds.  
The sea is never so far away and ships sail

perceivable at distance. All as illustrated by Dr. Seuss.  
And whether or not true, the fact of boats and physics  
has romance in it. As in all acts of leaving stable ground  
to step on a platform moving beyond our will  
in circles, on waves, Why put our selves this way?  
If only for the promised adventure, the idea

*(continue on next page)*

of being where we are not, always on the way  
from wherever we have been. To be lulled into going back  
in the duyan, a place that does not exist  
in homegrown English. Which must be why  
we cannot get over how ships defy the immediately impossible.  
Bodies so certain at harbor, seemingly lost detritus at sea

afloat a gaping vastness on moonless night, we  
see again the lighted routes: Orion, Polaris, North star.

These days, we line up to buy tickets, check ourselves in,  
boarding the crowded ship and sinking  
into seats or bunks near windows, near open decks  
where islands disappear and we hear the wind again.  
Our selves drifting back to all the places we've been.

## Big River City

*You can't step into the same river twice.*  
—Heraclitus

How we inhabit cities in our minds.  
Take for instance this

and its two bridges. One coming in  
another, out.

In addition, the ferry and the dock.  
The airport and the wide

open spaces for dreaming.  
Everywhere, exits.

Mornings and evenings the stream.  
Women and men, school children

racing against bundies.  
Traffic lights, road humps.

Construction is always ongoing  
as does the series of row housing.

*(continue on next page)*

Dwellings, where we  
later hang signs

for rent and for inquiries  
call, mobile

numbers our only written address.  
Elsewhere we go

on living leaving cities in minds.

### **Return to Sta. Rosa**

The port is no longer the same. What do you remember now of what used to be clear  
her full name and the story of your arriving at twelve with an aunt

who gave away crayons to children who never had. An exchange of  
letters long before the first shy hello what else to say you both looked at your shoes

hers polished and special for the occasion, yours taken for granted.  
Did the letters continue after that Christmas, you no longer remember

she had come to Opon City with a story about a factory but truly the story  
was lost long before that. The pump boat comes as close as it could get

someone has to push you on a pram the rest of the way. Your lady love  
holds your hand and marvels even after hearing the same story again and again

the coasts from where children thin and laughing had gazed across at places  
she had wanted to go, had gone, had disappeared in among throngs

*(continue on next page)*

after years. The brine washed dock remains long and beautiful, welcomes you  
and your lady love with white outrigger boats in the morning

locals deep brown with pails of mussels and sea urchins, squint at sea. Farther ahead  
by the dry sandy road a school house, setting of your repeated story where you find

you do not remember anything else except a full name and a piece of greeting  
in the salty local language so you say hello.

**Nitrate and Total Phosphorus Levels  
in Buhisan, Bulacao and Lahug Rivers, Cebu, Philippines  
An International Research Presentation of Prof. Fleurdeliz Maglangit**

***Abstract***

Buhisan, Bulacao, Lahug Rivers are three of the five major rivers in Cebu City, Philippines that were not monitored for water quality. This study aimed to provide baseline data by assessing the nitrates and Total Phosphorus (TP) levels which could be used as a basis for management options of these rivers. Samples were taken by grab sampling from three designated sites (upstream, midstream and downstream) along each river. Analysis was done in the laboratory following standard methods. Results showed that the nitrate levels did not exceed the allowable concentration set by the government but the TP did. The mean TP values observed at Buhisan, Bulacao and Lahug Rivers ranged from 0.10-1.82 mg·L<sup>-1</sup>, 0.05-0.48 mg·L<sup>-1</sup>, and 0.17-2.75 mg·L<sup>-1</sup>, respectively. The TP levels in the midstream and downstream areas of Buhisan and Lahug Rivers exceeded the 0.4 mg·L<sup>-1</sup> limit. High TP levels could be attributed to anthropogenic sources like untreated domestic waste discharges, unsanitary sewer systems in the surrounding communities, and runoffs from fertilized backyard gardening, and piggery.

*This completed paper was presented during the 7<sup>th</sup> International Scientific Conference on Applied Sciences and Engineering in Flora Grand Hotel, Dubai, on 27-28 February 2016.*

**The Crowning of Thorns: of princes, lions, and foxes: *An analysis on the diminution of the efficacy of Machiavellianism in the Philippines*  
A Research Presentation of Atty. Francis Michael Abad**

***Abstract***

This paper is a textual analysis on certain principles embodied in Machiavelli's "The Prince" based on historical and contemporary events surrounding the Philippine presidency, particularly the incumbencies of Arroyo and Aquino. For decades Philippine presidents have exhibited actions which may very well be Machiavellian in character. This paper looks into some qualities exemplified in "The Prince" as applied by a number of presidents and through the evaluation of these actions vis-à-vis their efficacy in accumulating political power, this study theorizes that the effectiveness of Machiavellianism has declined due to certain Constitutional-Legal and Practical factors established and occurring in the Philippines. The paper also revisits the merits of Machiavellian theory and re-evaluates its nature and underlying motives. Ultimately, the goal is to rationalize why Machiavellianism is not viable political tool in the Philippines.

*This published paper was presented during the research presentation, "On Machiavellianism in Philippine presidency, customer behavior in service failures, sari-sari store owners' buying behaviors, job satisfaction in hotel setting, and socio-cultural appropriation of sex-sell billboard ads," on 20 January 2016 at the UP Cebu Audio-Visual Room 1.*

**A study on the buying behavior of sari sari store owners in Metropolitan Cebu**  
*A Research Presentation of Dr. Tiffany Adelaine Tan*

**Abstract**

The aim of this paper is to describe the buying behavior of *sari-sari* store operators in Cebu City. Two hundred *sari-sari* store owners/operators were interviewed. The results show that firstly, the top 3 determinants for owners/operators when sourcing products are **PRICE, ASSORTMENT** of products and **LOCATION**. Secondly, the owners/operators' decision on what goods to sell is mainly based on customer feedback, i.e. when they receive requests on particular items. The contribution of these small retail outlets to the revenues of fast moving consumer goods cannot be undermined since their role as a distribution channel is crucial to market growth of any consumer product.

*This completed paper was presented during the research presentation, "On Machiavellianism in Philippine presidency, customer behavior in service failures, sari-sari store owners' buying behaviors, job satisfaction in hotel setting, and socio-cultural appropriation of sex-sell billboard ads," on 20 January 2016 at the UP Cebu Audio-Visual Room 1.*

**Influence of Demographic Variables on Customers' Behavior  
in Cases of Service Failures**  
*A Research Presentation of Dr. Tiffany Adelaine Tan*

**Abstract**

The purpose of this paper is to examine the relationship between demographic variables and a customer's complaint behavior and to assess the relationship between complaint behavior and customer intentions. The target population included graduate students in Metro Manila and 428 completed survey questionnaires were used for the study. The Test for Independence ( $\chi^2$ ) was used to verify any statistical relationship between the variables. Out of the 8 proposed hypotheses, only 2 found strong data support. The results suggested that the propensity to complain differed significantly only across education and the dining frequency while gender, age, income, and civil status accounted for no significant difference. Results also suggested that a positive but weak relationship exists between the customer's intentions to patronize and recommend and the complaint behavior of the sample group. However, the customer's behavioral intentions after the service failure incident did not differ significantly even after a complaint was filed. Despite the results of the study, it would be to the advantage of the restaurateurs to perform service recovery as resort to lure back the dissatisfied customers to patronize the restaurant and spread positive word of mouth, particularly since competition in the restaurant industry is immense.

*This paper was presented during the research presentation, "On Machiavellianism in Philippine presidency, customer behavior in service failures, sari-sari store owners' buying behaviors, job satisfaction in hotel setting, and socio-cultural appropriation of sex-sell billboard ads," on 20 January 2016 at the UP Cebu Audio-Visual Room 1.*



**Socio-Cultural Appropriation of Sex-Sell Billboard Ads:  
A Multimodal Study on the Grammar  
of Sexually Implicit Advertising Text and Images  
A Research Presentation of Mr. Gregg Lloren**

**Abstract**

In the Philippines, 'sex-sell' advertising (ads) – particularly billboards – have been controversial given the traditional and cultural sensibilities of the community to which these ads are exhibited. This paper analyzed the grammar of visual language of Bench's 2011 undergarment billboards featuring the Volcano Philippine Rugby Team as models. Using the multimodal framework of Ganther Kress and Theo Van Leeuwen (Kress & Van Leeuwen, 2001), some multimodal researchers in social and visual semiotics, the results of FGD's and key informant interviews, this paper illustrates how grammar in visual language is compatible with M.A.K. Halliday's systemic functional linguistics (Halliday, 1994); and are essential semiotic resource in establishing the meaning potentials of visual designs that may affect the traditional values and cultural sensibilities of their target audience. The study concludes that – in the stratification of meaning-making from discourse to distribution – the meaning potentials in billboard ads are participated upon by both designer and viewer. Thus, the paper recommends that designers observe proper visual grammar in order to appropriate their ads to the sensibility of the audience.

*This paper was presented during the research presentation, "On Machiavellianism in Philippine presidency, customer behavior in service failures, sari-sari store owners' buying behaviors, job satisfaction in hotel setting, and socio-cultural appropriation of sex-sell billboard ads," on 20 January 2016 at the UP Cebu Audio-Visual Room 1.*

**The Influence of Organizational Justice  
on Job Satisfaction In A Hotel Setting  
A Research Presentation of Dr. Leahlizbeth Sia**

**Abstract**

Perceived organizational justice in the workplace is a primary factor affecting employee job satisfaction and tenure. This paper examined the relationship between organizational justice and job satisfaction of managers, supervisors, and staff in a hotel setting situated in one of the major cities outside Metro Manila, Philippines, namely Metropolitan Cebu. Specifically, it looked into the influence of the three dimensions of organizational justice (distributive, procedural, and interactional) on the hotel employees' level of satisfaction with their jobs with regards to fairness of manager/supervisor to staff relationships, pay, and schedule (among others). A Likert scale, survey instrument was administered to select respondents from thirteen departments of nine hotels in Metropolitan Cebu, Philippines: Front Office, Food & Beverage, Housekeeping, Sales & Marketing, Human Resources, Maintenance, Kitchen, Finance, Butchery, Engineering, Administration, Security, and the Executive Office. Structural Equation Modeling (SEM) was applied for data analysis. The results revealed that distributive and interactional justice positively affects employees' job satisfaction, while procedural justice does not have a significant impact.

*This paper was presented during the research presentation, "On Machiavellianism in Philippine presidency, customer behavior in service failures, sari-sari store owners' buying behaviors, job satisfaction in hotel setting, and socio-cultural appropriation of sex-sell billboard ads," on 20 January 2016 at the UP Cebu Audio-Visual Room 1.*

**Exploring Philippine Culture Through Movement**  
*A Creative Work Presentation of Ms. Ma. Alena Macasil*

**Rationale**

The concert explores two dance genres, the folk and contemporary. Folk dance is a dance that originates as ritual and depicts characteristic of the common people/natives of a county/ community that is transmitted from generation to generation. While contemporary is a popular form of dance that incorporates elements from many styles of dances like classical, modern and jazz.



The show exhibited selected folk dances of Luzon, Visayas and Mindanao documented by the Mother of Folk Dances Francisca Reyes Aquino. Movements are not purely authentic, contemporary movements at some features are combined.



*This completed creative work was presented on 22 January 2016 at the UP Cebu Performing Arts Hall.*



**The Context-Driven Approach to Implementing  
a Cebuano-English Machine Translation System**  
*An International Poster Presentation of Dr. Robert Roxas*

**Abstract**

This paper describes the context-driven approach to implementing a Cebuano-English machine translation system. It uses a modified lexicon that not only stores the meanings but also the context clues associated for each meaning. The selection of the translation for each significant word in the input sentence was guided by the context clues present in the sentence. The system uses the Augmented Transition Network (ATN) to parse the input sentence. The system was tested by feeding sample sentences, and the initial test produced 98% accuracy rate.

*This paper was presented during the 11th International Symposium on Natural Language Processing (SNLP 2016), Classic Kameo Hotel, Phranakhon Si Ayutthaya, Thailand, on 10-12 February 2016.*

### **CVSC assists 3 activities of Biology Program**

Central Visayas Studies Center assisted the Biology Program of the Sciences Cluster in their 3 lecture or training activities.

The office took care of the accommodation, catering, and venue reservation for the Philippine Genome Center of the UP System in their one-day lecture on bioinformatics entitled, "Introduction to Next-Generation Sequencing Data Analysis." The training, which included Sciences Cluster faculty members as participants, was conducted on 26 February 2016 in the Union Building of UP Cebu.

This was followed by a lecture on "Searching for sawfishes: the world's most endangered family of sharks and rays" on 29 February 2016. The guest speaker was Dr. Ruth Leeney, a post-doctoral research fellow from the Biological Sciences of the Simon Fraser University.

The last activity, another lecture, was on "Toxoplasmosis: A Neglected Zoonosis." This is a recent research project of the guest speaker, Dr. Yoshifumi Nishikawa of the Obihiro University. Prior to the lecture, a MOA between UP Cebu and the Japanese university was signed.

### **Diliman research team collaborates with UP Cebu student researchers for Metro Cebu research fieldwork**

CVSC assisted the research team composed of Prof. Jem R. Javier, Dr. Mary Ann Bacolod and Prof. Jesus Federico Hernandez from the Department of Linguistics; Dr. Ramon Guillermo and Dr. Althea Enriquez from the Department of Filipino and Philippine Literature; and Dr. Rhandley Cajote from the Department of Computer Science of UP Diliman in looking for field researchers to conduct fieldwork in Metro Cebu for their research project on developing a monolingual Filipino dictionary driven by digital corpus.

Ten student researchers from UP Cebu were hired to record and transcribe Filipino as spoken in everyday settings such as markets, schools and offices.

## Web of Science Free Trial

Thomson Reuters is providing FREE TRIAL for Web of Science, its curated citation index that can facilitate your search for information and references for your research projects. You can access the free trial at

URL: [webofscience.com](http://webofscience.com)

A **research publication workshop** is also arranged on 20 April 2016 (Wednesday) here at UP Cebu where you can learn how to navigate and maximize use of the Web of Science for your research and how to choose journals to publish your work. Below is the program for this workshop.

09:00 am – 09:45 am	Literature Review – What to look for? Why <b>Web of Science</b> ?
09:45 am – 10:15 am	Parts of a manuscript: How to present your work in the best light
10:15 am – 10:45 am	Where to submit your work: A look at journal metrics with <b>Journal Citation Report</b>
10:45 am – 11:05 am	Red flags: How to avoid unethical journals?
11:05 am – 11:30 am	A sample cover letter
11:30 am – 11:50 am	What happens after you submit manuscript:
11:50 am	Q & A

For interested participants, please confirm your attendance through the CVSC email.

the oniswer company™  
THOMSON REUTERS®

WEB OF SCIENCE™  
The most comprehensive and versatile research platform available



**WEB OF SCIENCE™  
DISCOVERY QUIZ 2016**

**RESEARCH LANDSCAPE IN PHILIPPINES**

**QUIZ PERIOD**  
 Quiz 1: Monday, 14 March 2016 – Wednesday, 13 April 2016  
 Quiz 2: Thursday, 14 April 2016 – Tuesday, 13 May 2016  
 Quiz 3: Monday, 16 May 2016 – Thursday, 17 June 2016

**GRAND PRIZE**

1. iPhone 6, 16GB
2. Apple Watch 38mm Aluminium Case
3. iPad Mini 2, WiFi, 16GB
4. Bose SoundTrue Ultra Earphones
5. Fitbit Charge HR Wireless Activity Wristband
6. Creative Sound Blaster Roar Bluetooth Speaker
7. Seagate Backup Plus Slim 1TB
8. Microsoft Arch Touch Mouse
9. Sony MDR-ZX310 Headphones
10. Sony 5000mAh Powerbank

**5 X WIRELESS MOUSE TO BE WON MONTHLY**

Individual with the highest number of correct answers for each quiz will win Thomson Reuters Wireless Mouse. Five wireless mouse will be given away for each quiz.

To register, please go to this link:

[http://ip-science.interest.thomsonreuters.com/wos\\_ph\\_2016](http://ip-science.interest.thomsonreuters.com/wos_ph_2016)



(032) 233 4708 loc. 209



cvsc.upcebu@up.edu.ph



[www.upcebu.edu.ph/research/central-visayas-studies-center](http://www.upcebu.edu.ph/research/central-visayas-studies-center)