

BIOGRAPHICAL SKETCH

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NAME: Paulino, Yvette Cepeda

POSITION TITLE: Assistant Professor of Health Sciences

eRA COMMONS USER NAME (credential, e.g., agency login): YPAULINO

EDUCATION/TRAINING (Begin with baccalaureate or other initial professional education, such as nursing, include postdoctoral training and residency training if applicable. Add/delete rows as necessary.)

INSTITUTION AND LOCATION	DEGREE (if applicable)	Completion Date MM/YYYY	FIELD OF STUDY
University of Guam	B.S.	06/2002	Biology
University of Guam	M.S.	06/2005	Biology
University of Hawaii, Manoa	Ph.D.	12/2009	Epidemiology

A. Personal Statement

I am humbled at the opportunity to lead the Guam team on this project. Throughout my 12 years on this partnership, as a graduate student and a junior faculty, I have collaborated with partnership colleagues and published ten manuscripts relevant to my work in nutritional and cancer epidemiology in Pacific Islander populations. Given my experiences on past partnership pilot projects, I have the local expertise and leadership to successfully complete the proposed research project. My work on the U56 planning grant provided the initial qualitative exploration of the cultural aspects of betel nut use in Micronesian populations. I have since learned that betel nut chewing patterns differ among the subgroups, in part due to the different degrees of betel nut enculturation and acculturation. The different betel nut chewing patterns seems to impose different degrees of risk for oral cancer, as seen in my current U54 study. By studying these differences, I am capable of identifying culturally appropriate strategies for the betel nut cessation program. Furthermore, my recent experience with a childhood obesity intervention program in Pacific children has helped me better understand the complexity of a randomized intervention and the need to adapt to the population while maintaining scientific rigor.

1. Paulino YC, Novotny R, Miller MJ, Murphy SP. Areca (betel) nut chewing practices in Micronesian Populations. *Hawaii J Pub Health*. 2011;3(1):19-29. PMID: [PMC4322768](#).
2. Paulino YC, Hurwitz EL, Warnakulasuriya S, Gatewood RR, Pierson KP, Tenorio LF, Novotny R, Palafox N, Wilkens LR, Badowski G. Screening for oral potentially malignant disorders among areca (betel) nut chewers in Guam and Saipan. *BMC Oral Health*. 2014;11(14):151. PMID: [PMC4292829](#).
3. Wilken LR, Novotny R, Fialkowski MK, Boushey CJ, Nigg C, Paulino YC, et al. Children's Healthy Living (CHL) Program for remote underserved minority populations in the Pacific region: rationale and design of a community randomized trial to prevent early childhood obesity. *BMC Public Health*. 2013 Oct 9;13:944. PMID: [PMC3851862](#).

B. Positions and Honors**Positions and Employment**

2002 Summer Research Intern, NIH *SPUR* Program, University of Oregon, Eugene, OR
 2003-2006 Research Assistant, NIH *RISE* Program, University of Guam, Mangilao, GU
 2005-2006 Adjunct Faculty, Math and Science Department, Guam Community College, Mangilao, GU
 2006-2009 Research Assistant, Epidemiology Department, University of Hawaii Cancer Center, Honolulu, HI

2009-2010 Instructor, Biology Department, University of Guam, Mangilao, GU
2010- Assistant Professor, University of Guam, Mangilao, GU

Other Experience and Professional Memberships

2007- Member, American Public Health Association
2007- Member, American Society for Nutrition
2008- Member, Society for Epidemiologic Research
2010- Member, American Association for Cancer Research
2011- Member, International Epidemiological Association
2011-2012 Chairperson, Guam Comprehensive Cancer Control Coalition
2013- Chairperson, Data and Surveillance, Guam Non-Communicable Disease Consortium

Honors

2004 U56 University of Guam-University of Hawaii Cancer Center MS Scholar, Mangilao, GU
2006 U56 University of Guam-University of Hawaii Cancer Center PhD Scholar, Honolulu, HI
2008 Achievement Rewards for College Scientists Scholarship Award in Cancer Research, Honolulu, HI
2012 American Association for Cancer Research Minority-Serving Institution Faculty Scholar in Cancer Research, Chicago, IL

C. Contribution to Science

1. My initial work in cancer research focused on lifestyle behaviors, particularly nutritional epidemiology, as a way to address some of the high rates of cancer among Pacific Islanders. In the Commonwealth of the Northern Marianas, I observed the nutrition transition and noted the island's heavy reliance on imported processed foods, which contributed to the high prevalence of childhood overweight and obesity. In Guam, I studied the cultural practice of feasting (via fiestas or parties) and the role it plays in obesity. My early publications provided some of the first findings on nutritional disparities among populations in the Mariana Islands, and cultural and behavioral practices that may explain the differences.
 - a. Paulino YC, Coleman P, Davison N, Lee S, Camacho T, Tenorio L, Murphy S, Novotny R. Nutritional Characteristics and Body Mass Index of Children in the Commonwealth of the Northern Mariana Islands. *J Am Diet Assoc.* 2008;108(12):2100-2104. PMID: 19027416.
 - b. LeonGuerrero RT, Paulino YC, Novotny R, Murphy SP. Diet and obesity among Chamorro and Filipino adults on Guam. *Asia Pac J Clin Nutr.* 2008;17(2):216-22. PMID: [PMC2762033](#).
 - c. Paulino YC, Leon Guerrero RT, Aguon CM. Nutritional analysis of a fiesta on Guam. *Micronesica.* 2008 Jan 1;40(1/2):233-244. PMID: [PMC2743493](#).
 - d. Paulino YC, Leon Guerrero RT, Novotny R. Women in Guam consume more calories on feast days than during non-feast days. *Micronesica.* 2011; 41(2):223-235. PMID: 25580033; PMID: [PMC4286890](#).
2. My work on feasting behaviors led me to another cultural-lifestyle behavior observed at fiestas or parties. Areca (betel) nut chewing is a traditional practice in selected islands in Micronesia. Areca (betel) nut chewing with tobacco was deemed a human carcinogen by the International Agency for Research on Cancer (IARC) in 1985. Then in 2004, chewing the areca nut (alone) was also deemed a human carcinogen based on experimental animal studies, largely because epidemiologic studies of populations that chew the areca nut alone were lacking. During the IARC evaluations, literature on chewing behaviors in Micronesian populations was scant. Furthermore, the unique chewing pattern (areca nut only) of Chamorros in Guam presented a rare research opportunity. I was able to provide some of the first documentation of betel nut chewing practices in Micronesia, as well an innovative statistic approach (latent class analysis) of teasing out the complex patterns of betel nut chewing. I used latent class analysis to further investigate the role betel nut chewing patterns in the risk for oral precancerous lesions, as well as in the risk for other chronic diseases.
 - a. Paulino YC, Novotny R, Miller MJ, Murphy SP. Areca (betel) nut chewing practices in Micronesian Populations. *Hawaii J Pub Health.* 2011;3(1):19-29. PMID: [PMC4322768](#).

- b. Paulino YC, Hurwitz EL, Warnakulasuriya S, Gatewood RR, Pierson KP, Tenorio LF, Novotny R, Palafox N, Wilkens LR, Badowski G. Screening for oral potentially malignant disorders among areca (betel) nut chewers in Guam and Saipan. *BMC Oral Health*. 2014;11(14):151. PMID: [PMC4292829](https://pubmed.ncbi.nlm.nih.gov/2492829/).
 - c. Paulino YC, Hurwitz E, Katz A, Novotny R, Wilkens L. Areca nut use is associated with obesity and arthritis in Guam: Results from the 2007 Behavioral Risk Factors Surveillance System (BRFSS) [abstract]. *Am J Epi*. 2011;173(Suppl):S1-S316.
3. My research on betel nut chewing and health has evolved from simple descriptive epidemiology to investigating the oral microbiome in search of early markers for cancer prevention. My work has led to several ongoing collaborative investigations focusing on betel nut within the Partnership. Furthermore, I developed and validated betel nut tools (expanded research tool and shortened health module) that have been used to measure and study betel nut chewing in Guam. Through community partnerships, I secured the commitment of local health advocates to sustain the betel nut measurement module in the Guam Behavioral Risk Factor Surveillance System, as a means of monitoring and surveillance. The tools have been shared with researchers and health professionals from other locations, including Hawaii, San Diego, and other islands in Micronesia. My work has been cited in a technical report on betel nut use in the Pacific, which was prepared by the World Health Organization. I served as a temporary adviser to the international group preparing the report.
 - a. Paulino YC, Wilkens LR, Hurwitz EL, Katz AR, Novotny R. Validation of the Areca (Betel) Nut State-Added Questionnaire in the Guam Behavioral Risk Factor Surveillance System (BRFSS). American Public Health Association Conference. 2012. 4356.0 [abstract].
 - b. Paulino YC, Novotny R, Katz A, Wilkens LR, Hurwitz EL. Development and validation of an areca (betel) nut usage measurement tool for Micronesia [abstract]. In: Proceedings of the 6th American Association for Cancer Research Conference on the Science of Cancer Health Disparities in Racial, Ethnic Minorities and the Medically Underserved; 2013 Dec 6-9; Atlanta, GA. Philadelphia (PA): AACR; *Cancer Epidemiol Biomarkers Prev* 2014;23(11 Suppl): Abstract nr B15.
 - c. Uncangco AA, Badowski G, David AM, Ehlert MB, Haddock RL, Paulino YC. First Guam BRFSS Report 2007-2010. Guam Department of Public Health and Social Services: Mangilao, GU. 2012.
 - d. World Health Organization. Review of areca (betel) nut and tobacco use in the Pacific: a technical report. Regional Office for the Western Pacific. 2012.

Complete List of Published Work in MyBibliography:

<http://www.ncbi.nlm.nih.gov/sites/myncbi/yvette.paulino.1/bibliography/47203384/public/?sort=date&direction=ascending>

D. Research Support

Ongoing Research Support

NIH/NCI U54-CA-143727 (Underwood - PI) 5/1/2012 – 08/31/2015

University of Guam/Cancer Research Center of Hawaii Partnership (2 of 2)

Project Title: *The influence of Areca (betel) nut chewing on the oral microbiome in Micronesia*

The major goal of this project is to collect pilot data to identify features of the oral microbiome associated with areca nut chewing; and to identify features associated with pre-cancerous intra-oral lesions.

Role: Co-Leader

USDA-NIFA 2013-68001-30335 (Novotny - PI) 4/1/2011 – 3/30/2016

Children's Healthy Living Program for Remote Underserved Minority Populations in the Pacific Region

The goal of this project is to set up the capacity for Pacific Island populations to prevent child obesity through a multi-level approach including training public health nutrition work force; conducting public health nutrition research; communicating health related information to the public; developing nutrition monitoring and surveillance systems; and building social, cultural, physical, and built environments to sustain changes.

Role: Guam Co-Investigator

1UL1MD009596

(Crespo - PI)

9/26/2014 – 6/30/2019

NIH BUILD

Project Title: *Enhancing Cross-disciplinary Infrastructure Training at Oregon (EXITO) Program*

The training grant supports innovation in creating research career pathways for underrepresented and diverse students, targeting students of Hispanic, African American, American Indian, Alaska Native, and Pacific Islander heritage.

Role: Co-Investigator

Completed Research Support

NIH/NCI U54-CA-143727

(Whippy - PI)

09/01/2009 – 08/31/2013

University of Guam/Cancer Research Center of Hawaii Partnership (2 of 2)

Project Title: *Development of protocols for studying oral precancerous lesions and health risks in betel nut chewers in Micronesia.*

The major goal of this project was to develop the methods for detecting oral precancerous lesions and other health risks as they relate to betel nut chewing in Micronesia.

Role: Co-Leader