# THE UNIVERSITY OF HAWAII CANCER CENTER CANCER PREVENTION AND CONTROL IN THE U.S.-ASSOCIATED PACIFIC

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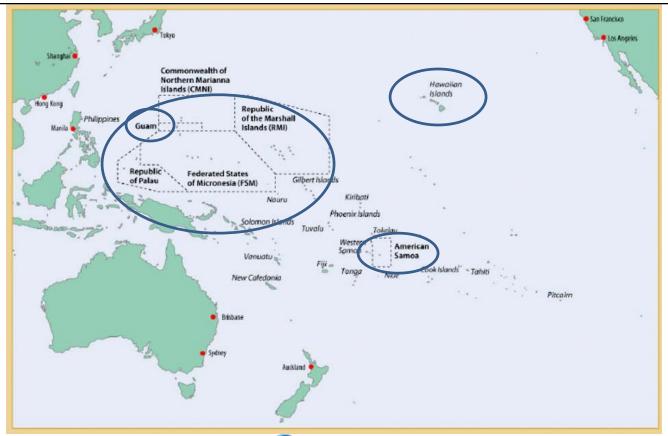


### Overview of Presentation

- UH Cancer Center Catchment Area
- Catchment Area Demographics
- Overview of Project
- Populations Surveyed
- Sampling Strategy
- Plan for Use of Data
- IRB and Study Fielding



# Catchment Area of the University of Hawaii Cancer Center Hawaii and the U.S. Associated Pacific Island Jurisdictions





### **UH Cancer Center Catchment Area**

### Trans-Pacific Partnership for Cancer Prevention

- U54 18 year Research Partnership with University of Guam
- U24 Partnership with American Samoa Cancer Coalition
- Interactions / Migration from Compact of Free Association (CoFA)
   Jurisdictions



# Catchment Area Demographics

- Pacific Islanders are one of the fastest growing ethnic groups in the U.S between 2000 and 2010
- Hawaii has largest growth of Pacific Islanders
- Migration from low-income CoFA jurisdictions to Hawaii and Guam for Healthcare

(Source: U.S. Census Bureau. 2010. The Native Hawaiian and other Pacific Islander Population 2010, Summary File 1.)



### Catchment Area Demographics

Table 5.

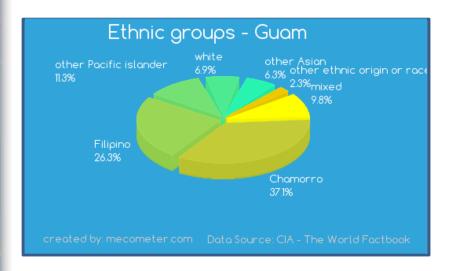
Native Hawaiian and Other Pacific Islander (NHPI) Population by Number of Detailed Groups: 2010

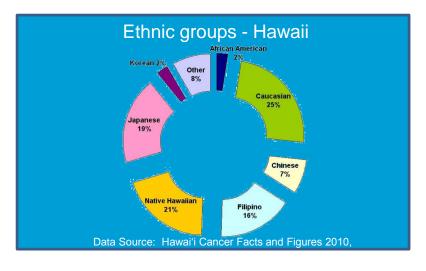
Detailed group	Native Hawaiian and Other Pacific Islander alone		Native Hawaiian and Other Pacific Islander in combination with one or more other races		
Detailed group	One detailed NHPI group reported <sup>1</sup>	Two or more detailed NHPI groups reported <sup>2</sup>	One detailed NHPI group reported	Two or more detailed NHPI groups reported <sup>2</sup>	Detailed NHP group alone or ir any combination
Total	521,876	18,137	650,672	34,510	1,225,195
oynesian Native Hawaiian	156,146 190,007	8,772 10,484	338,358 48.120	23,801 16,199	527,077 184.440
Tahitian. Tongan Tokelauan	966 41,219 107	305 4,502 386	1,493 8,657 107	2,298 2,805 325	5,062 57,183 929
Other Polynesian <sup>3</sup>	3,238	1,330	3,459	1,126	9,15
Chomesian		,	·		
Guamanian or Chamorro  Mariana Islander	88,310 197	2,697 109	51,900 72	4,891 23	147,79 39
Saipanese	405	344	199	83	1,03
Palauan	4,851 254	357 160	1,927 64	315 43	7,45 52
Kosraean	487	287	97	35	90
Pohnpeian	1,012	617	286	145	2,06
Chuukese	2,650 500	1,073 199	318 223	170 87	4,21 1,01
Marshallese	19,841 105	<b>430</b>	1,813 129	350 61	22,43 40
Other Micronesian4	22,874	2,601	2,979	658	29,11
lelanesian					
Fijian	24,629	480	6,627	568	32,30
Papua New Guinean	233 60	4	172 43	7	41 12
Ni-Vanuatu	45	11	43 37	8 5	12
Other Melanesian <sup>5</sup>	100	6	102	14	22
other Pacific Islander	43,931	1,916	183,490	10.842	240.17

(Source: U.S. Census Bureau. 2010. The Native Hawaiian and other Pacific Islander Population 2010, Summary File 1.)



# Catchment Area Demographics





16,000 Chuukese / Marshallese 63,640 Chamorro in Guam

17,000 Chuukese / Marshallese 273,000 Native Hawaiian in Hawaii



### **Project Overview**

Expand HINTS assessments to Native Hawaiians (N=500) and recent migrant Marshallese and Chuukese populations in HI (N=500), Chamorro (N=500) and recent migrant Marshallese and Chuukese (N=500)in Guam. Compare/contrast HINTS responses according to acculturation status. Will use a printed survey

Use Respondent Driven Sampling (RDS) to recruit a geographically diffuse population of Native Hawaiian in HI; Chamorro in Guam, Marshallese and Chuukese in both Guam and Hawaii. Compare/contrast HINTS responses with similar BRFSS questions.



## Project Overview – Acculturation

People have preferences regarding who they hang out with, what kind of music, TV shows, and food they life. Please select the response that best fits your preference.

#### A. Your best friends are from...

1. The U.S.

2. Your country, culture,

or ethnic groups(s) of origin

- 3. Both
- 4. Neither

- B. The holidays you celebrate are from...
- 1. The U.S.

2. Your country, culture, or ethnic groups(s) of origin

- 3. Both
- 4. Neither

- C. The food you eat at home is from...
- 1. The U.S.

2. Your country, culture,

- 3. Both
- 4. Neither

or ethnic groups(s) of origin



(Source: Unger 2002)

### Project Overview – Use of RDS

#### **RDS Recruitment Pattern**

Seeds = 14 each group

Wave 1 = 42

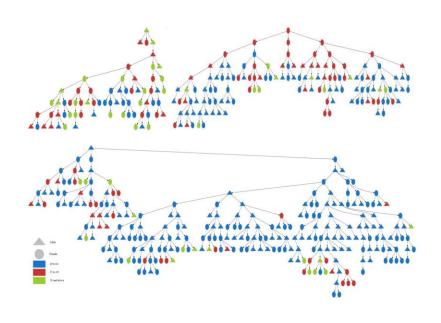
Wave 2 = 126

Wave 3 = 378

Total: 560 - 10% = 504

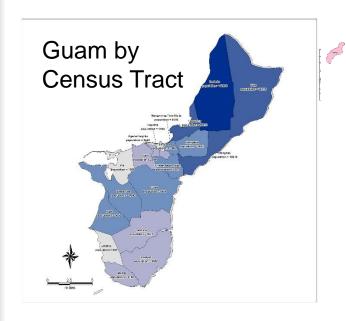
Table 1.	Margin of error		
Sample size	Design effect	Confidence level 90%	Confidence level 95%
400	2	6%	7%
500	2	5%	6%
400	3	7%	8%
500	3	6%	7%

#### Diagram of RDS recruitment networks



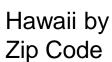


### Project Overview - Geocoded Data













### Prior Use of HINTS Data

Prior study informed project on use of text messaging to promote cervical cancer screening in Micronesian women ages 21-65.

Assessed 617 Micronesians in HI and GU using HINTS

Highest rates of cervical cancer (79.9/100,000 RMI - 9.9/100,000 U.S.)

(Jemal, et al,2013)

- Screening 6% Chuuk, 19% RMI, migration to HI and GU (70% advanced)
- 68% had working cell phones with SMS
- 40% used cellular networks to connect to the internet



### Potential Use of Data

- Identify specific health communications patterns by ethnic group for interventions.
- Address acculturation / concordance as a potential factor in health promotion
- RDS may approximate a random sample for use in further research with Micronesians
- Potentially identify and address geographic disparities relative to ethnic group
- Identify areas for cancer control educational interventions by ethnicity



### IRB Approval and Timeline

- Preliminary IRB Approval Obtained in January 2017
- Staff Hired in Guam and Hawaii in February 2017
- Staff RDS Training Completed in February 2017
- Study Equipment Procurement Pending (scanning hardware)
- Field study by April 2017 with Data Collection through June 2017



## Mahalo/Si Yu'us Ma'ase

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# Mahalo/Si Yu'us Ma'ase



