

## GET INVOLVED WITH CHL

We want to partner with parents, caregivers, teachers, community leaders, and other agencies to create sustainable change at the community level that supports healthy eating and physical activity for young children ages 2-8 years across the Pacific.

You can get involved by first visiting the CHL Program website at [www.CHL-Pacific.org](http://www.CHL-Pacific.org) to learn more about the CHL Program or by contacting project staff at one of the partner sites listed on the back panel.



All photos courtesy of the UHM Center on the Family, except child in snow and by river courtesy of Ronald Standlee Strom.

## CONTACT CHL

### Alaska

**University of Alaska Fairbanks  
Center for Alaska Native Health Research**  
Dr. Andrea Bersamin | 907.474.6129  
abersamin@alaska.edu

### American Samoa

**American Samoa Community College  
Community and Natural Resources**  
Dr. Don Vargo | 684.699.1394 x234  
donvargo@rocketmail.com  
Mr. Aufa'i Ropeti Areta | 684.699.1575  
aareta@yahoo.com

### Commonwealth of the Northern Mariana Islands

**Northern Marianas College  
Cooperative Research, Extension and  
Education Service**  
Dr. Jang Ho Kim | 670.234.5498 x1715  
jangk@nmcnet.edu

### Freely Associated States of Micronesia

- Federated States of Micronesia
  - Republic of the Marshall Islands
  - Republic of Palau
- c/o University of Hawai'i at Manoa  
Dr. Jonathan Deenik | 808.956.6906  
jdeenik@hawaii.edu

### Guam

**University of Guam  
College of Natural and Applied Sciences**  
Dr. Rachael Leon-Guerrero | 671.735.2026  
rachaeltlg@ug Guam.uog.edu

### Hawai'i

**University of Hawai'i at Manoa  
College of Tropical Agriculture and  
Human Resources**  
Dr. Rachel Novotny | 808.956.3848  
novotny@hawaii.edu

[www.CHL-Pacific.org](http://www.CHL-Pacific.org)



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# CHL

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



Alaska

American Samoa

Commonwealth of the Northern Mariana Islands

Federated States of Micronesia

Guam

Hawai'i

Republic of the Marshall Islands

Republic of Palau

[www.CHL-Pacific.org](http://www.CHL-Pacific.org)

# Partnering with community members and organizations to make deliberate choices that lead to healthier children

## GET TO KNOW CHL

The Children's Healthy Living Program for Remote Underserved Minority Populations in the Pacific Region (CHL) is a partnership among remote Pacific states and other jurisdictions of the US: Alaska, American Samoa, Commonwealth of the Northern Mariana Islands, Federated States of Micronesia, Guam, Hawai'i, the Republic of the Marshall Islands, and the Republic of Palau. CHL started in 2011. These jurisdictions have US Land Grant Colleges, which have united in the Pacific Land Grant Alliance (PLGA), providing an operational framework for CHL.



We are combining efforts to:

- train a public health nutrition work force
- conduct public health nutrition research
- develop a food, nutrition, and physical activity data-management and -evaluation system
- communicate nutrition- and health-related information to the public

With no US National Nutrition monitoring (e.g, NHANES) in these jurisdictions, not even in the states of Alaska and Hawaii, the information we obtain through CHL will guide future children's obesity-prevention programs and policies.

The goal of this Food and Agricultural Science Enhancement (FASE) Coordinated Agricultural Program (CAP) among Pacific Region USDA-defined Experimental Program for Stimulating Competitive Research (EPSCoR) states/jurisdictions is to build social/cultural, physical/built, and political/economic environments that will promote active play and intake of healthy food to prevent young children's obesity in the Pacific Region. To do this, CHL will engage the community, and focus on capacity building and sustainable environmental change. CHL will serve as a model for other regions with remote underserved Native populations at risk for obesity.

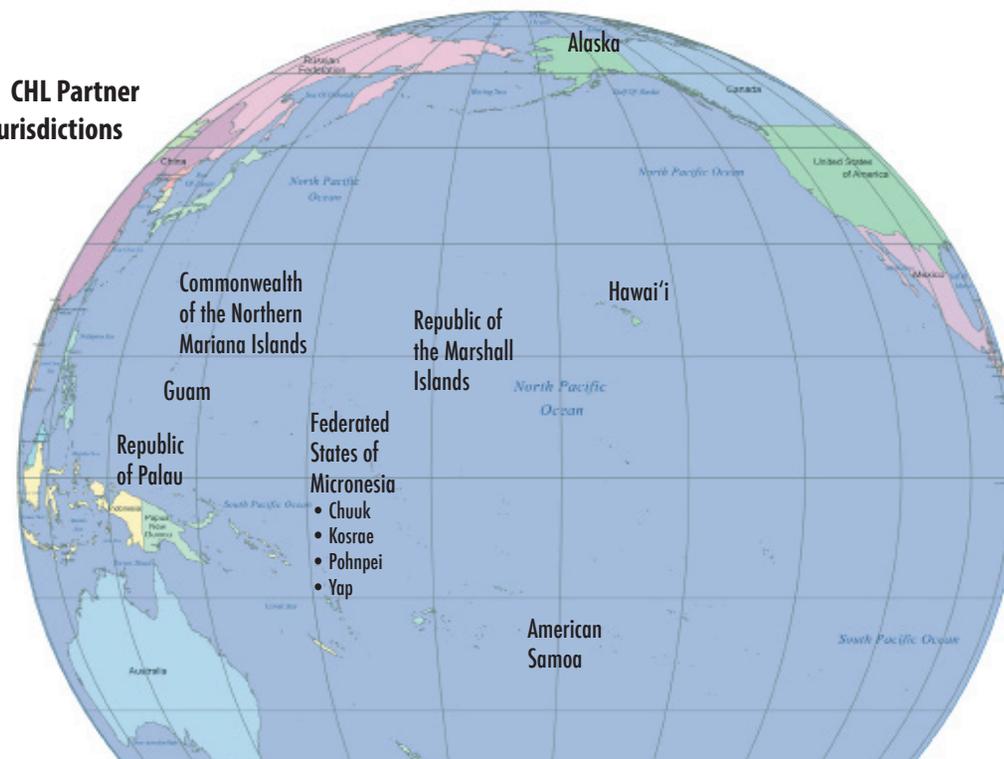
More information at [www.CHL-Pacific.org](http://www.CHL-Pacific.org).

## CHL PROGRAM OBJECTIVES

1. Conduct jurisdiction-level program and data inventories and situation analysis.
2. Provide degree training for 22 Pacific professionals and paraprofessionals in obesity and related fields.
3. Develop a Pacific food, nutrition, and physical activity data-management and -evaluation system.
4. Develop and conduct community-based "environmental" interventions to prevent or decrease young children's overweight and obesity.
5. Evaluate the effectiveness of community-based "environmental" intervention efforts.
6. Introduce, enhance, and/or support policies for healthy eating and physical activity for 2- to 8-year-old children.



## CHL Partner Jurisdictions





February 4, 2014

## News and Summary Information

### Children's Healthy Living Program for Remote Underserved Minority Populations of the Pacific (CHL)

A partnership among Alaska, American Samoa, CNMI, Guam, Hawaii & Freely Associated States of Micronesia (Federated States of Micronesia - Chuuk, Kosrae, Palau, Yap; Marshall Islands; Palau)

Funded by USDA/AFRI/NIFA Grant, 2011-68001-30335, (Novotny)

### Research

New peer reviewed papers, found below.

The CHL intervention design paper has been getting a lot of attention, including an award on the RE-AIM approach to interventions. Associated links below.

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: the launch of BMC Public Health Lynne R Wilken, Rachel Novotny, Marie K Fialkowski, Carol J Boushey, Claudio Nigg, Yvette Paulino, Rachael Leon Guerrero, Andrea Bersamin, Don Vargo, Jang Kim and Jonathan Deenik. BMC Public Health, 13:944 (09 Oct 2013)

<http://www.biomedcentral.com/1471-2458/13/944>

<http://re-aim.org/>

### Other Peer Reviewed Publications

Fialkowski MK, DeBaryshe B, Bersamin A, Nigg C, Leon-Guerrero R, Rojas G, Areta A, Vargo A, Belyeu-Camacho T, Castro R, Luick B, Novotny R and the Children's Healthy Living for Remote Underserved Populations in the Pacific Region (CHL) Program



Team. A community engagement process identifies environmental priorities for change to prevent early childhood obesity in the Children's Healthy Living Program for Remote Underserved Populations in the Pacific Region (CHL). *Matern Child Health J.* 2013 Sep 17. [Epub ahead of print]

Novotny R, Fialkowski MK, Areta AAR, Bersamin A, Braun K, DeBaryshe B, Deenik J, Dunn M, Hollyer J, Kim J et al: The Pacific Way to Child Wellness: The Children's Healthy Living Program for Remote Underserved Minority Populations of the Pacific Region (CHL). *Hawai'i journal of medicine & public health : a journal of Asia Pacific Medicine & Public Health* 2013, 72(11):406-408.

#### Conference Abstract Publication

Fialkowski MK, Areta AR, Belyeu-Camacho T, Bersamin A, Rojas G, Castro R, DeBaryshe B, Leon-Guerrero R, Luick B, Vargo A, Nigg C, Novotny R. Using Community Readiness Assessment to Inform Environmental Intervention Development in the Children's Healthy Living (CHL) Program in Remote Underserved Minority Populations of the Pacific. *FASEB J* 2013 27:232.8 (Experimental Biology, Boston, MA, April 20 - 24, 2013)

#### Oral Presentations

Areta A. CHL in American Samoa. Samoa and American Samoa 4th Annual Bilateral Summit: Exploring Effective Solutions to NCD Challenges. November 14 - 15, 2013.

Novotny R, Deenik J, Leon Guerrero R, Bersamin A, Kim J, & Vargo D. Children's Healthy Living Program for Remote Underserved Minority Populations of the Pacific Region (CHL) - Annual Report to USDA. 2013 SNEB Conference. August 9 - 12, 2013.

Vargo D. Children's Healthy Living Program in American Samoa. American Samoa Community Cancer Coalition. August 8, 2013.



Vargo D. Providing Research for Evidence-Based Healthful Living Practices in American Samoa. ASCC-CNR Wellness Center Opening. August 30, 2013.

### Poster Presentations

Fialkowski MK, Matanane L, Wong S, Leslie J, Stewart M, Dunn M, Deenik J, Novotny R. Integrating Pacific Cultural Concepts into the Introductory Nutrition Curriculum: The Children's Healthy Living Program (CHL). 2013 SNEB Conference. 8/9-8/12/2013

Matanane L, Leon Guerrero R, Fialkowski MK. A Glance at the Food Access Points in Guam: The Children's Healthy Living Program. 2013 CTAHR Student Research Symposium April 12-13, 2013

Esquivel M, Novotny R. Development and evaluation of the Children's Healthy Living (CHL) childcare center wellness policy (WP). 2013 CTAHR Student Research Symposium April 12-13, 2013

### Baseline data collected for intervention program

Based on estimates from October 15, 2013, the total number of child participants in the intervention baseline measurement collection across the 5 participating jurisdictions is 3,919 as below:

Alaska: 382 children had anthropometry measurements taken, 348 children wore an actical, 373 have completed a Food and Activity Log

American Samoa: 802 children had anthropometry measurements taken, 468 children wore an actical, 460 have completed a Food and Activity Log

CNMI: 924 children had anthropometry measurements taken, 450 children wore an actical, 540 have completed a Food and Activity Log

Guam: 784 children had anthropometry measurements taken, 365 children wore an actical, 649 have completed a Food and Activity Log



Hawaii: 971 children had anthropometry measurements taken, 416 children wore an actical, 443 have completed a Food and Activity Log

**The remaining jurisdictions are also collecting similar data to constitute a Prevalence Survey for each Jurisdiction.**

The collection of prevalence survey data in the FAS region began October 23, 2013 in Pohnpei State of the Federated States of Micronesia. Prevalence survey data collection was completed in Pohnpei on November 6, 2013. For Pohnpei, 203 children had anthropometry measurements taken, 102 children wore an actical, and 205 completed a Food and Activity Log. The Marshall Islands Survey is now underway.

**Intervention**

The input and priorities elicited from the community during the situational analysis process, as well as published best practices for improving the target behaviors of fruit, vegetable, water, and sugar-sweetened beverage intake as well as physical activity, sleep and sedentary behavior, were translated into 6 CHL intervention strategies. These strategies are related to: policy for healthy eating and physical activity; engaging children in growing and eating local healthy foods; training role models; increasing access for children to be active; increasing access to good water; and providing other education and training related to CHL target behaviors. The following 4 cross-cutting functions leads strategy implementation: review assessment data for the policy and physical environment; partner and advocate for environmental change; promote the CHL message; and train the trainers. Jurisdictions are currently implementing community-based intervention strategies in each of these functions. Monthly progress reports are used to track progress.

CHL intervention activities that delivered science-based knowledge to people in our communities included:

- Providing nutrition and physical activity inspired training sessions to community members, organizations, teachers and students



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- Providing role model training to community members
- Conducting culturally-based events, such as the Makahiki, to relay on CHL messages to the communities in culturally appropriate ways.
- Support events (e.g., Field Days, Walks, Childhood Obesity Awareness Month) that share CHL message
- Use of Social Marketing as a dissemination tool
- Provided data on the community assessment findings to identify built environment improvements (e.g. a community park) in CNMI

### CHL Products

- The CHL newsletter is distributed quarterly (12 issues to date) to a listserv of 400 emails.
- The CHL webpage is a primary resource of information, especially related to the training program, and point of contact for the public. Since July 2013 we have had 1907 unique visits to the site in which 63% of those were new visitors. Visitors spent on average 2 minutes and 46 seconds on the website with 2.8 pages on average viewed per visit.
- CHL Master Role Modeling Manual developed to accompany CHL Master Role Modeling Workshop
- CHL Role Modeling Kit developed to accompany CHL Role Modeling Workshop
- Physical Activity and Nutrition Manual updated for Alaska
- CHL Food Cost Survey developed
- Tools for inventorying and assessing the food store, restaurant, parks, and churches were adapted from previously validated tools for CHL



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- Physical Activities Information Sheet developed for Early Childhood Centers in Alaska
- Food and Activity Tutorial DVD for use in the CNMI
- Guam Gardening Curriculum products including power point presentations and publications on "Raised Beds and Container Gardening", a four module curriculum and a reference guide on "Starting your Garden" which include topics on soil management, container gardening, propagation by cuttings and seeds, mulching, sheet mulching, raised beds, composting, and water in the garden.
- Demonstration gardens in Guam
- Gardens created at schools, homes, and transitional shelter in Hawaii

## Training

We have a full cohort of 22 degree seeking CHL Trainees, representing each CHL jurisdiction, including each state of FSM studying at University of Alaska, University of Guam and University of Hawaii.

Current CHL Training Students by site, institution and degree program:

Alaska

Tara Stiller, University of Alaska Anchorage, MPH

Ron Standlee-Strom, University of Alaska Fairbanks, MS in Natural Resources Management

American Samoa

Marietta Lafaele, University of Hawai'i, BS in Food Science and Human Nutrition

Aifili Tufa, University of Hawai'i, PhD in Public Health



Commonwealth of the Northern Mariana Islands (CNMI)

Rose Castro, University of Alaska Anchorage, Master of Public Health (MPH) online  
Patricia Coleman, University of Alaska Anchorage, Master of Public Health (MPH) online

Freely Associated States of Micronesia (FAS)

Ivenglynn Andon (Pohnpei), University of Guam, BS in Health Sciences

Kimberly Areieta (Marshalls) University of Guam, BSN in Nursing

Lilian Billimon (Chuuk), University of Guam, BS in Health Sciences

Joachim Castro (Chuuk), University of Hawai'i, BS in Food Science and Human Nutrition

Samuel Foulchag (Yap), University of Hawai'i, BS in Food Science and Human Nutrition

Trisha Johnson (Pohnpei), University of Hawai'i, BS in Food Science and Human Nutrition

Shra Kedi (Marshalls) University of Hawai'i, BS in Food Science and Human Nutrition

Edumyle Otobed (Palau), University of Hawaii, Kapiolani Community College, AS in Liberal Arts

Evigan Sengebau (Palau), University of Guam, BS in Health Sciences

Neelma Skilling (Kosrae), University of Hawai'i, BS in Human Nutrition, Food, and Animal Sciences (HNFAS)

Renny Glenn Taiugmai (Yap), University of Hawaii, Kapiolani Community College, AS in Liberal Arts

Srue Wakuk (Kosrae) University of Hawaii, Kapiolani Community College, AS in Liberal Arts



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## Guam

Tanisha Aflague, University of Hawai'i, PhD in Nutrition

Lenora Matanane, University of Hawai'i, MS in Nutrition

## Hawaii

Monica Esquivel, University of Hawai'i, PhD in Nutrition

Ashley Morisako, University of Hawai'i, Master of Public Health (MPH)

Additionally, the CHL training program activities has included the development of curriculum to provide training in obesity prevention to the CHL Scholarship Students. These courses are 1. Obesity 101, 2. Community Engagement/Community-Based Participatory Research, 3. Evidence-Based Approaches and Practices in Childhood Obesity Prevention, and 4. Advocacy and Policy. By Spring 2014 all courses will have been instructed at least once.

The first Pacific based introductory nutrition course was offered online through the University of Hawaii Outreach College in Fall 2013.

The CHL Seminar on Obesity Prevention: Community Engagement/Community-Based Participatory Research for the CHL Scholarship students was taught in the Spring 2013. In the Fall 2013 semester the CHL Seminars Obesity Prevention: Obesity 101 and Obesity Prevention: Evidence-Based Approaches and Practices in Childhood Obesity Prevention were taught. The CHL Seminars on Obesity Prevention: Community Engagement/Community-Based Participatory Research and Obesity Prevention: Advocacy and Policy will be taught in the Spring 2014.

An online Pacific-based introductory nutrition course was offered in the Fall 2013 semester.

Worked with Guam Cooperative Extension to hold a summer camp in one of the intervention communities in July 2013; activities included exercise and physical activities utilizing the SPARK curriculum for the



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older children (1st - 5th grade) and Mighty Moves curriculum for the younger children (preschool & Kinder). In addition, nutrition education classes and gardening was taught to children of all age levels.

The CHL Training Program began providing a professional and academic skill building session one day a week in the Fall 2013 for the CHL Scholarship Students. The Program has also implemented a peer-mentoring program to link CHL students with upperclassmen in their major to assist them in excelling in their academics. This session and peer mentoring program will be offered again in Spring 2014.

Training for measurement activities has occurred in jurisdictions. This training also included anthropometry standardization against a lead measurer. Master Role Model Training of community members occurred in each jurisdiction except for FAS and Alaska. Role Model Training was conducted in each jurisdiction except for FAS and Alaska. SPARK Physical Activity Training was also conducted for teachers in Guam and CNMI.

Numerous CHL staff from FAS, Guam, CNMI and American Samoa attended a CHL sponsored Facilitation Workshop to promote collaborative leaders. In addition, CHL team members also attended a CHL sponsored workshop to be Master Role Model Trainers in their home jurisdictions.

## **Summary**

CHL has passed the half-way point of the CHL 5-year cycle. CHL has completed baseline measurement collection, begun intervention implementation, and are actively engaged in training future professionals, producing Pacific child obesity prevention products, and engaging Pacific communities.

## USDA National Institute of Food and Agriculture (NIFA) Awards to Insular Areas

| Fiscal Year  | # Applications | # Awards | Award No.        | Project Title   | Primary Investigator    | Award \$               | Annual Total \$         |
|--------------|----------------|----------|------------------|---|-------------------------|------------------------|-------------------------|
|              |                |          |                  | -   |                         |                        |                         |
| 2010         | 1              | 1        | 2010-38501-21876 | <a href="#">Phase I: Developing Residence Instruction and Distant Education in Food and Agriculture Related Sciences in the Pacific Islands</a> | Yudin, Lee Stanton      | \$718,002              |                         |
|              |                |          |                  |   |                         |                        | \$<br>718,002           |
| 2011         | 1              | 1        | 2011-38501-30610 | <a href="#">Phase II: CariPac Consortium Distance Education Grant for Institutions of Higher Education in Insular Areas</a>                     | Vineyard, Christy       | \$592,599              | \$592,599               |
| 2011         | 1              | 1        | 2011-38501-30524 | <a href="#">Improving Teaching Techniques and Agricultural Sciences Knowledge for Students in the Central Rural Region Of Puerto Rico</a>       | Ramos-Rodriguez, Olgaly | \$62,000               | \$62,000                |
| 2011         | 1              | 1        | 2011-38501-30578 | <a href="#">Nutrition Live at UPR-RP; Distance Education Courses within the Nutrition and Dietetics Program</a>                                 | Pinto-Lopez, Elsa       | \$62,000               | \$62,000                |
|              | 3              | 3        |                  |   |                         |                        | \$<br>716,599           |
| 2012         | 1              | 1        | 2012-38501-19675 | Phase III: CariPac Consortium Distance Education Grant for Institutions of Higher Education in Insular Areas                                    | Christy Vineyard        | \$<br>717,945.00       | \$<br>717,945.00        |
| 2013         | 3              | 1        | 2013-70004-21317 | Phase IV - CariPac Consortium Distance Education Grant for Institutions of Higher Education in Insular Areas                                    | Christy Vineyard        | 610,059.00             | \$<br>610,059.00        |
| <b>Total</b> | <b>11</b>      | <b>9</b> |                  |   |                         | <b>Total Period \$</b> | <b>\$<br/>1,328,004</b> |



|              |           |           |                  |   |                  |            |                     |
|--------------|-----------|-----------|------------------|---|------------------|------------|---------------------|
| 2011         | 1         | 1         | 2011-38416-31146 | <u>Phase VII- Developing Residence Instruction in Food and Agriculture Related Sciences at Land Grant Institutions in the Pacific and Caribbean</u> | Gonzalez, Gladys | \$861,233  |                     |
|              |           |           |                  | -   |                  |            | <b>\$861,233</b>    |
| 2012         | 1         | 1         | 2012-38416-19977 | Phase VIII-Developing Resident Instruction in Food and Agriculture  | Gonzalez, Gladys | \$ 861,079 |                     |
|              |           |           |                  |   |                  |            | <b>\$ 861,079</b>   |
| 2013         | 2         | 1         | 2013-70004-21018 | Phase IX-Developing Resident Instruction in Food and Agriculture Related Sciences at Land Grant Institutions in the Pacific and Caribbean Is        | Gonzalez, Gladys | 849,959.00 | 849,959.00          |
| <b>Total</b> | <b>15</b> | <b>10</b> |                  |   |                  |            | <b>\$ 5,454,401</b> |