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April 12, 2011

Press Release Material

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

*Funded under the United States Department of Agriculture, National Institute of Food and Agriculture, Agriculture and Food Research Initiative, Childhood Obesity Prevention Challenge Area*

The Children's Healthy Living Program for Remote Underserved Minority Populations in the Pacific Region (CHIL) is a partnership among remote Pacific states and other jurisdictions of the US: Alaska, American Samoa, Commonwealth of the Northern Marianas, Guam, Federated States of Micronesia, Hawaii, Palau, and the Republic of the Marshall Islands. All jurisdictions have US Land Grant Colleges, which have united in the Pacific Land Grant Alliance (PLGA). We are combining efforts to train a public health nutrition work force, conduct public health nutrition research and communicate nutrition and health related information to the public. There is no US national nutrition monitoring (NHANES) in these jurisdictions, not even in the states - Alaska and Hawaii. We will combine efforts to develop nutrition monitoring and evaluation systems, and to publish and disseminate information to understand and guide 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 child obesity in the Pacific Region. To do this, CHIL will engage the community, and focus on capacity building and sustainable environmental change. CHIL will serve as a model for other regions with remote underserved Native populations at risk for obesity.

Principal Investigator, Rachel Novotny, PhD RD Professor, University of Hawaii at Manoa, College of Tropical Agriculture and Human Resources, Dept. Human Nutrition, Food and Animal Sciences

**Funding:** 24.8 million over 5 years

**Performance Sites (Lead Site Investigators)**

- U Hawaii, Manoa (Dr. Rachel Novotny)
- U Alaska, Fairbanks (Dr. Bret Luick)
- American Samoa Community College (Dr. Donald Vargo)
- Northern Marianas College (Dr. Jang Kim)
- U Guam (Dr. Rachael Leon Guerrero)
- College of Micronesia – Federated States of Micronesia (FSM -Pohnpei, Yap, Kosrae, Chuuk), Palau, Republic of the Marshall Islands (RMI) (Leader not yet determined)

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- USDA integrated CAP grant - A regional multi-disciplinary community based strategy to address child obesity

### **CHIL Goal**

The goal of this coordinated agricultural program (CAP) among Pacific *USDA defined Experimental Program for Stimulating Competitive Research (EPSCoR)* states/jurisdictions, is to build social/cultural, political/economic, and physical/built environments that will promote active play and intake of healthy food to prevent young child obesity in the Pacific Region.

### **RATIONALE AND SIGNIFICANCE**

The CHIL program addresses the USDA NIFA priority areas of 1) food safety, nutrition and health 2) agricultural systems and technology and 3) agricultural economics and rural communities. The CHIL program will assist NIFA in meeting the community-based childhood obesity prevention priority by providing long-range improvement in and sustainability of agriculture and food systems in remote underserved US jurisdictions of the Pacific Region, which are not served by National Nutrition and Health Monitoring (NHANES). This program will develop and enhance existing training programs, and train a cadre of 16 food, nutrition and health professionals from the PLGA region in a collaborative network. This will elevate the capacity of the region to build and sustain a healthy food and physical activity environment to maintain healthy weight and prevent young child obesity. We will develop and evaluate environmentally focused interventions in multiple diverse underserved rural communities using community-based participatory approaches to develop effective and sustainable changed healthy living (healthy food intake and active play/physical activity) and decrease the prevalence of young child obesity. CHIL will use the data gathered and intervention results to incur at least one policy change in each jurisdiction. The CHIL program will serve as a model for other Native underserved rural minority groups.

**Background:** The Children's Healthy Living Program for Remote Underserved Minority Populations in the Pacific Region (CHIL) is a partnership among remote Pacific states and other jurisdictions of the US: Alaska, American Samoa (AS), Commonwealth of the Northern Marianas Islands (CNMI), Guam, Federated States of Micronesia (FSM), Hawaii, Palau, and the Republic of the Marshall Islands (RMI). All jurisdictions have US Land Grant (LG) Colleges, which have united in the Pacific Land Grant Alliance (PLGA). None of these states/jurisdictions have the US national nutrition and monitoring system (NHANES). The PLGA region is vast and isolated, covering more area in the Pacific Ocean than the contiguous US. Populations are separated by thousands of miles of ocean (Pacific Islands) and land without roads (Alaska), unique environments and delicate ecosystems, which must be considered in the design of obesity prevention interventions. The PLGA region is highly reliant on food imports, which are often highly processed and energy-dense. Yet the region is also dependent on traditional foods, to varying degrees. Native communities are particularly vulnerable, due to severe socio-economic disparities and threats to Native lifestyle. It is vital to strengthen the social/cultural, physical/built and political/economic environment in a way that supports

local culture if we are to attain our vision of preventing young child obesity in these remote, underserved Native populations.

**Prevalence of Child Obesity in the Pacific Region:** Native communities in PLGA regions are seriously underrepresented in obesity research despite a high prevalence of obesity and related behavioral and environmental risk factors. According to the few available data for the region, prevalence of overweight and obesity has been estimated at 60 to 90% of the adult population and 15 to 45% of 2-8 year olds, higher than levels seen on the contiguous US.

**Consequences of Obesity:** The health and social consequences of overweight and obesity are substantial, and obese and overweight children are at risk for serious chronic illnesses. Already, the Pacific Island jurisdictions have declared a “State of Emergency” due to the high prevalence of chronic conditions. It is estimated that about 60% of 5 to 10 year old overweight children will develop type 2 diabetes at some point in their lives, compared to one third of all US children. Obese children are more likely than their peers to experience negative social and psychological consequences including discrimination, stigmatization, and low self-esteem. Orthopedic, neurological, pulmonary, digestive, and endocrine systems are all negatively affected by obesity in children. Early puberty is found among overweight girls, and delayed puberty among boys.

**Training Available in the Pacific Region:** Few professionals in the Pacific Region have the training and resources to assess community needs and to develop, deliver, monitor and evaluate effective multi-component intervention and outreach programs with their communities to address the modern mix of food, nutrition and related public health issues. The CHIL program will utilize existing degree programs, enhancing and developing collaborative and articulated programs, providing trans-disciplinary, trans-Pacific training for obesity prevention, in the context of nutrition & health promotion.

**Previous Work of the Investigative Team:** CHIL investigators are based at Land Grant Colleges and Universities and have broad multi-disciplinary expertise that will contribute to our multilevel, socio-ecological approach to prevention of child obesity. The multiple and diverse perspectives, skills, and experiences of the key personnel complement one another and creating a well-qualified multi-disciplinary team for this program.

### **CHIL Objectives**

1. Program and data inventories / needs assessments
2. Train 22 professionals & paraprofessionals
3. Pacific food, nutrition & physical activity data management & evaluation system
4. Community based primary prevention environmental intervention
5. Decrease prevalence of young child overweight and obesity and improve health
  - decrease the prevalence of young child overweight & obesity
  - decrease acanthosis nigricans
  - increase sleep
  - increase moderate to vigorous physical activity
  - decrease sedentary behavior (screen time)

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- increase healthy eating
  - increase fruit & vegetable intake
  - increase water intake
  - decrease sweetened beverage intake
  - decrease fatty meat intake
- 6. At least one environmental policy change per state / jurisdiction

### **CHIL Intervention Innovation**

- Focuses on environmental change, including policy, of the school neighborhood or community for active play & healthy eating for the Pacific Region
  - Local low cost nutrient dense foods, especially in neighborhood stores
  - Opportunities for active play in neighborhoods
- Intervening in fragile environments in the Pacific at extreme risk for childhood obesity
- Remote communities have limited options for obtaining foods & physical space for activity - opportunity for large impact
- Pacific environments & ethnic populations are unique & understudied

### **Key CHIL Intervention Messages**

- 1) daily active play
- 2) less screen (TV or DVD) time
- 3) daily water
- 4) fewer sugar sweetened beverages
- 5) daily fruit & vegetables

### ***Plan for sustaining the program***

The CHIL emphasis on capacity building through training, community based participatory research, dissemination/outreach, policy change and use of a local advisory committee, will assure integration of CHIL activity into local and regional plans and, thus, assure sustainability of effort. The CHIL program will promote partnerships and collaboration that will naturally extend beyond the life of the grant due to a shared agenda, collaborative partnership and shared resources.

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## **Suggested Talking Points and Speakers**

Rachel Novotny, PhD RD Professor of Nutrition, UHM, PI

- State of Emergency for non-communicable diseases declared by Pacific Island Health Officers in the Pacific Region. Prevention of obesity is a primary strategy for action.
- US Dept. Agriculture competitive grant - A regional multi-disciplinary community based strategy to combat young child obesity
- “Children’s Healthy Living Program for Remote Underserved Minority populations of the Pacific Region (CHIL)” - Partnership of Land Grant Colleges in the Pacific that includes Hawaii, Alaska, American Samoa, Guam, CNMI, Freely Associated States - the Federated States of Micronesia, Republic of Palau, Republic of the Marshall Islands
- Identify, support and promote healthy family and community strategies for each local environment, including with appropriate policy, economic, social, cultural and physical environments- such as food stores and parks- for healthy eating and active play to prevent and reduce obesity

Lynne Wilkens, PhD, Researcher and Biostatistician, Cancer Center, UHM, Co-I

- Unique environments of the Pacific that require blending of community based methods with research design and analysis to determine effective sustainable interventions

Barbara DeBaryshe, PhD, Associate Professor, Family Studies, UHM, Co-I

- Identify and evaluate healthy family and community strategies that work in each local environment and support and promote them, including with appropriate policy change

Michael Dunn, PhD, Associate Professor of Nutrition, UHM, Co-I

- Articulation and enhancement of degree programs across our institutions to train a cadre of regional leaders in multi-disciplinary approaches of obesity prevention and control

Ron Takahashi, MBA, Professor and Chair, Culinary Arts, Kapiolani Community College, Co-I

- Focus on skills to produce and prepare tasty healthy local foods