

# UNIVERSITY OF HAWAII

PACIFIC BUSINESS CENTER PROGRAM

Economic Development Multi-Purpose Business  
Incubation Center (MPBI) Program PRESENTATION

MAUMAU MATAGI LELEI  
MOE LA MAHAEHAE

*THE WINDS OF OPPORTUNITY*

**PIFON CONFERENCE**

**NADI, FIJI**

**MAY 06-09**



# IN PACIFIC ISLAND CULTURES LIFE AND HEALTH

ARE THE GREATEST GIFTS OF ALL THAT WE MUST ASSURE  
OUR CHILDREN







# BREADFRUIT AND HEALTH

BREADFRUIT FOOD PRODUCTS WILL  
IMPROVE THE HEALTH OF ELDERS AND  
CHILDREN OF THE NEXT GENERATION  
WITH GLUTEN FREE, LOW GLYCEMIC  
BREADFRUIT FOOD PRODUCTS

THAT CAN REPLACE HIGH SUGAR,  
WHEAT, FLOUR AND OTHER HIGH  
GLYCEMIC INDEX FOOD IMPORTS.

# IMPORTED PROCESSED FOOD AND RAMPANT HEALTH CHALLENGES

HAWAII 95% OF FOOD IS IMPORTED

## *Addressing the Root Cause vs. the Symptoms*

**“Rates of non-communicable diseases such as diabetes and cardiovascular diseases among the Pacific Island Countries are the *highest in the world* and account for 75% of all deaths.”**

**—Asian Development Bank *2011***



# HEALTH PRIORITY

UH PACIFIC REGIONAL BREADFRUIT INITIATIVE HEALTH GOAL

***“BREADFRUIT PRODUCTS CAN SLOW DOWN  
AND STOP OBESITY & DIABETES THAT IS NOW  
A CRISIS IN THE PACIFIC AND LEADING CAUSE  
OF DEATH. OUR CHILDREN ARE AT VERY HIGH  
RISK AND WE MUST TAKE ACTION NOW.”***

***Papalii Dr. Tusi, PRBI Director***

## Dr. Sela Panapasa

Is a native of Rotuma, Fiji and a Research Scientist at the Research Center for Group Dynamics, Institute for Social Research at the University of Michigan.

She is internationally renowned for her research and initiatives that address health issues among Pacific Islanders. The leading cause of death in the Pacific is diet based. Diabetes, obesity and ancillary conditions attributed to imported high sugar content processed foods and drink are the primary cause. Low glycemic index and gluten free breadfruit, taro and banana food products to supplant food imports can save thousands of lives including those of the unborn. Returning to traditional foods such as breadfruit with new culinary product innovations, i.e., ice cream, pasta, cereal, cheese cake etc. can attract local island consumers, especially children, to avoid the imported versions. Distribution and sharing of such products can reverse a man-made global health problem with a micor natural solution.





# WEAVING CULTURAL WISDOM AND VALUE WITH MODERN SCIENCE, KNOWLEDGE AND TECHNOLOGY

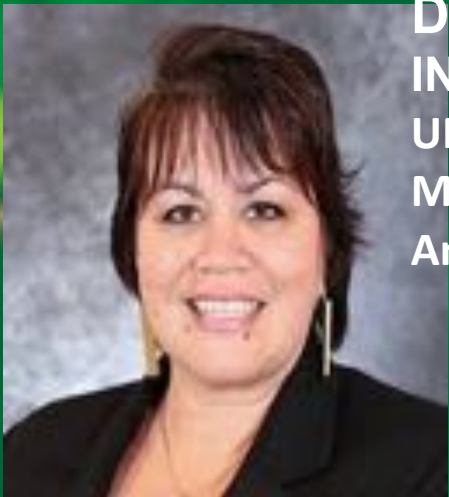


**DR. SELA PANAPASA**  
UNIVERSITY OF MICHIGAN  
native of Rotuma, Fiji Ancestry

**RAYNALD SAMOA, MD.**  
ENDOCRINOLOGIST



**DEE ANN CARPENTER, MD**  
INTERNAL MEDICINE,  
UNIVERSITY OF HAWAII SCHOOL OF  
MEDICINE, native Hawaiian  
Ancestry



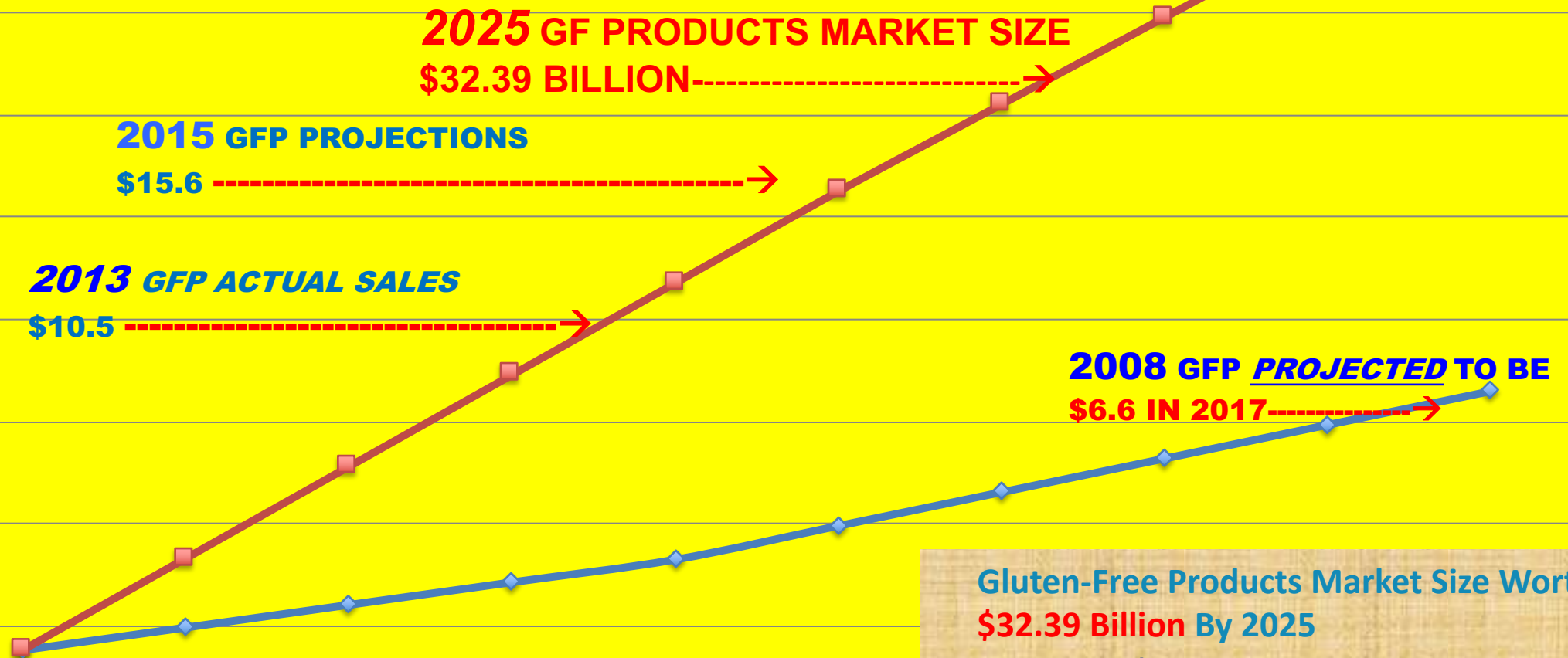
**PETER RONEY, MD**  
Ophthalmology  
Hokulea Crew member  
(2007) & World Wide  
voyage (2017)



**GALUMALEMANA  
FUAPOFO AVEGALIO**  
EMS CHIEF AM. SAMOA  
GOVERNMENT

# Global Gluten Free Product (GFP) Actual (2013) Sales & Projections (2025) in the Billions

- Gluten Free Foods and Beverages Market: Trends and Developments in the U.S. 4<sup>th</sup>ed, [www.packagedfacts.com](http://www.packagedfacts.com))
- (Mintel Group Ltd, an international marketing research firm)
- Grand View Research Inc. Market Research Reports & Consulting



Gluten-Free Products Market Size Worth  
**\$32.39 Billion By 2025**

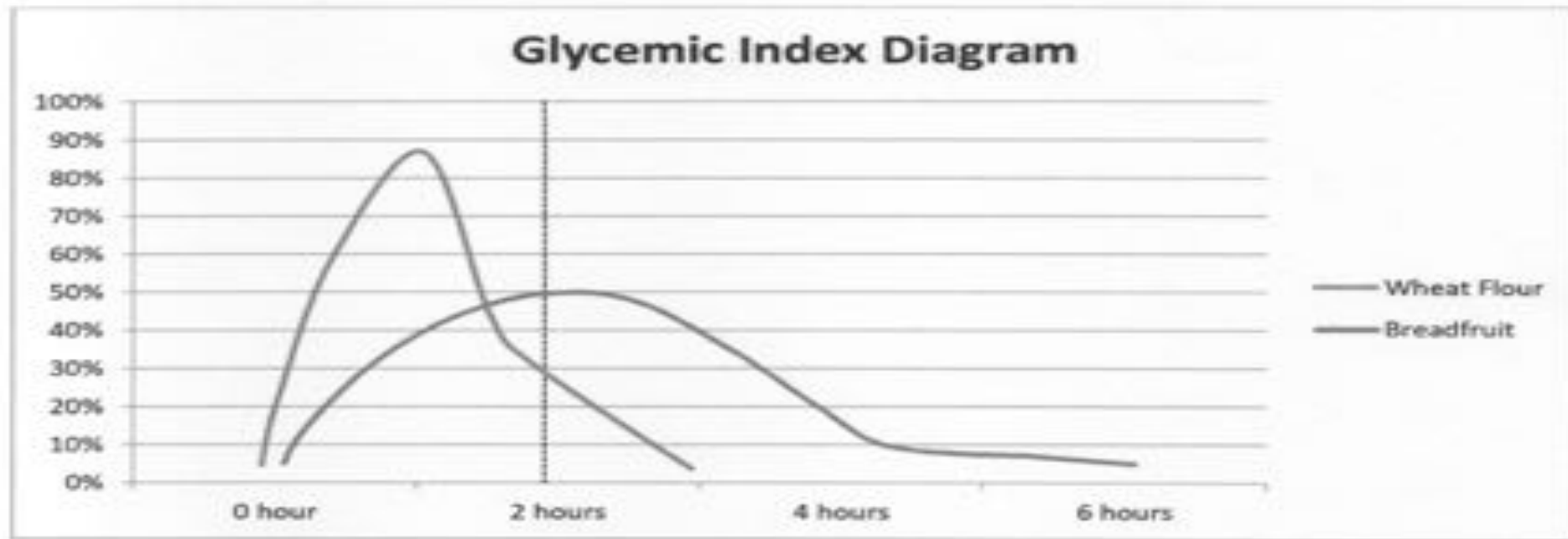
March 2019 | GRAND VIEW RESEARCH



# Diagram shows the low-glycemic index (GI) nature of ma'afala breadfruits.

The diagram compares blood glucose level in human subjects after eating regular wheat bread, and after eating baked breadfruits at the same 100g (about 3 oz) portion sizes.

PROFESSOR ALVIN HUANG, UNIVERSITY  
OF HAWAII COLLEGE OF TROPICAL  
AGRICULTURE, PRBI





IT OFTEN TAKES A  
GENERATION OR MORE  
TO CHANGE BEHAVIOR



*but only*  
MOMENTS IN THE KITCHEN  
TO CHANGE THE  
INGREDIENTS



BREADFRUIT  
ICE CREAM



BREADFRUIT  
PASTA & SPAGHETTI



BREADFRUIT  
CEREAL



BREADFRUIT  
CHEESE CAKE

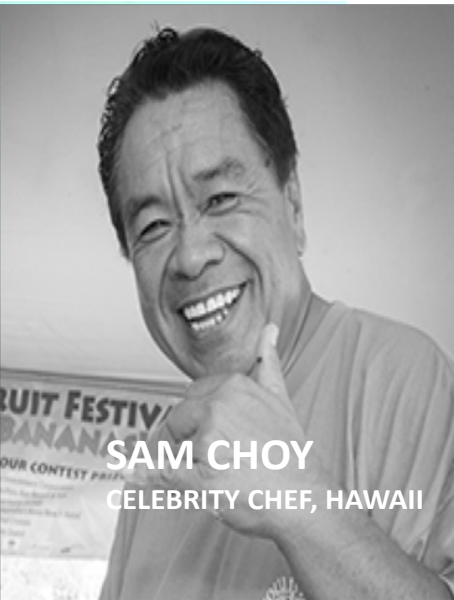


# MARKETING: RECRUIT PACIFIC CELEBRITIES TO HELP SAVE THE CHILDREN FROM THE RAVAGES OF DIABETES AND OBESITY

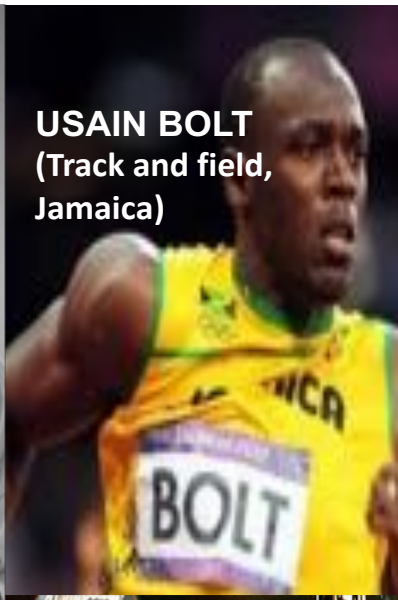
Celebrity Chefs, Professional Athletes, Actors, Pacific & Caribbean Islanders recruited for marketing promotion.



**JASON MOMOA**



**SAM CHOY**  
CELEBRITY CHEF, HAWAII



**USAIN BOLT**  
(Track and field, Jamaica)



**Heather Headley**  
Trinidadian American singer,



**Kelsey Grammer** actor  
, US Virgin Islands



**SEIULI 'THE ROCK' JOHNSON**  
Dwayne Johnson



**Manase Jesse Sapolu**  
4 time super bowl champion

[Jason Momoa defends Justice League ... mashable.com](https://www.mashable.com/2016/02/25/jason-momoa-defends-justice-league/)



**MARIOTA**



**TIM DUNCAN**  
(Basketball, St. Croix, US Virgin Islands)



**SHELLY-ANN FRASER-PRYCE**  
(Track and field, Jamaica)



**Oesa Kolinisau**  
Captain Fiji 7's  
Olympic Gold





Research & Development by University of  
Hawaii Pacific Business Center Program  
Pacific Regional Breadfruit Initiative

**KEY CONSULTANTS**

- The late University of Hawaii College of Tropical Agriculture Professor Alvin Huang, who was a pioneer research & development scientist in breadfruit food product development and tropical foods such as taro for commercialization.
- Kansas State University Professor Dr. Fadi Aramouni is a national and internationally recognized product development expert on gluten free flour, breadfruit flour product development and FDA standards for local and export markets.
- Dr. Jeff Gwirtz, is an International milling and flour making expert who has worked extensively with breadfruit in the Pacific and the lead contractor for processing from harvest to flour who worked extensively as a food engineer in the US food industry and is an adjunct professor at Kansas State University for milling and flour making.

**MAJOR CHALLENGE OF BREADFRUIT  
FERMENTATION AND TECHNOLOGY RESOLVED BY  
PROFESSORS FROM THE UNIVERSITY OF HAWAII,  
KANSAS STATE UNIVERSITY AND JAG Service Inc.,  
LAWRENCE KANSAS**



# **SUCCESSFUL TEST: BREADFRUIT FLOUR MILLED AT AMERICAN SAMOA COMMUNITY COLLEGE LANDGRANT JANUARY 2016**





**The UH Food Science Professors reaffirms the unique compatibility between breadfruit flour and coconut cream, a known fact among Pacific Islanders for millennia.**







## **COCONUTS THE NATURAL INGREDIENT:**

COCONUT FLOUR MIXED WITH BREADFRUIT FLOUR FORMS A  
NATURAL BLEND FOR FOOD ENTREPRENEURS TO MAKE UNIQUE  
BREADFRUIT FOOD PRODUCTS.

### **Breadfruit Flour**



Dried at Community Drying Stations  
Shipped to Pago for Blending and  
Warehousing.

### **Proprietary Coconut/ Breadfruit Blend**

One of the specialty blends to be  
made at Pago. Better quality,  
Higher Value and a Competitive  
Edge to imitators.

# SUCCESSFUL TEST: BREADFRUIT NOODLES



- Rice flour is used for making noodles.
- Many Asians are allergic to rice so cannot eat it.
- Noodles made from 100% Breadfruit flour. Contains no rice flour and excellent for people allergic to rice.



# **SUCCESSFUL TEST:** ULU CHEERIOS ON A PRODUCTION LINE IN THE U.S.





# **SUCCESSFUL TEST: ULU PASTA MADE FROM PASTA MACHINE**





# Ulu Flour, Cereal and Pasta





# Ulu Flour, Cereal and Pasta



## PRODUCTS TO BE FEATURED AT THE 2019 GLOBAL BREADFRUIT SUMMIT



**BREADFRUIT  
BEER**



**BREADFRUIT  
CHEESE CAKE**



**BREADFRUIT  
CHIPS**



**BREADFRUIT  
ICE CREAM**

FEB 2019 70,000  
BOTTLE DEMAND  
FOR MUTINY



**BREADFRUIT  
VODKA**

**Dr. Diane Ragone**  
NTBG, KAUAI



**Dr. Laura Nkrumah**  
UWI, Trinidad & Tobago



**Dr. Craig Elevitch**  
Agroforestry Net. Inc



**Dr. Susan Murch**  
UBC, Okanagan,  
Canada







Breadsticks  
Bagels  
Empanadas



Fruit pastries & turnovers.



Pita pocket bread



Cakes

**BREADFRUIT FOOD  
CREATIONS BY HAWAII CHEFS**



Lavosh



# BY-PRODUCTS

## FROM TCOM AND BREADFUIT RESEARCH & DEVELOPMENT

Important Secondary Products with  
Economic Potential

- Food Ingredients
- Insecticides
- Cosmetics
- Plastics/Biopolymers
- High-value chemicals
- Fuel
- Activated carbon/bio char
- Electrical power
- Synthetic fuels
- Food dehydrator
- Water extraction



**Dr. Susan Murch**  
University of British  
Columbia, Okanagan,  
Canada







# **BREADFRUIT LATEX, AIR PERMIABLE & BIO-DEGRADABLE**

ULU SAP/LATEX RESEARCH  
FOR FINE PLASTIC PRODUCTS AND  
BIO DEGRADABLE PLASTICS COMBINED WITH  
HIGH FIBER ORGANIC MATERIALS





## **ULU WOOD: TERMITE & MARINE WORM RESISTANT**





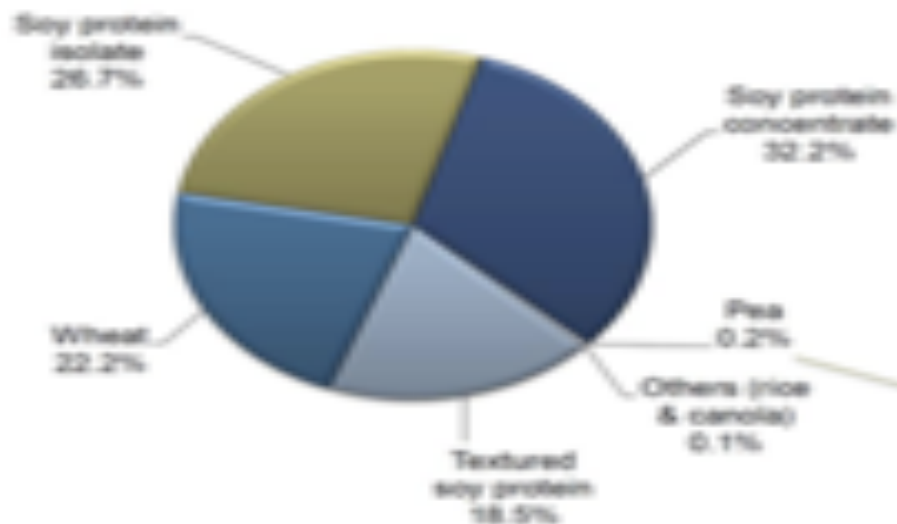


RESEARCH FINDINGS BY DR. SUSAN MURCH, UNIVERSITY OF BRITISH COLUMBIA, OKAGAN

# Commercial Potential of Protein Isolate

- Market size = \$43 billion in 2013
- 61.2% is animal protein
- Only 13% plant protein
  - Plant protein is expensive
  - Relatively few plants produce complete protein

Plant Protein Ingredients Market: % of Revenue by Category, Global, 2013

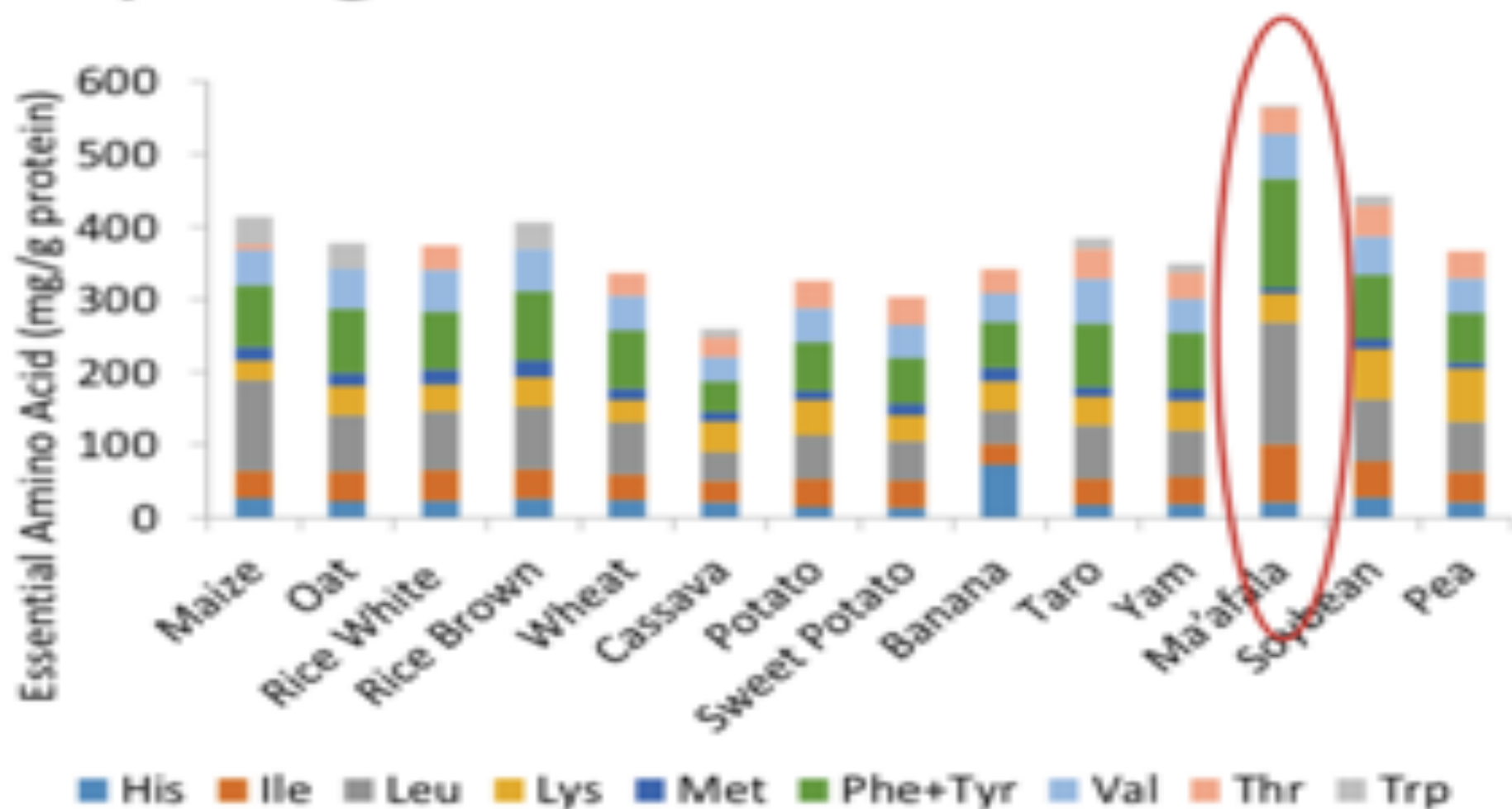


## Pea Proteins

Pea proteins are one of the few plant protein ingredients that scores high on organoleptic acceptance by consumers. Pea protein isolates typically consists of 85 percent protein. Applications include meat substitutes, processed foods such as soups, sauces, and baked goods, snacks, nutraceuticals, and sports nutrition.



How does breadfruit compare to other proteins? – Ma'afala is better than everything else.





# New Ingredients from Breadfruit



**32% Latex**

Biopolymers  
Bioplastics  
Edible plastics

**6% Protein**

Gluten-free  
Non-GMO  
Complete

VERY HIGH  
US FOOD  
PRODUCT  
MARKET  
DEMAND

**61% Starch**

Compared to corn:

Similar thickening  
Smaller granule size  
Lower viscosity  
Less sensory impact  
Slower digestion

LOW GLYCEMIC INDEX FOOD PRODUCTS  
MAJOR INTEREST IN US & WORLD MARKET



# HIGH DEMAND COSMETIC

## Squalene



- Moisturizer in cosmetics
- Extracted from shark livers
- > 1 tonne of squalene = death of > 1,300 sharks
- >2,000 tons used per year
- = death of >2 million sharks
- Demand is increasing
  - 5,300 tons (6 million sharks) required by 2022.
- Some cosmetic brands (L'Oreal, Unilever and Estee Lauder etc) want plant source
  - the yield is too low to meet demand
  - the cost of production is high
  - the quality is poor
- Squalene can be extracted from breadfruit leaves & inflorescences





# ORGANIC PESTICIDE RESEARCH



US Agricultural Research Service,  
US Department of Defense Deployed War Fighter Research  
Program and the  
National Tropical Botanical Gardens Breadfruit  
Institute



SMOKE CONTAINED FOUR  
COMPOUNDS MORE  
POTENT THAN DEET



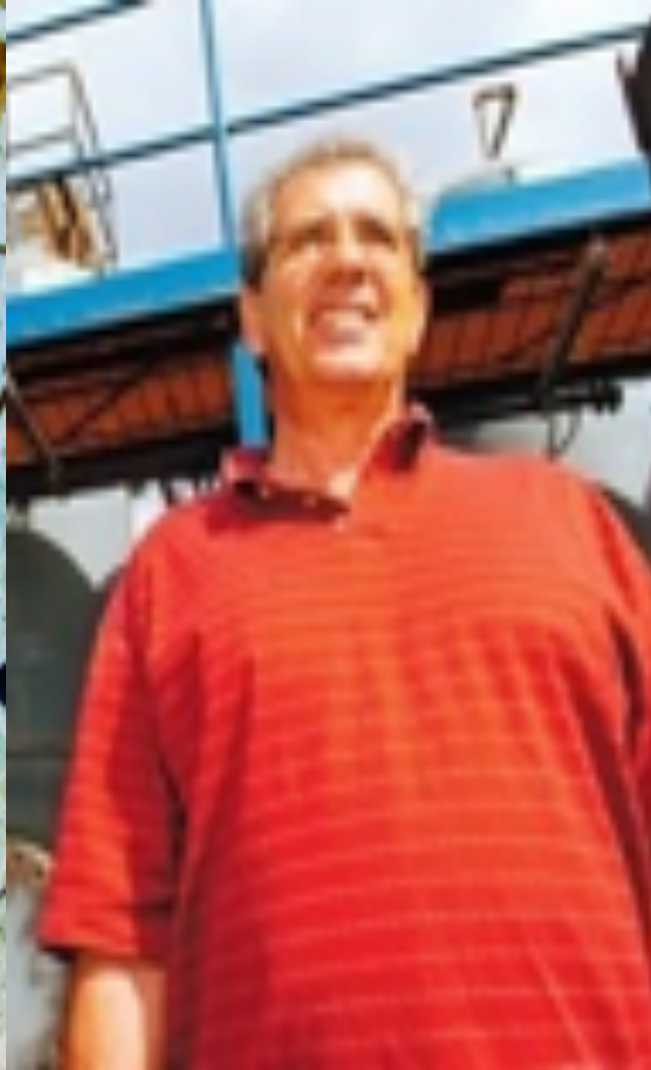
SYNTHETIC  
CHEMICAL  
ABSORPTION  
HEALTH  
CONCERN







RIDDING THE  
OCEAN OF  
PLASTICS & DEBRI



**THERMAL CONVERSION OF  
ORGANIC MATERIAL (TCOM)  
& INTEGRATED TECHNOLOGIS  
THAT ARE MICRO DESIGNED  
FOR ISLANDS.**



**TCOM SYSTEM**  
**Waste Reduction/Conversion**

**USPTO Patent 2012**

**Chairman's Innovation Award**

**Total Energy 2013**





# AGRICULTURAL AND MUNICIPAL WASTE CONVERSION

*Before Processing*

COCONUT  
HUSKS/BIO  
WASTE, ETC.



MUNICIPAL WASTE,  
PLASTICS/SLUDGE/TIRES/ETC



*After Processing*

## **ACTIVATED CARBON OR BIO CHAR**

- UP TO 200% MORE POTENT THAN LEADING COMMERCIAL FERTILIZER)
- EXCELLENT FOR ATOLLS & POOR ARABLE LAND
- REGENERATION OF ONCE ARABLE DESERTS
- HIGH VALUE COMMODITIES MARKET

*High Commercial Value*



# Feedstocks for Processing

*Tires*



*Plastic*



*MSW*



*Wastewater Sludge*



*Green waste*



*Agricultural waste*



*Forest waste*



*Medical waste*



*Construction Waste*



# Finished Value Products



Synthetic Diesel or Kerosene



Synthetic Natural Gas



Activated Carbon or Biochar



Electrical Power

Tipping Fees Tax Credits Carbon Credits



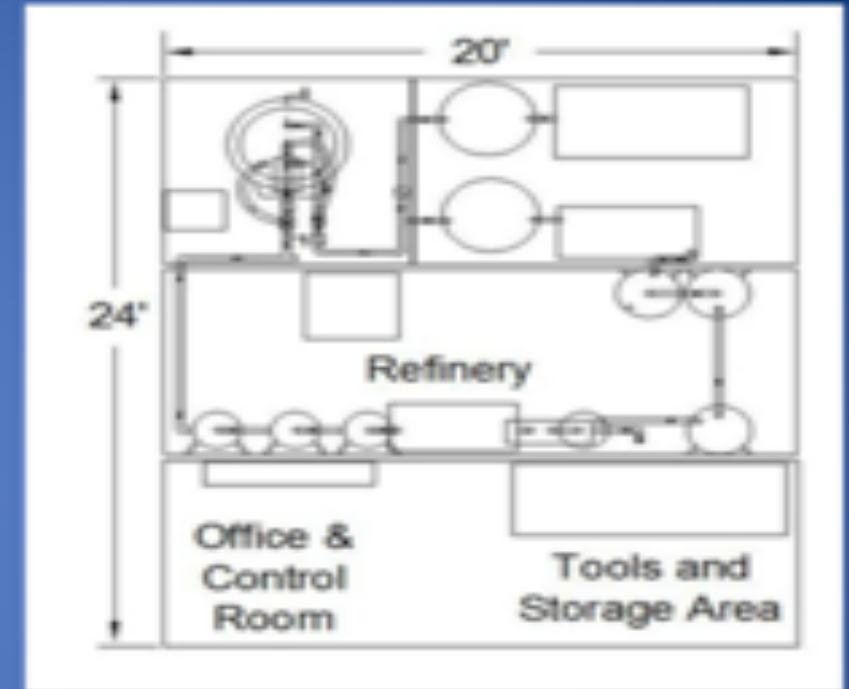
# 20 Foot Containerized Configuration



REFINERY CONTAINER



OFFICE/STORAGE



**SYSTEM DESIGNED FOR DEPLOYABILITY BY LAND, AIR OR SEA.**

- **EASY TO SHUT DOWN AND SECURED DURING DISASTER.**
- **EASY TO START UP FOR POST DISASTER RECOVERY.**



# Field Deployable Benefits

**CURRENTLY DESIGNED INTO A RETROFITTED FREIGHT CONTAINER  
FOR DEPLOYMENT TO ISLANDS AND REMOTE AREAS**

- Configurations: Stationary, Portable or Mobile
  - Modular and Scalable
  - Self Contained with Small Footprint
  - Fast Installation and Operation
  - Low Maintenance





# TCOM SYSTEM DESIGNED FOR EASY OPERATIONS & MAINTENANCE USING LOCAL CAPACITY

## OPERATION, MAINTENANCE AND MANAGEMENT DESIGNED FOR EASY USE

- 14 YR. OLD
- 60+ YR. OLD GRAND MOTHER

CAN OPERATE AND MAINTAIN TCOM  
SYSTEM.





T  
C  
O  
M



**THERMAL CONVERSION OF ORGANIC MATERIALS**

### **3/25 2019 NEWLY ACQUIRED WAREHOUSE IN KAPOLEI, HAWAII**

FOR MANUFACTURING, ASSEMBLY, TRAINING, PARTS-STORAGE FOR EXPORT AND ASSEMBLY OVERSEAS, DEMONSTATION SITE, THERMAL CONVERSION ENGINEERING & FOOD ENGINEERING LABS, PROCESSING AND BY-PRODUCT DEVELOPMENT, ETC.



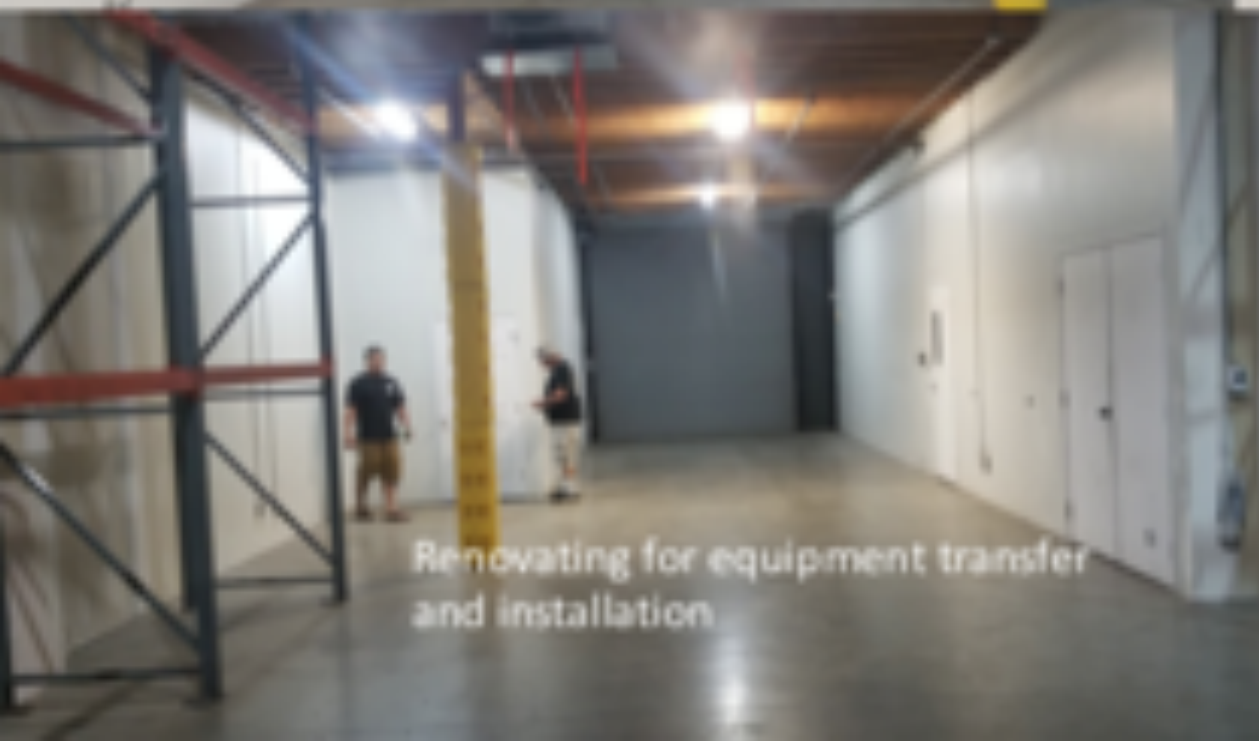


Ample space for engineering & technology labs, storage and shipment



Office cubicles ready for assignment & use

Additional space planned for accommodations, training rooms and kitchens



Renovating for equipment transfer and installation



2) fully furnished conference rooms with a/c



# PACIFIC MICRO SOLUTIONS TO GLOBAL CHALLENGES

## DISASTER PREPAREDNESS: RESPONSE & RECOVERY

BUILDING A RESILIENT & SELF-RELIANT COMMUNITY: UH PBCP/HAUULA COMMUNITY COLLABORATION MODEL



**Dotty Kelly**  
**President**  
Hauula  
Community  
Association



**Brother Sage**  
**Executive  
Pastor**  
Director of the  
Uhane Hemolele  
Pi'ikea of Hauula

Hauula Community Resilience, TCOM, Disaster  
Preparedness, Food Security & Community  
Based Economic Development Model

➤ **PRIORITY: WATER, FOOD,  
SHELTER, INJURY TREATMENT**

- a. 80 ACRES OF PRUNED  
BREADFRUIT  
AGROFORESTRY
- b. CROSS CROPPED WITH: SHORT  
& LARGE FRUIT BEARING  
COCONUT TREE'S
- c. CROSS CROPPED WITH  
MEDICINAL PLANTS
- d. CROSS CROPPED WITH OTHER  
COMMERICAL PLANTS AND  
TREE'S.

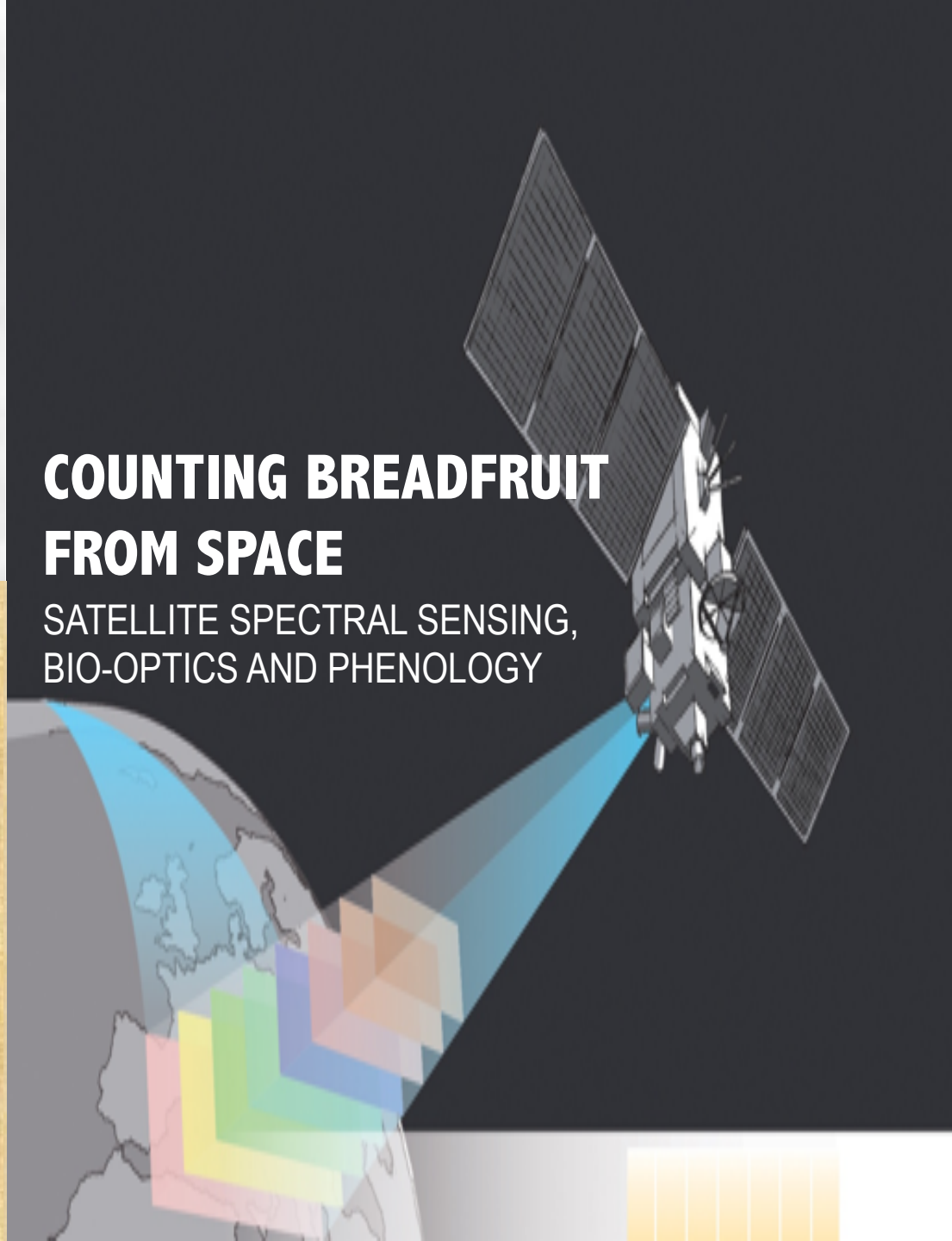
- a.1. FOOD SECURITY: Dried  
breadfruit has minimum 2 year shelf  
life. Buried breadfruit 7 years.
- b.1. WATER SECURITY: Five coconut  
trees per family member. Protocol  
for use guarantee's clean, healthy  
drinking water indefinitely.
- c.1. BASIC MEDICAL SECURITY:  
Natural medicinal plants for injuries.
- d.1. RECOVERY: Tree & Plant  
recovery rapid and stabilizing.



**BILL THOMAS, DIRECTOR**  
**U.S. NATIONAL OCEANIC &**  
**ATMOSPHERIC ADMINISTRATION**  
PACIFIC & US INDIGENOUS  
AFFAIRS



**ANGELA HENDERSON,**  
**U.S. COAST GUARD VETERAN**  
WORKING WITH NORTH SHORE  
COMMUNITY BREADFRUIT FOOD  
SECURITY IN HAUULA, TEACHING THE  
USE OF REMOTE SENSING TO HAUULA  
YOUTH.



## **COUNTING BREADFRUIT FROM SPACE**

SATELLITE SPECTRAL SENSING,  
BIO-OPTICS AND PHENOLOGY



# DISTRIBUTION AND LOGISTICS

## *MOVING THE PRODUCT*

### AT THE U.S. NATIONAL & GLOBAL MARKET LEVEL:

- TO THE GROWER: IF YOU CAN'T MOVE IT, YOU CAN'T USE IT
- TO THE CONSUMER: IF YOU NEED IT WE'LL GET IT TO YOU
- DISTRIBUTION LINKS TO HIGH POTENTIAL OUTLETS
- FOOD DISTRIBUTER PARTNER PROVIDES CREDITBILITY AND MARKET PENETRATION OPPORTUNITIES





'ALONE YOU CAN GO FAST,  
TOGETHER WE CAN GO FAR.  
WE HAVE TO GO FAR QUICKLY.'

**MINIMUM SUPPLY  
ASSURANCE OF  
BREADFRUIT FLOUR FOR  
NICHE DEMAND IS 50,000  
TONS PER MONTH.  
SUPPLY SOURCE MUST  
BE REGIONAL**

*South Pacific*

**REGIONAL SUPPLY STRATEGY KEY TO MEETING  
GROWING MARKET DEMAND. COLLABORATION AS  
FAMILY VITAL TO SUCCESS.**





**MINIMUM SUPPLY ASSURANCE OF BREADFRUIT FLOUR FOR NICHE DEMAND IS  
50,000 TONS PER MONTH. SUPPLY SOURCE MUST BE REGIONAL  
'THE ISLAND JURISDICTIONS MUST WORK TOGETHER'**



**PACIFIC BUSINESS CENTER PROGRAM  
AND PIFON REGIONAL MODEL CAN  
BE REPLICATED TO THE CARRIBEAN**





Logistics

# BREADFRUIT PRODUCT MARKET TESTING OPPORTUNITY



Retail Solutions



Product Development



Grower Connection



## Supply Chain Solutions

**CH ROBINSON NATIONAL &  
GLOBAL DISTRIBUTOR  
HELPED LAUNCH 2012 PRBI IN  
PAGO PAGO, AMERICAN SAMOA**

**\$13.3 Billion in Total  
revenues annually  
since 2012.**

**CAN LINK PRBI WITH KEY  
OUTLETS WHEN SUPPLY OF  
PRODUCT CAN BE ASSURED**

**BREADFRUIT  
PRODUCTS**



Food Safety



Organics





# Client Logo Sheet



# CH ROBINSON





**HAWAII**



**FIJI**



**SAMOA**



**TONGA**

**PROPOSED** *ISLAND FARMERS* **Gathering**  
**in the**

*US Virgin Islands*

**ENGAGNG AS FAMILY**

Strengthening ancient kinship ties with  
mother earth through the gift of  
breadfruit by cultural protocol, ritual and  
ceremony between the farmers of  
Oceania and the Caribbean



**MICRONESIA**



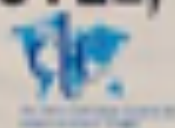
# FIRST INTERNATIONAL SYMPOSIUM ON BREADFRUIT RESEARCH & DEVELOPMENT

TANOA INTERNATIONAL HOTEL, NADI FIJI, 16 - 19 APRIL 2007



International  
Association  
of Agricultural  
Universities

2007 FIJI



gtz GLOBAL TECHNOLOGY ZONE





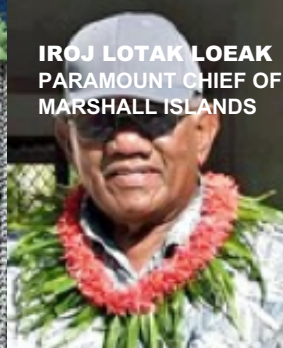


**HIS HIGHNESS TUI  
ATUA TUPUA  
TAMASESE**

HEAD OF STATE OF  
SAMOA



**KUPUNA AUNTIE MALIA  
OLCC, HAWAII**



**IROJ LOTAK LOEAK  
PARAMOUNT CHIEF OF THE  
MARSHALL ISLANDS**



**DR. HILDA CATHY HEINE,  
PRESIDENT REPUBLIC OF  
THE MARSHALL ISLANDS**



**RATU JONI MADRAIWIWI  
FORMER PM OF FIJI**



**FIAME NAOMI  
MATAAFA  
DEPUTY PRIME MINISTER OF  
SAMOA**



**FALEOMAVAEGA  
ENI FA'AUA'A  
HUNKIN 2015**



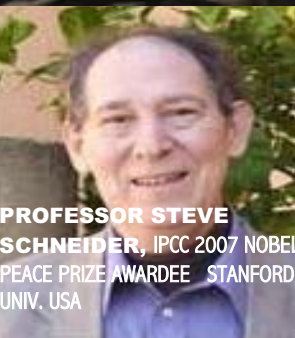
**TULSI GABBARD**  
Representative from Hawaii,  
US HOUSE OF REPRESENTATIVES



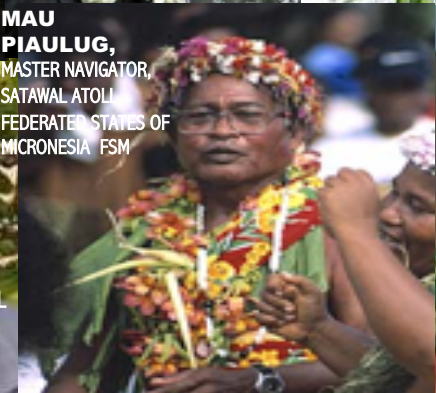
**SENATOR KALANI  
ENGLISH,  
HAWAII STATE SENATE**



**KALO MATAELE,  
KINGDOM OF TONGA**



**PROFESSOR STEVE  
SCHNEIDER, IPCC 2007 NOBEL  
PEACE PRIZE AWARDEE STANFORD  
UNIV. USA**



**MAU  
PIAULUG,  
MASTER NAVIGATOR,  
SATAWAL ATOLL  
FEDERATED STATES OF  
MICRONESIA FSM**



**Lubuw Falanruw,  
2009 2<sup>nd</sup> fastest  
growing Business in  
Hawaii, Yap State,  
FSM**



**Vaimasenuu Zita Maetel, Samoa**

**Dr. Fran Palama, Hawaii**

**Angela Williams  
Hawaii, USA**

**Dr. Sela Panapasa,  
Fiji**

**Beadie  
Kanahale  
Dawson,  
Hawaii**

**Dr. Myiang,  
Myanmar,  
Pacific Gate  
Way Center**

**Dr. Takiara Ingram,  
Raro Tonga**



**NIK PULA  
DEPT OF THE  
INTERIOR DIRECTOR  
OIA**



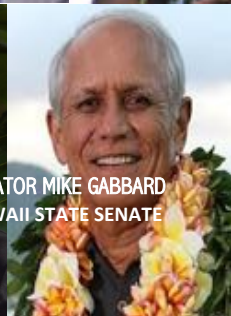
**Mulufi  
Hanneman  
Mayor of  
Hawaii 2010**



**KUMU RAMSAY  
TAUM**



**DR. DIANE RAGONE  
NTBG BREADFRUIT INSTITUTE  
DIRECTOR**



**SENATOR MIKE GABBARD  
HAWAII STATE SENATE**



**AUMUA AMATA  
COLEMAN  
RADEWAGEN,  
Delegate, US  
CONGRESS**



**POMAI KALANI BERTELMANN  
Captain of the Hokulea on the final  
leg around the world to Hawaii**



**WITI IHIMAERA,  
AUTHOR; WHALE RIDE  
AOTEAROA, NEW  
ZEALAND**



**GOVERNOR  
INOS CNMI  
2015**



**LAVINIA  
KAUMAITOTOYA  
PIFON, FIJI**



**PROFESSOR DAVID KORTEN,  
AUTHOR INTERNATIONAL  
BEST SELLER**



**PULEFANO  
GALEA'I,  
PCC**



**TUIONE PULOTU  
MASTER CARVER**



**NAINOA THOMPSON.  
MASTER NAVIGATOR  
HOKULEA**



# STARS OF OCEANIA

2006, 2009, 2013, 2017



Pacific Island Farmers Organisation Network



**KAIULANI MURPHY  
HOKULEA NAVIGATOR**



**PAPALIITELE & CHA  
THOMPSON  
PACIFIC ISLANDER AND STATE  
BUSINESS LEADERS**



**PBCP**  
PACIFIC BUSINESS CENTER PROGRAM  
UNIVERSITY OF HAWAII





University of Hawaii Pacific Business Center Program  
Economic Development Multi-Purpose Business Incubation Center (MPBI)

# VETERANS OCEANIA

## Vision

Empowering veterans to have a better  
quality of life

## Mission

To establish a network of Oceania  
States to address issues common to  
veterans of the pacific.

**WORKING DRAFT  
DEVELOPED IN APIA,  
SAMOA WITH:**

**RSA REPRESENTATIVES:**

- DANNY NELSON
- JOHN BLUETT
- GAVIN NICOL

**HOSTED BY HIGH CHIEF  
TUALA PONIFASIO AND  
OWNER OF TRAVELLER'S  
POINT, APIA, SAMOA**





# FOURTH ANNUAL 2019 Global Breadfruit Summit:

***ISLANDS MICRO SOLUTIONS  
TO GLOBAL CHALLENGES  
AND THE ROAD TO THE 2020 WORLD EXPOSITION IN DUBAI***

**POLYNESIAN CULTURAL CENTER, HAWAII OCTOBER 15-18**

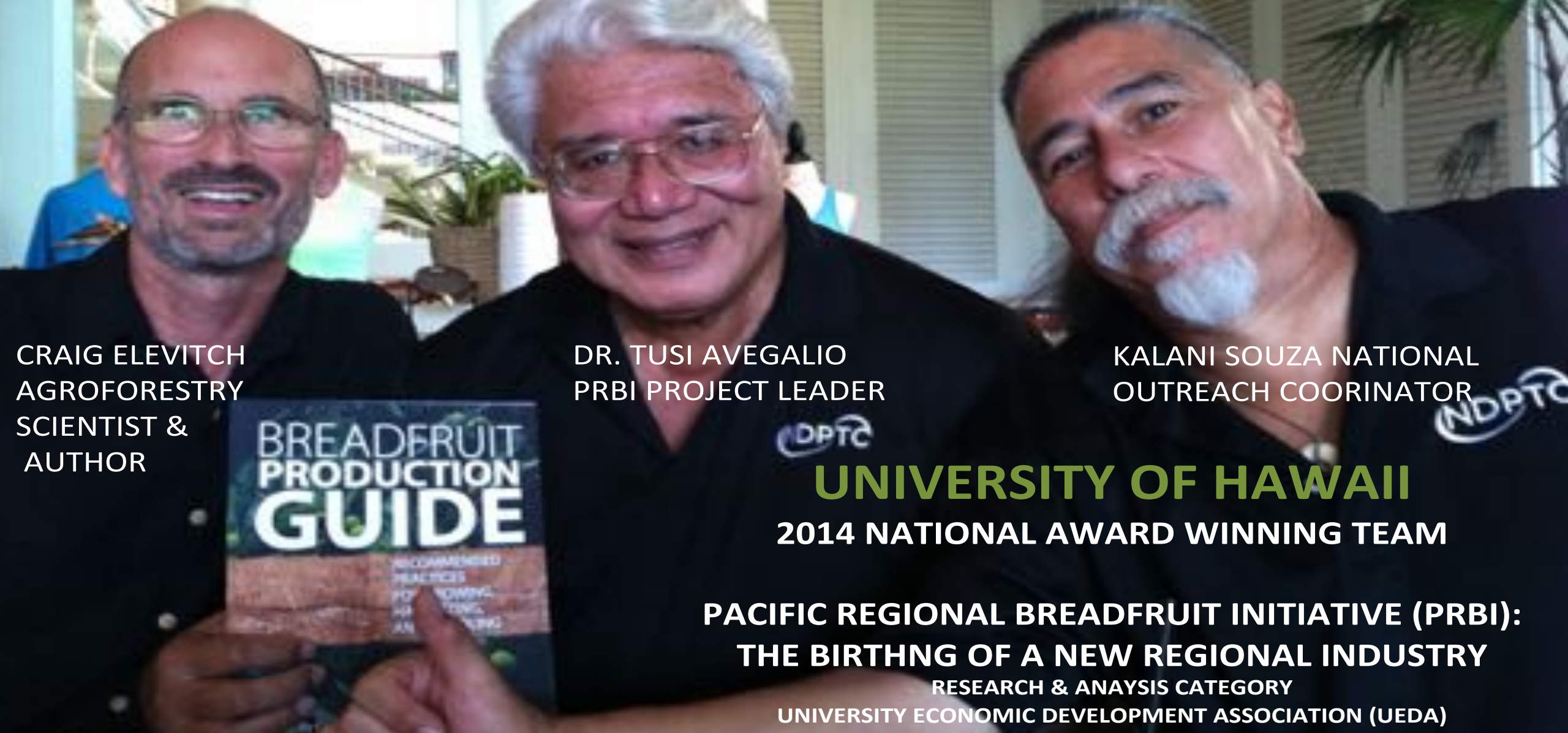
**‘...FEATURING ISLAND PRODUCTS,  
TECHNOLOGY, TRADITIONAL  
PRACTICES AND HEALTHY  
BREADFRUIT FOOD ALTERNATIVES  
TO FIGHT DIABETES AND OBESITY...’**

***PLANNING DRAFT ONLY***



# 2014 NATIONAL AWARD

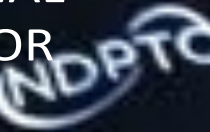
(PBCP NOMINATED FOR 2019 NATIONAL AWARD)



CRAIG ELEVITCH  
AGROFORESTRY  
SCIENTIST &  
AUTHOR

DR. TUSI AVEGALIO  
PRBI PROJECT LEADER

KALANI SOUZA NATIONAL  
OUTREACH COORINATOR



**UNIVERSITY OF HAWAII**

**2014 NATIONAL AWARD WINNING TEAM**

**PACIFIC REGIONAL BREADFRUIT INITIATIVE (PRBI):  
THE BIRTHNG OF A NEW REGIONAL INDUSTRY**

**RESEARCH & ANAYSIS CATEGORY**

**UNIVERSITY ECONOMIC DEVELOPMENT ASSOCIATION (UEDA)**

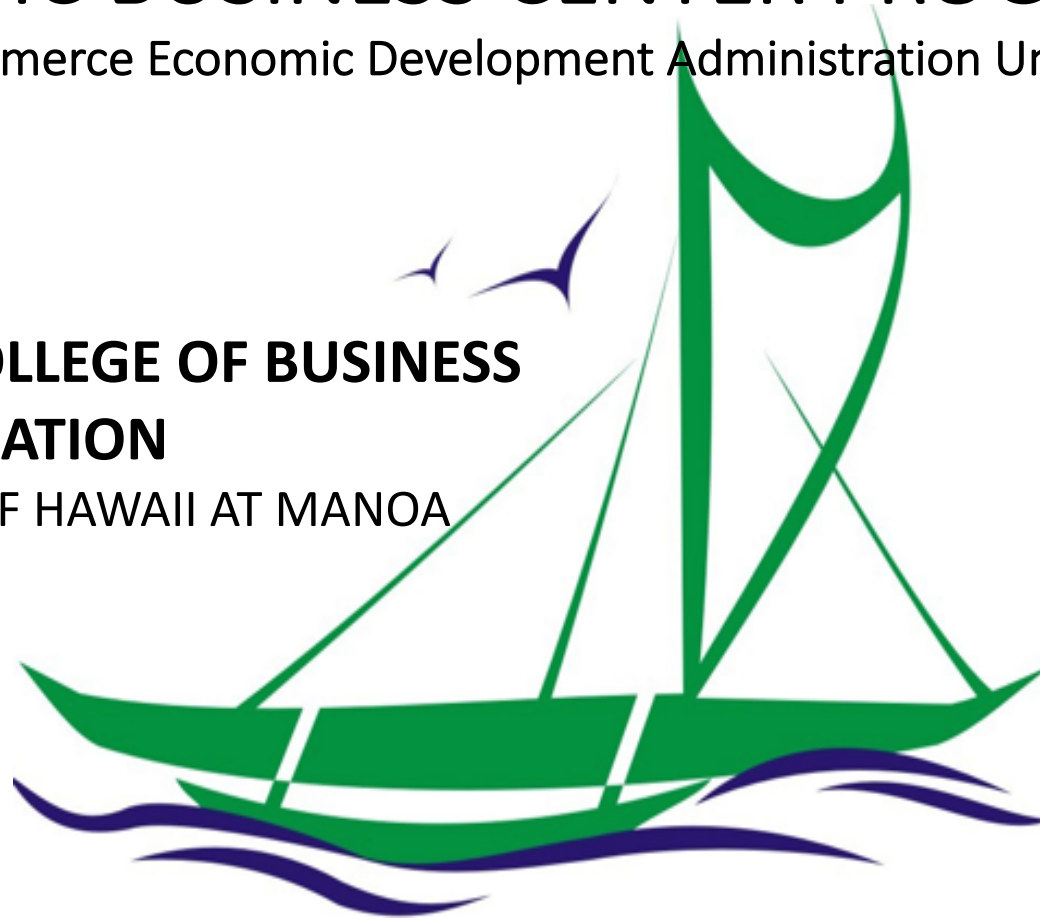


# UNIVERSITY OF HAWAII

## PACIFIC BUSINESS CENTER PROGRAM

US Dept. of Commerce Economic Development Administration University Center

**SHIDLER COLLEGE OF BUSINESS  
ADMINISTRATION**  
UNIVERSITY OF HAWAII AT MANOA



# ***ALOHA***





# Papalii Dr. Tusi Avegalio

TRADITIONAL LEADER & BUSINESS PROFESSOR  
LEADER OF TWO NATIONAL AWARD WINNING CENTERS

## Director

Pacific Business Center Program (PBCP)

EDA UNIVERSITY CENTER

&

## Executive Director

Minority Business Enterprise  
Center (MBEC)

US DEPARTMENT OF COMMERCE

,

*'The ability to weave traditional wisdom & cultural values with modern science and technology is an essential skill towards effective leadership in today's world.'* Papalii



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of HAWAI'I®  
SYSTEM