

### TABLE OF CONTENTS

Letter from the Board President Letter from the Executive Director	2 3	
The Island Provides: Solving Hawai'i's Energy Challenges	5	
Growing Food, Growing Keiki: Hawaiʻi Island School Garden Network	9	
Cultivating Hawai'i's Food Future: Kū I Ka Māna Beginning Farmer Rancher Development Program	14	
The Foundations of an Āina-Based Economy: The Laulima Center for Rural and Cooperative Business Development	16	
It All Starts with a Seed: Hawai'i Public Seed Initiative	20	
The Rain Follows the Forest: Kohala Watershed Partnership	23	
Reestablishing a Sense of Place: Kahaluʻu Bay Education Center	25	
Outstanding in the Field: Hawai'i Island Meaningful Outdoor Experiences for Students	28	
Promoting Kamaʻāina Intellectual Leadership: Mellon-Hawaiʻi Doctoral and Postdoctoral Fellowship Program	31	
Stability in Diversity: Administrative and Financial Reports	35	
Welcome to the 'Ohana: New Staff Profiles	36	

### LETTER FROM THE PRESIDENT OF THE **BOARD OF DIRECTORS**

Perhaps it's because our planning process is simply one of listening listening to the aspirations and concerns of island residents. Perhaps it's because Hawai'i has the resources needed to address the concerns of island residents and to realize their aspirations. Perhaps it's because our organization has expanded its reach and capabilities while remaining small and nimble—nimble enough to respond to



rapidly evolving opportunities and challenges. Perhaps it's because we have cultivated local and national partnerships of superior quality. Perhaps for all of these reasons we, as a small, independent, communitybased organization, have exercised strategic influence, not only on Hawaii Island, but across the state.

In the following pages, you will learn about our programmatic achievements, as well as hear from leaders in conservation, renewable energy, sustainable agriculture, applied and basic research, and education about the positive influence our collaborative work is having on Hawaii's future. Dr. Guy Kaulukukui, for example, remarks on what he learned while serving as the associate director of The Kohala Center, and how that inspired him to develop the multimillion dollar watershed health initiative, "The Rain Follows the Forest," during his tenure as deputy director of the Hawai'i State Department of Land and Natural Resources. Mr. Kyle Datta, founding partner of the Ulupono Initiative, comments on how our early and continuing work on energy issues opened possibilities for real solutions to our energy challenges in the state of Hawai'i. Our own Nancy Redfeather, Hawai'i Island School Garden Network director, took a program of a few school gardens to its current size of serving sixty-nine of the seventy-four schools on Hawai'i Island and developed a statewide Farm-to-School and School Garden Hui, which is working successfully with the Hawai'i State Departments of Education, Health, and Agriculture and the University of Hawai'i to develop the capacity to provide healthy, fresh, locally grown food to our children in Hawai'i's schools.

As you will see, we have learned that in order to be effective, we have had to combine our skills in program development and delivery with policy work. And, of course, to remain effective, we know that we must continue to cultivate a truly robust network of dynamic leaders—within our organization and across our partnerships.

In terms of advancing the development of knowledge, the Mellon-Hawai'i Doctoral and Postdoctoral Fellows are revolutionizing how we in Hawai'i understand ourselves, our history, and the potential for our future in ways that are also valuable to the world: book manuscripts produced by the fellows have been published by, or are in process with, Duke University Press, Kamehameha Schools Press, Oregon State University Press, Oxford University Press, the University of California Press, the University of Hawai'i Press, and the University of Minnesota Press.

The quality and the impact of the work we do have resulted in our own financial health. This in turn has allowed us to build the right financial, legal, and administrative infrastructure to ensure the success of our partnerships and our ability to serve island communities and island environments effectively.

We thank you again for your support and for believing in what we, together, can do for Hawai'i and the world.

Sincerely yours,

Roberta Chu

President, Board of Directors, The Kohala Center



Roberte F. Lan

### LETTER FROM THE

In the year 2000, at the turn of the century, something curious happened on the island of Hawai'i. Health professionals were compiling the results of a community survey and were astonished by the unexpected findings. In response to a health crisis in Hawai'i—namely, unacceptably high rates of diabetes, obesity, drug and



alcohol abuse, and domestic violence—island residents were asked what would make our communities healthier, happier places in which to live. People were clear about what should be done. They did not ask for more health and social service programs. Instead, they asked for greater educational and employment opportunities—opportunities created by caring for our land and honoring our root culture. They asked for a fundamental revaluing of who we are as an island people and a rethinking of how we live our lives.

Thus the idea for The Kohala Center was born.

I was living in Los Angeles and working for a large foundation at the time, and colleagues of mine heard of the survey and sent me the results. In this extraordinary time in history, with global economic, environmental, social, and health crises swirling around us, I was stunned by the clarity, the ambition, and the sincere and thoughtful vision of island residents. I was asked to return home. And I gladly accepted the invitation, excited and honored to join island leaders, island families, island communities, and friends like you in working hard for Hawai'i's future ... and the world's future. Energy self-reliance, food self-reliance, and ecosystem health—'aina (land)-based programs for community well-being—came to the fore as generators of knowledge and jobs, and as vibrant ways to engage children and youth in the excitement of learning and discovery.

I have no doubt that we will be the healthiest, happiest place on the planet. We can achieve, as our founding board members envisioned, a state of pono (goodness, well-being), in which individuals realize their potential, contributing their very best to one another, to the community, and to the 'aina, the land itself, in exchange for a meaningful and happy life. We will be a model of and for humanity.

*Mahalo nui loa* for supporting us and believing in what we can do together—for Hawai'i and for the world.

Matthews M. Hamabata, Ph.D.

Matt Hawabah

Executive Director, The Kohala Center

BY LATE 2000, the concept of an independent academic institute that would respectfully engage Hawai'i Island's natural and cultural landscapes was gaining momentum. Conversations with locally and nationally renowned intellectual leaders made it clear that Hawai'i Island, the land itself, was a truly valuable intellectual asset. By viewing the 'aina (land) through this lens, rather than as a land mass prime for extraction and commercial development, it also became clear that the challenges the island faced at the intersection of human and natural systems were, in and of themselves, intellectual assets: they could provide research opportunities to craft new, innovative solutions to local and global environmental challenges. Such research opportunities also held the potential to build and expand the science and education sectors of Hawai'i Island's economy.

In January 2001, The Kohala Center emerged in response to identified community needs and to the generous interest of scientists worldwide. The Center's focus on research and education, and its respectful engagement of Hawai'i Island environments, would empower it to heal the natural environment, strengthen the social fabric, and develop the economy of Hawai'i Island through thoughtful, innovative 'aina-based programs. Indeed, The Kohala Center would help communities on the island and around the world thrive—ecologically, economically, culturally, and socially.

One of the first topics island business leaders asked The Kohala Center to address was energy: specifically, the high cost of energy, the state's dependence on imported petroleum to satisfy a majority of its energy needs, and the impacts of that dependence on the island's communities and businesses. In response to these concerns, The Kohala Center partnered with the Rocky Mountain Institute, the County of Hawai'i, local business leaders, and energy experts from across the country in 2003 to facilitate dialogues to explore alternative and renewable energy generation in Hawai'i. These collaborations led to professional development workshops for planners and architects, and even the conceptual design of new, energy-efficient residential developments and commercial complexes. In 2007, the County of Hawai'i worked with The Kohala Center and the School of Forestry and Environmental Studies at Yale University to create the first-ever sustainable energy study for Hawai'i Island. The study made clear the cost and magnitude of Hawai'i Island's oil dependence: three-quarters of a billion dollars in 2007 alone. Fortunately, recommendations put forth by The Kohala Center and its partners in a follow-up project for the County of Hawai'i in 2012 are being implemented on Hawai'i Island, leading to cost- and energy-saving measures as well as the promotion of alternative energy production initiatives.

### The Island Provides

## SOLVING HAWAIT'S ENERGY CHALLENGES

Increasing the availability of clean renewable energy is fundamental to The Kohala Center's mission to protect and celebrate Hawai'i Island's natural and cultural landscape. Energy production and use pervade all aspects of today's society, and have significant impacts on The Kohala Center's work in agricultural development and ecosystem health.

It is no secret that energy in Hawai'i is expensive. Costs can be unpredictable, swinging from month to month and year to year. This is a direct result of Hawai'i's dependence on imported petroleum for the vast majority of its energy needs, which in turn makes the state highly vulnerable to supply disruptions and susceptible to paralysis in an emergency. Lasting solutions to the island's energy challenges will involve action to reduce the cost, volatility, and risk profile associated with the current energy supply chain.

Fortunately, existing technology and natural resources are presently advanced enough to enable much higher levels of renewable energy. These technologies and resources are available at lower costs than continuing to purchase petroleum. In addition, the distributed nature of many renewable energy resources allows for improved resilience and reliability of the energy system. "In 2003, The Kohala Center was instrumental in working with the Rocky Mountain Institute and New Energy Partners to bring together the energy stakeholders in the County of Hawai'i to collaborate on solving the County's energy challenges. This conference was widely credited for breaking the decade-long stalemate between Hawaiian Electric Company and the renewables advocates."

> -Kyle Datta, founding partner of the Ulupono Initiative and former managing director of the Rocky Mountain Institute

Microgrids powered by distributed solar, wind, and battery systems are being deployed in the continental U.S. at lower costs than the status quo, and already are competitive in Hawai'i, where energy costs are three to four times higher than on the mainland.

The Kohala Center's work in the field of energy selfreliance began in 2003 in response to a request from island business leaders to address the rising cost of energy and the consequent negative effects on island households and businesses. In collaboration with the Rocky Mountain Institute and the County of Hawai'i, The Kohala Center convened an information session to begin a dialogue on accelerating local development of renewable energy. Experts in energy-related fields from across the country traveled to Hawai'i Island to work collaboratively and constructively with local leaders to develop workable solutions to the island's energy challenges.

This initial workshop led to renewed regional conversations involving a broad spectrum of stakeholders about key energy issues facing Hawai'i in the 21st century. Proposed solutions included identification of cost-effective methods to harness the island's abundant renewable resources, development of new electric utility business models, and grid modernization efforts to integrate renewable resources into the existing power system. Defining these issues and solutions helped to advance statewide discussions on critical energy topics, culminating in the landmark 2008 agreement between the State of Hawai'i and the U.S. Department of Energy in which the federal government pledged to assist Hawai'i in achieving an extraordinary and unprecedented transformation of the state's energy system: a 70% reduction in the use of fossil fuels for electricity and transportation.

Subsequent to the 2003 workshop, The Kohala Center partnered with the Center for Industrial Ecology at Yale University to produce a Baseline Energy and Material Flow Analysis for Hawai'i Island. This was the first attempt to analyze and quantify all the sources and uses of energy island-wide. As a follow-up to that study, The Kohala Center continued its partnership with Yale to produce recommendations to a Hawai'i County Department of Research and Development as to how additional renewable energy production and energy efficiency measures might reduce Hawai'i Island's dependence on fossil fuel.



"The Kohala Center, under contract with the County of Hawai'i, partnered with the School of Forestry and Environmental Studies at Yale and collaborated with all sectors of the energy arena to County Energy Sustainability Plan, resource today. We found The Kohala Center to be uniquely grounded in a culture of global excellence and with great heart for serving Hawai'i. Its distinctive work remains cutting-edge, while at the same time respectful of people, place, and things of the past resulting in meaningful change of great value."

> —JaneTesta. former Director of Research and



In 2012, The Kohala Center again partnered with Yale to update the Baseline Energy Flow Analysis, using the latest data and information on the functioning of the island's energy system. This analysis was complemented by a Five-Year Roadmap containing twenty-five actionable recommendations designed specifically for the County of Hawai'i. The Roadmap identifies ways in which the County government could lead Hawai'i Island to greater energy sustainability and significantly advance the island's renewable energy goals, all while reducing costs to taxpayers by eliminating millions of dollars in County energy purchases.

This year, The Kohala Center worked with the University of Hawai'i at Hilo and Cornell University to develop a Microgrid Feasibility Study. This power-system engineering and economic analysis describes how UH Hilo can utilize its own electrical infrastructure to increase energy security and reliability for the campus while saving thousands of dollars in electricity costs. In addition, The Kohala Center is collaborating with the County of Hawai'i Mass Transit Agency and the University of Michigan School of Natural Resources and Environment on a preliminary analysis of the island's public transportation system to suggest ways to reduce vehicle miles traveled and make shared ground transportation more attractive and efficient for island residents.

One key challenge facing Hawai'i is facilitating innovation in state and local energy policy. Island residents cannot make large-scale changes to the island's energy system without the help of government and community leaders. It is clear that a renewable energy future can reduce the cost of needed energy services for island families and businesses. It can also strengthen our energy system and reduce its impact on our island's ecosystems. However, it requires the concerted efforts of all of the island's leaders to make these needed improvements a reality.

The Kohala Center remains committed to proactive research, policy recommendations, conservation and restoration initiatives, public outreach and education all carried out through local, regional, national, and international partnerships. Through these partnerships, increased energy self-reliance for people and communities across the island is truly attainable.



"The County of Hawai'i is currently progressing with implementation of five priority action items recommended in The Kohala Center's Five-Year Roadmap, including decision-making, development of a Biofuels Evaluation Framework, a a new Mass Transit Strategic Plan, and large-scale deployment of solar County facilities."

> -William Rolston, Energy Coordinator, County of Hawai'i

### WHILE THE KOHALA CENTER

was conducting community forums to understand Hawai'i Island's energy challenges and devise solutions, an important contingent of residents emerged with specific energy concerns farmers. The island's agricultural producers clearly articulated that the high cost of energy in Hawai'i adversely impacted their ability to pump adequate water and transport their products. The high cost of fertilizers—imported petroleum-based inputs—also threatened agricultural production. Given these concerns, The Kohala Center forged a research partnership with the Rocky Mountain Institute in 2007 to conduct an assessment of Hawai'i Island's food and agricultural sectors. The study revealed that the state of Hawai'i was vulnerable because more than 85% of the food consumed in Hawai'i is shipped or flown in from outside the state. It became evident that Hawai'i's costly dependence on fossil fuels threatened not only the state's energy security, but food security as well.

In response to the RMI study, residents asked The Kohala Center to move forward immediately to address the issue of food security by supporting and increasing the number of school gardens on Hawai'i Island. Launched later that year, the Hawai'i Island School Garden Network (HISGN) now assists learning garden programs at sixty-nine of the island's seventy-four schools. HISGN also formed the statewide Hawai'i Farm-to-School and School Garden Hui, which advocates for the expansion of fresh, healthy, locally grown food in school meals. Through the Hui's efforts, the Hawai'i State Departments of Education, Health, and Agriculture are now supportive of empowering local schools to procure food from island farms so that students have greater access to fresh, healthy, locally grown food.

To help agricultural producers increase their capacity to fulfill the food needs of schools and other institutional buyers, The Kohala Center formed the Laulima Center for Rural and Cooperative Business Development, which provides technical assistance in the formation of cooperatives, business planning, creation and implementation of capitalization strategies, and provision of legal services. To ensure that there are enough farmers to support production, the Kū I Ka Māna Beginning Farmer-Rancher Training Program was launched in 2012 with the goal of training at least forty new farming families. And to preserve and promote biodiversity, the Hawai'i Public Seed Initiative was created to facilitate seed saving and exchanges on five Hawaiian Islands.

# Growing Food, Growing Keiki

# HAWAI'I ISLAND SCHOOL GARDEN NETWORK

Launched by The Kohala Center in 2007 with support from the Ulupono Initiative, the Hawai'i Island School Garden Network (HISGN) is a direct response to island residents' expressed desire to promote agriculture and healthy nutrition among Hawai'i Island's youth. In just five years, HISGN has:

- Developed a network of school garden programs, educators, administrators, and volunteers at sixty-nine of Hawai'i Island's seventy-four elementary, middle, intermediate, and high schools;
- Launched a year-long school garden teacher training program, Kū 'Aina Pā;
- Organized and facilitated an annual, statewide School Learning Garden Symposium;
- Collaborated in the formation of the Hawai'i Farm to School and School Garden Hui, and published the 2012 Statewide School Garden Survey and 2012-2013 Strategic Plan;
- Taken the role of host site for FoodCorps Hawai'i, the Hawai'i regional branch of a national program that trains young leaders to create and support school-based gardens and connects youth to real, healthy food.

The benefits of school gardens extend far beyond opening children's minds to the importance of agriculture and helping them understand how food grows. School gardens also serve as outdoor learning laboratories in which subjects such as science, technology, engineering, arts, and mathematics can be taught in practical, hands-on ways. By getting kids out of the classroom and into the garden, they learn by doing, rather than passively receiving information.

Perhaps the most critical benefit of school garden programs is their potential to curb the alarming increase in the number of children diagnosed with childhood obesity and adult diseases such as high blood pressure, high cholesterol, diabetes, and depression. In 2013, the Centers for Disease Control (CDC) reported that nearly one out of every six children in the U.S. is obese—three times greater than the rate just thirty years ago. Today, children are anticipated to have shorter lifespans than their parents by ten to twenty years, with one in three expected to develop diabetes in their lifetime. Not surprisingly, the CDC, the U.S. Surgeon General, Kaiser Permanente, and health care providers across the country have declared the state of children's health a "national crisis." Given that 60% of Hawai'i's public school students have most of their nutritional needs met through school meals, school gardens and school cafeterias can play an essential role in connecting kids to real, healthy food.

### Kū Aina Pā: School Garden Teacher Training Program

Many school garden teachers in Hawai'i are part-time, or primarily teach classroom subjects, and facilitate their school's garden program as a secondary activity. The state does not have established support for school garden staff or curricula, leaving most school garden teachers to write grants, seek funding for their positions, and create curriculum for themselves. Since its beginning, HISGN has provided teachers with much-needed connections to local resources, curriculum development, and organic gardening skill development. In 2012, HISGN launched a more formal school garden teacher training program, Kū Āina Pā ("standing firmly in knowledge upon the land"), with support from a U.S. Department of Agriculture (USDA) "Agriculture in the K-12 Classroom Challenge" grant. Kū 'Āina Pā provides pre-kindergarten through eighth grade educators with the knowledge and skills needed to successfully plan, implement, develop, and sustain a school learning garden. The program stresses how school gardens can foster academic, mental, and physical excellence; nurture a school learning garden utilizing organic practices and whole-systems thinking; link and integrate classroom curriculum to gardens; and promote place-based experiential learning in their outdoor classrooms. The inaugural cohort, comprised



"Over the past year, the Hawai'i Island School Garden Network has played a crucial role in generating local and broader support for school garden programs in Hawai'i. HISGN has provided highquality professional development other instructional tools directly schools. Through its support of school gardens, HISGN has helped students gain skills and behaviors conducive to greater educational attainment and healthier lifestyles. When students are healthy, they be prepared to learn, and perform better on academic achievement tests. The desired outcomes for health, agriculture, environment, education, and economics all influenced by student participation in school garden programs."

— Jennifer Ryan, School Health Coordinator, State of Hawai'i Department of Health



of thirty garden educators from twenty Hawai'i Island schools, participated in a week of classes in the summer of 2012 at Hawai'i Preparatory Academy's Energy Lab and at the Māla'ai Culinary Garden at Waimea Middle School. Classes covered topics such as Hawaiian skills, values, and traditions; sustainability; soil biology and beneficial microbes; island agricultural zones; linking gardens to school curricula; and writing lesson plans. During the school year, participants attended three weekend workshops, created action research projects, worked with a mentor, and visited three other school gardens. Kicking off its second year in June 2013, Kū 'Āina Pā opened its doors to educators from around the state: the program's second cohort of thirty participants includes teachers from school garden programs on O'ahu, Maui, Moloka'i, Kaua'i, and Lāna'i.

### School Learning Garden Symposium

Graduates of Kū 'Āina Pā's first cohort passed the baton to the 2013-2014 program participants at the sixth annual School Learning Garden Symposium, organized by HISGN and held June 7-8, 2013 at Hawai'i Preparatory Academy in Waimea. The theme of the symposium"The Hawai'i Island School Garden Network has benefited Kohala Elementary School by providing the framework and funding for a STEM-based Discovery Garden now operating in its fourth year. Currently, we are in collaboration with The Kohala Center, HISGN, and FoodCorps in creating an even more in-depth, comprehensive, gardenbased instructional curriculum which exposes children to healthy living and respecting the 'aina. We look forward to continuing these our school and community."

- Danny Garcia, Principal, Kohala Elementary School

school garden teachers, administrators, staff, volunteers, and interested community members attended from around the state, as well as from Oregon, California, and as far away as Connecticut. The two-day symposium featured twenty-one breakout sessions, panel discussions, presentations by members of Kū 'Aina Pā's first cohort of their yearlong research projects, a screening of the movie Nā Kupu Mana'olana: Seeds of Hope, tours of six Waimea-area school gardens, and a closing luncheon hosted by Slow Food Hawaii.

"School Learning Gardens and Sustainability Education: Bringing Schools to Life and Life to Schools"—was inspired by the title of keynote speaker Dr. Dilafruz Williams' acclaimed book, which casts school gardens as whole-systems design solutions in which social, ecological, and educational issues intersect. More than 120 classroom teachers,

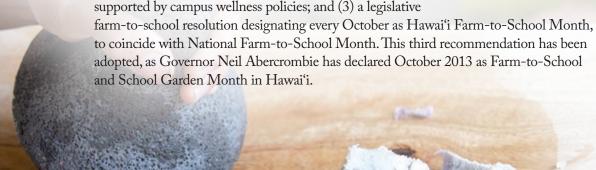
### Hawai'i Farm-to-School and School Garden Hui

HISGN program director Nancy Redfeather has taken an active leadership role in advancing two statewide initiatives: the Hawai'i Farm-to-School and School Garden Hui and the Hawai'i Department of Health's School Garden Task Force. In an effort to promote fresh, nutritious, local food in schools across the state, the Hui (association, group) advocates for stronger, direct connections between Hawai'i's farms and educational institutions, and strengthening of school garden programs to inspire students to grow and consume healthy foods. Farm-to-school programs combine healthy eating in school settings with a coordinated approach to improve children's daily nutrition by making healthy changes to school lunches and snack programs. Such programs integrate nutritional education through school gardens and wellness policies, increase opportunities for physical activity, and connect students to their local agricultural communities and farms. Hawai'i does not yet have an official Farm-to-School program, but the USDA Fresh Fruit and Vegetable Morning Snack Program is beginning to build new relationships between schools and their neighboring farmers. This program is now in eighty schools across the state, and interest is building to raise capacity to improve children's health by providing fresh, locally grown food in schools.

In 2012, the Hui asked the Hawai'i State Department of Education for approval to develop and deploy a statewide school garden survey to gauge the reach and impact of campus agricultural programs, as well as determine the top goals and needs. The survey found that 168 school gardens across the state engage 830 teachers and 21,577 students, and cumulatively comprise thirty acres of land. The most cited needs were equipment, financial support, program coordinators and instructors; increased community involvement, promoting sustainability awareness, and increasing food production were the most commonly noted goals. Based on survey responses, the Hui recommended (1) funding for a one- to two-year position at a state agency to coordinate inter-agency strategic planning and identify the best pathways to developing and sustaining a statewide farm-to-school program; (2) that schools with garden programs create a wellness committee to ensure that garden-based nutritional learning is supported by campus wellness policies; and (3) a legislative

School Gardens as a Springboard for Science Innovation. We are so fortunate to have educators like you all who have invested such an enormous amount of effort into making this project a success!"

— Gregory Smith, Division of Community and Education, USDA-National Institute of Food and Agriculture





In February 2013, FoodCorps, a national program dedicated to connecting children to real, nutritious food and to developing school garden programs, selected The Kohala Center to be its host site for the state of Hawai'i. Launched in 2009 as an extension of the AmeriCorps program, FoodCorps currently operates in fifteen states, supporting 125 service members at 108 schools and educational programs. The Kohala Center, under the leadership of host site supervisor Nancy Redfeather and FoodCorps Fellow Amelia Pedini, will serve as the headquarters for FoodCorps Hawai'i, coordinating eight service members for the 2013-2014 academic year: five on Hawai'i Island, one on O'ahu, and two on Moloka'i. These eight emerging leaders were selected from over eighty finalists from around the U.S. and chosen based on their knowledge of local culture and values, dedication to healthy communities, a sense of kuleana (responsibility) to foster youth, and the willingness to develop innovative practices to build food systems.

Fiscal year 2013 saw the Hawai'i Island School Garden Network's influence, leadership, and support extend not only to more schools on Hawai'i Island, but across the state. The knowledge and expertise of the program's leaders and partners are empowering school learning garden educators statewide to improve their programs, promote 'aina (land)based learning is school curricula, and ultimately make a positive difference in the physical and intellectual well-being of Hawai'i's future generations.

# Cultivating Hawai'i's Food Future

# KŪ I KA MĀNA BEGINNING FARMER RANCHER DEVELOPMENT PROGRAM

When the Hāmākua Sugar Plantation—and much of Hawai'i's sugar industry—shut down in the mid 1990's, many residents of Hawai'i Island's Hāmākua district expressed a desire to support diversified agriculture as a means to strengthen the rural region's economy. A district agricultural plan envisioned small-scale family farms throughout Hāmākua supplying food for its households, communities, and beyond. With an abundance of agriculturally viable lands, favorable climate and rainfall, rich soils, and access to water from the Lower Hāmākua Ditch, one key question remained: Where are the farmers?

The shortage of farmers is not just a local challenge—it's a national one. As older farmers retire and many of their progeny have waning interest in agricultural careers, the pipeline of trained farmers and ranchers is smaller than in generations past. In response, the USDA dispersed \$18 million in funding in 2012 across twenty-seven states to support new farmer training and education programs. The Kohala Center received a grant from the USDA to create and deliver Kū I Ka Māna, a beginning farmer-rancher training initiative. The County of Hawai'i provided the necessary matching support to secure the USDA grant.

The challenges faced by citizens interested in becoming farmers, particularly in Hawai'i, can be daunting. While a lack of knowledge or sense of "where to begin" is a significant barrier, the high costs of land and resources in Hawai'i can make careers in farming seem unattainable. Infrastructure for preparing, packaging, and distributing agricultural products within the state is limited. And lack of access to capital can be discouraging to novice and experienced farmers alike. Kū I Ka Māna seeks to help beginning farmers overcome many of these barriers.

Kū I Ka Māna is part of a comprehensive effort to reduce Hawai'i Island's dependence on imported food by increasing local production. The program targets limitedresource farmers and ranchers; socially disadvantaged farmers including Native Hawaiian, Filipino, Japanese, Chinese, Pacific Islander, and women; and veterans. The three-year program will focus on training and nurturing at least 48 new farm families to increase local food production, decrease dependency on imports, diversify Hawai'i Island's rural economy, create jobs, and ultimately promote greater community self-reliance.

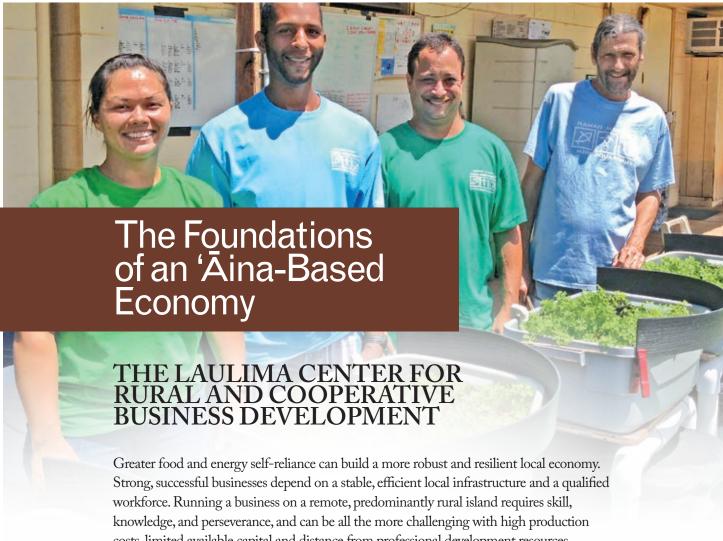
The program consists of sixteen weeks of classroom and in-field instruction by some of Hawai'i's leading agricultural and business professionals. As part of the program, The Kohala Center is leasing twelve acres of dormant farmland in Honoka'a from Kamehameha Schools, which is being transformed into a hands-on training farm. Subjects covered include agricultural topics such as soil fertility and health, composting, biochar, pollination, and pest and disease management, as well as business essentials such as marketing, budgeting, and accounting. Students also have the opportunity to intern on functioning farms and receive mentoring from experienced farmers. The program will also assist graduates who successfully complete business plans to secure land leases on Hawai'i Department of Agriculture farmlands managed by the Hāmākua Agricultural Cooperative, Kamehameha Schools or other land holders, gain access to farm equipment and materials; and successfully produce, market, and distribute their crops.

The inaugural cohort, comprised of twelve local families, concluded formal instruction in May 2013. The second cohort commences in August 2013 with fifteen families enrolled. Two additional cohorts will launch in the winter and summer of 2014.



"The Kū I Ka Māna Beginner Farmer Training Program provided us with the mindset, knowledge and tools to approach farming as a business, and to plan for financial success. we received, we now have a clear vision of what steps we need to take to get from idea to market. We are currently working with a consultant on a business plan and are very lie ahead!"

> -Mike and Mele Bennett, graduates of Kū I Ka Māna's first cohort



costs, limited available capital and distance from professional development resources.

To address these challenges The Kohala Center founded the Laulima Center for Rural and Cooperative Business Development in 2011 to support the creation and fortification of cooperative and agricultural businesses in Hawai'i. Starting with funding from a U.S. Department of Agriculture (USDA) Rural Cooperative Development Grant and additional support from the Ulupono Initiative, the Laulima Center has since assisted more than 100 rural business ventures state-wide and helped them obtain \$1.2 million in funding. Under the leadership of co-op and business development specialists

Melanie Bondera and Nicole Milne, the center offers expertise in cooperative business education, organizational development, business and strategic planning, market analyses, marketing, capitalization strategies, legal assistance, and conflict resolution.

The Laulima Center saw rapid growth in its second year of operation, continuing its cooperative and business development programs while also offering businessbuilding workshops to the public, connecting Hawai'i Island farmers with Supplemental Nutritional Assistance Program (SNAP) recipients, and undertaking a yearlong, statewide study of Hawai'i's organic food industry.



### Cooperative Development

Since its inception, the Laulima Center has helped eleven new cooperative businesses incorporate in the state of Hawai'i, and provided technical assistance to sixteen existing co-ops. In fiscal year 2013, Laulima Center staff assisted:

- Whispering Winds Bamboo Cooperative (Maui) by conducting a Business Operations Management Assessment, and assisted the co-op to develop strategic and marketing plans;
- Maui Aquaponics Workers Cooperative with incorporation, establishing a governance system, and securing funding;
- Makakuoha Cooperative (Moloka'i) with business development and procurement of a USDA Rural Business Enterprise Grant;
- Moloka'i Livestock Cooperative with range management training;
- An emerging coalition of ranchers and hunters on Maui seeking to establish a venison industry by culling invasive axis deer;
- Five water co-ops in the Ka'ū district of Hawai'i Island with membership and board trainings;
- Cho Global Natural Farming co-op (Hawai'i Island) with formation and fund development; and

"We have been fortunate to work with the Laulima Center and its staff. The people and perspectives involved in organic and natural farming are highly diverse, and the Laulima Center team does an excellent job of working with everyone, which at times can be very challenging. Having the Laulima Center support cooperative and rural business development in Hawai'i is a benefit to us all, and I look forward to continuing our relationship on future projects."

> —David Matsuura, Cho Global Natural Farming Cooperative



# Agricultural Business Development This year the Laulima Center received \$366,000 in funding from the USDA, the University of Hawai'i's Agribusiness Incubator Program, Hawai'i Department of Agriculture, and private funders, enabling it to assist more than sixty rural and agricultural businesses. The center has helped: • Sust'āinable Molokai with business planning to produce and sell timber-grade bamboo;

- Robb Farms (Hawai'i Island) in writing a business plan;
- Hāmākua Agricultural Cooperative (Hawai'i Island) to further co-op advertising and product promotion for its members' products; and
- Mauna Kea Tea (Hawai'i Island) to acquire tea processing equipment to expand market reach and increase the shelf life of their products.

### Value-Added Production

Given the variety of fruits and vegetables that can be grown in Hawai'i due to the state's year-round growing season and diverse microclimates, the Laulima Center recognized the vast potential for entrepreneurs and food producers to create and sell specialty food items. "Made in Hawai'i" value-added food products can fetch premiums both locally and overseas. Through a USDA Small Socially Disadvantaged Producer Grant the Laulima Center organized four "Food Business Basics" workshops held in Hilo, Honoka'a, and Pāhala on Hawai'i Island, and Ho'olehua on Moloka'i.

More than 170 chefs, farmers, co-op members, and aspiring specialty food producers attended the workshops, led by prepared foods industry consultant Lou Cooperhouse and Laulima Center agricultural business development specialist Nicole Milne. Milne continues to work with several of these participants to procure grants and loans, as well as develop business and marketing plans.

Grant funding from the USDA Rural Business Enterprise Grant enabled the Laulima Center to assist two Hawai'i Island agricultural businesses further their food processing capabilities. The Hāmākua Agricultural Cooperative was able to establish a food processing facility in Honoka'a stocked with equipment purchased and subleased by the Laulima Center. Certified-organic tea producer Mauna Kea Tea, based in Ahualoa, Hawai'i Island, was able to procure tea processing equipment through the USDA grant.

### Coffee Berry Borer Education

Responding to demand from Hawai'i Island coffee farmers for resources to combat the coffee berry borer, the Laulima Center partnered with the Hawai'i Community Federal Credit Union, Kona Coffee Farmers Association, and the Kamehameha Schools to plan and implement "Integrated Pest Management of the Coffee Berry Borer." The two-day workshop led by Colombian expert Luis Aristizábal attracted 150 farmers; six follow-up, on-farm sessions were subsequently conducted in Kona and Ka'ū.

### EBT in Farmers Markets

A \$90,000 USDA Farmers Market Promotion Program grant to the Laulima Center was used to assist six Hawai'i Island farmers markets accept Electronic Benefits Transfer (EBT) payments from Supplemental Nutritional Assistance Program (SNAP) beneficiaries. Joining two markets that already accepted EBT, the eight markets formed a marketing group, with the Laulima Center facilitating an island-wide promotional campaign. In the first nine months since joining the program, the six new markets reported total EBT sales of \$163,000. The expansion of the number of farmers markets accepting EBT not only helps Hawai'i Island's most vulnerable citizens access fresh, nutritious food to supplement their diets, it also increases sales volume for local farmers and producers.

With additional funding from Ulupono Initiative and Kaiser Permanente, the Laulima Center coordinated an "EBT Double Dollar Days" promotion December 22-23, 2012, giving EBT customers a one-dollar match for each dollar they spent, up to \$20. The eight participating famers markets reported 888 total customers benefiting from the promotion, which brought new, repeat customers to the markets after the promotion. In the first quarter of 2013, the markets reported an average increase in EBT sales of 46%, meaning more island residents are procuring healthier foods for their families, and farmers are increasing their incomes and production capacities.

### Organic Industry Analysis

The Laulima Center received a Specialty Crop Block Grant from the Hawai'i Department of Agriculture to conduct a feasibility study to determine the need for a state organic program office, and what support services it could provide to Hawai'i's organic food producers, distributors, retailers, and consumers. The absence of a statewide representative industry organization, coupled with a local organic food supply unable to keep pace with demand, led to several leaders in Hawai'i's organic community encouraging The Kohala Center to take up this study. In February 2013 the Laulima Center convened an Organic Industry Advisory Group, comprised of industry representatives from Hawaiʻi Island, Maui, Oʻahu, and Kauaʻi, to define the industry's challenges and devise solutions to foster growth and productivity. A final report containing an industry analysis and recommended solutions will be released in early 2014.

Through rural and agricultural business development consulting, research, grant procurement and distribution, and the promotion of cooperative businesses and alliances, the Laulima Center is working to strengthen the integrity of island enterprises to serve the needs of local communities—and the 'aina itself.





## HAWAI'I PUBLIC SEED INITIATIVE

With the rate of species loss worldwide, and with Hawai'i currently importing 99% of its seed, local strategies for seed production are especially critical for developing resilient systems and food security. In the past century, three-quarters of the world's food biodiversity has been lost. Of all the food plant varieties that once fed humanity, only 25% remain.

One solution that communities in Hawai'i have adopted to increase food production—and improve food quality—is seed saving and exchange. Local gardeners and farmers are returning to practices lost over recent generations to maintain crop biodiversity, as well as to preserve Hawai'i's cultural heritage. What started as simple seed exchanges on Hawai'i Island, and later on other islands, evolved into a statewide public seed initiative—the Hawai'i Public Seed Initiative—with the help of The Kohala Center.

During the past three years, the Seed Initiative has helped local farmers and gardeners select, grow, harvest, store, and improve seed varieties that will thrive in Hawai'i. The Kohala Center conducted a baseline survey of community capacity and interests on seed saving, and obtained federal funding from the USDA Organic Program to hold a symposium that led to the creation of the statewide Seed

"The Hawaii Public Seed Initiative wishing to save their heritage seeds and plants for present and future generations. By training scores of practitioners, the Initiative has provided the guidance, tools, and your seeds before they are lost forever. The program is developing into a noteworthy community program throughout the State of into the future for generations."

—Dr. RussellT. Nagata, Hawai'i County Administrator for the University of Hawai'i at Manoa, College of Tropical Agriculture and **Human Resources**  Initiative in 2010. Other sponsors included the University of Hawai'i at Hilo College of Agriculture, Forestry, and Natural Resource Management; the University of Hawai'i at Mānoa College of Tropical Agriculture and Human Resources; County of Hawai'i; and the Keauhou-Kahalu'u Education Group of Kamehameha Schools.

Additional funding from the Ceres Trust supported education and outreach activities designed to develop community seed networks and seed banks. In fiscal year 2013, the Initiative brought together hundreds of beginning and avid farmers and gardeners through workshops on Hawai'i Island, Kaua'i, O'ahu, Maui, and Moloka'i. In addition, the program facilitated a three-day statewide "Train the Trainers" workshop on Hawai'i Island. The advanced training aimed to help dedicated individuals from each island deepen their seed production skills and continue to advance and promote seed networks on their respective islands.

The Hawai'i Public Seed Initiative has broadened awareness among growers, farmers, and consumers statewide of the need to save and share the most viable and vulnerable varieties of seeds best suited for Hawai'i's climate and soils. By empowering networks of committed individuals on Hawai'i's five major islands, the Initiative supports Hawai'i's aspiration for greater food production and security.



### SCHOOL GARDEN PROGRAMS,

strong rural and agricultural businesses, a new generation of farmers, and an abundance of local seeds all hold great promise for increased food self-reliance on Hawai'i Island. Yet the island's ability to provide sustenance hinges on the availability of water and the maintenance of fertile soils and healthy coral reefs. As The Kohala Center created and implemented programs to address the production of energy and food locally, it became clear that the health of island ecosystems was intimately intertwined with these issues as well.

A traditional Hawaiian proverb states: "Hahai no ka ua i ka ululā'au," or "The rain always follows the forest." Understanding this principle, Native Hawaiians took great care to nurture and maintain mountain forests and to harvest only what they needed, for they knew the absence of vegetation would reduce rainfall. Decades of deforestation, development, and a proliferation of invasive plants and animals, however, impacted Hawai'i's lush rain forests, watersheds, and endemic organisms, resulting in native species loss, soil degradation, and sediment runoff that made its way into the ocean, adversely impacting marine life.

The Kohala Watershed Partnership, a sponsored program of The Kohala Center, has worked to restore and protect the watersheds and ecosystems of Kohala Mountain on north Hawai'i Island. Approximately fifty miles southwest of Kohala Mountain, staff and volunteers at the Kahalu'u Bay Education Center educate over 50,000 visitors to Kahalu'u Bay each year about "reef etiquette," or how best to enjoy the bay without damaging the fragile corals vital to the health of marine life. And The Kohala Center's Hawai'i Island Meaningful Outdoor Experiences for Students program provides financial and curriculum resources to island teachers, enabling them to conduct outdoor research projects in select island ecosystems to ensure that future generations gain an appreciation of the environment surrounding them.

By taking a mauka-to-makai (mountain-to-sea) approach to its ecosystem health initiatives, The Kohala Center offers island residents of all ages multiple opportunities to respectfully learn about, engage with, and care for the natural resources that endow and sustain Hawai'i Island's communities.



# The Rain Follows the Forest

## KOHALA WATERSHED PARTNERSHIP

Dedicated to protecting and sustaining the forest, the water, and the people of Kohala Mountain, the Kohala Watershed Partnership (KWP) continues to steward the 'aina (land) and water resources of north Hawai'i Island. The efforts of the partners and staff of KWP address the many threats to Kohala Mountain's native ecosystems, including invasive plants, feral animals, and climate change. Kohala Mountain watersheds are home to unique plant and animal species, and are the ultimate sources of fresh water for the communities, farms, ranches, and businesses of Hāmākua, and North and South Kohala. As a voluntary coalition of landowners and land managers, KWP brings together diverse regional stakeholders, resulting in positive outcomes that will benefit many generations to come.

KWP currently has a staff of five full-time employees, two part-time employees, and more than 400 community volunteers. Ecosystem restoration, invasive species management, sediment mitigation, biodiversity conservation, and environmental education are the foundation of KWP's ongoing work.

community of Pelekane Bay exemplifies the positive effects of an integrated approach of watershed management on mitigating local human impacts from acute and chronic successive disturbances. This success involving watershed stabilization and restoration by the Kohala Watershed Partnership and reduced fishing pressure through management initiatives."

—Dr. Ku'ulei S. Rogers, Coral Reef Biologist, Hawai'i Institute of Marine Biology

In fiscal year 2013, the Kohala Watershed Partnership:

- Ground-surveyed over 6,600 acres to map and control the invasive tree, Rauvolfia vomitoria in North Kohala, and contained the spread from an initial infestation of nearly 10,000 acres to a core population covering just 2,000 acres.
- Worked with the State of Hawai'i and private land owner partners to complete 2.5 miles of conservation fencing for the Upper Laupāhoehoe Nui Watershed Reserve, a 2,400-acre wetland forest that comprises the largest area of groundwater recharge on the northern half of Hawai'i Island.
- Built ten additional sediment check dams on the leeward Kawaihae watershed to slow sedimentation in Pelekane Bay, and witnessed the healing of the land resulting from the implementation of these physical and biological barriers to erosion.
- Organized twenty-six volunteer work days, bringing together the positive energies of more than 300 student and adult community members working to mālama 'āina (care for the land). Volunteer efforts resulted in maintenance of trails, outplanting about 7,000 native plants, and clearing more than two acres of invasive plants.

"The Department of Land and initiative, 'The Rain Follows the Forest,' successfully increased state spending on watershed need for action and the seeds of the idea that eventually grew into this campaign were planted during my time at The Kohala Center."

—Dr. Guy Kaulukukui, former associate director, The Kohala Center and former deputy director, Hawai'i Department of Land and Natural Resources

The Kohala Watershed Partnership also took a new community program under its wing in 2013: Coqui-Free Waimea. While the southern and eastern parts of Hawai'i Island are overrun with coqui to the point that eradication may be impossible, residents of Waimea have a chance to keep coqui at bay through vigilance and cooperation. Given Kohala Mountain's fragile and unique ecosystem, keeping the invasive amphibian off the mountain is critical to maintaining balanced biodiversity. Coqui deprive native birds, bats, and other beneficial species of their primary food source—insects—and have no natural predators. Their 90- to 100-decibel "chirps" throughout the night disturb residents and diminish property values.

Citizens of Waimea are motivated to educate their community about the spread of coqui, to reduce the number that are transported into Waimea, and to control any existing frog populations. Support from the Richard Smart Fund of the Hawai'i Community Foundation and individual donations have enabled the program to hire two part-time staff members and secure larger-scale spraying equipment used to spray food-grade citric acid, which kills the frogs but doesn't harm other animals or plants. Coqui-Free Waimea trains community members how to report, track down, and capture or spray coqui frogs. In its first few months the program has achieved success in reducing or eliminating frog populations on certain streets, and prohibited the frogs' encroachment onto Kohala Mountain.

Caring for the land, forests, water, and native species of Kohala Mountain is of utmost importance to KWP's dedicated partners, staff, volunteers, and community members. The Kohala Watershed Partnership's collaboration amongst diverse constituents is the ultimate definition of laulima: many hands working together for everyone's success.



## KAHALU'U BAY EDUCATION CENTER

Kahalu'u Bay is an important cultural and scientific treasure on Hawai'i Island. It may also be considered the nursery of the island's coastal fisheries. For decades, the park was a spirited gathering place for local 'ohana (families) to congregate, celebrate, talk story, play music, swim, fish, and relax. But increased visitor traffic into the park and bay gradually took its toll on park facilities and the bay itself, with vibrant corals literally being trampled to death by swimmers and snorkelers.

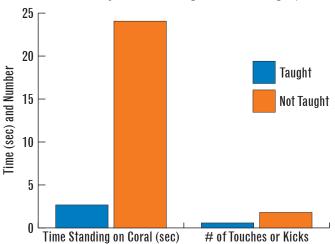
In the year 2000, University of Hawai'i Sea Grant agent Sara Peck launched **ReefTeach**, a volunteer-driven program dedicated to educating visitors to the bay on how to care for the coral reefs. Over time the Sea Grant program, community and business leaders, residents, and government agencies asked The Kohala Center to adopt and expand the program; in 2011, The Kohala Center established the Kahalu'u Bay Education Center (KBEC). Founded through a ten-year agreement with the County of Hawai'i Department of Parks and Recreation—one of a few partnerships of its kind between a county government and a nonprofit organization in the state—KBEC is committed to healing Kahalu'u Bay, educating visitors about the bay's fragile ecosystem, implementing a Master Plan to revitalize the park, and reconnecting island residents with this once-beloved gathering place.

"Scientifically, Kahalu'u Bay is doing (respected elders). By listening to our kūpuna on how the place looked in the it changed, we can see how cultural understanding can add significant insights to coral reef management understanding Kahalu'u Bay and helping the community to mālama 'āina like their ancestors did."

-Kaipo Perez, Ph.D., 2012-2013 Mellon-Hawai'i Doctoral Fellow, and Recreation Specialist, Hanauma Bay, City and County of Honolulu. Dr. Perez conducted his doctoral dissertation research at Kahalu'u Bay and in Education Center.

KBEC's staff and more than 400 ReefTeach volunteers devote themselves to bringing Kahalu'u's coral reefs back to health. In 2012, ReefTeachers had direct educational interactions with nearly 52,000 out of the estimated 400,000 people who visited the bay. Operating out of a van every day that Kahalu'u Beach Park is open, KBEC rents snorkeling gear and sells educational guides, underwater cameras, ecofriendly sunscreen, and notecards, with all proceeds directed toward the center's education and conservation programs. As part of the Master Plan, The Kohala Center and KBEC are raising funds to expand the center by replacing the van with a larger, semi-permanent trailer, which will provide more storage space and allow KBEC to serve and educate even more visitors. By teaching the importance of "reef etiquette," behavioral changes on the part of swimmers and snorkelers are noticeable—corals are regenerating slowly but surely.

#### Kahalu'u Bay Visitors: Taught vs. Not Taught, 2012



KBEC, in its efforts to educate and promote awareness of Kahalu'u Bay, has:

- Maintained the Citizen Science program, which recruits and trains volunteers and students to collect, analyze, and record water samples in Kahalu'u Bay to monitor the bay's health. The data are entered and tracked on an online portal. This collaborative effort is supported by the U.S. Environmental Protection Agency and Natural Energy Laboratory of Hawai'i Authority.
- Extended ReefTeach to the community of Puakō, nearly forty miles north of Kahalu'u. Through a National Oceanic and Atmospheric Administration grant and a partnership with the Puakō Community Association (PCA), new ReefTeachers are being recruited and trained to provide reef etiquette



"We have been snorkeling at the bay for twenty years now. Oh, how we have noticed the corals coming direct result of the education you provide to the tourists snorkeling in the bay. Keep up the good work!"

-Kelly S., Kahalu'u Bay Visitor



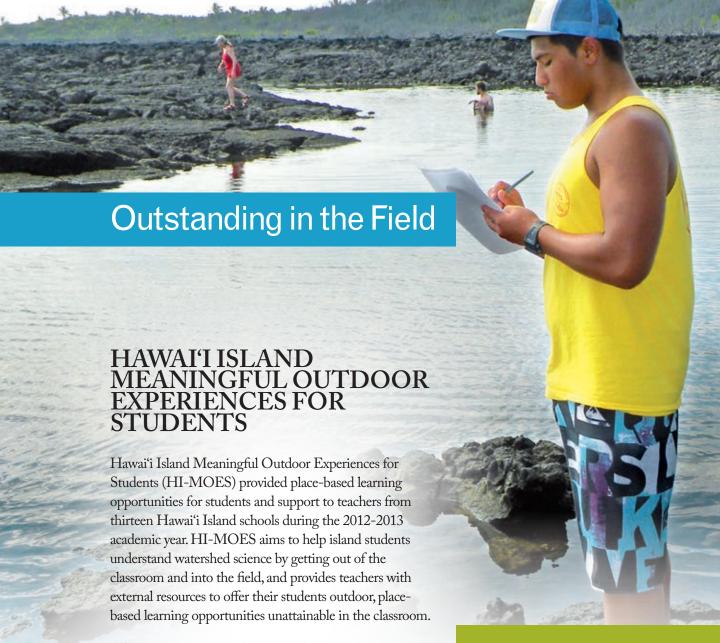
education at Waialea Bay and Paniau Beach. KBEC is providing technical assistance to help PCA develop educational materials and a volunteer training program. The Kohala Center will provide a gateway on its online portal to allow Puakō to enter human use data collected by the volunteers serving at Paniau Beach and Waialea Bay.

- Updated the Spawning Guide for the Leeward Coast of Hawai'i Island, a downloadable educational tool used to provide a basic understanding of the lifecycles of twenty-three species of fish commonly found on Hawai'i Island's west coast. By reviving community knowledge of traditional fishing practices that sustained Native Hawaiians for generations, public fishing habits are influenced to curtail overharvesting and to prevent further population declines of key species in West Hawai'i.
- Conducted outreach to elementary and middle schools in West Hawaii, teaching 1,300 island keiki (children) about the importance of healthy corals to local fisheries and sharing the information on the Spawning Guide.
- Initiated a monthly photo contest to encourage residents and visitors to submit their best wildlife photos from the bay.

The Kahalu'u Beach Park Conceptual Master Plan provides a long-term vision to update and revitalize the park's facilities. The goal is to transform Kahalu'u Beach Park into a modern and welcoming site for local families and visitors, while continuing to serve the community, promote respect for the environment, and enhance and protect the ecosystem of Kahalu'u Bay. The Conceptual Master Plan was developed through a collaborative effort between the County of Hawai'i's Department of Planning, the Department of Landscape Architecture at the University of Washington at Seattle, and The Kohala Center. Participants in the design charrette included island residents, business leaders, educators, volunteers, lineal descendants of Kahalu'u, Kamehameha Investment Corporation, University of Hawai'i Sea Grant College Program, and homeless beach denizens.

With the help and support of local families and businesses, the County of Hawai'i, and dedicated and passionate volunteers, KBEC is working to ensure that Kahalu'u Bay remains a happy, healthy gathering place where area residents, visitors, and wildlife can coexist in respectful, lasting harmony.





Educators receive year-long consulting support from outdoor educators for both classroom and field activities; presentations or site visits from cultural practitioners and scientists working in the area; assistance with organizing and carrying out field trips; mini-grants to support project-related supplies and substitute teachers; assistance from outdoor educators and scientists with implementing year-long, hands-on, investigative research projects; and training opportunities in the use of new technologies.

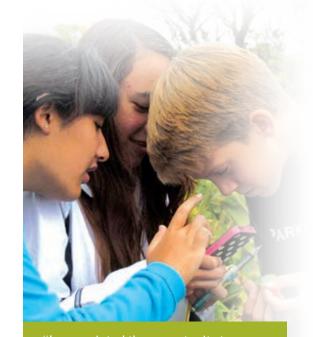
On April 25, 2013, all participants gathered together at the HI-MOES Science Symposium, held at the 'Imiloa Astronomy Center in Hilo. Modeled on a realworld science conference, each participating school had "After completing the HI-MOES program I have a newfound confidence that I can take my students out into the field by myself. I have never taken a group out of the classroom to study science but now I feel I can do it on my own, and field-based learning."

- Eliosa Bellah,

student representatives present their findings for peer review at the Symposium. Students had the opportunity to engage in public speaking, interact with professionals involved in environmental studies, and meet students from other schools.

Approximately 500 students participated in the program, learning about Western scientific methods and Hawaiian cultural-based knowledge. Hawaiian cultural leaders, such as Kuʻulei Keakealani, curator at Kaʻūpūlehu Interpretive Center at Kalaemano, shared their knowledge with the students. Studies took place at sites within four diverse ahupua'a (mountain-to-sea land divisions) on Hawai'i Island: Kahalu'u Bay, Kohala Mountain, Hilo Bay Watershed, and Ka'ūpūlehu. Students participated in a variety of field studies including water quality, coral health, and forest ecology.

Participating schools included Innovations Public Charter School, Kealakehe High School, Waikoloa Middle School, Honoka'a High School, Laupāhoehoe Charter School, Kalaniana'ole Intermediate School, Ke Kula 'O Nāwahīokalani 'ōpu'u, Hawai 'i Preparatory Academy, Parker School, and Kea'au High School.



"I appreciated the opportunity to community to share ideas and see what they were doing in the were very clearly laid out and I had a good idea of how to get started

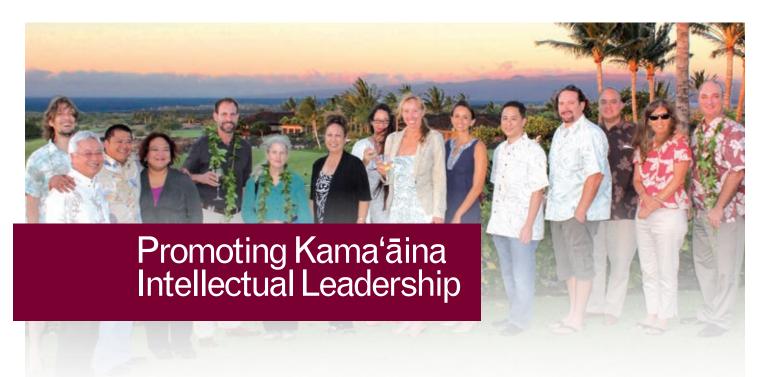


OVER THE YEARS, as The Kohala Center has contributed to creating a knowledge-based economy and society, it has created knowledge-rich jobs. The Center alone employs thirty-two staff members, who work regularly with independent contractors in a diversity of engaging fields such as geographic information science, Hawaiian cultural praxis, forest ecology, marine biology, engineering, economics, geohydrology, copywriting, curriculum development, graphic design, and web development. To ensure that island youth will eventually qualify for these knowledge-rich careers, The Center is committed to

Preparing island students for the knowledge-rich jobs of the future, however, requires more than school programs, technical assistance, and internships. Harnessing Hawai'i's intellectual capital to cultivate the next generation of Hawaiian scholars is essential to ensuring the state's colleges, universities, and research agencies remain competitive, and that indigenous knowledge is carried forward, further developed, and celebrated.

working with its colleagues in public schools.

In 2008, The Andrew W. Mellon Foundation approached The Kohala Center with the idea of creating a fellowship program to identify and support doctoral and postdoctoral scholars. With additional support from Kamehameha Schools, the Mellon-Hawai'i Doctoral and Postdoctoral Fellowship Program was created, and has since enabled fourteen doctoral candidates to finish their dissertations and eleven postdoctoral scholars to publish original research. The program is making a difference: Fellows are receiving academic appointments and gaining tenure. Furthermore, their book manuscripts have been published by or are in the process of publication with academic presses such as Duke University Press, Kamehameha Schools Press, Oregon State University Press, Oxford University Press, University of Hawai'i Press, University of California Press, and University of Minnesota Press.



### MELLON-HAWAII DOCTORAL AND POSTDOCTORAL FELLOWSHIP PROGRAM

Through the generosity of The Andrew W. Mellon Foundation and Kamehameha Schools, the Mellon-Hawai'i Doctoral and Postdoctoral Fellowship Program was established at The Kohala Center. In Academic Year 2012-2013, the Kahiau Foundation also joined the effort. The Mellon-Hawai'i Program is designed for Native Hawaiian scholars early in their academic careers and for others who are committed to the advancement of knowledge about the Hawaiian natural and cultural environment, Hawaiian history, politics, and society. Before accepting their first academic posts, doctoral fellows are given the opportunity to complete their dissertations and publish original research; postdoctoral fellows are given the opportunity to publish original research early in their academic careers. By fostering the further development of kama'āina (island-born) intellectual leadership, this work

"When future generations look back at the explosion of Hawaiian scholarship after the turn of the 21st century, they will be able to clearly see the impact of those who were funded by the Mellon-Hawai'i program. This is no exaggeration."

-Noelani Goodyear-Ka'ōpua, Ph.D., Associate Professor and Undergraduate Chair, Department of Political Science, University of Hawai'i at Manoa and 2010-2011 Mellon-Hawai'i Postdoctoral Fellow

advances The Kohala Center's work of building a knowledge-based economy and society. A distinguished panel of senior scholars and kūpuna (respected elders) choose the fellows based on their leadership potential and their dedication to advancing Hawaiian research and knowledge. Since the program's inception in 2009, twenty-five fellows have been selected. In 2012, the program entered its fifth year and welcomed one postdoctoral fellow, Dr. Katrina-Ann Rose-Marie Kapā'anaokalāokeola "Kapā" Nākoa Oliveira, and two doctoral fellows, Dr. Kaipo Perez III and Marie Alohalani Brown.

Oliveira devotes her life as a researcher to marrying geography and Hawaiian language to expand the knowledge of her kulāiwi (ancestral homelands) and her lineage. She earned her Ph.D. in geography from the University of Hawaii at Mānoa in 2006 and currently serves as the director and an assistant professor at UH Mānoa's Kawaihuelani Center for

Hawaiian Language. In 2012 she accepted a Mellon-Hawaii Postdoctoral Fellowship to finish her book, Ancestral Places: Understanding Kanaka Geographies. Published by Oregon State University and due to be released in the spring of 2014, the book is a revision of her dissertation. "This book brings body, earth, and action together as a whole," Oliveira explains. "One word in Hawaiian can mean many things and the concepts are often different from the English translation. Making interconnections of life visible and validating these relationships provides insight into the wisdom of the Hawaiian culture, both historically and in contemporary times."

The Mellon Hawai'i Fellowship gave her the time to focus on writing and provided access to mentors that could guide and encourage her in the book-writing process. "The fellowship helped me understand what it means to have a mentor. Every day I was grateful that I had people I could talk to about my ideas."

Her next book will be Naming Maui: Mai Kekahi Kapa a Kekahi Kapa Aku, which will chronicle the significance of place and street names on her home island of Maui to Hawaiian history. She got the idea for the book while driving on the island and realized that the names of roads and places can be a useful tool in teaching her students about Maui's history.

As a Native Hawaiian and marine biologist, Dr. Kaipo Perez III believes that his kuleana (responsibility) is to "sustain Hawai'i's natural resources so they can thrive for generations to come." His time in the Mellon-Hawai'i program allowed him to finish his dissertation, "Ecological Evaluation of Coral Reef Resources at Kahalu'u Bay, Hawai'i" for his Ph.D. in zoology from UH Mānoa. Perez's research focused on assessing ecosystem health and monitoring coral reef resources at Kahalu'u Bay on Hawai'i Island. His research findings indicated that the "spatial patterns of coral were not regulated by a single factor. Instead, a combination of factors, which included depth and salinity, significantly explained the variance in coral community structure. Depth is an important factor at Kahalu'u, as shallower depths are subjected to heavy human usage, which includes coral trampling.

"Analogous patterns exist for fish, where both abiotic and biotic variables significantly influence fish biomass and numerical abundance," Perez notes. "The impacts of abiotic factors are based on species thresholds. Individual biotic requirements of all fish and by trophic level are influenced by space or shelter availability and food."

"We strongly support the goals of The Kohala Center to prepare our future Kanaka Maoli academics, community leaders. Indeed, the work of past fellows has significantly impacted both knowledge generation and application in areas including education, language revitalization, engagement approaches to reverse socio-cultural, political, economic,

> -Maenette K.P. Ah Nee-Benham, Ed.D., Dean, Hawai'ianuiākea School of Hawaiian Knowledge, University of Hawai'i at Mānoa



As part of his dissertation, Perez also integrated scientific ecological observations with Traditional Environmental Knowledge (TEK) and cultural practices, which were gleaned from the region's kūpuna. Perez explains that "cultural knowledge or TEK is seldom integrated with science, but when coupled it provides a more holistic view of both the environment and its resources. It offers a more comprehensive understanding of the bay's history, reef resources, and management challenges."

Perez's research included collecting scientific information about the bay and interviewing kūpuna who possessed intimate knowledge the Kahalu'u ahupua'a (mountain-tosea land division) and its associated reef resources. He shares that he did not attempt to test the knowledge of the elders for accuracy, but instead was able to "show the importance of TEK and how it can provide significant insights into the field of marine ecology." Perez further explains that the "integration of place-based knowledge and science is essential for making sound management decisions," and that by incorporating the community and their concerns into the research it brings forth their mana'o (thoughts, perspectives) and empowers them to play a role in the management of natural resources.

Currently, Perez is working as the ocean recreation specialist at the Hanauma Bay Nature Preserve on O'ahu. His expertise in coral reef ecology, coupled with his deeply rooted cultural values and knowledge, guides him in his new position at the preserve. "I am continually finding that when culture and science are woven together, even in a new setting, it affords the opportunity to make informed management decisions that may have tremendous impacts on future generations."

Doctoral candidate Marie Alohalani Brown believes that understanding different cultures can "create the bridges of wisdom that humanize us and allow us to create the change

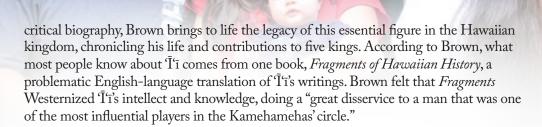
necessary to live in harmony." In the summer of 2013 Brown was offered a position as acting assistant professor of religion at UH Mānoa, in which she will specialize in weaving together history, story, and the Hawaiian belief system to deepen the knowledge of Hawaiian culture.

During her year in the Mellon-Hawai'i program, Brown worked on her dissertation, "Facing the Spears of Change: The Life and Legacy of Ioane John Papa Ti." Through this

"The effect [of the Mellon-Hawai'i Fellows Program] on our communities should not be underestimated. For many decadesour Native Hawaiian children have grown up without intellectual role models. This is changing rapidly, in no small part due to this fellowship program. More Hawaiian professors higher education in every field, and that means more Hawaiian teachers at every level. The next grow up knowing that they can go to college and succeed if they wish, and go as far as they want to go because they see many other Hawaiians doing so. This represents incredible, important, and powerful change."

> —Noenoe K. Silva, Ph.D., Professor, Indigenous Politics, Affiliate Faculty, Kawaihuelani Center for Hawaiian Language, University of Hawai'i at Mānoa





T'i began his service to Kamehameha I when he was only ten years old. Having survived several devastating epidemics that ravaged the Hawaiian population and eventually becoming a statesman, Ti was, according to Brown, one of the more influential figures in his time. Reading the written records and intellectual contributions of Tis life, Brown was able to document—from a Hawaiian cultural perspective—the archival knowledge and wisdom of a man who was seen as "an amazing intellect and an example of a man who believed in fulfilling his duties to his Kings and his people." Brown recognizes that studying 'Ī'ī's life makes several important contributions: it provides valuable knowledge of the Hawaiian belief system as the generations before him and his contemporaries passed on; and his life is important for examining Kanaka Maoli (Native Hawaiian) agency in important arenas during several crucial transitional periods in Hawaiian history between 1810 and 1870.

"I cannot stress enough how valuable the fellowship was to my immersing myself without any other concerns—just the task of focusing on and writing up my research. Not to mention the amazing mentors and scholars that I could talk to about my work. It is a true 'ohana (family)," says Brown.

Brown is publishing her first article, "Mourning the Land: Kanikau in Noho Hewa—The Wrongful Occupation of Hawai'i" in the American Indian Quarterly. In this article, Brown analyzes Anne Keala Kelly's documentary Noho Hewai: The Wrongful Occupation of Hawai'i that looks at Native Hawaiian resistance to three different abuses of the land: U.S. military occupation of Hawai'i, settler colonialism, and corporate tourism. Brown asserts that the theme of mourning the land speaks to intergenerational trauma from which many Native Hawaiians suffer in the aftermath of the U.S.-backed overthrow of the Hawaiian Kingdom.

Brown will continue with academic research that she hopes will expand cultural literacy and deepen insight into Hawaiian culture. She hopes that through her work, Hawaiian and other indigenous cultures will find "the power to speak to what is most important to the balance of life as a whole."

The Mellon-Hawai'i Doctoral and Postdoctoral Fellowship Program continues to offer a unique opportunity to scholars to complete work that is dedicated to preserving Hawaiian knowledge and forge relationships between scholarly research and the rich legacy of Hawai'i and its people. It is also building a community of intellectual leaders from Hawai'i—for Hawai'i and the world.



## Stability in Diversity

# ADMINISTRATIVE AND FINANCIAL REPORTS

Under the able leadership of chief financial officer Debi Kokinos, CPA, and with the assistance of grants administrator CJ Davis and the accounting staff, The Kohala Center manages at any given moment in time seventy-five to eighty grants and contracts. This capacity means that the organization has a diversified stream of support for our programs.

In addition, program managers receive budget-to-actual reports on all grants and contracts by the tenth of every month. Should program managers require budget-to-actual reports to date, they can receive them within twentyfour hours. This allows for a near real-time tracking of expenditures.

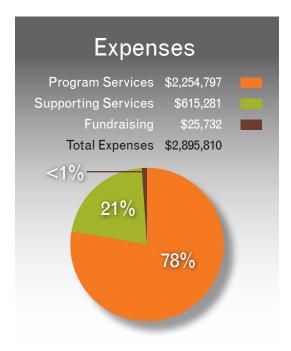
The organization's ability to receive, track, and manage a large number of grants and contracts from diverse sources of support lends great financial stability and efficiency to our programmatic efforts.

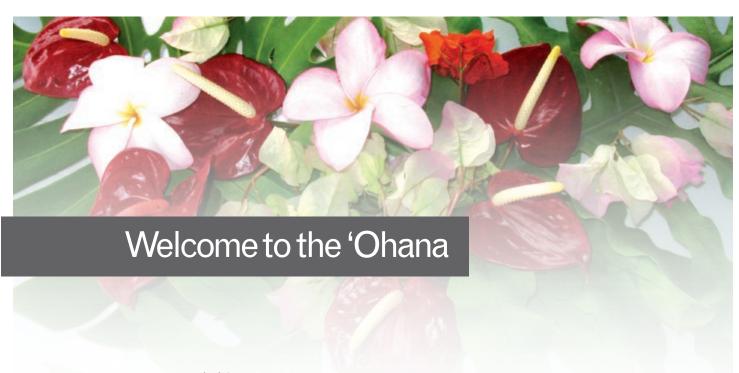
Financial matters for the fiscal year ended June 30, 2013:

Total liabilities:	\$554,805
Unrestricted net assets:	\$211,996
Temporarily restricted net assets:	\$621,650
Total net assets:	\$833,646
Total liabilities and net assets:	\$1,388,451
Change in net assets:	\$388,286

## Support and Revenue

Federal	\$801,134				
State & Local	\$324,821				
Trusts & Foundations	\$913,244				
Contributions	\$613,295				
Earned & Other	\$581,542				
Total Support and Revenue					
18%	25%				
19%	10%				
28%					





## **NEW STAFF PROFILES**

As The Kohala Center's board president, Roberta Chu, is fond of saying, "it's all about the people." Indeed, it is through the commitment of competent and talented people that The Kohala Center is able to respond to the needs and aspirations of island residents. In the pages that follow, meet the newest additions to The Center's staff of dedicated and passionate professionals.

## Derrick Kiyabu

## Director, Beginning Farmer-Rancher Development Program

I was born and raised on O'ahu and graduated from McKinley High School. After high school I moved to Hilo to attend Hawai'i Community College; it was there that an environmental science class got me interested in agriculture. I went on to attend the University of Hawai'i at Mānoa, where I received my Bachelor of Science in agriculture from the College of Tropical



Agriculture and Human Resources. I also went to graduate school at Michigan State University and studied community food systems.

While still an undergraduate student, I got an internship working in a nonprofit community development organization and ended up spending six years working there. I have been working in the fields of agriculture and community development ever since.

Before joining The Kohala Center, I worked at MA'O Organic Farms in Wai'anae, O'ahu. MA'O inspired me to go back to grad school and pursue a career in agriculture or farming. I gained valuable experience in production agriculture and gained great friends and mentors as well.

My work at The Kohala Center allows me to combine my interests in both production agriculture and community development. I like being able to engage in the big picture for agriculture in our region while being involved in the early development stages of The Center's training farm in Honoka'a. We have our work cut out for us, but we're making great progress, transforming twelve acres of fallow sugar cane land into a productive place where we are growing food and new farmers.

I believe The Kohala Center is effective in supporting small farmers in Hāmākua and North Hawai'i through agricultural education, business and market development, and research and technical support, and it's exciting to be a part of this initiative to train new farmers, increase food production, and nurture the 'aina (land) back to health and productivity.

## **Anthony Blondin**

## Farm Manager, Beginning Farmer-Rancher Development Program

I was born and raised in the suburbs of southeast Michigan. I received a Bachelor of Science degree at the University of Michigan; I studied biology with an emphasis in ecology and entomology. After college I helped pilot an internship program at the Ecovillage Training Center, a project at an intentional community in southern Tennessee called "The Farm." From



there I moved to an environmental education center on 270 acres of mountainside in Tennessee, where I was the head gardener on three acres of an extremely diverse, edible landscape. I learned about natural building, permaculture, off-grid community living, and many other valuable skills.

When I decided to start my own farm, friends in Paoli, Indiana, leased forty acres of forest and pasture to me. I started Sun Circle Farm on five acres of pastureland and sold cut flowers, starts from a greenhouse, and mixed vegetables with an emphasis on storage crops. I also worked at the Bloomington Community Farmer's Market for eleven years, and had wholesale accounts with local food co-ops, restaurants and distributors. I transitioned to a human- and horse-powered farm using traditional hand tools and Belgian and Percheron Draft horses. My last year on the farm was spent completing a 5,000 square foot, traditional wooden-pegged timberframe barn using farmmilled timbers and local lumber.

I married my wife Hayley, and though it was a hard decision, we left southern Indiana to start a new life together somewhere tropical with a year-round growing season. Hayley got a teaching job in Waimea and we moved to Hawai'i Island in 2010.

Since landing here, I've worked with round pole timber construction, helped develop homestead gardens in Pa'auilo, managed a hundred acres of coastal agricultural land in Kapa'au, and was a course supervisor and guide at Kohala Zipline.

My work life has taught me that hard work, thoughtfulness, perseverance, and a little luck will lead to a bountiful harvest. Having patience, humility, and maintaining the long vision can get one through difficult times.

I am very excited to put my skills to use by designing, establishing, managing, and carving out a farm on the challenging landscape of Ka Hua 'Āina, The Kohala Center's training farm



in Honoka'a. I look forward to producing local vegetables and meat. At the same time, I am inspired by the idea of creating a model demonstration and teaching farm for both beginning farmers of Hāmākua and of Hawai'i nei. Food, fiber, and housing security for our community and islands are paramount.

## Tawn Speetjens

## Field Crew Member, Kohala Watershed Partnership

I was born in Honoka'a but raised all over the Pacific: Pohnpei in the Caroline Islands, Micronesia, Guam, and then back to Honoka'a until I graduated from high school in 2004. I studied biology at the University of Hawai'i at Hilo and graduated in 2009.



In both high school and college, I found biology was the easiest subject of study for me. I was most interested in avian biology, especially native Hawaiian forest birds, and then developed an interest in seabirds. My dad has been my mentor. He taught me the importance of leading a full life, taking pride in my work, and treating others with kindness.

I worked previously for the U.S. Fish and Wildlife Service at Papahānaumokuākea Marine National Monument as a biological technician on Laysan Island. Biology work has been natural to me and it turns out I really enjoy it as a profession.

Working at The Kohala Center is my dream job. I enjoy working outside as well as working close to home, and want to gain experiences that make me a more well-rounded advocate for the environment. I have found that biology encompasses a lot more than research, and that land management is not like anything one studies in school, but it is just as important. I am inspired by the opportunity to make a lasting difference in the environment for other people to enjoy in the future.

## Paul Chow

## Field Crew Member, Kohala Watershed Partnership

I was born and raised in Ka'ū here on Hawai'i Island. I graduated from Ka'ū High School and worked at Mattos Electric as an electrician assistant, and also worked as a ranch hand at Kelonukai Ranch.

I was brought up working in the field. It has been my family's

work, and is an every day thing for us. My dad is my role model: he taught me how to work hard, respect people, and survive.



There are many different perspectives of the land on Hawai'i Island that I wasn't aware of. The world of endangered plants and the threats of invasive species are things I have learned about while working with the Kohala Watershed Partnership. I enjoy the opportunity to do different things every day. Working in the various areas of Kohala Mountain and making a difference in protecting these special places on the island I grew up on means a lot to me.

#### Debi Kokinos

## Chief Financial Officer, The Kohala Center

I was born in Long Beach, California, and moved to Santa Barbara, California when I was in the ninth grade. After graduating from high school in Santa Barbara, I moved to many places over the next ten years and then settled back in Santa Barbara. I attended the University of California at Santa Barbara and graduated with a Bachelor of Arts in business economics. I then studied and passed the California CPA exam and took additional courses to become a Certified Financial Planner



After graduating from college I joined a CPA firm and worked for nine years before moving to another firm to become the manager of the tax department. Subsequently I became a co-owner of this forty-person CPA firm. After seven years I retired, traveled for a few years, then opened my own practice and was a self-employed CPA specializing in working with individuals and small to medium businesses and non-profits.

In 2001, while I was a self-employed CPA, I attended and graduated from massage school. In 2002 I began studying lomi lomi on Maui, and continued over the next five years to take additional courses on both Maui and the mainland which included teacher training. Each year as I traveled to Maui I felt drawn to the islands and to the teachings of Abraham Kawai, and finally moved to Hawai'i Island in October of 2007.

In July 2011 I started working for The Kohala Center as an independent consultant. While making the decision to work for The Kohala Center full time, what resonated for me was the vision of the organization: a state of pono, in which individuals realize their potential, contributing their very best to one another, to the community, and to the 'aina itself, in exchange for a meaningful and happy life. This vision continues to inspire me today, as this is truly what The Kohala Center is about.

## Kalikolehua Grace

## Bookkeeper, The Kohala Center

I was born and raised on the slopes of Hualalai in the ahupua'a (mountain-to-sea land division) of Keauhou and Kahalu'u. Nurtured by a family of diverse educators, I am the second eldest of nine children who have now set down roots all around the world. I was raised to appreciate the natural beauty, history, and culture of Hawai'i.



My husband Kalani and I are the proud parents of three children: Kilinahe (15), Kina'u (9), and Kekinopohu (4). We moved from Kailua-Kona to Kailapa, Kawaihae in 2009 and immediately took to its peaceful atmosphere, beautiful sunsets, and perfect views of the koholā (whales) that grace us every winter. We've learned that the dry land of Kawaihae can produce abundant vegetable gardens; our favorite thing to grow is 'uala (sweet potato). I am an active member of our community's association, which is currently working on a Community Center complete with a fenced-in playground.

I have worked as a dispatcher at Shell Vacations Club in Kona, and also as the administrative assistant to the general manager at the Holua Resort. My last job was bookkeeping for my family's tree-trimming company in Kona. When the bookkeeping position opened up with The Kohala Center, I jumped at the opportunity.

It was through the Kohala Watershed Partnership's work on Pelekane Bay that I learned about The Kohala Center. What I enjoy the most about The Kohala Center is its focus on local resources and the mālama (care) of such resources. I appreciate working with the amazing group of people at The Kohala Center, each of whom brings their own knowledge and talent to the table. My goal is to work with an organization that practices environmental responsibility and teaches it as well, and I believe that is The Kohala Center.

## Liam Kernell

## Communications and Project Management Specialist, The Kohala Center

I was born and raised in Honolulu, and was truly blessed to have received scholarships to attend two of Honolulu's finest schools: Hanahauoli from kindergarten through sixth grade, and 'Iolani for grades seven through twelve. After graduating from 'Iolani I attended college at the University of California at Berkeley, and earned a Bachelor of Arts in social sciences with an emphasis in public policy and public health.



I enjoyed the many social, cultural, and career opportunities the mainland had to offer, and spent time in several of the continental U.S.'s most creative cities: San Francisco, Seattle, and Austin. After 18 hot summers in Texas watching Austin transform from a small, eclectic city to a sprawling metropolis, it was time to move on. I considered moving home to Honolulu, but yearned to reconnect with the "old Hawai'i" I remembered. Of the main Hawaiian Islands, Hawai'i Island felt the most like the Hawai'i I knew growing up. It was like moving someplace completely new that felt comfortable and familiar. It felt like the old Hawai'i I wanted to malama and protect.

Before working for The Kohala Center I bounced between graphic design, marketing, and communications gigs. I worked in advertising for most of my years in Austin, alternating between high-tech and public-service marketing (the former more than paid the bills, the latter fulfilled my desire to contribute to the greater good). I found through my work that project management was something I enjoyed and was really good at, so while I stayed in the communications field, I transitioned my career to focus more on defining and managing the processes and resources to get things done.



I love working with The Kohala Center's truly diverse crew of talented, passionate people who all cooperate to protect this magical place and improve the quality of life of island communities. In my hybrid role of being responsible for communications and project management, I get to touch virtually all of our programs. My job has taken me snorkeling in Kahalu'u Bay, up to the wet and windy slopes of Kohala Mountain, to farms up and down the Hāmākua Coast, to verdant learning gardens at island schools, and to gatherings of island residents enthused and empowered by knowledge and opportunity.

I hope to connect The Kohala Center with a broader audience of people, both here on Hawaii Island and around the globe. By bringing a fresher, more accessible voice to our communications, I hope that people of all ages, cultures, and education levels will be inspired by the work we do.

## Al-Qawi Majidah

#### Administrative Assistant to Programs, The Kohala Center

I was born in Seattle, and raised on a farm in Oklahoma with cows, chickens, and a watermelon patch. I received a Bachelor of Arts in political science from Washington State University and attended the University of Sussex in England, where I received a Master of Arts in international relations.



While in high school I got involved in competitive speech and debate. This got me interested in politics but I felt politics was not the best way for me to make a contribution to society. I have always been highly involved in the communities I've lived in, and nonprofit work seemed like a natural direction for me to take.

I worked at Wilderness Works, a nonprofit in Atlanta; served an AmeriCorps service year at the American Red Cross in Seattle; interned at the International Rescue Committee in Seattle and Mercy Corps in DC; and spent three months in Nepal interning at the National Democratic Institute. I farmed for three months across France. I waitressed in a pizza place in L.A., worked at the WSU library, was a teller at a bank in Oklahoma, and immersed myself in numerous activities that connected me with my community.

My work life has taught me to consider all aspects, to not lose sight of the grand picture, and to focus in on the details needed to accomplish the grand picture efficiently and effectively. I draw inspiration from many people I come into contact with, and feel that each person aids me in life lessons for life's journey. Chanrithy Him, in particular, has shown me courage and resilience.

The great weather, inclusiveness, and the ability to farm brought me to Hawai'i. The Kohala Center does crucial work in the community that addresses critical needs for longevity of life. The programs at The Kohala Center bring people closer to the land, as well as independence, which promotes prosperity for all.

Working for The Kohala Center has opened the door of opportunity for me! I plan to continue on my life's purpose in this line of work, strengthening communities through meaningful and effective programs.



## **BOARD OF DIRECTORS**

**PRESIDENT** 

Roberta Chu

Senior Vice President, Bank of Hawaii

VICE PRESIDENT FOR GOVERNANCE AND SECRETARY

Herbert M. (Monty) Richards, Jr.

President and Chairman, Kahua Ranch

VICE PRESIDENT FOR INTERNAL AFFAIRS AND TREASURER

James Takamine, MPA, MBA

President and Chief Executive Officer, Hawaii Community Federal Credit Union

VICE PRESIDENT FOR EXTERNAL AFFAIRS

Valerie Ossipoff

Vice President, Marketing and Sales, KonaBeachHouse.com

## **DIRECTORS**

Puanani Burgess

One-Peace-At-A-Time

Richard Ha

President, Hāmākua Springs Country Farms

Robert Lindsey, Jr.

Trustee, Office of Hawaiian Affairs

John Powers, J.D.

Attorney

Ian Robertson, J.D.

Principal, The Robertson Company

## SENIOR STAFF

**EXECUTIVE DIRECTOR** 

Matthews M. Hamabata, Ph.D.

**DEPUTY DIRECTOR** 

Elizabeth Cleary Cole, Ed.D.

CHIEF FINANCIAL OFFICER

Debi Kokinos, CPA

## PHOTO CREDITS

#### Mike Bennett

Page 14, farmers

#### Samantha Birch

Page 4, wind turbine; Page 5, wind turbine, Page 7, wind turbine

#### Angy Chesler

Page 3, Dr. Matthews Hamabata

#### Hawai'i Community Foundation

Page 2, Roberta Chu

#### Jack Jeffrey

Cover, 'i'iwi; Page 30, 'ōhi'a lehua, Page 35, fern

#### Maui Aquaponics Workers Cooperative

Page 16, worker-owners

#### Pūnana Leo o Hilo

Cover, children in garden; Page 13, teacher and child in garden

#### Doug Sell

Page 22, green sea turtle

#### University of Hawai'i College of Tropical Agriculture and Human Resources

Page 17, farmers

#### Andrew Walsh

Cover, yellow tang

#### James D. Watt/Seapics.com

Page 32, Wave



### P.O. Box 437462, Kamuela, HI 96743

Phone 808-887-6411 | Fax 808-885-6707 | info@kohalacenter.org | www.kohalacenter.org

Facebook.com/TheKohalaCenter | ▶ Twitter.com/Kohala\_Center