

# mālamalama

THE LIGHT OF KNOWLEDGE

The magazine of the University of Hawai'i System

Volume 30 Number 3, September 2005



## Culinary Stars

### INSIDE:

Comet crashing  
Sports psychology

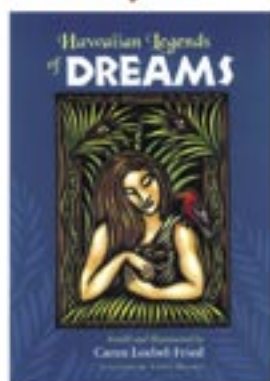
Safe bridges  
Defeating diabetes

## Selected Fall titles from UNIVERSITY OF HAWAI'I PRESS



### **Leaves from an Autumn of Emergencies**

Selections from the Wartime Diaries of Ordinary Japanese  
Samuel Hideo Yamashita



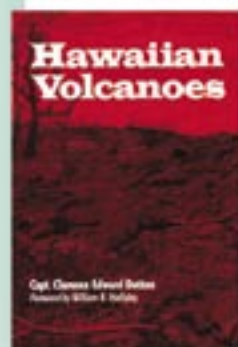
### **Hawaiian Legends of Dreams**

Caren Loebel-Fried



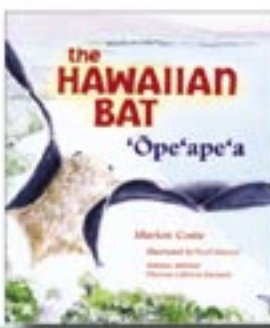
### **Teaching Mikadoism**

The Attack on Japanese Language Schools in Hawaii, California, and Washington, 1919-1927  
Noriko Asato



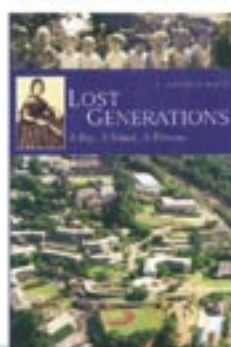
### **Hawaiian Volcanoes**

Capt. Clarence Edward Dutton  
Foreword by William R. Halliday



### **The Hawaiian Bat**

'Ōpe'ape'a  
Marion Coste  
illustrated by Pearl Maxner



### **Lost Generations**

A Boy, a School, a Princess  
J. Arthur Rath

For details, please visit:  
[www.uhpress.hawaii.edu](http://www.uhpress.hawaii.edu)

## Meet Dr. Worthley, Statistician

What do baseball and business  
have in common?

**Statistics.**

Apply now to learn more.

- Evening MBA
- Executive MBA
- Japan-focused MBA or China-focused MBA
- Neighbor Island MBA
- Vietnam Executive MBA
- Joint JD/MBA
- Master in Accounting (MAcc)
- Internet-Based Distance Master of Accounting
- Master in Human Resource Management (MHRM)
- PhD in International Management

**UNIVERSITY OF HAWAI'I AT MĀNOA**  
**COLLEGE OF BUSINESS**

[www.cba.hawaii.edu](http://www.cba.hawaii.edu)



Ranked among the top 25  
U.S. graduate schools for  
international business



Accredited by AACSB  
International

## Editor

Cheryl Ernst

## Art Director

Rowen Tabusa (BA '79 Mānoa)

## Photographer

Bob Chinn

## Associate Editor

Tracy Matsushima (BA '90 Mānoa)

## Online Editor

Jeela Ongley (BA '97 Mānoa)

## Contributing Alumni Editors

Emily Fay

Nico Schnitzler (BA '03 Mānoa)

## University of Hawai'i President

David McClain

## Board of Regents

Andres Albano Jr.

(BS '65, MBA '72 Mānoa)

Byron W. Bender

Michael A. Dahilig

Ramon de la Peña (MS '64,

PhD '67 Mānoa)

James J. C. Haynes II

(BBA '65 Mānoa)

Kitty Lagareta

Allan R. Landon

Ronald K. Migita

(BBA '66 Mānoa)

Alvin A. Tanaka

Jane B. Tatibouet

Myron A. Yamasato

(BBA '73 Mānoa)

Published three times a year by  
External Affairs and University Relations,  
University of Hawai'i

## Change of address

UHF—Address Update

P.O. Box 11270, Honolulu, HI 96828

808 956-8829 or

[addressupdate@uhf.hawaii.edu](mailto:addressupdate@uhf.hawaii.edu)

## Voluntary subscription

Suggested donation \$10

Send to Mālamalama

2444 Dole St., BA2

Honolulu, HI 96822

## Free electronic subscription

Email [ur@hawaii.edu](mailto:ur@hawaii.edu) (please include your  
name and address)

## Advertising information

[ur@hawaii.edu](mailto:ur@hawaii.edu) or 808 956-8856

UH is an equal opportunity/affirmative  
action institution. This publication  
available in alternate form for people  
with print disabilities.

## China trip creates opportunities for UH, state, alumni

At UH, we embrace enthusiastically our responsibility to benefit both our students and the communities we serve. We strive to provide each student with a transformational educational experience, and we seek to insure that our state has the skilled workforce essential for future economic success in a climate of social health and social justice. As part of this process, we reach beyond our own community to afford students an opportunity to participate in an increasingly global society.

In June, a number of UH chancellors, deans and faculty members joined Wendie and me on the trade mission led by Gov. Linda Lingle to China, where we intensified our decades-old collaborations with various institutions. In Guangdong province, we celebrated the 20th anniversary of the sister-state relationship with Hawai'i. We accompanied the governor to Zhongshan, ancestral home of many Chinese immigrants to Hawai'i and Dr. Sun Yat-sen, the founder of modern China. On behalf of UH, I signed a systemwide agreement covering business, tourism and culinary studies and student exchanges with Sun Yat-sen University in Guangzhou. We attended the Asia-Pacific architectural symposium at Tongji University co-hosted by Mānoa's School of Architecture and walked down the red carpet at the Shanghai International Film Festival, where one of the eight finalists was *The Land Has Eyes*, a film by Mānoa Professor Vilsoni Hereniko. In Beijing we discussed expanding our ongoing relationships with Peking University and forged a relationship with the O'ahu-sized Zhongguancun tech park.

As fascinating and memorable as these experiences were, the highlight of our trip was reconnecting with alumni and friends at functions in Shanghai, Beijing, Guangzhou and Hong Kong. Our graduates make significant contributions to their communities and have a great deal of aloha for the university where they spent some of their formative years. We're most fortunate to have them, and you, as supporters of the University of Hawai'i.



**In Hong Kong, from left, McClain, Iris and alumnus Eddie Lam, Wendie McClain, alumnus Ananda R. Arawwawela**

Best wishes and aloha,

David McClain

# CONTENTS

## FEATURES


- ◀ **Deep Impact** ..... 8  
A Mānoa comet expert is part of the NASA science team deciphering the plume caused by an intentional crash landing
- Sports Psychology** ..... 11  
A Hilo faculty member uses psychological intervention to help skaters become champions
- Diving In** ..... 12  
An NCAA champion diver is one of UH's national student standouts
- ◀ **Culinary Masters** ..... 13  
Visiting chefs, innovative programs and creative students mark UH culinary programs
- Safe Crossings** ..... 16  
Engineers develop new materials and monitoring techniques to keep our bridges safe while an architect inventories the state's historic spans
- ◀ **Defeating Diabetes** ..... 19  
From basic research to public education, UH faculty members join the battle against a disease that threatens to become an epidemic
- ◀ **Remembering Miller** ..... 23  
Pioneer spirit, eight white rats and generosity—the legacy of Carey D. Miller continues

## DEPARTMENTS

- Campus News** ..... 3
- Research and Scholarship** ..... 6
- Alumni** ..... 24
- Class Notes** ..... 27
- ◀ **Sports** ..... 31
- Enlightenment** ..... 32


**On the cover:** Kapi'olani students Dorothy Colby and Sonny Acosta enjoyed a moment with TV's Iron Chef Hiroyuki Sakai during the Culinary Institute of the Pacific's spring culinary expo. Colby received the gold medal in vegetable-carving in the statewide competition. As the winner of the hot food category, Acosta received a one-week internship in one of Sakai's Japan restaurants





## UNIVERSITY OF HAWAI'I FEDERAL CREDIT UNION

*The University's Credit Union*



*Celebrating 50 years of service  
to the University and  
Community Colleges of Hawai'i*

### LOANS


New and Used Car Loans  
Real Estate Mortgages  
Home Equity Lines of Credit

### BENEFITS, PRODUCTS & SERVICES

Free Online Banking  
and Bill Payment  
ATM's "Non-Surcharge"  
Convenient Branch Service Statewide  
Financial Planning  
Business Accounts

2019 S. King St. Honolulu 96826  
Mon., Tues., Thurs., Fri  
8:00 a.m. - 4:00 p.m.  
Wed 8:00 a.m. - 3:00 p.m.

(808) 983-5500  
[www.uhfcu.com](http://www.uhfcu.com)



Federally insured by NCUA

## Native Hawaiian law center established

Mānoa's William S. Richardson School of Law received a \$600,000 federal grant to open a Center for Excellence in Native Hawaiian Law. Focusing on Native Hawaiian issues, rights and community relations, it will be an important resource in reconciliation over the loss of Hawaiian sovereignty, notes Sen. Daniel Inouye. It will also provide support for Native Hawaiian law students. Center Director Melody Kapilialoha MacKenzie has written extensively about Native Hawaiian rights and taught for many years as an adjunct professor.

—Karla Brown

## 2005 Regents' Medals awarded

### Excellence in Teaching

Gerald Browne, assistant professor of English, Kaua'i  
 Duane Clark, assistant professor in philosophy and religion, Maui  
 Douglas Crowell, instructor in math, Kapi'olani  
 Catherine Fulford, professor of educational technology, Mānoa  
 Anthony Guerrero, associate professor of medicine, Mānoa  
 Terry Hunt, associate professor of anthropology, Mānoa  
 Antoinette Martin, professor of art, Windward  
 Paul Onomura, associate professor of diesel mechanics, Honolulu  
 Rebecca Ostertag, assistant professor of biology, Hilo  
 Petri Pieron, associate professor of nursing and allied health, Hawai'i  
 Wesley Teraoka, associate professor of geography, Leeward  
 Eric Yamamoto, professor of law, Mānoa

### Excellence in Research

Bruce Chorpita, professor of psychology, Mānoa  
 Ho-min Sohn, professor of East Asian languages and literatures, Mānoa  
 Paul Lucey, researcher, Hawai'i Institute of Geophysics and Planetology, Mānoa



## WWII chaplain's papers donated

Mānoa's Hamilton Library has received the official papers, personal correspondence and other papers of 442nd Regimental Combat Team Chaplain Hiro Higuchi (BA '31 Mānoa). The papers document World War II-era activities from Harvard's Army chaplain school to training at Camp Shelby and service on the European front, as well as details of life in Hawai'i as shared in letters from his wife Hisako. "These boys, in regular kanaka fashion, just slop along until the tests and then crash through always with the highest mark the Army ever had," he wrote of Hawai'i's Japanese American soldiers in November 1943. See <http://libweb.hawaii.edu/libdept/archives/mss/aja>



## Publications honored

Leeward Community College's academic catalog won first place in this year's National Council of Marketing and Public Relations Paragon Awards competition. Forty judges who received 1,750 entries applauded the catalog for its organization of content and use of faculty and staff pictures to promote the people at the heart of the college.

Closer to home, *Mālamalama* magazine received its second consecutive Public Relations Society of America-Hawai'i chapter Koa Hammer award.



**The patient moans, vomits and cries out for help, his breath labored and his pulse slow. Nursing students cluster around his hospital bed, using newly acquired skills to evaluate and respond. Behind one-way glass, their instructor both observes and controls the situation while video cameras record the session for later review. Such is the value of SimMan™, the Laerdal manikin that simulates life and even death while giving students practice in procedures such as intubation and defibrillation. SimMan and his simulated hospital room are new learning tools in Mānoa's School of Nursing and Dental Hygiene. The school is seeking funding to add SimBaby to its patient list.**



**Mānoa's May commencement had graduates and guests seeing green and marching to a new tune. Green caps and gowns replaced traditionally black regalia, and a new processional was introduced. "Above All Nations," composed by Mānoa Professor of Music Donald Womack, takes its name from the motto engraved on Founders' Gate (Above all nations is humanity) and incorporates subtle musical quotes from "Hawai'i Pono'i" and the campus alma mater, "In Green Mānoa Valley." Highlight of the August ceremonies: an appearance by *Star Trek* actor and community activist George Takei as commencement speaker. Mānoa commencement information is at [www.manoa.hawaii.edu/commencement](http://www.manoa.hawaii.edu/commencement).**



### Honorary degrees awarded

**G**enerosity characterizes the most recent recipients of UH's honorary doctor of humane letters. Legendary Hawaiian musician Genoa Keawe, above, was honored during May commencement ceremonies at Windward Community College, where she has shared her knowledge and expertise through the Hawai'i Music Institute. Scholar and Japanese senior international attorney Kaoru Kashiwagi was recognized during ceremonies at the William S. Richardson School of Law, where he has provided financial support for a program in Japanese law and job opportunities for students and graduates.

### Hawaiian, travel, ethnobotany degrees added at Mānoa

**B**eginning this fall, the College of Languages, Linguistics and Literature will offer an MA in Hawaiian, and the School of Hawaiian, Asian and Pacific Studies, an MA in Hawaiian studies. The latter program incorporates five concentrations—envisioning the nation, native history and literature, mālama 'āina resource management, visual and performing arts and comparative Polynesian and indigenous studies. The School of Travel Industry Management launches its MS in Singapore in February. The 18-month program will provide on-location and online courses geared for travel industry professionals and government agency employees. See [www.singapore.tim.hawaii.edu](http://www.singapore.tim.hawaii.edu).

Responding to high interest in an emerging discipline, the College of Natural Sciences has established a BS in ethnobotany focused on cultural interaction with plants. See [www.botany.hawaii.edu](http://www.botany.hawaii.edu).

### UH ranks with Princeton Review, *U.S. News*

**T**he Princeton Review recommends Mānoa in its 2006 *America's Best Value Colleges* as one of 81 institutions with superlative academics, ample financial aid and comparatively low costs. The guide to the best undergraduate deals in 35 states bases selection on institutional data and student surveys at more than 350 campuses. In graduate programs, *U.S. News & World Report* lists Mānoa's College of Education 60th for teacher preparation schools (up 13 spots from last year). Also in the *U.S. News* top 100 for 2006: Mānoa's College of Business Administration (22nd in international business) and School of Law (25th in environmental law and 83rd overall).

—Karla Brown

### Accreditation update

**I**n response to UH progress reports, the Association of Schools and Colleges' Accrediting Commission for Community and Junior Colleges has lifted the warning status placed on Kapi'olani, Kaua'i, Leeward and Maui campuses for assessment and program review issues. ACCJC's concern for community college planning and administrative operations within the UH System should be allayed by a reorganization establishing a vice president for community colleges. All seven community colleges remain fully accredited with their next regularly scheduled site visits in 2006.



**Maui Community College officials, students and community members broke ground in July for a new \$21 million student housing project. Developed by Agora Realty, it will accommodate 400 students in 100 two-bedroom, two-bath units that include kitchens and living rooms. Environmentally friendly features include solar-powered lighting and water heating and irrigation by a non-potable source. Completion is anticipated in fall 2006.**

### Nursing PhD goes online

Students entering Mānoa's PhD nursing program this fall will pursue their doctorates online but the experience isn't all digital. They'll gather in a Waikīkī hotel for orientation, initial instructions and a chance to get acquainted with each other and instructors. Interaction will continue through topical discussion boards and informal, real-time chat rooms as they tackle lessons and library materials from home computers.

"Students now in the program seem very enthusiastic about it. They think it will make for a much more accessible program," says Lois Magnussen, interim associate dean of the School of Nursing and Dental Hygiene. In addition to accommodating work schedules and other constraints, online education allows international students to forgo student visas in favor of shorter, easier-to-obtain tourist visas for those segments requiring in-person attendance.

Magnussen hopes the online program will encourage more nurses to pursue doctoral training, both to conduct nurse-directed research and to boost the number of qualified instructors as demand for nurse training increases.

—Stacy Harada



**When fashion technology students visit Europe, the itinerary includes a lace school, glass and leather factories and the Piero Tucci handbag factory along with the Eiffel Tower and the leaning Tower of Pisa. Honolulu's summer tour included museums and monuments in Paris, Venice, Valdagno, Como, Milan, Pisa, Florence, Rome and the Vatican City. Design firm Valentino allowed a rare peek inside the secretive world of fashion houses, and students were able to "shop and shop and shop" at designer outlets, reports Assistant Professor Joy Ann Nagaue.**

### Online accounting master's offered

Students from Colorado to Taiwan are taking advantage of a new Internet-based master's degree offered by Mānoa's School of Accountancy. The program, which started in January, meets needs both at home and abroad. In the U.S., it trains public accountants to address federal reporting requirements increased in the wake of Enron and WorldCom scandals. It also makes the MAcc available to international students who find it harder to study in the United States under tightened Homeland Security procedures. Also available are prerequisite studies for students who lack a background or undergraduate degree in accounting. For information, visit [www.cba.hawaii.edu/IBMAcc](http://www.cba.hawaii.edu/IBMAcc).



### Young poets encouraged

The statewide Star Poets project gives voice to students in grades 3–12. A partnership between Windward Community College and Starbucks Coffee Hawai'i, the program publishes the work of young writers, provides cash awards to their schools and hosts winners like Maui fourth grader Alden Simmer, above, at a public reading and awards ceremony. "The students write about moments in their lives that matter to them. They care about their families and friends and the state of the world," notes Windward professor and Star Poets coordinator Libby Young.

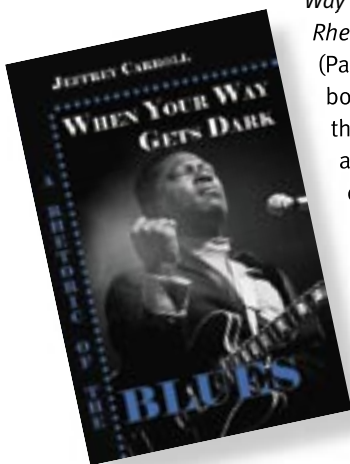
Entry forms for the seventh annual contest, winning 2005 poems and a Star Poets Poetry Resource Guide are available at Starbucks stores or [www.windward.hawaii.edu](http://www.windward.hawaii.edu). Young compiled the ideas for teaching poetry to K–12 students and distributed copies to school libraries using a \$10,000 Starbucks Foundation grant. For information, contact Young at 808 235-7396 or [libby@hawaii.edu](mailto:libby@hawaii.edu).

### Student linguists honored

A student organized project to help native speakers document their own languages won the 2005 Partners in Excellence award from the Test of English as a Foreign Language and NAFLA: Association of International Educators. Mānoa Department of Linguistics graduate student volunteers teach language documentation techniques and issues to students who speak languages that have not been well documented.

### Book examines rhetoric of blues

While enjoying an Otis Rush show in Chicago in late 1994, long-time blues fan Jeffrey Carroll began to consider the performance from an English professor's point of view. A decade later, the result is *When Your Way Gets Dark: A Rhetoric of the Blues* (Parlor Press), a book that examines the musical form as an effective, consciously constructed style of language.



Drawing on a variety of contemporary scholars, essayists and theorists,

the Mānoa faculty member concludes that the blues defines a distinct cultural history and experience beyond the sensory pleasure it provides.

### Tuna stocks reevaluated

Pacific tuna stocks aren't as threatened as previously thought. A 2003 *Nature* paper based on partial data from Japan concluded that global stocks of the popular fishes would soon disappear. For an April 2005 paper in the same journal, scientists from Mānoa's Pelagic Fisheries Research Program and other agencies used widely accepted analysis methods to examine data on all of the main habitats of tropic tuna from all the major countries engaged in large-scale fishing. While some species are depleted, other populations are strong—critical data for regulatory decisions to be made by the Western and Central Pacific Tuna Commission, created by international treaty in late 2004 to manage fisheries across the Pacific.

### Killer caterpillar discovered

Caterpillars coexist with snails on every continent except Antarctica, but only in Hawai'i's rainforest have they developed a taste for hard-shelled snacks. Entomologist Daniel Rubinoff and graduate student William Haines described the newly discovered predator in the July 22 issue of *Science*. The caterpillar, which turns into a moth in the genus Native Hawaiian *Hyposmocoma*, uses its silk to bind a snail to the leaf on which the snail is resting. Wedging its cocoon next to or inside the snail's shell, it then stretches out from the cocoon to consume its meal. While a few other caterpillars dine on soft-bodied insects or ant brood, the snail diet marks a dramatic dietary divergence that could help explain how evolution functions.



### UH research enterprise grows

UH research activity continues to grow dramatically, according to two measures announced recently. Federal expenditures on research at the Mānoa campus reached \$143.6 million in 2003, an increase of 30 percent in one year, according to figures released by the National Science Foundation during the summer. Mānoa ranked 31st among the country's public universities for such expenditures. Meanwhile, the UH System's royalty income surpassed \$1 million in fiscal year 2005, marking the fifth year that revenue from the licensing of UH patents has increased.

### Bacteria and pottery counter dairy waste

Livestock operations add more pollutants to U.S. rivers, lakes and coastal waters than any other activity, and milk fats in dairy waste pose a particular challenge. At Mānoa's Waiale'e Research Station on O'ahu's North Shore, College of Tropical Agriculture and Human Resources researchers are demonstrating a bacteria-based system that works four times faster than conventional treatment and removes 90 percent of contaminants.

Awarded Best Plan Overall in the 2005 Social and Environmental Technology Inventors Challenge, the system employs two patent-pending technologies. In sealed, airless tanks, bacteria digest the organic waste, generating methane that can be used as fuel. In an aerated, open tank, bacteria trapped in highly porous pottery consume the remaining organic waste and convert ammonia to harmless nitrogen gas. Free of offensive odor, the remaining water is used to irrigate pasture for the dairy cows.



Researcher Liangjie Dong with pottery reactor at test site

A related process uses floating pottery reactors and their resident bacteria to clean waste-contaminated ponds. Together, the systems prevent excess nutrients from reaching the ocean. The Waiale'e demonstration system is a partnership of the U.S. Environmental Protection Agency, the Hawai'i Department of Health and CTAHR.

—Kathleen Vickers

## Contraceptives OK, processed meats questionable

Two new multiethnic cancer reports suggest oral contraceptives are OK but hot dogs should be consumed in moderation. In an ovarian cancer study now entering its 10th year, investigators found that use of low-dose oral contraceptives reduces risk of ovarian cancer—a benefit that appears to increase the longer women take birth control. Marc Goodman of the Cancer Research Center of Hawai'i said high calcium intake and dietary beta carotene may also provide some protection. Future work will focus on genetic factors.

In the second study, researchers found that people who consume the most processed and red meat have the highest risk of pancreatic cancer, perhaps due to preparation or preservation methods. Results are preliminary, stresses CRCH Etiology Program Director Laurence Kolonel, but playing it safe will do you a favor.

## Particle discoveries announced

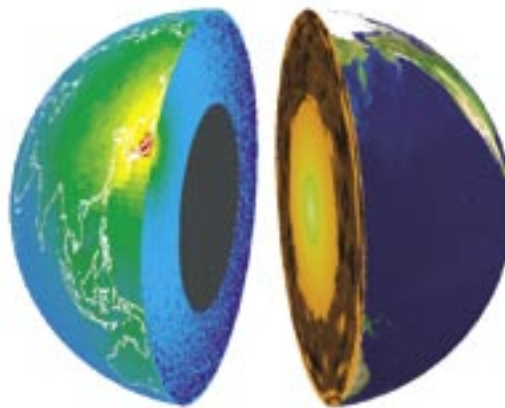
Mānoa high energy physics researchers recently helped positively identify the hypothesized anti-neutrino and discover an unexpected new particle called  $Y(3940)$ . The anti-neutrinos described in the July 28 issue of *Nature* are produced by decay of uranium and thorium, radioactive elements distributed at different depths within the Earth. Because anti-neutrinos travel great distances and only rarely interact with other matter, they provide a new tool in deciphering the geophysical formation and evolution of the planet, says John Learned, a member of the UH team that worked with international partners at Japan's KamLAND facility.

Another international team working on the Belle experiment at Japan's KEK High Energy Physics Laboratory reported the new  $Y(3940)$  particle in the May *Physical Review of Letters*. The short-lived subatomic particle may be a "hybrid meson," theorized to consist of a quark, antiquark and gluon, a particle that mediates the strong forces binding quarks together to form particles, says UH team leader Stephen Olsen.

UH has a long history of cutting edge work in high energy physics, including participation in the 1975 discovery of the top quark, one of six fundamental constituents of matter, now chronicled in *The Evidence for the Top Quark: Objectivity and Bias in Collaborative Experiments* (Cambridge University Press).

## China rain analysis aids global warming estimates


China's seasonal rainfall cycle has changed during the past 40 years—bringing increased rain to arid and semi-arid regions in the northwest, water shortages to heavily populated central and northern regions and more floods along the lower Yangtze River. Examining data from 500 rain-gauge stations, Mānoa Associate Professor of Meteorology Yuqing Wang and his student Li Zhou found that the precipitation trends correlate with changes in large-scale summer atmospheric circulation over Asia. Their findings, reported in *Geophysical Research Letters* show that atmospheric circulation models can be used to estimate the impact of global warming on precipitation trends.



**Princess Aiko is growing well and smelling sweet in Hawai'i. The Mānoa College of Tropical Agriculture and Human Resources' new, pink multi-purpose anthurium cultivar was developed in response to the floral industry's demand for fragrant anthuriums. Named in honor of the daughter of Japan's Crown Prince Naruhito and Crown Princess Masako, it will be marketed as "Imperial" in deference to that country's restriction on commercial references to the royal family. It is just one of several varieties recently released or in development for potted and cut flower markets.**

## More study needed on ethnic grandparent caregivers

Maintaining the family's culture appears to be an important role for grandparents who care for their grandchildren, but ethnic differences occur, say Merle Kataoka-Yahiro, Clementina Ceria-Ulep and Rick Caulfield of Mānoa's School of Nursing and Dental Hygiene. They summarized available studies in the *Journal of Pediatric Nursing* (Vol. 19 No. 5). African Americans were very satisfied with their care-giving role and did not dwell on the associated challenges. Hispanic grandparent caregivers (traditionally grandmothers) reflected strong helping networks within families and were affected by societal changes that impacted their well-being and health. The sole Asian American study involved Chinese grandparents who became substitute parents responsible for child care. With 6 million U.S. grandparents residing with grandchildren, healthcare providers need to integrate the cultural perspective of grandparent caregivers as well as health and social factors that can interfere with care-giving as they provide service to ethnic families.



**Scientists target a comet,  
literally, to better understand  
the solar system**

# DEEP IMPACT

by Cheryl Ernst

hydrogen-based) material and rocky grains. Trillions of them may exist in a disk of objects beyond Neptune called the Kuiper Belt and the giant Oort Cloud believed to surround our solar system. Some are nudged by the gravitational pull of other comets or planets into orbits that take them through the inner solar system as often as every three years or as rarely as once in hundreds of millennia. Warmed by the sun, they shed a trail of dust and gasses as much as millions of miles long.

It is this tail that makes some comets visible and, well, pretty, says Meech. As a graduate student in astronomy, a desire to spend her time observing something attractive coincided with the opportunity to work with a new comet expert on the Massachusetts Institute of Technology faculty. Highlights from her own remarkable career at UH's Institute for Astronomy include 1989 observations that proved the unusual object dubbed Chiron was indeed a comet, 1991 documentation of an outburst from Comet Halley long after it moved away from the sun and discovery that Halley loses about a meter's depth of material in every pass.

**Tempel-1 wasn't Meech's first choice** as an impact target. The mission to crash an impactor into a comet while a flyby craft looked on initially considered Phaethon. The asteroid had been well studied, and Meech and others who suspect it is a dead comet wondered if an impact could restart cometary activity by releasing trapped gasses. "We don't know what happens to comets," says Meech. "Do they become extinct when the core has no more ice or just turn off because a thick dusty layer insulates the core from heat?"

Phaethon's velocity made the mission riskier than a slower target, so scientists conducted hundreds of hours of observation on the understudy—its shape, shade, rotation speed, pole location and so on. Building the impactor and flyby craft also required compromises. Engineers demanded

**I**f you crash it, they will come. Thousands of people gathered at events across Hawai'i on July 3 to witness a spacecraft's suicide collision with Comet Tempel-1. Countless others followed events on cable TV or stole glances at the evening sky hoping to see signs of an explosion equivalent to five tons of TNT. Comet watchers beyond Earth's horizon connected to NASA's public Deep Impact website in unprecedented numbers, temporarily bringing the site down.

High atop the quickly darkening Mauna Kea summit, UH Mānoa Astronomer Karen Meech and UH NASA Astrobiology Institute postdoctoral researcher Audrey Delsanti stepped outside the IRTF observatory to see if the flash would be visible to the naked eye. Like the other watchers, they were unrewarded, but hardly disappointed. For Meech, who is anything but a casual observer, satisfaction goes far beyond being a part of scientific history. As a member of NASA's Deep Impact science team, she experienced the mission both as the culmination of 10 years of careful planning and the beginning of intense scientific scrutiny that promises to dramatically expand our knowledge of comets.

**What we do know about comets** is that they are big dirty snowballs. Generally small, with a nucleus just a half to a few miles in diameter, they are composed of primarily water and other ices as well as organic (i.e., carbon- and



navigational aids for last minute course adjustments. Astronomers insisted on using alternate materials for components. The impactor was predominantly made of copper because traditional aluminum would interact chemically as it vaporized on impact, interfering with data collection.

As it turned out, the SUV-sized flyby craft used so little

fuel on its trip to Tempel that it could be sent to another comet for a flyby or collision mission if astronomers (and public enthusiasm for Deep Impact) can convince NASA that it is worth the cost of the ground crew and antenna time.

Cost was the reason NASA opted for a kamikaze mission. Deep Impact cost \$333 million, compared to the billions of dollars required to land a working probe. Scientists can learn a surprising amount by studying the plume of debris exploded from the comet by the dishwasher-sized impactor's 23,000-mile-per-hour crash landing. One likened the mission to a geologists hammer, breaking through the weathered crust of a sample to look at the pristine material within. That's important because comets are believed to be the bits leftover when planets formed from the dust and debris surrounding a young Sun 4.5 billion years ago. Preserved in a distant deep freeze, they amount to a historical record of the early solar system.

**"We don't know what's inside.** Is it dense or fluffy?" says Meech. How thick and strong are the core and outer layers and how do they interact? What structure does the ice take, and is it all H<sub>2</sub>O or also carbon monoxide and carbon dioxide? One intriguing question is whether comets could have delivered water to a parched early Earth and, with it, the organic compounds needed to produce life. Comparing

Continued on next page

### UH astronomer earns worldwide acclaim

**M**ānoa astronomer David Jewitt is on a roll this year. He was elected to both the National Academy of Sciences and American Academy of Arts and Sciences and earned international recognition for discovery of 12 new moons orbiting Saturn—all within two weeks' time. Jewitt attributes his success to the UH Institute for Astronomy, which he joined in 1988. "The institute is undoubtedly one of the best places in the world to be an observational astronomer," he says. "You can't beat the fantastic astronomical facilities we have in Hawai'i." 1992 co-discoverer of the comet-filled Kuiper Belt, Jewitt's team observed the new satellites orbiting Saturn in detailed surveys using two Mauna Kea telescopes.

### In other recent space news from UH

**Many young, Sun-like stars** in the Orion Nebula are surrounded by enough orbiting dust and other material to form



markers  
and con-  
centra-  
tions in  
the chemical  
make up of  
Earth and comets  
could yield clues.

Oh, and then

there's that practical matter of gaining information that may help should a comet or asteroid threaten Earth. IfA's David Tholen works on the near-Earth asteroid hazard. "We really don't know how an asteroid will respond to being pushed," he says. "Will it move like a brick, or will it deform like a pillow? The answer has important implications for how we deflect an object on a collision course."

(Deep Impact is expected to slow the comet's velocity by just .0001 millimeter per second and shift it a whisker 10 meters closer to the Sun—good news for those worried that the collision could send Tempel-1 tumbling Earthward, but sobering to those calculating the force needed to counter a real threat.)

Tholen and postdoctoral colleague Yanga Fernandez provided images and precise measurements that helped accurately predict the time of impact. Others at IfA used Mauna Kea telescopes to monitor the impact—Schelte "Bobby" Bus conducting a six-week study of the composition and temperature of dust and gas from the interior of the comet at NASA's Infrared Telescope Facility, Klaus Hodapp using a new instrument on the UH 2.2 meter to gauge whether the nucleus is chemically uniform and Richard Wainscoat employing a high-speed imaging camera on the UH .6-meter to understand the physics of impact and evolution of dust flowing from the nucleus.



**Comet expert Karen Meech will talk about Deep Impact in a Frontiers of Astronomy Community Lecture, 7 p.m. Sept. 22 at Mānoa's Architecture Auditorium**

**F**or the first time in modern astronomy, virtually every professional telescope was trained on the same event. For 800 precious seconds following the impact, the flyby craft recorded the plume. Space based instruments, including the Spitzer Infrared telescope, Chandra X-ray observatory and Hubble Space Telescope, collected spectroscopic, ultraviolet, microwave and other readings. From IRTF's control room, Meech coordinated a network of

Continued on page 30

a planetary system like our own. Data from Mauna Kea's newest telescope, the Submillimeter Array, suggest that formation of solar systems is a common and continuing event in the Milky Way galaxy, according to IfA's Jonathan Williams and colleagues.

**Super-massive black holes** a hundred-million times the mass of our Sun appear to have gorged on surrounding material and stopped growing when the fuel ran out billions of years ago. Meanwhile, smaller black holes continue to grow slowly and steadily, Amy Barger and IfA colleagues reported in the February issue of *Astronomical Journal*.

**Calcium-aluminum-rich inclusions (CAIs)** are widely believed to be the oldest solids formed in the early solar system 4.567 million years ago. If so, how could some of them contain younger crystal aggregates called chondrules? Alexander Krot of Mānoa's Hawai'i Institute of Geophysics and Planetology and colleagues suggest an answer in the April 21 issue of *Nature*. Electron microscopy and electron and ion microanalysis of samples from the chondrite meteorite Allende suggest that the chondrules were added during a reheating and melting of the CAIs about 2 million years after the CAIs first formed.

**In the cover story** of the June issue of *Geology*, Mānoa's Victoria Hamilton and an Arizona colleague report that an ancient region of olivine-rich rocks near one of Mars' largest volcanoes is four times larger than previously estimated. Because the mineral olivine can weather rapidly when exposed to water, the findings may help determine where and how much water was once present. A subsequent *Nature* paper on the global distribution of rock types on Mars describes the planet as more mineralogically diverse than previously thought. Infrared data suggests Mars is more Earth-like in terms of its igneous rock types even though it lacks plate tectonics, a major process for producing evolved rocks on Earth.

**Nearly \$3 million in grants** from NASA and the W. M. Keck Foundation will support creation of a new cosmochemistry laboratory in Mānoa's Hawai'i Institute of Geophysics and Planetology. Newly recruited scientists Gary Huss and Kazuhide Nagashima will join UH meteorite and planetary experts in using an ion microprobe to help interpret remotely-sensed data and analyze meteorite samples, lunar rocks, cosmic grains and comet dust.

**Alumnus Chad Trujillo** (PhD '00 Mānoa) was part of the team that discovered what they believe to be the 10th planet, a Kuiper Belt object larger than Pluto. Release of the name is pending International Astronomical Union acceptance of the discovery.

—Arlene Abiang and Cheryl Ernst



## Sports psychology helps competitors skate to a win

by John Burnett

# Creating Champions

In the film *The Natural*, unknown 35-year-old rookie Roy Hobbs crushes pitch after pitch deep into the stands during his first batting practice with the New York Knights. Coach Red Blow exults, “better late than never,” causing club manager Pop Fisher to retort, “Red, this is practice!”

Despite the axiom “practice makes perfect,” baseball has long had its share of “5 o’clock heroes”—guys who consistently clout the long ball in batting practice, but when the game rolls around, are more likely to strike out or pop up in a critical situation. The national pastime also has a term to describe a player who performs his best when the contest is on the line: “gamer.”

Sports psychologist Harald Barkhoff calls 5 o’clock heroes “training champions,” and he is building a reputation for turning them into “competitor types,” his term for gamers.

Barkhoff is an assistant professor of health and physical education at UH Hilo and a former national-class artistic roller skater in his native Germany. The German Artistic Roller Skating Federation tapped him to help two skaters on the German national team prepare for the November Artistic

Roller Skating World Championships in Fresno, Calif.

Both skaters became world champions. “It’s the first time in I don’t know how many years that both of the world champions, female and male, were German,” says Barkhoff. “That was pretty exciting.”

Working with UH Mānoa psychologist Elaine M. Heiby, Barkhoff used a technique he calls “psychological intervention” with skaters Frank Albiez and Nathalie Heinz. They described the methodology in the March 2004 issue of *Athletic Insight: The Online Journal of Sports Psychology*, examining differences in self-concept and mood between training champions and competitor types.

“Our approach is to first observe that phenomenon and then try to modify that behavior with the proper program,” he says. “We tried a very simple thing—find out what kind of things annoy them in training, such as noise, and let them work under these harder circumstances.” After dealing with extra obstacles in practice, athletes are better able to cope with the pressures of a world championship. “We adjust the circumstances so they have to find a way to cope with mental obstacles. They work very hard on that.”

To obtain daily input from their subjects on training and other factors, Barkhoff and Heiby turned to a technology indispensable to most young people, cell phones. “Every night, they received a text message questionnaire to fill out about how their training went—including how their mood was, how they got along with their friends and with their coach,” Barkhoff explains. “In itself, that is kind of an intervention, because you are forced to reflect on your day.”

Barkhoff directed undergraduate students in analyzing such data. “We found, for example, that highly correlated were factors like performance and mood.” Developing a profile of the athletes’ optimal emotional states gives a coach meaningful information to help them get into that state before competition.

The catch is that the optimal emotional state varies from athlete to athlete.

“Everyone is different,” Barkhoff explains. “Some need to be totally rested. Some need to be almost over-aroused. There are very individual differences, and we have to find them out, which takes a long time and a lot of data. We made our findings after a year or two and incorporated them into this program. And I think, to some degree, it worked. At least the results are pretty good.”

For Albiez, 25, who had an unfortunate reputation for



Harald Barkhoff

Continued on page 30



# Huang is Diving to Win

## Qionglie Huang's gymnastic coach was right.

Seventeen years ago, he told the then 7-year-old Wenzhou, China, native that she wouldn't go far in gymnastics. He suggested she try diving instead. Last spring, Huang, now a senior at Mānoa, captured the 1-meter springboard NCAA championship at Purdue University's Boilermaker Aquatic Center. Huang's 327.00-point total broke a pool record.

"It's always nervous when you compete," the four-time All-American says. "But if you don't compete for a

while, actually you miss the feeling of standing on the board."

In competition, Huang combines years of training and natural ability with an intensity that can be intimidating. "People said if they didn't know me, they wouldn't talk to me because my face was very scary," she laughs.

Diving coaches Mike Brown and Anita Rossing are impressed with Huang's focus and diving intuition. "She knows a great deal about her own diving," says Brown. "Not all divers are as tuned into their own diving as she is. She'll do the dive and she'll know what correction needs to be made without much comment. When you coach a Buddhist, it's best to do nothing."

Although the 2008 Olympics will be in Beijing, Huang does not expect to compete. "I don't have a chance to represent the Chinese team because they have such a strong team," she says. "They already have the people they want." The years she spent outside the Chinese system—Huang has been at Mānoa since completing one year at University of Electronic Science and Technology in Zhejiang province—make it hard for her to get a spot on the team. "I just want to go and be a part of it with my country."

She may be philosophical, but Brown and Rossing are hopeful. Huang is ready for the highest level of international competition, they say. "You never know," Rossing speculates, "if she goes back and does well in their competitions, or gets back into their system..."

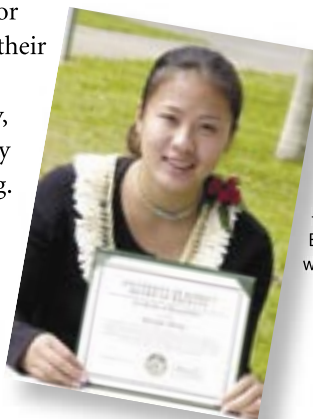
Either way, Huang is happy with her diving. "I like diving right now," she says. "It's

something that's part of your life, you get on the board and it makes you feel better." ☺

## Other 2004–05 Student Standouts

- \* **Blaine Murakami** is the third Mānoa engineering student in five years to receive the Alton B. Zerby and Carl T. Koerner Outstanding Electrical and Computer Engineering Student Award—top honors from national engineering society Eta Kappa Nu. Murakami, who graduated in May with professional publications, a patent-pending invention and an award winning communication technology business plan to his credit, is working in industry before pursuing a graduate degree.
- \* Single mother, UH Presidential Scholar and Maui Community College graduate **Krista Jo Dusek** was a *USA Today* Academic All American and received one of 25 national Jack Kent Cooke Scholarships worth up to \$30,000 a year to continue her education.
- \* UH Hilo political science major **Mark Farrell** received \$30,000 for graduate study as one of the country's 75 Truman Foundation Scholars for 2005.
- \* Guam native and UH Mānoa marine biology student **Aja Reyes** won one of 80 Morris K. Udall Foundation Scholarships and one of two U.S. Coral Reef Task Force summer conservation internships.
- \* New Caledonian **Pierre-Henri Soero** was the first UH Mānoa golfer to compete in the U.S. Open golf tournament.
- \* Law students **Ranae Doser**, **Christopher Terry** and **Jennifer Tsou** won Best Memorial Brief in last fall's International Environmental Moot Court competition.
- \* Mānoa libero **Alfred Reft** was named the nation's best defensive player by ASICS/Volleyball magazine.

— by Heidi Sakuma (BA, BA '04 Mānoa), an External Affairs and University Relations student writer and Mānoa graduate student in English



Visiting chefs and hands-on learning help create

# Tomorrow's Culinary Stars

by Jeela Ongley

Photo by Anthony Martinez

**C**hefs-in-training huddle nervously around the outskirts of the 'Ōhia Building at Kapi'olani Community College, looking slightly haggard but alert as they talk in low voices. Some of them have been up for over 36 hours—slicing, dicing, roasting, braising, glazing and otherwise prepping their entries for their 6 a.m. presentation in the Hawai'i State Student Culinary Exposition. Now they watch anxiously as white-coated judges inspect their comestible creations.

As a culinary salon, the expo allows students to compete individually or in teams for top honors in a variety of categories that allow them to show off their skills and creativity. More than 62 participants have come from across the state to compete in the spring 2005 event, including community college students from the Kapi'olani, Hawai'i and Kaua'i campuses and high school students from Farrington and Konawaena.

For Sonny Acosta, a Farrington graduate and second-year student in the Culinary Institute of the Pacific at Kapi'olani, being tired is just the beginning. He has been practicing his entry at least once a week for a month before the salon and every day on the week of the salon. The hard work pays off. His dish of crispy kalikali rolls with a star anise burre blanc, vine-ripened tomato seaweed compote, braised hon shimeji and ali'i mushrooms with tako-yaki

**Famous or not, CIP alumni will shape the way Hawai'i dines**

style scallion popovers won the hot food contest and earned him a weeklong internship with Master Chef Hiroyuki Sakai, the "Iron Chef" of Food Network fame. Chef Sakai also lent his considerable charisma to a standing-room-only cooking presentation in the stage-like demonstration kitchen on the ground floor of the building.

Upstairs in the cafeteria, rows of tables covered in white tablecloths form a maze of eye-popping culinary presentations. Unlike the hot foods competition, judging in this part of the salon is based not on taste, but rather the intricate details of presentation. A cake that looks almost exactly like a bonsai tree causes double takes while sugar sculpted into an unbelievable bouquet of tropical flowers looks good enough to lick.

Unfortunately, this is not Willy Wonka's factory. The rainbow-colored sweets have all been glazed and are inedible—a feast for the eyes only, some weeks in the making.

In contrast, back-to-school mom and Kapi'olani student Dorothy Colby wins recognition in a timed vegetable-carving contest, with onlookers watching as onions bloom into flowers and cantaloupe becomes a serrated bowl in which to present more fruits and vegetables. Colby has found new energy career-wise as she moves from nonprofit management into the culinary arts. Like many non-traditional students, she has a clear yet evolving picture of where she wants to be.



Maui's new Pa'ina Culinary Arts Center

Photo by Anthony Martinez

"I entered the program planning to do personal chef work and teach children and families cooking. As soon as I entered the program, I was lucky and found some work in that area, teaching children's cooking at the Richard Street YWCA," she explains. "My actual specialty will be not so much a certain type of cuisine, but working with families with special needs, working with members who are disabled or elderly, to find out what they like. This may mean I recreate something from their youth to provide comforting, home-style food or meet special needs regarding food textures and chewing."

While *Pacific Business News* last May asserted that "Hawaiian cuisine is increasingly led by KCC graduates," alumni of the six other Culinary Institute of the Pacific programs—at Leeward, Kaua'i, Hawai'i and Maui campuses; the UH Center in West Hawai'i and the Employment Training Center at Windward—also are making inroads into the industry.

"They're all famous to me," responds Kaua'i Community College culinary instructor Clarence Nishi when asked about star chefs from his program. Few who take UH culinary classes will become household names à la Alan Wong, but all play an important role in the state's economy.

"We want to ensure that student learning outcomes meet industry expectations and needs to perpetuate Hawai'i's reputation as a great dining destination," explains CIP Director Conrad Nonaka. "We also have a role in perpetuating culinary arts as an economic force in the local and global community."

To that end, the CIP Leeward facilities recently got a \$3.4 million makeover, doubling the size of the kitchen and

tripling the size of the bake shop, and the program is ready to expand. On the Windward side of O'ahu, students from high-risk populations can get their foot in the door of a culinary career via the 17-week CIP program at ETC while earning credits toward their high school diploma.

At the CIP on Maui, new \$17 million dollar facilities span nearly 38,000 square feet in a two-story structure that includes nine kitchens, six quick-serve outlets and The Class Act, an upscale, full-service restaurant staffed by students and similar to Ka 'Ikena at Kapi'olani or The Pearl at Leeward.

"The culinary industry, through the leadership of the Hawai'i Regional Chefs, has grown in size, quality and sophistication," says Interim Vice President for Community Colleges John Morton. Culinary programs of the UH community colleges are tailored to accommodate this growth.

Although the groundbreaking is at least two years away, plans are moving forward for an advanced culinary training center at the Cannon Club at Diamond Head, which would offer the only four-year culinary degrees in the state. (Mānoa offers bachelor's and master's degrees in hospitality, but they are focused on restaurant and food service management.) "The advanced training programs planned for the Cannon Club site are designed to continue local industry growth and also serve as an attraction to those from outside Hawai'i, both in North America and Asia, who wish to learn the techniques of east-west fusion that is Hawai'i regional cuisine," says Morton.

"Hawai'i students who want advanced culinary training currently have to leave the state," adds CIP Director Nonaka. The target population for advanced training includes stu-

## The expo features culinary creativity, preparation skills and food as art

dents from all seven UH culinary training programs and former students now working in industry as well as out-of-state students who want specialty training.

With such ambitious plans, fundraising and innovation are always top of mind for CIP units. Several programs have an annual fundraiser, often featuring gourmet foods and celebrity chefs. All participate in product sales and special events, including fairs, markets and competitions to raise money and awareness.

“We have a very dedicated staff that is willing to get involved in almost every food event on Maui,” CIP Maui Director Bobby Santos says proudly. “We have been active participants in the famous Kapalua Wine and Food Festival, Taste of Lahaina, Taste of Wailea, Maui Calls, the Terry Fox Run event at the Four Seasons Wailea and Maui Academy of Performing Arts Garden Party.”

Another kind of community focus drives the Maui Culinary Academy Research and Development Center. Second-year student Bryson Ching has worked with Chris Speere and Teresa Shurilla for more than a year in product research, testing and tasting to develop tasty pastries with sugar alternatives. His sugar-free strawberry and blueberry shortcake recipe won HMSA’s 5-A-Day contest, and the team produced E Hele Mai ‘Ai, a video series that shares healthy ways to prepare locally grown foods.

A Native Hawaiian afflicted with diabetes, Ching is almost shy until he starts talking about the sugar-free initiative. “Sugar plays a main role in baking. It influences color, crispiness, tenderness; it makes cakes rise. It is hard to make sugar-free stuff that doesn’t taste like rubber or like crap,” he says with a laugh. “Synthetic sugars like Splenda don’t hold up in high heat.

Xylitol holds up well, and has a lot of other benefits, so that is what we use in the oat cakes we make and sell.” His main goal is “to let other diabetics enjoy what they are missing.”

Try Ching’s sugar-free oat cakes on campus in the Pa’ina facility or weekly Aloha Friday Farmer’s Market. Another place people can taste the work of UH culinary students is at the new John A. Burns School of Medicine building in Kaka’ako, where apprentice chefs from Kapi’olani run the cafeteria.

From resorts to nursing homes, fine dining establishments to edgy start-ups, students of the UH community colleges are influencing the way Hawai’i eats, today and in the future. ④

Jeela Ongley (BA ’97 Mānoa) is web content coordinator in External Affairs and University Relations



**Bryson Ching**

## UH Culinary Programs

### Hawai’i

**Programs:** certificate and AAS in food service

**Public dining:** cafeteria

**Contact:** 808 974-7611

200 West Kāwili Street, Hilo, HI 96720-4091  
hawccinf@hawaii.edu

### Kapi’olani

**Programs:** certificate and AS in culinary arts and patisserie

**Public dining:** Ka ‘Ikena fine dining (lunch and dinner), Saturday farmer’s market, cafeteria

**Major fundraiser:** Ho’okipa, Royal Hawaiian Hotel, Oct. 8

**Contact:** 808 734-9466

‘Ōhelo 125, 4303 Diamond Head Road, Honolulu, HI 96816  
culinary@hawaii.edu; <http://programs.kcc.hawaii.edu/fshe/>

### Kaua’i

**Programs:** certificate in food service, certificate and AAS in culinary arts

**Public dining:** lunch service

**Major Fundraiser:** Spring Gourmet Gala at the school, Apr. 14

**Contact:** 808 245-8311

3-1901 Kaumuali’i Highway, Līhue, HI 96766  
[http://kauai.hawaii.edu/program\\_desc/business/culinary.htm](http://kauai.hawaii.edu/program_desc/business/culinary.htm)

### Leeward

**Programs:** certificate and AAS in food service

**Public dining:** cafeteria, The Pearl fine-dining restaurant (open for lunch Wednesday–Friday)

**Major Fundraiser:** Taste of the Stars at the school, May 6

**Contact:** 808 455-0011

96-045 Ala ‘Ike, Pearl City, HI 96782  
tlbenave@hawaii.edu  
<http://emedia.leeward.hawaii.edu/foodservice>

### Maui

**Programs:** certificate and AAS in culinary arts and baking, AAS in restaurant supervision

**Public dining:** Class Act restaurant and exhibition kitchen, food court with six quick-serve outlets

**Major fundraiser:** Nobel Grape and Kea Lani Dinner, April

**Contact:** 808 984-3225

310 W. Ka’ahumanu Ave., Kahului, HI 96732  
[www.maui.hawaii.edu/mca](http://www.maui.hawaii.edu/mca)

### UH Center in West Hawai’i

**Program:** certificate and AAS in food service

**Public dining:** kitchen extension dining room open a couple days a week

**Contact:** 808 322-4850, 322-4856 (admission and advising)

81-964 Haleki’i St., Kealahakua, HI 96750  
uhcwh@hawaii.edu

### ETC at Windward

**Program:** introduction to culinary arts

**Public dining:** cafeteria

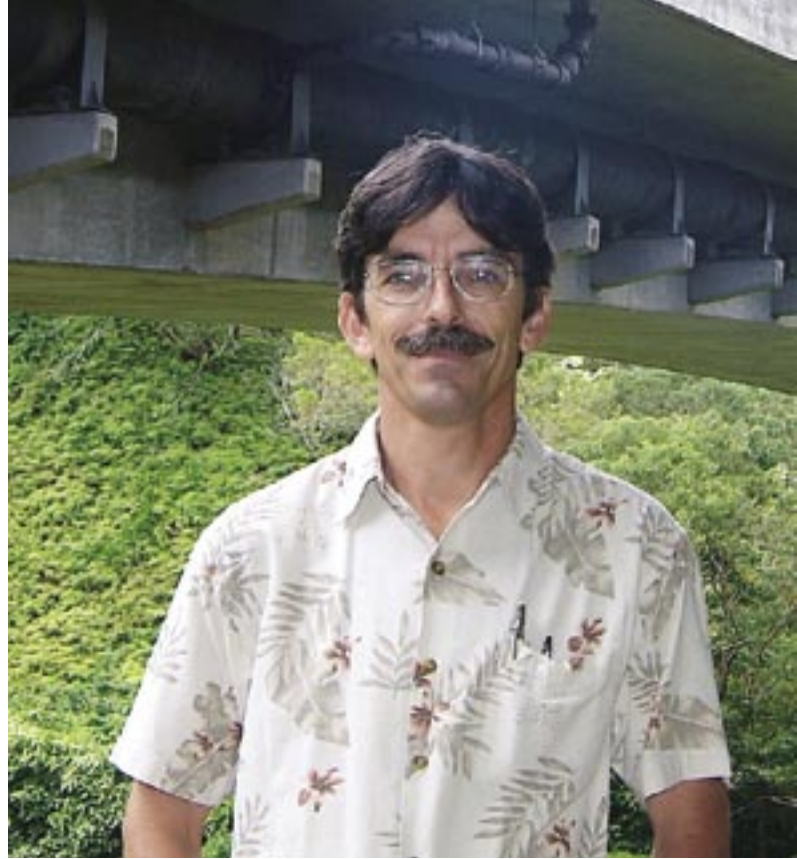
**Contact:** 808 844-2365

45-720 Kea’ahala Rd., Kāne’ohe, HI 96744  
etcinfo@hawaii.edu

New materials and monitoring techniques are

# Keeping our bridges safe

by Jennifer Crites



Whether traversing picturesque one-lane stream-crossings along the Hāna Highway or freeway overpasses in Honolulu, most of us trust the bridge we're on will do its job and support us. That's not always the case. In 1989, a 15-second California earthquake caused the Oakland Bay Bridge to collapse. In 2000, more than 50 people were hospitalized after an 80-foot section of bridge connecting a North Carolina NASCAR racetrack to its parking structure snapped, dropping event-goers onto U.S. Highway 29. And on July 2, 2005, a 35-year-old Oregon bridge crumbled, plunging a tow-truck driver 75 feet into the river below.

UH Mānoa Professor of Civil and Environmental Engineering Ian Robertson has been working with Hawai'i's Department of Transportation and the Federal Highway Administration to monitor bridge performance and develop

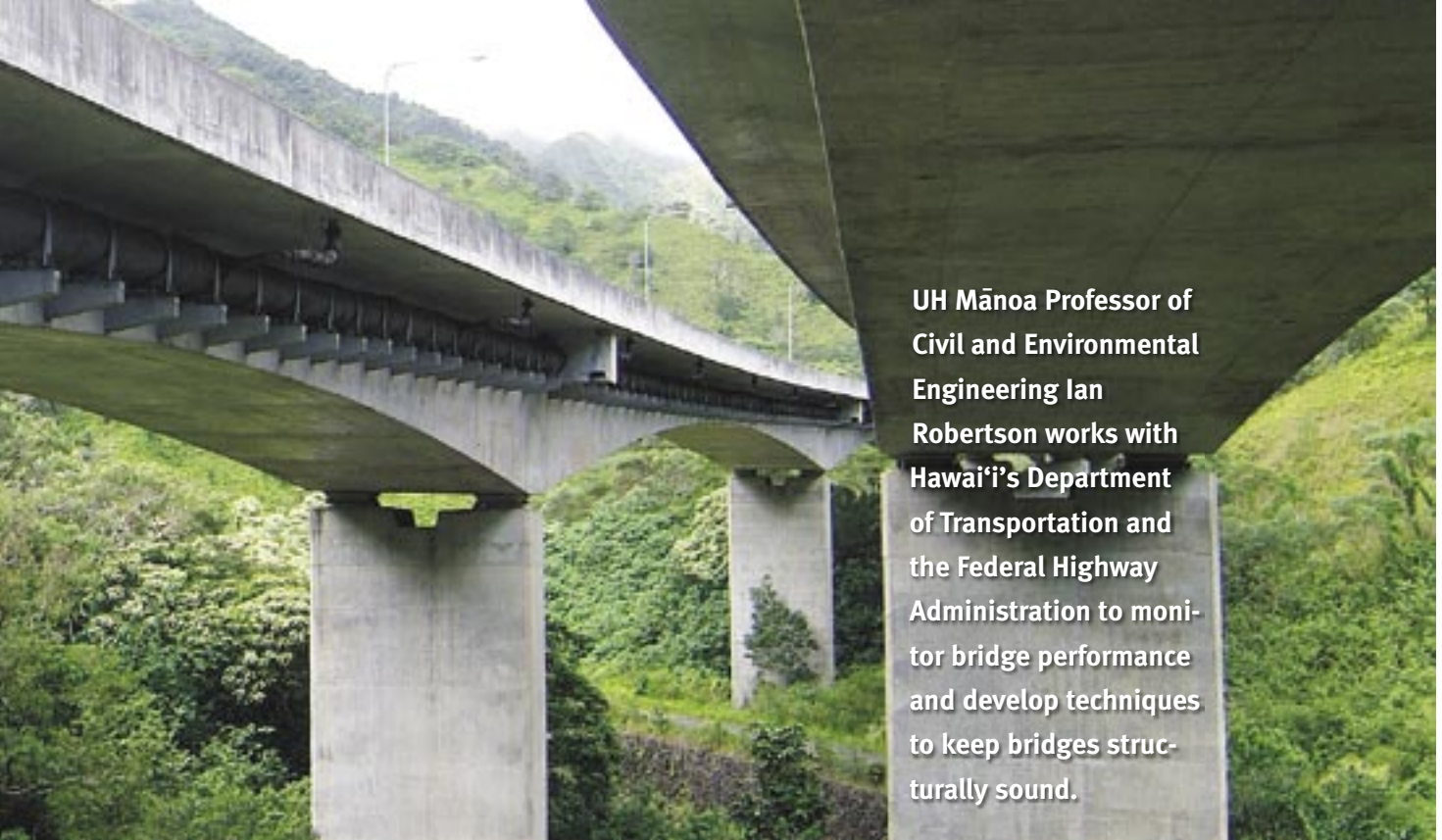
techniques to keep bridges structurally sound. Bridges face a number of environmental hazards, which Robertson and his colleagues and students address in the department's structures laboratory. Don't look for test tubes. In this lab a cement mixer stands at the ready; ovens bake asphalt, stone, sand and cement; a band saw slices through steel rods; and slabs of concrete endure various ordeals.

In one procedure, black mesh made of carbon fiber is glued to concrete beams, which are placed in a machine dubbed "the rack." The device grabs onto both ends of the fiber-bonded concrete and applies up to 55,000 pounds of tension to pull it apart. "Attaching carbon fiber stirrups increases a concrete beam's strength and resistance to cracks. We're testing to determine at what point the fiber detaches from the concrete," explains Robertson. Working with colleagues and the City and County of Honolulu, he plans to use carbon fiber to repair shear cracks in an O'ahu bridge.

In the basement, blocks of con-

crete have been exposed to salt water and drying cycles for six years, waiting for the steel rebar inside to corrode (a factor in the North Carolina bridge collapse and always a possibility in Hawai'i's salt-air environment). "Now that corrosion has started in the control specimens, we can take core samples and measure the concentration of chlorides, which initiate corrosion," says Robertson. He'll also check changes in the concrete's normally high pH level—a factor that protects against corrosion. Other blocks in the test have not yet corroded because they've been chemically reinforced with different aggregates or fly ash, a fine dust that fills gaps in concrete.

In 1994 the highway administration and state DOT asked Robertson to monitor H3's North Hālawā Valley Viaduct to determine its performance over time. "Concrete moves," notes Robertson. "It shrinks as it dries. Daytime heat and nighttime cooling cause expansion and contraction. When you squeeze it (with weight or pressure from embedded prestressed



**UH Mānoa Professor of Civil and Environmental Engineering Ian Robertson works with Hawai'i's Department of Transportation and the Federal Highway Administration to monitor bridge performance and develop techniques to keep bridges structurally sound.**

steel rebar), it shortens, just as a sponge does.” In conjunction with computer modeling, Robertson installed instruments that measured the concrete’s strain and stress, as well as the deflection, or movement, of the bridge. The 10-year study showed that the bridge had been well designed for Hawai’i’s environment. “Safety,” he emphasizes, “is looking at long-term performance to verify that a structure is not behaving unexpectedly.”

On the Big Island’s Hāmākua Coast, Robertson plans to conduct more long-term tests and seismic monitoring. “When the bridges along this coast were built in the early to mid 1900s, designers didn’t accommodate adequately for ground shaking from earthquakes,” he says. In recent years DOT has seismically strengthened or retrofitted most of the bridges. One, the Kealakaha Stream Bridge, is slated for a complete rebuild. To monitor the new structure, Robertson will install electrical-resistance and fiber-optic strain gauges as well as accelerometers to monitor shaking in both the

bridge and surrounding soil. “After an earthquake,” he says, “we can analyze all the readings and recreate exactly what happened to the bridge during the earthquake. This will be the first bridge in Hawai’i instrumented for earthquake monitoring.”

Seismic activity can create some unusual problems. “If you shake soil that is saturated, which is often the case around bridges over rivers, firm soil becomes liquid,” explains Robertson. “If soil under a bridge foundation liquefies, you lose support for the bridge.”


Associate Professor Peter Nicholson is addressing this problem, mapping the potential for liquefaction under bridges and other island structures.

Associate Professor Michelle Teng employs sonar to chart scour—the amount of riverbed washed away during a flood, which weakens support around bridge piers. Underwater transmitters send signals to the riverbed every 15 minutes and data loggers record the signals’ bounce-back time to monitor changes in depth. “If scouring becomes too serious, officials can close

## **Bridging the ages: architecture classes document historic structures**

**M**ānoa Professor of Architecture A. Spencer Leineweber and her students ford rivers, climb into gorges and cross every old bridge in their hunt for historic bridges. “We’ve looked at more than 1,800, all built before 1959—statehood,” she says. “We’re doing research for the state Department of Transportation to determine which bridges are important to the history of Hawai’i.” Some may be eligible for inclusion on the National Register of Historic Places and, consequently, for repair funding.


Director of the school’s Heritage Center, Leineweber looks at criteria developed for the National Register to classify a bridge as historic: was it built



In the quest for better bridge materials, graduate student Bhavna Sharma tests the delamination of carbon fiber reinforced polymer that has been bonded to the surface of a concrete specimen

the bridge for public safety,” says Teng. For lack of real data, engineers have had to rely on equations developed from lab experiments under idealized conditions in designing foundations to extend below scour depth, she adds. “We’re collecting that data.”

According to the U.S. Department of Transportation’s 2004 National Bridge Inventory, one-third of Hawai‘i’s 1,099 bridges are functionally obsolete and 14 percent are structurally deficient. The numbers don’t tell the whole story, however. Hawai‘i’s historic bridges fall into the former category because their narrow lanes and other features don’t meet current highway design standards, but communities insist on keeping historic designs intact. Are these old bridges safe?

“A number of years ago, with funds from Federal Highways, the state started retrofitting a lot of bridges,” Robertson says. “There is continuing repair, too, but Hawai‘i’s bridges have performed well because the state and counties did a good job of constructing them in the first place.” That’s something Hawai‘i drivers can rely on. 

Jennifer Crites (AA '90 Windward, BA '92 UHWO) is an author and freelance writer/photographer in Honolulu

by a well-known designer, has its integrity (original materials, design and construction) been maintained, was the construction technique innovative for its time, did the bridge influence development or important changes to the island?

The dozens of bridges holding up the Pali and Likelike Highways may be important, she says, “because those two roads were built at about the same time and were a major factor in the development of the Windward side. “The importance of a specific item may vary because of the time period,” she explains. “In the postwar period, developing ways to build bridges efficiently and effectively in concrete was important, while earlier bridges were steel or wood.”

Two Hawai‘i bridges are already included on the National Register—O‘ahu’s concrete arched Hale‘iwa bridge and Kaua‘i’s Hanalei Bridge, originally constructed in steel (1912) and then modified in steel (1960 and 2003) to preserve original features.

With fieldwork and research completed, Leineweber will meet with DOT’s Historic Bridge Committee to refine the listings and make final recommendations to the Hawai‘i Historic Places Review Board.

—Jennifer Crites



# Defeating Diabetes

by Janine Tully

---

**Type 1** diabetes is an autoimmune disorder that mostly strikes in childhood. For reasons unknown—scientists believe genetic and environmental factors play a role—the immune system destroys insulin-producing beta cells in the pancreas. Symptoms include increased thirst, frequent urination, constant hunger, weight loss, blurred vision and extreme fatigue. People with type 1 diabetes must take insulin shots to live.

**Type 2** diabetes results when the pancreas produces too little insulin or the cells do not absorb it, a condition called insulin-resistance. It occurs mostly in people over 40, although the number of children diagnosed with type 2 diabetes has increased significantly. The Pacific Health Research Institute reports there are 50 new cases annually in Hawai‘i. Healthcare professionals say obesity is a major culprit.

Despite public awareness, improved diagnosis and treatment and new drugs, diabetes afflicts nearly 18 million people in this country and costs us billions of dollars a year. In Hawai‘i, the state Department of Health estimates that 100,000 people have diabetes, 25,000 of them undiagnosed. “Without better ideas for intervention, diabetes could become the major U.S. health issue,” says UH Hilo Professor of Anthropology Daniel Brown.



**Jane Kadohiro is confident** diabetes will be beaten. “That’s why it’s very important that people take care of themselves—so they are around when there is a cure,” the Mānoa assistant professor of nursing says. Diagnosed with type 1 diabetes at age 8 half a century ago, she has firsthand reason for optimism. “I know I should have died probably a long time ago,” she says frankly. “Diagnosed in the era I was, statistics were against me. Treatment was in its infancy. So it’s like, OK Lord, maybe you have kept

## Health lifestyles: education programs promotes exercise and healthy food choices to prevent and deal with diabetes

me here for a reason.”

Kadohiro travels up to five or six times a year around the world, spreading a message of hope, perseverance and self-management. Every day, she tests her sugar levels four to six times and takes five insulin shots. “People don’t understand that when you live with diabetes you have to make many decisions throughout the day. You have to adjust your insulin, take your meds, watch what you eat, exercise. That’s not easy.”

She’s not alone. Experts call diabetes a worldwide epidemic. “While the largest increases are in type 2, there is also a global increase in type 1,” Kadohiro observes. Investigators have identified factors that may contribute to diabetes—obesity, family history and behavioral patterns. Still, they are at a loss as to why some people, including Native Hawaiians, are more prone to diabetes than others, says Margaret West, a research associate in the John A. Burns School of Medicine’s Department of Native Hawaiian Health.

Anthropologist Brown has studied obesity in children for two decades, most recently under a five-year, \$4 million NIH grant. While he found that Native Hawaiians children are significantly heavier than their classmates,

genealogical studies show that children with high percentages of Hawaiian ancestry are not fatter (on average) than classmates with less Hawaiian ancestry. “This suggests that genetics is, perhaps, not as important as social factors in determining risks for being overweight,” Brown says.

He also observed that Native Hawaiian children with high percentages of Hawaiian ancestry exhibit more fat around their stomachs than other children. “We suspect that Hawaiians have a tendency to place excess fat on their abdominal areas, and that this increases their diabetes risk. In general, metabolically active fat (present in abdominal areas) causes more health risk because the fat gets into the blood more easily.”

**“Health disparities” is the term** experts use to describe ethnic differences in disease rates and outcomes. “While we know the basics of treatments for both types of diabetes, it is critical that we individualize treatment and address cultural and social issues in the population with which we are working,” says Kadohiro.

Health disparity is a complex process involving many variables, including socio-economic factors, says

## Current UH projects related to diabetes research

**Nerve damage** Autonomic neuropathy (nerve damage) often accompanies diabetes and leads to amputations or blindness. Researchers aren’t sure why, but they suspect insulin may play a role independent of high blood sugar. The Kohala Health Research Study indicates that while diabetes is as common among people of Asian ancestry as among Hawaiians and part-Hawaiians, the prevalence of excess weight and body fat distribution differs significantly, as does insulin levels. “This indicates to us that insulin resistance may have differing importance in the cause of heart disease, diabetes and diabetes complications,” says Andrew Grandinetti, associate specialist with Mānoa’s Pacific Biosciences Research Center.

**Cholesterol connection** Although pharmaceuticals have made

major strides in treating low density lipoprotein (LDL) or “bad cholesterol,” controversy over the optimal diet for this disorder continues. “Other than unsaturated fats and fiber, little is known about what nutrients may be beneficial in treating LDL associated with type 2 diabetes,” says Andre Theriault, professor in Mānoa’s Division of Medical Technology. He and colleagues study effects of plant nutrients on LDL. A low dose of xanthohumol (a compound extracted from hops) reduced the production of LDL by inhibiting lipogenic (fatty) enzymes in a liver cell grown in a petri dish, but Theriault isn’t promoting beer drinking as a way to lower bad cholesterol.

**Skin screening** Acanthosis nigricans, or AN, is a skin disorder characterized by large brown areas on the back of the necks,

Mānoa Instructor in Nursing Anne Leake, who teaches diabetes self-management to Filipinos in Waipahu. “You can have a well-informed and motivated person who is receiving culturally competent care, but if it is being provided within an environment that does not meet their needs, the outcomes will be poor,” Leake says.

The Department of Native Hawaiian Health collaborates with other agencies to target education programs. Its four-year-old Native Hawaiian Diabetes Intervention Program is a community-based dia-

betes lifestyle program that includes traditional healing methods and cultural values. Studies show that participants who received support

from ‘ohana (family) are more likely to eat healthier and be more active. Last year’s Diabetes Worksite Project used diabetes education in the workplace to focus on diet, exercise and clinical measures (weight, blood pressure, glucose, cholesterol and A1c—a test that measures glucose over three months). Participants showed a marked

improvement in their clinical tests and self-care.

**Not everyone is sold on self-management** education programs. “We’ve been telling people for years about the dangers of obesity, and it’s gotten worse,” says physician Richard Arakaki, who has been involved with the national Diabetes Prevention Program for many years. “I’m not a big fan of behavioral change. It requires a team—health practitioners, dietician, family—and there are so many socio-economic barriers,” the Mānoa professor of medicine continues. “I take a more clinical approach. I look at therapeutic options to improve the care of diabetic patients and their quality of life.”

Among the advances: improved monitoring devices and a variety of oral medications and insulins as well as insulin pumps worn outside the body. The Food and Drug Administration is expected to approve an insulin inhaler this year, and it recently approved Byetta, a twice-daily injectible drug derived from the saliva of the Gila monster that helps control sugar levels and doesn’t appear to cause weight gain. “Science will help us in the future,” says Arakaki. “It will help us understand what influences obesity



and what happens physiologically.”

Despite his skepticism, Arakaki is conducting a lifestyle intervention study with Professor of Nursing Jillian Inouye “because I think she’s on the right track; she’s trying to impart change.” Inouye received a five-year, \$1.2 million grant from the National Institutes of Health to look at the effectiveness of cognitive/behavioral intervention on self-management among Asians and Pacific Islanders with type 2 diabetes. “The main focus is on changing people’s thinking about how

arms and knuckles of children and adolescents. AN is associated with obesity, insulin resistance, hypertension, high cholesterol and type 2 diabetes among some ethnic groups, but there is no data for Pacific Islanders. Maui Community College Instructor in Nutrition Karen Kay Robbins has partnered with Hui No Ke Ola Pono to determine whether Native Hawaiian youngsters with AN are predisposed to diabetes. “We’re hoping that this will be an effective, simple, noninvasive tool for identifying children and adolescents who need to be checked for type 2 diabetes,” she says.

**Muscle man** Jinzeng Yang, Mānoa assistant professor of human nutrition, food and animal science, explores the role of muscles in processing fats. Yang created transgenic mice by tweaking a

protein (myostatin) found in muscle cells. After two months on a high-fat diet, regular mice became obese and insulin resistant. Fed the same diet, the more muscular transgenic mice remained healthy with normal fat mass and hormone levels. “The research strongly suggests that muscle build-up during growth stages plays a significant role in preventing obesity,” Yang says.

**Heart health** Physician Richard Arakaki participates in an international study called ORIGIN, for Outcome Reduction with Initial Glargine Intervention, which tests insulin treatment and Omega-3 fatty acids in the prevention of heart disease in pre-diabetics and diabetics. “Heart disease is commonly seen in diabetics, but interventions to lower blood sugars have not yielded a reduction of heart disease in type 2 diabetics,” he

## Diabetes has become a worldwide epidemic



**Technological advances: an inhaler (left) may make medicine easier to take and telemedicine monitors patients from home while scientists continue the search for a cure**

they can better manage their disease,” says Inouye. “We also look at cultural aspects, people’s values and how that can fit into a healthy lifestyle.”

Participants meet weekly with a clinician to discuss specific concerns and find solutions. “Susan” lost 80 pounds after undergoing gastric bypass surgery and wants to lose 50 more. She watches her diet, goes to the gym and will soon return to playing tennis. One of her solutions? Even when she can’t exercise, she picks pua kenikeni flowers from her tree each day so the tree will keep blooming and she’ll keep moving.

A College of Tropical Agriculture and Human Resources program in Hilo teaches people with diabetes the value of five medical tests—hemoglobin A1c, blood pressure, cholesterol levels, microalbumin (a test of kidney functioning) and annual eye exams. “We explain what the tests are and how

to read them so that when people go to their doctor, they will ask for the numbers and not be satisfied with just knowing their hemoglobin levels are OK,” says nutritionist and project coordinator Julia Zee.

**Her advice is familiar**—more plant products and fiber in the diet—but she understands that restricting a staple closely tied to the culture (like rice)

can be very difficult, even leading to depression, a condition that affects 30 percent of diabetics. “I tell them, ‘don’t try to change your diet all at once. There isn’t any food that absolutely you cannot have. It’s knowing how much to eat. Take small steps.’”

She echoes optimist Kadohiro as she concludes: “We can’t give up.”

Janine Tully (BA ’87 Mānoa) is a Hawai’i freelance writer

## Diabetes curriculum earns alums award

**D**iabetes and You, a curriculum for fourth graders, won the 2004 American Diabetes Association’s Outstanding National Youth Initiative Award for its creators, Department of Education retirees and UH Mānoa alumni Carl (BEd ’63, PD ’64) and Irene (BA ’66) Takeshita. Developed at the request of the state Department of Health out of concern for the increasing number of young children diagnosed with type 2 diabetes, the curriculum focuses on symptoms, risk factors and complications associated with the disease and how proper nutrition and exercise can prevent or delay its onset. Since 1999, the Takeshitas have presented the two-session program to more than 2,000 students and adults on O’ahu, Hawai’i, Moloka’i and the mainland. Teachers interested in learning to use the curriculum can call the local ADA office (below) or DOE’s Health and PE section, 808 733-9141 ext. 311, or email itake@hawaii.rr.com.

### Additional Resources

OhanaHealth—[www.the-ohanahealth.org](http://www.the-ohanahealth.org) or 808 956-9723

American Diabetes Association—[www.diabetes.org](http://www.diabetes.org), or call the Hawai’i office at 808 947-5979 or 1-888 DIABETES

Juvenile Diabetes Research Foundation—[www.jdf.org](http://www.jdf.org); call the Hawai’i chapter at 808 988-1000

U.S. Department of Agriculture’s Steps to a Healthier You—[www.mypyramid.gov](http://www.mypyramid.gov)

says. The project aims “to be very aggressive” at getting blood sugar down to near normal levels or lower using insulin plus Omega-3.

**Telemedicine twosome** Nancy Johnson, nursing division chair at Maui Community College, has implemented TeleHealth, a phone and video system that allows nurses to care for patients via a home TV monitor. Another project uses the Internet to monitor the progression of renal disease in diabetics of Native Hawaiian ancestry. “The study showed that renal disease progressed more rapidly in patients with standard treatment, which suggests that renal disease may be significantly slowed by intervention of e-health visits,” she observes.

Dubbed “Mr. Telemedicine” by *Wired* magazine, Mānoa

Professor of Electrical and Computer Engineering David Yun developed a website for diabetes self-management with Hawai’i Medical Services Association physician Joseph Humphry. Patients input their test results; ‘OhanaHealth responds automatically if their glucose levels are too high or too low and provides advice. “The website tells you how you’re doing,” says Yun. “You can ask questions and look at your charts.” ‘OhanaHealth targets economically disadvantaged groups in Hawai’i and the Marshall Islands. Patients must be monitored by a doctor who must also participate in the program. Results are promising—80 percent of Wai’anae control group participants maintained their glucose levels within the acceptable range. Yun says the program could cut down on doctor’s visits and allow doctors to care for more patients.

# Miller Remembered:

## Tea honors legacy of pioneer food scientist

**W**hether graduates of home economics or human nutrition, alumni of Mānoa programs in food science are invited to return to Miller Hall Sunday, Nov. 6 for a 2 p.m. tea to celebrate the ongoing legacy of Carey D. Miller.

She was diminutive in stature and conservative in demeanor, yet Miller was a pioneer in many ways. She came from immigrant stock, watched stagecoaches pass her parents' Idaho ranch and attended a one-room schoolhouse. She graduated from a Boise high school in 1912 and became the first in her family to attend college, earning a bachelor's with honors from University of California, Berkeley, and a master's from Columbia University.

In 1922 she sailed from San Francisco to take charge of the fledgling UH home economics department, turning a Hawai'i Hall room into a laboratory for her eight white rats. She served as chief planner for the Home Economics Building, which opened in 1939, and increased department enrollment to 160 majors during her tenure. She also did the first work on vitamin content of fresh and canned pineapple and documented the high vitamin C content of guava and papaya, proving local produce could meet nutritional needs.

"Miss Miller found that instruction had been limited to western diets out of textbooks written for the mainland United States. The dietary needs of non-Caucasians who were the majority of the local population were practically ignored," recalls student, colleague and friend Helen Lind. Miller analyzed and wrote about the basal metabolism and diets of Polynesians and Asians. She visited homes; collaborated with doctors, nurses and dentists and spoke frequently about the value of good dietary habits. Eloquent on the dangers of too much salt and sugar, she challenged soup and baby food companies to reduce additives. Among her more than 70 publications was the

### **She studied the nutritional content of tropical fruit and non-western diets**

widely popular *Some Fruits of Hawai'i: Their Composition, Nutritive Value and Use in Tested Recipes*, first published by University of Hawai'i Press in 1936 and most recently released in 2002.

The Department of Human Nutrition, Food and Animal Science still presents the Carey Award established by her students in 1957. Upon her retirement a year later, Carey D. Miller Hall was named in her honor.

Miller then turned her scientific acumen to miniature orchids, producing award-winning blossoms in yellow, long the signature color of her home garden. Remembering the four years she worked to save money for graduate school, she left the majority of her estate for student scholarships. Since Miller died in 1985, her trust made 300 awards totaling \$335,000 to graduate and undergraduate students. The \$671,000 principle will now be distributed to 11 nonprofit organizations, including the Hawai'i Dietetic Association, which she co-founded, and Hawai'i Association of Family and Consumer Science, which has pledged to continue Miller's scholarship tradition.

To RSVP for the tea or find out about other department Legacy Project events, call 808 956-8105. 📞



UHAA invites nominations for the

## 2006 Distinguished Alumni Awards

Visit [www.UHalumni.hawaii.edu](http://www.UHalumni.hawaii.edu) or call 1-877-UH-ALUMS for details or nomination forms

**Deadline is Oct. 31, 2005**

## UHAA Activities

**Online registration and details for all UH Alumni Association-related events at [www.UHalumni.hawaii.edu](http://www.UHalumni.hawaii.edu)**

**Sept 23** William S. Richardson School of Law's Second Annual All-Class Reunion, Sheraton Moana Surfrider. Contact Della Au Belatti ('03) at [lawalum@hawaii.edu](mailto:lawalum@hawaii.edu)

**Oct 7-8** Aloha Friday Pau Hana in Seattle, a UHAA Pacific Northwest Chapter event. Call Earle Oda 425 861-2720 or email [earleoda@aol.com](mailto:earleoda@aol.com)

**Oct 9-15** UH Homecoming. Lots of great events culminating in the football game against New Mexico State. Don't miss the fun! For details, call 808 956-2586, email [alumnews@hawaii.edu](mailto:alumnews@hawaii.edu) or visit [www.UHalumni.hawaii.edu](http://www.UHalumni.hawaii.edu)

**Oct 16** UHAA and Outreach College present Kenny Endo Taiko Ensemble in East Meets West with members-only reception prior to performance, Hawai'i Theatre in Honolulu. For details call 808 956-2586, email [alumnews@hawaii.edu](mailto:alumnews@hawaii.edu) or visit [www.UHalumni.hawaii.edu](http://www.UHalumni.hawaii.edu)

**Oct 22** UH tailgate at San Jose State provides fun for California residents and visitors. Call 808 956-2586, email [alumnews@hawaii.edu](mailto:alumnews@hawaii.edu) or visit [www.UHalumni.hawaii.edu](http://www.UHalumni.hawaii.edu)

**Nov 1** Seventh Annual Legacy in Tourism: A Fundraiser for the UHM School of Travel Industry Management sponsored by TIM International Alumni Chapter, Hilton Hawaiian Village Coral Ballroom. Call Lee-Ann Choy 808 864-9812

**Nov 5** UH Golden Scholars 50th Reunion for the Class of 1955. Call 808 956-2586, email [alumnews@hawaii.edu](mailto:alumnews@hawaii.edu) or visit [www.UHalumni.hawaii.edu](http://www.UHalumni.hawaii.edu)

## UH 'Ohana

### Hawaiian Islands

Nearly 80 companies and 600 guests supported the May 10 UH Alumni Association gala dinner and Distinguished Alumni Awards presentation, right, through purchase of a table or donation to the silent auction. Mānoa

### College of Business

**Administration's** annual Business Night 2005 drew 550 students, faculty, alumni and community leaders in April, followed by a successful **College of Engineering** dinner a week later.

May was very busy, kicking off with the **Nursing Alumni Association's** networking brunch at Alan Wong's Pineapple Room in Honolulu. Education in Democracy, the

### College of Education's

recognition dinner featured U.S. Sen. Daniel K. Akaka as keynote speaker. More than 150 people attended the William S. Richardson

### School of Law Alumni Association Golf

Tournament, right, and 'ono prime rib buffet. The **Colleges of Arts and Sciences**

reunion included tours highlighting Mānoa faculty, students and programs; the Hawai'i Biomedical Research Complex in Kaka'ako; Waikiki Aquarium and Kapi'olani's Culinary Institute of the Pacific. While **Las Vegas** past president Phyllis Matsuda enjoyed the reunion, her chapter closed the month with a 128-golfer tournament at the Palm Valley course in Summerlin, attended by 21 members of Honolulu-based UH Engineering Alumni Association.

### International

Alumni events in Beijing and Shanghai coincided with a visit from Hawai'i Gov. Linda Lingle, a state trade delegation and UH officials. The **Travel Industry Management International** chapter sponsored an event for all UH alumni in Hong Kong. An earlier Hong Kong alumni dinner raised about \$4,000 to help with flood damage at Mānoa's Hamilton Library.

### Mainland

**UHAA-Las Vegas** celebrated Lei Day at the annual Paniolo Polynesian Pacific Festival in the California Hotel and Casino parking lot. The chapter sold 2,350 musubi and memorabilia to benefit the chapter's scholarship fund and Hawai'i National Guard. UH Interim President David and Wendie McClain attended UHAA-Los Angeles and Orange County's dinner for alumni in March. Los Angeles, Las Vegas and Pacific Northwest volunteers staffed college fairs and hosted summer send-offs for new UH students.





## Yoshida flies UHAA with pride

**Current position:** Senior director, North America and Europe—marketing and sales at Hawaiian Airlines, and president, UH Alumni Association

**UH Degree:** BFA in theatre/dance '82 Mānoa

**Favorite UH classes:** Logic and anatomy, where a professor's passion for topics like the blood filtering activity of the glomerulus in the kidney made lessons unforgettable

**Favorite campus places:** The temporary dance building and Kennedy Theatre. "There is a certain smell every time I enter the theater that makes me feel like, well, dancing!"

**Hobbies:** Running, yoga, working out, hula, pets, gardening

**Guilty pleasure:** "I am a shopoholic"

At 5-foot-1, Janet Yoshida didn't have much of a shot at a professional dance career, but her UH dance instructors prepared her well for the real world. "Carl Wolz, Yasuki Sasa, Reiko Oda, Phyllis Haskell and so many others were not just instructors but mentors and major influences in my life," she says. "My education gave me the discipline that helped me pursue career aspirations I never knew I had!"

In 1988 she helped form a San Diego alumni chapter to stay connected with her Hawai'i roots. She remained active when she returned to Honolulu. "Involvement in UHAA is a meaningful way to express my pride. I have met some incredible fellow alumni; there is so much to be proud of."

UHAA provides continuity as students transition into careers, she says. "It is our responsibility to support our alma mater, never stop learning and communicate with graduates at all stages of their lives. We should never take UH for granted."

## Make the connection

Name (last, first, middle/prior last name)

M / F Circle

Mailing address

City

State

Zip

Country

Telephone (home, work, fax)

Email

Birthdate

UH Campus(es) attended\*

UH degree(s)

Graduation year(s)

Name of spouse/significant other

M / F Circle

UH Campus(es) attended\*

UH degree(s)

Graduation year(s)

Designate one alumni **chapter** from list on reverse side

☐ New member ☐ Renewal

**ANNUAL MEMBERSHIP** (check one)

☐ \$50 Single ☐ \$60 Joint

☐ \$25 Recent Graduate (within 5 years of graduation)

☐ \$25 UH Faculty/Staff

**LIFE MEMBERSHIP** (check one)

☐ \$750 Single ☐ \$1,000 Joint

☐ \$175 (1955 graduate or prior/age 70 and over)

**METHOD OF PAYMENT** (check one)

☐ Check or money order enclosed (payable to UHF/UHAA)

☐ VISA ☐ MasterCard ☐ AmEx

Credit card no.

Expiration date

Signature

\*Please include degree and campus information from all UH campuses attended (example: Kapi'olani CC and UH Mānoa)

**Please return this form to:**

UHF/UHAA, 2440 Campus Road Box 307  
Honolulu, HI 96822-2270

**Fax:** 808 956-6380

**Phone:** 808 956-ALUM (2586) **Toll free** 1-877-UH-ALUMS (842-5867)

**E-mail:** alumnews@hawaii.edu

## Become part of the club

When you join the UH Alumni Association (application on reverse) you can choose from any one of the active alumni chapters listed below.

### CAMPUS CHAPTERS

Association of Alumni and Friends of UH Hilo  
Association of Kaua'i CC Alumni  
Hawai'i CC Alumni Association and Friends  
Honolulu CC Alumni Association  
UH West O'ahu Alumni Association

### UH MĀNOA CHAPTERS

Colleges of Arts and Sciences Alumni Association  
College of Business Administration Alumni and Friends  
College of Education Alumni Association  
College of Tropical Agriculture and Human Resources Alumni Association  
Department of English as a Second Language  
Dental Hygiene Alumni Association  
Engineering Alumni Association  
Alumni Association of the John A. Burns School of Medicine  
Nursing Alumni Association  
School of Architecture Alumni Association  
School of Library and Information Sciences Alumni  
School of Public Health Alumni Association  
School of Social Work Alumni and Friends  
Travel Industry Management International  
William S. Richardson School of Law Alumni Association  
Army ROTC Alumni  
Ke 'Ānuenue Alumnae Association  
UH Founders Alumni Association  
Te Chih Sheh

### REGIONAL CHAPTERS

UHAA-Colorado	UHAA-National Capitol Region
UHAA-East (New York Area)	UHAA- Pacific Northwest
UHAA-Greater Midwest Region	UHAA-San Diego
UHAA-Las Vegas/Southern Nevada	UHAA-San Francisco Bay Area
UHAA-Los Angeles/Orange County	UHAA/EWCA-Florida
UHAA-Maui Club	



### UH Establishes Dan and Maggie Inouye Distinguished Chair

Perhaps no one symbolizes post-World War II Hawai'i's belief in the power of education and democratic process better than UH alumni Daniel and Margaret Awamura Inouye. He became the nation's first Japanese American senator and a tireless advocate for justice. She earned a master's at Columbia University and taught speech and education at Mānoa during the 1950s.

So UH and UH Foundation officials were delighted when the Inouyes relaxed their long-standing reluctance for namesake tributes and lent their names to an endowed chair. Housed jointly in Mānoa's William S. Richardson School of Law and Department of American Studies in the College of Arts and Humanities, the Dan and Maggie Inouye Distinguished Chair in Democratic Ideals will bring visiting scholars and public figures to Mānoa to offer courses and seminars for campus and the community that emphasize democratic processes and the importance of public life.

The volunteer campaign leaders—retired banker Walter A. Dods Jr., attorney Jeffrey Watanabe and UH Interim President David McClain—have raised nearly \$2 million. Donors of \$25,000 and more are listed below.

For information about the chair or to make a gift, contact UH Foundation President Donna Vuchinich, 808 956-3711 or [donna.vuchinich@uhf.hawaii.edu](mailto:donna.vuchinich@uhf.hawaii.edu).

\$200,000—Bank of Hawai'i Corporation, First Hawaiian Bank

\$100,000—Alexander and Baldwin Foundation, Central Pacific Bank, Estate of James Campbell, Hawaiian Electric Company/Hawaiian Electric Industries/American Savings Bank, Hawaiian Telcom, Norwegian Cruise Line, Oceanic Time Warner Cable

\$75,000—ABC Stores

\$50,000—David and Maggie Cole, Deloitte and Touche, Walter and Diane Dods, Island Insurance Foundation, The A.C. Kobayashi Family Foundation, Pacific Marine and Supply Company, Servco Foundation, KTA Super Stores' Koichi and Taniyo Taniguchi (memorial gift), Watanabe Ing Kawashima and Komeiji

\$25,000—AIG Hawai'i Insurance, First Insurance Company of Hawai'i Charitable Foundation, Howard Karr, David and Wendie McClain, Kenneth P. Mortimer, Trinity Investment Trust

**Get Connected with  
UH alumni.hawaii.edu!**



**Create your personal alumni profile**  
**Post a Class Note and read about your classmates**  
**Find the alumni chapter nearest you**

To register, use the 10-digit number in the upper right corner of your address label on the back of this magazine, or request your alumni ID number by emailing [alumnihelp@uhf.hawaii.edu](mailto:alumnihelp@uhf.hawaii.edu).

1-877-UH-ALUMS (1-877-842-5867)

**Campuses:** UH Mānoa, Hilo and West O'ahu; Hawai'i, Honolulu, Kapi'olani, Kaua'i, Leeward, Maui and Windward Community Colleges

## 2000s

**Ashley (Gattin) Bowden** (BA '99 West O'ahu) joined Henderson State University in Arkadelphia, Ark., as annual fund coordinator.

**Kim Chanbonpin** (JD '03 Mānoa) enters the LLM program at Georgetown University Law Center in the fall.

**Tia Graham** (BS '04 Mānoa) has been promoted to sales manager for MCI Sales, Starwood Hotels.

**Mona L. Hirata** (MBA '03 Mānoa) and **Grace Chang** (BA '95, JD '04 Mānoa) celebrated the five-year anniversary of their company, MG Concepts, Weddings by Grace and Mona, in April.

**Kyle Ikeda** (MA '00 Mānoa) is a PhD candidate in Japanese literature at Mānoa. He co-founded a Japanese literature discussion group, which meets bi-monthly at Paradise Palms.

**Elizabeth J. McGrath** (MS '04 Mānoa) received a Achievement Rewards for College Scientists–Honolulu scholarship in astronomy, which she will use to pursue her UH doctoral research on how massive galaxies formed.

**Collin Miyamoto** (MBA '01 Mānoa) was promoted to manager of real estate services at Avalon Development Company in Honolulu.

**Dymian Racoma** (BA '01, MA '03 Mānoa) is membership manager for the Bishop Museum and edits the quarterly newsletter.

**Lynnette Ramirez** ('98–'00 Leeward; BS '02, MS '04 Mānoa) received a Achievement Rewards for College Scientists–Honolulu scholarship. She is a UH doctoral student in mechanical engineering.

**Lauren (Wehr) Shindo** (MA '01 Mānoa), **Asuka Suzuki** (MA '01 Mānoa) and **Kaoru N. Villa** (MA

'02, MA '04 Mānoa) are PhD candidates in Japanese literature at Mānoa.

**Jean Suh** (BBA '00 Mānoa) is audit supervisor at Nishihama & Kishida, CPAs. She joined the Honolulu firm in 2002 after working in Illinois.

**Marimichael Walker** (BS '04 Mānoa) was promoted to catering sales manager for the Sheraton Waikiki Hotel.

## 1990s

**Lynn A. S. Araki-Regan** (JD '95 Mānoa) is economic development coordinator for the County of Maui and an attorney in private practice.

**Rona Awber** (BA '96 Mānoa) married **Jeremy Bennett** (BA '97 Mānoa) on Moloka'i in May. They live and work in Honolulu.

**Mirella Vasquez Brooks** (BS '99 Mānoa), part-time family nurse practitioner and Mānoa nursing instructor, received a Achievement Rewards for College Scientists–Honolulu scholarship to use as she pursues UH doctoral work in nursing.

**Keoni Chang** (AS '93 Kapi'olani) is Foodland's first corporate chef. Taste his work at the Beretania store deli in Honolulu.

**Carl Chu**, (AAT '94 Honolulu; BBA '97 Mānoa), was promoted to tax senior at Nishihama and Kishida, CPAs. He managed a retail operation before joining the Honolulu firm in 2003.

**Karl Fujii** (BBA '90 Mānoa) was promoted to vice president and chief financial officer at Hawaiian Building Maintenance. He is past president of UH Alumni Association and serves on Mānoa's Athletic Advisory Board and Commencement Task Force.

**Akiko Hagiwara** (MA '91, PhD '05 Mānoa) is a *sennin kooshi* (assistant professor) at Tokyo University.

**Amy Hennessey** (BA '96 Mānoa) is vice-president of McNeil Wilson Communications in Honolulu.



## Boisse Correa

Honolulu police chief

**Career:** Chief, Honolulu Police Department

**UH degrees:** MSW '73, Cert. in Public Administration '91, Mānoa

**Roots:** Kuli'ou'ou, O'ahu

**Family:** Parents Lawrence and Norma; older sister Mary Ann

**Hobbies:** Kayaking, yard work and playing with his dogs, Chloe and Koa

Boisse Correa's life could have taken many routes. He was groomed early to be a labor leader, held high hopes of becoming a postal inspector, worked undercover for the FBI and signed a free agent contract to play offensive line for the NFL's Cleveland Browns. Yet he spurned all those opportunities to join the Honolulu Police Department. In his 35 years on the force, Correa has worked in nearly every facet of the department, most recently as an assistant chief and head of homeland security.

None of Correa's previous experience fully prepared him for the pressures of being top cop in the nation's 12th largest city. He has adapted to the change though, just as he has all his life. In the 13 months since Correa became HPD's ninth chief of police, some of his priorities—community policing, department accountability and a crack-down on repeat offenders—have already taken shape. He says his studies in social work at UH taught him “empathy, understanding and genuineness ... to look at life, people and systems and be compassionate about them.” It's an approach he takes to work every day and one that carries out the department's motto—“serving and protecting with aloha.”

—Neal Iwamoto



## Takashi Tsuchiya

A partner in trade

**Career:** Chief executive director, Japan External Trade Organization, Chicago

**Roots:** Takasaki, Japan

**UH degree:** MA in American studies '79 Mānoa

**Family:** Wife Yoko, son Shu, daughter Kimi

**Hobbies:** Playing and watching golf and baseball, watching movies and TV comedies

**Favorite Chicago Japanese restaurant:** "I like Ginza because it is a down-to-earth kind of restaurant serving food suited to real Japanese taste."

**Favorite thing about Hawai'i:** Cultural fusion of East and West. "I lived in Hale Mānoa. Its international setting, which I describe as in-between 'real America' and Asia or Japan, was very comfortable. You were never conscious of your nationality, nor left feeling isolated or lonely."

After graduating from Tokyo University of Foreign Studies with a BA in American studies, Tsuchiya joined JETRO, a government-related nonprofit organization that promotes trade and investment between Japan and the rest of the world. He took leave to study at Mānoa as an East-West Center grantee, and returned to positions as public affairs department director at JETRO New York, vice president at JETRO Bangkok and, most recently, research planning division director at JETRO headquarters in Tokyo.

"I enjoy working both in various countries and with various peoples," Tsuchiya says. In the Chicago post, he helps Midwest companies find Japanese business partners. "Of course," he adds quickly, "free of charge."

—by Karla Brown

**Ryan Higa** (BFA '95 Mānoa) will spend more time on his art and his day job after three years of running a workspace gallery for local artists in Kaimukī with fellow alumni.

**Lea Ok Soon Hong** (JD '91 Mānoa), shareholder and director of Alston Hunt Floyd & Ing, was selected 2004 Outstanding Woman Lawyer of the Year by Hawai'i Women Lawyers.

**Gaur Johnson** (BS '99, MS '02 Mānoa) received a Achievement Rewards for College Scientists—Honolulu scholarship. He is a UH doctoral candidate in civil and environmental engineering.

**John Lehrack** (MA '93 Mānoa) directs the Hawaiian music choral group *Na Leo Nahenahe* in San Francisco.

**Sachiko Matsunaga** (PhD '94 Mānoa) is professor and chair of modern languages and literatures at California State University—LA.

**Cindy Lee Meiers** (MPH '96, BA '94 Mānoa) is administrator of the Hi'olani Health Care Center at Honolulu senior living community Kāhala Nui. A board member of the Hawai'i Long Term Care Association, she previously managed Beverly Manor/Avalon Care Center.

**Ann Stamp Miller** (MA '94, PhD '99 Mānoa) associate professor at TransPacific Hawai'i College, has been awarded a Fulbright Scholar grant to teach history and research her next book in Dresden, Germany, for the coming year.

**Emi Murayama** (MA '99 Mānoa) is a PhD candidate in Japanese language at Mānoa.

**Chrystie Naeole** (BA '99 Mānoa) received a Achievement Rewards for College Scientists—Honolulu scholarship. She is a UH doctoral candidate in biology, conducting research on DNA-based arrays for genotyping.

**Yuko Nakayama** (BBA '94 Mānoa) was promoted to tax manager at Nishihama & Kishida, CPAs. She uses her bilingual



skills to assist the Honolulu firm's nonresident clients.

**Brian Richardson** (MA '96, PhD '98, MLIS '02 Mānoa) published the book *Longitude and Empire: How Captain Cook's Voyages Changed the World*.

**Yumiko Tateyama** (MA '98 Mānoa) is a PhD candidate in Japanese language at Mānoa.

**Bill Tobin** (BBA '95 Mānoa) is chair of the Hawai'i Restaurant Association and managing partner of Tiki's Grill & Bar.

**James Wong** (MAcc '95 Mānoa) is senior audit manager at Nishihama & Kishida, CPAs. He joined the Honolulu firm in 1995 and has owned and operated a retail and wholesale business.



## 1980s

**Rick Bissen Jr.** (JD '86 Mānoa) was appointed to the Maui Circuit Court in January.

**Herman Pi'ikea Clark Jr.** (BA '84, MFA '96 Mānoa) lives and teaches in New Zealand, where he started a clothing line, Pili, featured in the *Honolulu Advertiser* and available at Neiman Marcus.

**Charles Roy Kelley** (MD '86 Mānoa), a physician and Outrigger executive, volunteers on the board of Kāhala Nui in Honolulu.

**Michael Nauyokas** (JD '89 Mānoa), originally from Colorado, is an attorney, mediator and arbitrator in Honolulu. The location of his firm was incorrectly reported in the May issue.



**Lisa Sakamoto** (BBA '81 Mānoa) was appointed vice president of Catholic Charities Hawai'i in May with fiscal responsibility for the organization. A certified public accountant and MBA, she has 20 years of corporate finance experience, the last 13 at Young Brothers, Ltd.



**Romala Scales-Radcliffe** (BA '87 Mānoa) is education coordinator and director of Kāhala Nui University, managing classes for residents and staff at the Kāhala Nui senior living community in Honolulu. She was previously with Barry University in Miami.



**Glenn Sexton** (BA '80 Mānoa) is vice president and general manager of Xerox Hawai'i.

**Lawrence E. Trott** (Cert '84 Kapi'olani) is Honolulu retirement community Kāhala Nui's director of dining and hospitality. He is a certified American Culinary Federation executive chef and American Dietary Association dietary manager and a member of Chefs de Cuisine of Honolulu.



**Kathleen Watanabe** (JD '82 Mānoa) was appointed Circuit Court judge on Kaua'i in March.

**Larry Welkowitz** (MA '82, PhD '85 Mānoa), associate professor of psychology, received the 2004-05 Keene State College Award for Faculty Distinction in Research and Scholarship.

## 1970s

**Roland Casamina** (BBA '76 Mānoa), who works for House of Finance, was elected president of Hawai'i Financial Services Association. Treasurer **Marvin Dang** (BA '74 Mānoa), is also a UH alum.

**Gregory Chun** (BA '77 Hilo; MA '84, PhD '94 Mānoa) is president and general manager of Bishop Holding Corporation, with primary responsibility for the Keauhou Resort build-out.

**Mary Ada Dillinger** (MLISC '79 Mānoa), board member of the Greater Midwest



Chapter of the UH Alumni Association, and husband Paul Dillinger enjoyed a two-month assignment to Africa Nazarene University in Kenya. (The couple is pictured with University Librarian James Ng'ang'a)

**David Farmer** (BFA '70, MA '73, JD '85 Mānoa), attorney and art writer for the *Honolulu Advertiser*, is treasurer of Hawai'i Collection Attorneys.

**Chiyome Leinaala Fukino** (MD '79 Mānoa) is director of the Hawai'i State Department of Health.

**Jo Kim** (JD '77 Mānoa) was named girls soccer coach of the year by Big Island Interscholastic Federation.

**Gwen Nagata** (BA '73 Mānoa) is sales manager at Indich Collection, Honolulu rug retailers.

**Lisa Niimi-Montalbo** (AAT '77 Leeward; BA '93 West O'ahu) and husband Herbert have two children. She teaches English at Wahiawā Middle School after working in a range of careers from travel agent to computer technician.

**Daniel Roffman** (BA '70 Mānoa) former state chess champion, is branch manager of Kaimukī Public Library in Honolulu.

**Jeff Rowe** (BA '71 Mānoa), president of the LA-Orange County Chapter of the UH Alumni Association, received hero recognition for his work from his employer, the *Orange County Register*.

**Charles Williams** (MPH '78 Mānoa) published *Paths of Darkness*, a memoir of a child's struggle to survive in the poverty of the Appalachian coalfields of West Virginia.



**Gordon Williams** (BA '73 Mānoa) is an active Christian writer and actor in Houston.

## 1960s

**Walter A. Y. H. Chinn** (BBA '60 Mānoa) retired at the end of May as court clerk after working nearly four decades in the federal court in Honolulu.

**George Held** (MA '62 Mānoa) published his seventh and eighth books of poetry, *Grounded and Martial Artists*.

**Stan Henning** (MA '65 Mānoa) is a specialist in Chinese and Okinawan martial arts.

**Rebecca Kanekoa** (BA '64, MA '65, PD '86 Mānoa), owner of Dilman Christian Academy elementary school, was elected officer of the FCCH along with husband Mitchell.

**Evelyn McConathy** (BA '68 Mānoa) joined the law firm of Drinker Biddle and Reath in Philadelphia.

**Frances Okazaki** (BS '68 Mānoa) was promoted to executive vice president overseeing office properties at CB Richard Ellis in Honolulu. She has received Special Achievement Awards for leadership and exceptional service to clients.



**Gregory Pai** (BA '67 Mānoa), retired economist and Hawai'i State Public Utilities



# Nonie Toledo

Executive, volunteer

**Career:** Vice president and general manager of Sprint Hawai'i

**Roots:** Kailua, O'ahu

**UH degree:** BA international business '79 Mānoa

**Family:** Husband Michael, daughter Katherine, son Michael

**Hobbies:** Making jewelry

**Early jobs:** Selling makeup door-to-door at 13, stock girl during high school, cocktail waitress in college

**Best thing about UH:** Good international business reputation, good college of business, casual atmosphere

**Best things about her job:** Variety and a great staff. "It's a lot of fun."

**Favorite Sprint product:** The Treo 650, Dual Band Sprint PCS Vision Smart Device—a PDA, calendar, phone, etc.

A graduate of Maryknoll High School, Toledo attended Chaminade and Santa Clara Universities. She returned to Hawai'i to attend Mānoa after her parents passed away. Working for Xerox took her to the mainland, where she learned vital business skills and landed a job with Sprint in 1992. She was chosen to head regional sales for Sprint Hawai'i a year later and promoted to general manager in 1998. The Sprint Hawai'i branch is one of the corporation's most profitable. Toledo's innovation, hard work and outstanding business ethic earned her recognition as 2003 Businesswoman of the Year from *Pacific Business News*.

While balancing career with family, Toledo also makes time for volunteer work. She co-chairs the education task force for Hawai'i Business Roundtable and is on the boards of Kapi'olani Medical Center, Red Cross, Boy Scouts and Aloha United Way.

Post notes at [www.UHAlumni.hawaii.edu](http://www.UHAlumni.hawaii.edu) or send to [alumnews@hawaii.edu](mailto:alumnews@hawaii.edu) or *Mālamalama*, 2444 Dole St., Honolulu 96822. Please indicate campus(es) attended, graduation year(s) and any name changes.

commissioner, enjoys art, music, study, teaching and fixing up an old house. He was commencement speaker for the School of Architecture in May.

## 1940s

**Kenneth Otagaki** (BS '46 Mānoa), an early advocate for agricultural diversification and retired director of UH's international training program, was celebrated as the College of Tropical Agriculture and Human Resources 2005 Distinguished Alumnus.



## In Memory

**Shannon Ajifu** (BEd '58, PD '59 Mānoa), a graduate of the College of Education and dedicated public school educator, died June 23. She was a teacher, counselor, vice principal and principal during 36 years with the Department of Education and served as a member of the state Board of Education.

**Clarence Fong Chang** (BA '36 Mānoa), who participated on the ASUH Student Council and campus debate team, died May 16. He was a retired physician and surgeon and former vice president of the UH Board of Regents.

**Cyril S. Kanemitsu** (BA '48 Mānoa), a graduate of the Colleges of Arts and Sciences, retired Big Island District Court judge and World War II veteran died March 10. He was a past president of the Japanese Chamber of Commerce, legal adviser to the United Sugar Cane Planters Association and member the Hawai'i Sugar Planters Association and other organizations.

**Haigo T. H. Shen**, an East-West Center distinguished alumnus and Mānoa School of Architecture benefactor and adjunct faculty member, died June 18 in Shanghai. He and his wife endowed the Haigo and Irene Shen Architecture Gallery at the school.



**Mark R. Welsh** (MEd '92 Mānoa), a graduate of the College of Education, passed away March 10 at his home in Portland, Ore.

**Pearl Nobuko Yamashita** (BEd '42, PD '43 Mānoa), formerly on the College of Education faculty, died Aug. 3. The Pearl N. & Paul T. Yamashita Scholarship in Special Education helps graduate students committed to teaching in Hawai'i.

**Judith E. Yoshimura** (BEd '52, PD '53 Mānoa), an alumna of the College of Education, died May 23.

## Deep Impact from page 10

more than 80 ground-based research telescopes. "We'll be taking data that we've never been able to take before. So to all of us in science, this is an extraordinarily exciting night," exclaimed Observatory Director Frederic Chaffee from Keck headquarters in Waimea, where 200 people watched feeds of live NASA coverage and the view from Mauna Kea.

Meech continues to coordinate images and data sent by research and professional astronomers from Australia to Uzbekistan. "Getting answers to important fundamental properties like nucleus density and composition will take significant work because we have to carefully understand the spacecraft and ground data and make sure it is well calibrated before we begin the science interpretation," she says. Astronomers scrambled to present sound results at the Asteroids, Comets, Meteors meeting in Rio de Janeiro beginning Aug 8.

Early analysis of the plume suggests a low density surface, probably loose and dusty. "If you hit something soft, the energy lifts material out of the crater," explains Meech. "If you hit cement, some of the energy is expended breaking the surface," resulting in a smaller plume. Infrared characteristics of the post-impact plume varied considerably from readings of the usual emissions, confirming that scientists were looking at previously unexposed material. Observations indicated the presence of hot water, carbon monoxide and organic features. Development of the crater appeared to be controlled by gravity and the dust ejected was microscopic.

Inquiry will continue, of course. When it comes to comet science, Tempel-1's new crater just scratches the surface. ☺

Cheryl Ernst is creative services director in External Affairs and University Relations

## Creating Champions from page 11

being a training champion, the intervention likely was crucial. "He is a great talent," Barkhoff says. "When he was a junior, he won everything in Europe at every level. But he always performed a little below the actual level of his capabilities." Good enough to make the team or the European championships or the world championships, he had never before won a world title.

Heinz, 21, had a different obstacle to overcome—the psychological aftermath of an uncharacteristic fall during a previous world championship. "What I like about her is that she was always so consistent," Barkhoff says. "Then she felt the pressure in her first world championships and made this huge mistake. So she said, 'OK, something's going wrong here. I want to repair it.' That makes it very easy as a sports psychologist, because the person really wants to work with you."

Barkhoff received his PhD from the University of Stuttgart. He came to Hilo by way of a visiting professorship at Mānoa, where he met and first collaborated with Heiby. "She is the most incredible mentor anyone could ever ask for," Barkhoff says. "She embodies what, for me, is aloha. Her mentality is work hard, play hard. I'd come in and she would ask, 'Did you get enough surf today?' I'd say, 'That's not important. Let's work on the project.' She'd say, 'It is important because when you're happy, you work hard.'"

Hawai'i fosters a spirit of collaboration, he observes. "People work together, get something done, are serious about their jobs—and at the same time, they're just so happy that they're here. They accept that everybody has different interests and that they live differently. This is so different from Germany, I tell you." ☺

John Burnett (AA '81 Leeward, BA '94 Hilo, MEd '00 Mānoa) is a Big Island writer and part-time UH Hilo employee



# New courts inspire big dreams

**T**he sun bears down on an early summer morning in Mānoa. Tennis racket in hand, John Nelson stares across the net, lightly tosses a ball in the air and sends it hurtling toward his opponent. The duel begins.

“I’m all over this guy!” the Rainbow Warriors men’s tennis coach jokes after winning a hard-fought point against team member Jarrod Diepraam. Though Nelson’s experience is worn down by Diepraam’s youth, his joy in the game is undiminished. “I love coaching and teaching,” he says, as he sits down to talk. “I have a passion for tennis. My twin brother and I would play at the park until the lights went out. I knew it would take a lot of hard work to succeed.”

Nelson earned NCAA Division II All-American honors at California State University–Hayward, played professionally in Europe and counts San Diego State University’s back-to-back Mountain West Conference championships among the highlights of a 20-year coaching career. He draws on elements from martial arts like jiu-jitsu to train Hawai‘i players. “I certainly

wouldn’t call us jiu-jitsu experts,” laughs Diepraam. “But once we learned about the philosophy of martial arts and how to apply it to tennis, the positive results were obvious. When Coach Nelson first came, I was struggling, but he has been a great influence.”

During his two years at Mānoa, Nelson also superintended improvements to the campus tennis courts. It wasn’t just a re-surfacing project—space between courts was increased to improve sight lines,

seating areas with bleachers were created and lighting improved.

“Now there’s this gorgeous facility where fans can come out and support us and see the

talent we have. It’s a tremendous motivation,” Nelson says. In a state that can’t ask for better weather for tennis year-round, he doesn’t see this facility as just for UH. “I see it as a part of the future of Hawai‘i tennis, at all levels.”

It’s boosted the level of Rainbow Warrior play. The team lost just one senior after a strong 2005 season. “There was significant improvement made during the season. This

year the goal is to win the Western Athletic Conference, something I believe we can do,” Nelson says. He relates a compliment received during this year’s WAC men’s and women’s championships, hosted by Mānoa for the first time since 1984: “Rice’s head men’s coach said this is one of the nicest facilities he has seen, and they’re one of the best teams in the country. He said he fully expects our program at Hawai‘i to take off in the next year or two.”

Freshman and ‘Iolani graduate Derrick Lajola is excited about the future. “I’ve always heard people talk about how isolated the islands are, but this facility makes it that much better for the public to get involved,” he says. “When I chose to stay here, it was to play in front of family, where they could see me develop as a player and a person. With Coach Nelson here, I feel fortunate to be a part of the Hawai‘i program.”

Nelson makes it no secret he feels the same. “With this unbelievable facility, I can see us ranked every year. I think Hawai‘i is a sleeping giant in the tennis world, and the university has made a commitment to making this program as successful as it can be. I love it out here. I don’t ever want to leave.” 🍷

—by Maka Masuda, Sports Media Relations student writer

**I think Hawai‘i is a sleeping giant in the tennis world**

—John Nelson, men’s tennis coach



***Nototrichium sandwicense***

kulu'ī

Digital photo by Bob Chinn

One of 16 native Hawaiian trees, shrubs and ground covers incorporated into the Native Plant and Ecosystem Educational Garden located in the Sherman Courtyard on the Mānoa campus. College of Tropical Agriculture and Human Resources staff and student volunteers spent two years developing the garden, which received Scenic Hawai'i's 2005 Betty Crocker Landscape Award in the Community Garden category.

[www.ctahr.hawaii.edu/nrem/courtyard.html](http://www.ctahr.hawaii.edu/nrem/courtyard.html)

# Local business leader Charles R. Hemenway died in Hawai'i in 1947.



## This year, he'll help 367 students get a college education.

**C**harles Hemenway achieved much during his lifetime. However, his passing didn't put an end to his good works. At last count, Mr. Hemenway's bequest has provided over 5,000 scholarships to deserving students at the University of Hawai'i. Through proper planning and a generous heart, Mr. Hemenway continues to transform the lives of hundreds of students, and positively impact the people and economy of Hawai'i.

As we approach the Centennial of the University of Hawai'i, we salute Charles Hemenway for his foresight and generosity.

For information on leaving a bequest to the University of Hawai'i through your will or trust, please contact us in confidence at 808-956-8034 or at [giftplanning@uhf.hawaii.edu](mailto:giftplanning@uhf.hawaii.edu).



Please visit us at [UHFLegacyGift.org](http://UHFLegacyGift.org)

# arts etc.



## EXHIBITIONS

- Thru Sep** Student Art Exhibition; Hilo 808 974-7307
- Sep 18–Nov 10** *Making Connections: Treasures of the University of Hawai'i Library* rare books, prints and more; Mānoa Art Gallery, 808 956-6888
- Nov 27–Dec 16** Graduate Exhibition; Mānoa Art Gallery, 808 956-6888
- Jan 15–Feb 17** Contemporary Japanese needlework from the Kurenai-Kai embroidery center; Mānoa Art Gallery, 808 956-6888

## FESTIVALS & FUNDRAISERS

- Sep 24** Ho'olaule'a featuring local music, food, crafts and more; Windward, 808 235-7338 or [www.windward.hawaii.edu/hoolaulea](http://www.windward.hawaii.edu/hoolaulea)
- Oct 8** Oktoberfest, a Friends of the Cancer Research Center fundraiser; [maukamakai@crch.hawaii.edu](mailto:maukamakai@crch.hawaii.edu) or 808 626-6755
- Nov 18** Night in the Stacks Fundraiser with food, lei; Hilo's Mo'okini Library, 808 974-7759
- Dec 2–3** Agriculture Department Christmas plant sale; Maui, 808 984-3500



## ETC

- Oct 14** SOEST Open House: The Hot Spot for Cool Science; Mānoa, [www.soest.hawaii.edu/openhouse/](http://www.soest.hawaii.edu/openhouse/) or 808 956-3151
- Nov 1** Intersections lecture by artist/musician Terry Adkins; Mānoa's Art Auditorium, 808 956-5260 or [www.hawaii.edu/art/intersections](http://www.hawaii.edu/art/intersections)
- Nov 8** Distinguished Lecture Series with Gen. Eric Shinseki, former Army chief of staff; Mānoa, [www.hawaii.edu/uhm/dls](http://www.hawaii.edu/uhm/dls) or 808 956-9405
- Nov 15** *Bunso*, documentary about children in jail in the Philippines, with Patti Lyons of the Consuelo Foundation; Mānoa, School of Social Work 808 956-6300.
- Dec 1** World AIDS Day event; Kapi'olani, 808 734-9353



## PERFORMANCES

- Oct 1** Trio Xia fresh from Taiwan tour; Mānoa's Orvis Auditorium, 808 95-MUSIC or [www.hawaii.edu/uhmusic](http://www.hawaii.edu/uhmusic)
- Oct 7** John Mount, bass-baritone and Beebe Freitas, piano; Orvis Auditorium, 808 95-MUSIC or [www.hawaii.edu/uhmusic](http://www.hawaii.edu/uhmusic)



**Oct 7–30**

*South Pacific*; Windward's Palikū Theatre, 808 235-7330 or [www.paliku.com](http://www.paliku.com)

**Oct 8**

Computer music and video by Jim Hearon; Mānoa's Orvis Auditorium, 808 95-MUSIC or [www.hawaii.edu/uhmusic](http://www.hawaii.edu/uhmusic)

**Oct 19–23**

*Fall Footholds*, annual dance concert; Mānoa's Ernst Lab Theatre, [www.hawaii.edu/theatre](http://www.hawaii.edu/theatre) or 808 956-7655



**Nov 5**

Gamelan Ensemble; Mānoa, 808 95-MUSIC or [www.hawaii.edu/uhmusic](http://www.hawaii.edu/uhmusic)

**Nov 11–19**

*Another Heaven*, historical drama premiere; Hilo Performing Arts Center, 808 974-7310

**Nov 11–19**

*The Duchess*, an adaptation of John Webster's work; Leeward Theatre, 808 455-0385 or <http://lcctheatre.hawaii.edu>

**Nov 11–20**

*Battle of Will*, American premiere of playwright Laurent Gaudé; Mānoa's Kennedy Theatre, [www.hawaii.edu/theatre](http://www.hawaii.edu/theatre) or 808 956-7655



**Nov 16**

Chorus and Hula and Chant Ensembles; Mānoa's Orvis Auditorium, 808 95-MUSIC or [www.hawaii.edu/uhmusic](http://www.hawaii.edu/uhmusic)

**Nov 20**

Guitar concert; Leeward Theatre, 808 455-0385 or <http://lcctheatre.hawaii.edu>

**Nov 27**

Choral concert; Leeward Theatre, 808 455-0385 or <http://lcctheatre.hawaii.edu>

**Nov 30–Dec 4**

*Little Shop of Horrors*; Mānoa's Ernst Lab Theatre, [www.hawaii.edu/theatre](http://www.hawaii.edu/theatre) or 808 956-7655

**Dec 5**

Mānoa's orchestra's Tchaikovsky spectacular; Blaisdell Concert Hall, Honolulu, 808 95-MUSIC or [www.hawaii.edu/uhmusic](http://www.hawaii.edu/uhmusic)

**Dec 10–18**

*The Nutcracker*, Leeward Theatre, 808 455-0385 or <http://lcctheatre.hawaii.edu>

**Jan 28**

Lunasa, the Irish music dream team; Leeward Theatre, 808-455-0385 or <http://leetheatre.hawaii.edu>

