

mālamalama

THE LIGHT OF KNOWLEDGE

The magazine of the University of Hawai'i System

Volume 30 Number 1, January 2005



**Rethinking
Rapa Nui**

Inside:
Life on Mars?
Performance in Hilo

Taste of the range
Fun in the garden

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After the flood

As many of you know, UH Mānoa is still recovering from what valley residents called the worst storm in 50 years. Water poured from Mānoa Stream Oct. 30, creating a swath of destruction down the Diamond Head side of the campus. Students meeting in Hamilton Library had to break a window to escape rising water as the flood swept books, rare manuscripts and irreplaceable documents as far as the athletics complex. I'm pleased to report that classes were cancelled for only two school days. Faculty, staff, students and volunteers rallied to salvage and clean what could be recovered, and technicians worked around the clock to restore power to 35 buildings. Gov. Lingle's declaration of a state of emergency and the efforts of Civil Defense and National Guard authorities facilitated recovery. The bulk of remaining restoration efforts continues at Hamilton and Biomedical Sciences, the most seriously damaged buildings. We are still tallying the damage, but the probability grows daily that we will exceed the State's \$25 million insurance coverage. If so, we will ask the governor and the Legislature for funds to make the Mānoa campus whole.

To be sure, nothing can replace years of data and specimen collections spoiled or swept away by muddy waters, but I am proud of the way the entire campus came together to assess needs and stem the damage. I am grateful to community leaders who offered office space for displaced faculty and staff, food and water for volunteers and moving boxes and freezer containers for temporary storage of library materials. By Dec. 1, the UH Foundation had recorded \$60,000 in gifts to campus and library recovery funds. Assisting groups, along with photos and library information, are available at <http://libweb.hawaii.edu/uhtmlib/index.htm>. If you wish to help, you can make a gift online at www.uhf.hawaii.edu/floodrelief or www.uhf.hawaii.edu/libraryrelief.

Together, we will recover stronger than ever.



David McClain



Photo by Susan Murata



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On the cover: The moai are mum, but a UH archaeologist and his students are telling the story of Easter Island's earliest inhabitants. Photo by Jennifer Crites. Story on page 15.

Mālamalama begins its 30th year as a periodical in 2005.

To mark the occasion, the staff developed this quiz. Hint: The answer in each case is "30."

HISTORY

Number of years that inaugural faculty member John Mason Young taught structural design to all engineering seniors | Number of students enrolled in the "introduction to education" extension course

in 1921 | Number

of Maui residents who attended UH in 1925

| The decade UH enrolled its first students from Africa and Switzerland | Years since Leeward Theatre's inaugural act, as well as ticket price for the anniversary gala | Number of seasons Dave Shoji has coached Rainbow Wahine Volleyball

MATHEMATICS

Average class size for a lower division course at Mānoa last year | Upper division credit hours required for a history major at UH Hilo | Percent of Kapi'olani graduates earning an associate degree in liberal arts | Number of BAs awarded by the School of Hawaiian Asian and Pacific Studies in 2002–03

GEOGRAPHY

Number of West O'ahu students from out of state in spring 2004 | Number of stations in two Moore Hall Language Learning Center class labs | Acres in a College of Tropical Agriculture and Human Resources experimental farm adjacent to Hawai'i Volcanoes National Park | Number of Kaua'i students of mixed Asian/Pacific Islander ethnicity and Leeward students of mixed Hispanic ethnicity | Percent of Honolulu students living at Leeward addresses | Number of researchers and professional staff at the Cancer Research Center of Hawai'i

ECONOMICS

Dollars per student semester hour spent on academic support at Honolulu | Cost of a senior's season pass for Vulcan baseball | Number of refracting telescope kits purchased by a donor for a Mānoa introductory astronomy lab course in 2003 | Cost of a brass alumni or chrome Warriors license plate holder at the UH Bookstore | Late registration fee for a student not already enrolled at West O'ahu

COMMUNICATION

Minutes to allow for taking Mānoa's Spanish placement exam | Broadcasts in Honolulu's Nature of Physical Science 122 televised course | Minutes of free parking validated with ticket purchase at Mānoa's Kennedy Theatre | Number of Hilo academic departments listed in the UH 2004–05 directory

30 Something

Degrees accredited and approved

The Mānoa School of Architecture's first-in-the-nation doctor of architecture program received the official nod from the National Architectural Accrediting Board.

The professional ArchD replaces the bachelor's and master's degrees with a seven-year, Asia-Pacific focused curriculum that emphasizes practicum experiences to close the growing gap between academic and professional sectors.

In other degree news, the Western Association of Schools and Colleges approved Hilo's plans to offer a master of science in tropical conservation biology and environmental sciences and the Board of Regents approved in concept Hilo's plans to establish its first doctorate—in Hawaiian and indigenous language and culture revitalization—and a master of arts in indigenous language and culture education.

Thought about teaching? Get on the fast track

Mid-career professionals and recent college graduates can take the fast track to a teaching career with the Mānoa College of Education's three-semester post-baccalaureate certificate in secondary education. The federally funded Transition to Teaching program provides a \$1,500 per semester stipend to students who commit to teaching mathematics or science in a Hawai'i public high school for three years upon successful completion of the program. PRAXIS exam fees will be reimbursed to candidates who pass the required tests. For program information, contact the college's academic services office, 808 956-7849. Application deadline for fall 2005 is Mar. 1.

Chancellors appointed at Hawai'i, West O'ahu

UH has two new chancellors. Rockne Freitas, a former UH vice president and Kamehameha Schools executive, heads Hawai'i Community College. Gene Awakuni, vice provost for student affairs at Stanford University, will become chancellor of UH West O'ahu in March. Both hold Mānoa degrees—Freitas earned his MEd and PhD in education; Awakuni, a BA in political science and master of social work.



Staying Dry: The one-rope bridge was one of six events completed by cadet teams from three states in the 12-hour PACRIM Ranger Challenge at O'ahu's Bellows Air Force Station in October. Alaska scored highest in five events, including the grenade throw, M-16 rifle disassembly/reassembly and 10-kilometer march with full packs. Guam won the land navigation event. When it comes to overall excellence, however, the Warrior Battalion is a winner. The 150-member Hawai'i unit was honored last summer for being in the top 15 percent of the nation's 271 units for the 2002–03 school year.



Magazine garners awards

Mālamalama received two Public Relations Society of America Koa Hammer awards in 2004, one for the overall magazine and another for UH Public Information Officer Kristen K. C. Bonilla's feature article on the Hamilton Library preservation department. The magazine also received a 2004 Award of Excellence for publication design from the Honolulu chapter of the International Association of Business Communicators.

HOW TO: Manage your money

A free web-based tool to help people manage their finances earned its UH designers the 2004 Dean Don Felker Financial Management Award. Since its launch in 2002, MoneyEd has helped more than 200 people increase savings, reduce debt and improve spending decisions. A required component of a family and consumer science course, MoneyEd's articles and worksheets are also free to anyone who logs on at www.ctahr.hawaii.edu/moneyed.

UPDATE: Battle map now available

Student cartographer Rob James's map describing the pivotal 1795 Battle of Nu'uano is now available from Kamehameha Schools Press. The master's degree candidate was inundated with requests for copies following a July 2003 *Mālamalama* article about the map, which earned James a National Geographic cartography award. Reviewed, revised and turned into a 24- by 28-inch poster, the map costs \$12.95 plus shipping. See <http://store.ksbe.edu/kspress>.



Construction Academy, other initiatives funded

Honolulu Community College received \$2.2 million in federal grants for its Construction Academy initiative. The funding from the Department of Labor and Department of Housing and Urban Development will help produce qualified workers for an industry that is experiencing tremendous growth as well as standardize building and construction curriculum with the K–12 system, create teacher mentorship and internship opportunities with businesses and establish a statewide industry advisory council.

Other recent community-building grants include

- * \$795,000 from the Department of Housing and Urban Development to Hawai'i Community College for a Kea'au Youth Business Center, where young people can pursue entrepreneurial projects, and job training programs for at-risk youth in the Puna area.
- * Close to \$400,000 each from the National Science Foundation to Maui Community College, the Pacific Biomedical Research Center and Mānoa's mathematics department to increase participation or provide training and scholarships for Hawai'i and Pacific islands students in science, technology, engineering and mathematics.
- * \$1.1 million from Atlantic Philanthropies to expand English language teaching capacity in Vietnam through Mānoa's Department of Second Language activities in Hanoi and Hawai'i.

Moving AHEAD with Iraq initiative

Cautious and protective. It's become a way of life. For the Iraqi graduate students, including Amjad Ahmad, Diaa Ibrahim and Adel Youkhana, below from left, spending the year at Mānoa completing research for their doctorates. For 115 Iraqi faculty attending a UH-organized workshop at the University of Jordan last August, the first scientific meeting outside of their country for many. And for UH faculty members, who've learned to travel incognito and keep flexible schedules while inside Iraq working on AHEAD, a U.S.-funded agriculture higher education and development project (*Mālamalama*, May 2004).

In Jordan, agriculture professors from the Universities of Mosul and Dohuk attended sessions on economics, horticulture and food science and visited an agricultural research station near the Dead Sea. Additional workshops are planned at the International Center for Agricultural Research in the Dry Areas in Syria and American University of Beirut in Lebanon. With an emphasis on regional partnerships, the land-grant approach to agricultural education and rebuilding resources within Iraq, AHEAD has awarded more than \$200,000 to 21 proposals to date. Involving regional partner universities creates a knowledge network for scientists working to revitalize Iraq's agricultural research and training programs, ensure its food security and build its agricultural sector, which is second only to oil in economic importance, says principal investigator Samir El-Swaify.



UH Hilo senior college program launched

Hilo's College of Continuing Education and Community Services provides opportunities for students over age 45 throughout the island through its new Senior College Program. Funding comes from the Bernard Osher Foundation. "Increasingly, Hawai'i is becoming a popular retirement location, with a unique quality of life and an environment that offers pristine living," observes Margaret Haig, principal investigator for Hilo's Osher grant. Senior College offers longtime residents and newly arrived retirees a chance to stimulate mind, body and spirit. Classes start in January 2005 and range from practical skills to recreational activities and environmental issues to religions of the world. Special programs include an Asian film festival and a theatre bus complete with dinner, show and backstage tour. For information, call 808 974-7664 and indicate the Big Island region where you live. —Karla Brown

Coconut Island laboratory planned

Planners are designing a new wet laboratory and visitor reception area for UH's Hawai'i Institute of Marine Biology on Coconut Island using \$1 million in capital improvement funding released by Gov. Linda Lingle last summer. UH is requesting another \$11 million for sorely needed shoreline construction and sea wall repair on the island. However, top priority on the university's capital improvement project request for the next biennium is \$147 million for health, safety and backlogged repair and maintenance projects. Also on the list are new buildings for Hilo's Hawaiian language and science/technology programs and improvements to student housing on Maui and Hawai'i Community College's Komohana campus.

UH included in best schools books

In its continuing quest to sell books to the college-bound, *Princeton Review* has issued its latest "best college" offerings. Mānoa is one of the 134 "best in the west" colleges, and is listed among the best 117 law schools—with top ranking for having the most diverse faculty and best environment for minority students—and best 143 business schools. Visit www.princetonreview.com for comments by the students surveyed. Earlier in the year, *Princeton Review* ranked Mānoa 44th among the nation's "most connected campuses" based on computer-to-student ratio, computer science curriculum and student responses. When it comes to "most unwired college campuses," Intel placed Mānoa at 37 out of 100 schools for wireless Internet access. A Pepsi Bottling Company grant and department commitments have expanded the modem-free zones.

Hilo plans pharmacy college

UH Hilo officials will recruit a dean and pursue plans to create a College of Pharmacy on the Big Island, with a goal of having a fully enrolled program in a new building (below) by 2011. The initiative is spurred by a national shortage of pharmacists that is particularly acute in Hawai'i's rural communities. Planners expect the school's operation to be largely sustained by revenue from tuition and private resources. In a

related effort, Hilo is working with the University of Alaska at Anchorage to extend distance education opportunities for pharmacy technicians to the Pacific Islands. On O'ahu, a short-term, non-credit pharmacy technician program incorporating classroom instruction and clinical practicum is available through Kapi'olani Community College; for information call Martin Chong at 808 734-9540.



Hale'iwa learning center opens

Leeward Community College and the Hawai'i Department of Education teamed up to give North Shore residents Kulanui O Kūpono (Schools of Excellence), a learning center at Hale'iwa Elementary School. The center welcomes people of various ages, backgrounds and educational levels. Kulanui O Kūpono opened with selected non-credit courses in October. Plans call for offering credit courses this spring.

"We hope that the Kulanui O Kūpono program will benefit North Shore communities by providing education and career development opportunities that will help stimulate and sustain economic growth," says Leeward administrator Varaporn Jamklai. For information, email kulanui@hawaii.edu or call 808 455-0392. —Karla Brown





Flash unit can turn green waste to carbon and cash

The Hawai'i Natural Energy Institute introduced the world's first commercial-scale flash carbonization unit at Mānoa in July. The technology produces high quality charcoal from biomass, including agricultural byproducts and yard trimmings. When fully operational, Mānoa's unit will turn campus green waste into gold—generating as much as \$100,000 from sale of the charcoal, says Michael Antal Jr., HNEI's Coral Industries Professor of Renewable Energy Resources.



High Energy Anniversary: Chinese Premier Wen Jiabao, right, greeted UH Professor of Physics Stephen Olsen during a celebration of 25 years of collaboration in high energy physics. Olsen and Professor Frederick Harris were among 10 U.S. representatives attending the Joint Committee for Cooperation on High Energy Physics in Beijing Oct. 15. Mānoa's High Energy Physics Group has participated in research at the Beijing Electron Spectrometer detector since 1993.

Testing the China market for Hawaiian goods

Does “made in Hawai'i” have cachet in the People's Republic of China? Will gift baskets packed in koa sell in a country that associates round wooden bowls with beggars? Such questions are important in any attempt to market Hawai'i products across the Pacific. Mānoa economists Linda Cox and Catherine Chan-Halbrendt engaged Chinese agricultural students to test consumers' price and packaging preferences at trade shows in China. While most of those surveyed preferred the less expensive basket, both “made in Hawai'i” and koa bowl packaging increased the perceived value of the gift baskets. The project was one of several faculty research initiatives funded by the university's Center for International Business Education and Research.



Grant benefits research, security

\$300,000 from the federal Office for Domestic Preparedness Homeland Security Grant Program will boost research in Mānoa's College of Tropical Agriculture and Human Resources while providing the state with the means to identify chemicals in environmental samples. The funds are being used to purchase liquid chromatograph-mass spectrometer equipment for the Environmental Biochemistry Laboratory headed by Qing Li, professor of molecular biosciences and bioengineering.

Historic kimono included in national brochure

Navy Commodore Matthew Perry's second expedition to Japan in 1854 opened Japan's ports to American trade. Among the gifts his ship brought back was a kimono destined for a place in the Mānoa College of Tropical Agriculture and Human Resources' Historic Costume Collection and a brochure developed by the Costume Society of America.

A descendant of a Perry crewman gave the woman's *kosode* (short-sleeved kimono) from Yokohama to the Marders family, which donated the robe to UH. Silk with gold-wrapped threads, it features *shochi-kubai*, a combination of plum, pine and bamboo known as *saikan no san'yu*, the three friends of the cold season. In Confucian symbolism, the plum represents courage; bamboo, resilience, and pine, long life—virtues to pursue when facing the afflictions of life.



Physician tackles high prescription costs

The high cost of prescription drugs impacts us all. One in three Hawai'i residents who take medications regularly put off filling prescriptions, reduce dosages, use mail order or cut back on food and utilities. One in five have no drug coverage. The state spent \$62 million on prescription drugs for Medicaid fee-for-service patients in 2000.

Until it is easier for doctors to know the cost of drugs and which less expensive options will work for a particular patient, drug prices and insurance premiums will keep increasing, says Assistant Professor of Family Medicine Chien-Wen Tseng. As a Robert Wood Johnson Foundation Generalist Physician Faculty Scholar, she will use her \$300,000 grant to design and test cost-efficient prescribing guidelines.

Student researchers win international honors

The Society for Economic Botany recognized two Mānoa doctoral students in August during the biennial International Congress for Ethnobiology in England. Anthropology candidate Heather McMillen's award will support her fieldwork in Africa (see *Mālamalama* Sept. 2004). Botany candidate My Lien Nguyen received the prize for best oral paper for "Some Like it Hot...and Sour: The Ethnobiological Evolution of Canh Chua Cá Loc in Vietnamese Migrations."

Oldest Malay manuscript identified

Scholars from around the world gathered in Jakarta in December to attempt translation of a 700-year-old Malay manuscript rediscovered by a Mānoa archaeologist and philologist. Assistant Professor of Indonesian Uli Kozok found the 34-page legal code in a Sumatran village in 2002, where it had been seen but not pursued by a Dutch scholar 61 years earlier. Recorded in Malay with a few sentences of Sanskrit on bark paper from the paper mulberry tree, the Tanjung Tanah document was radiocarbon dated to the 14th century, making it the oldest known Malay manuscript. With funding from the U.S. Ambassador's Fund for Cultural Preservation, UH and the Yayasan Pernaskahan Nusantara foundation are coordinating translation, publication and preservation of the document. A replica will be placed in the Indonesian national library and the original returned to its home village.



UH creates major impact in Hawai'i economy

The UH system's \$1.4 billion in education-related expenditures in 2003 generated nearly \$2 billion in local business sales, \$1.2 billion in employee earnings and \$132 million in state tax revenues. According to the new UH Economic Research Organization report, UH represented 3.1 percent of the state's economy. Its 35,800 jobs represented 4.6 percent of the state's total. Each dollar of state general funds invested in the UH system generated an additional \$2.09 in education-related expenditures and \$4.35 in total business sales. Find out more at www.hawaii.edu/ovppp/econimpact.html.

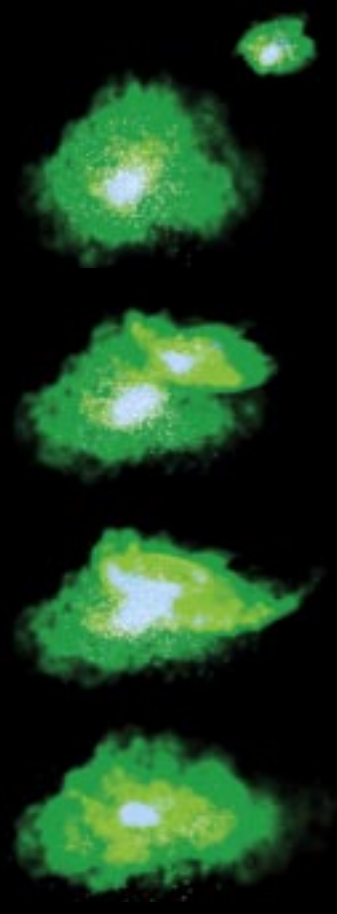


Illustration courtesy of NASA

Galaxies merge in perfect cosmic storm

Like the collision of high-pressure weather fronts, two galaxy clusters smashed together in what astronomers are calling a "perfect cosmic storm" 800 million light-years from Earth. One of the most powerful events ever witnessed, the collision was second only to the Big Bang in energy output. It was recorded by an international team led by the Institute for Astronomy's J. Patrick Henry using x-ray emissions captured by the European Space Agency's XMM-Newton orbiting observatory and reported in the Nov. 1 issue of *Astrophysical Journal*. Creation of the massive cluster supports the theory that the universe was built "from the bottom up" through merging of smaller objects, says Henry. The team will keep watching, but it will take about 7 billion years to achieve relative calm in what is now one of the largest objects in the universe. More at www.gsfc.nasa.gov/topstory/2004/0831galaxymerger.html



Power Flowers: Lavender Lady, an anthurium developed by College of Tropical Agriculture and Human Resources horticulturalists, won the blue ribbon in the Society of American Florists' national Outstanding Variety Competition. Close on its heels was Tropic Fire, another CTAHR creation. The red anthurium received the second place red ribbon.

Mapping to improve coastal management decisions

The Hawai'i Coastal Geology Group in Mānoa's Department of Geology and Geophysics, will map historical patterns of erosion on the Windward O'ahu coast. The maps will help characterize future erosion hazards, establishing a scientific basis for beach management policies, says principal investigator Charles "Chip" Fletcher. The group hopes to establish a one-stop data source for shoreline management. Its work on Maui resulted in a new setback policy. The Windward O'ahu mapping is being funded by a \$100,000 grant from the Harold K. L. Castle Foundation.

Colorful fish give researchers an eyeful

Humans delight in the bright colors that make reef fish readily visible. The fish-eye view of things is another matter, however. Mānoa Emeritus Professor of Zoology George Losey is among those working to understand the role of fish coloration. He and colleagues recently analyzed fish-eye pigments and measured background colors in various reef habitats. The average wavelength of light reflecting off the reef is a light blue similar to bands of color on the *Pygoplites diacanthus* angelfish. Effectively, the fish blend in with the background. Color patterns might even serve as a danger signal. Damselfish scurry in mass behind coral outcrops when predators approach. A UV patch on the dorsal fin of the *Dascyllus reticulatus* species might alert neighbors without being visible to predators who are unable or too distant to perceive UV wavelengths.

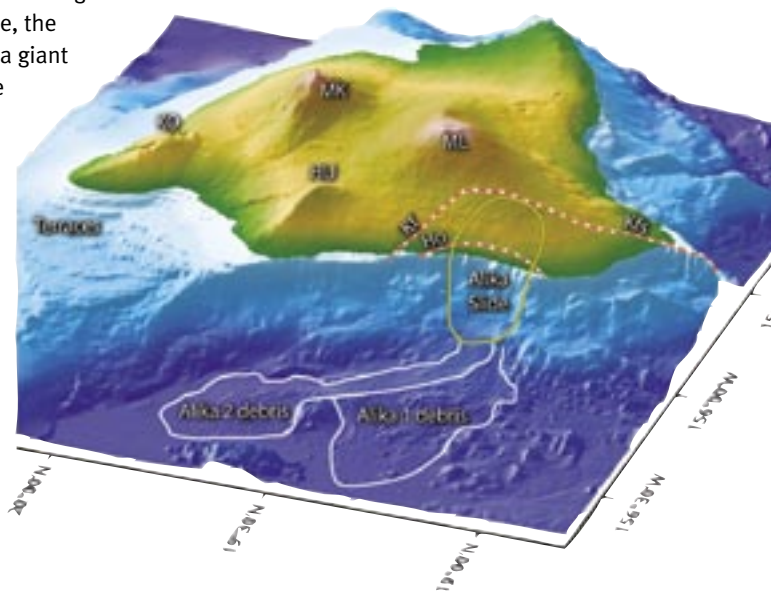
Pest management team honored for fly work

Hawai'i's successful fight against the fruit fly could allow the agriculture industry to expand production by as much as \$45 million a year, improve locally grown produce and increase the potential for new export crops. The Hawai'i Fruit Fly Area-Wide Pest Management core team has applied a range of techniques—from prompt burial of rotting fruit to more effective use of lures and poison baits to release of sterile mates—to tackle the melon fly and Oriental, Mediterranean and Malaysian fruit flies. The program earned the U.S. Department of Agriculture 2004 Secretary's Honor Award and the Entomological Society of America's Integrated Pest Management Team Award, with special honors for Mānoa entomologist Ronald Mau.



Evidence of giant tsunami unearthed

120,000 years ago, the giant Alikā 2 landslide sent 120 cubic miles of material thundering down the western slope of Mauna Loa. Discovery of marine deposits the same age on the adjacent Kohala volcano suggests the landslide triggered a massive tsunami that swept fossil-laden sand up to four miles inland and 1,600 feet in elevation. An international research group led by Mānoa oceanographer Gary McMurtry found smashed marine shells and coral fragments cemented to chunks of lava and soil by what was once coralline sand at an onshore deposit. Similar species are found on a drowned coral terrace now 1,400 feet below sea level—indicative of a back-reef environment that was quite different from the current shoreline. Since the Big Island is known to be sinking about an inch per decade, the scientists conclude that a giant tsunami, not uplift of the landmass, is responsible for the upland deposits. More research is planned, but the scientists are racing against another destructive force—unauthorized bulldozing related to rampant development of the area.



Lasers create opportunities on Kaua'i

Photo by Kent Tanigawa

Kaua'i Community College received a big donation this past summer—literally.

In May, the campus took possession of 17 crates, containing 12,000 pounds of high-tech laser equipment. Thanks to the generous gift from The Boeing Company, Kaua'i now has a photonics lab. The equipment included optical benches, optical mounts, accessories and a cryogenic system.

Photonics is the technology of generating and harnessing light and other forms of radiant energy whose quantum unit is the photon. In photonics, optical devices such as lenses, mirrors and telescopes direct a laser beam. It is a rapidly expanding field with a wide range of practical applications, including surveying and imaging equipment, police speed guns, fiber optic telecommunications systems, laser eye surgery and industrial production applications.

The photonic gift came about when Kaua'i was called upon to participate in training and educating island students in support of workforce development on the island. Kaua'i Mayor Bryan Baptiste created Team Tech initiatives, whose major push has been to attract high-tech industry to help boost Kaua'i's economy. One of the island's largest employers is the Pacific Missile Range Facility, which needs trained technicians.


Taking the lead on the huge job of assembling and then getting trained on the new equipment was Kaua'i electronic technology Associate Professors Francis Takahashi and Rick Matsumura. It took these instructors, two Boeing experts and three students the summer to set up the equipment, valued at \$110,000. Boeing made two staff people available for the assembly, and Envisioneering, a Virginia-based engineering firm, donated enough money to employ three students. The students had close ties to the campus—Shaun Arakaki is a Kaua'i campus graduate and Brandon Allard and Bryson Seman were both first year electronics technology students at the time. After lab assembly, the instructors and students had to master the equipment. The staff also went for laser safety training at the Air Force Research Laboratory on Haleakalā.

The timeline was tight—the lab had to be operational by the start of the fall semester, when the campus' first photon training class was offered. The photonic program is an innovative new com-

ponent to the campus' traditional electronics technology program, which includes instruction in electronics, computer technology, networking, information technology and telecommunications. In the next step for photonics, Takahashi and his staff have been tasked with creating a curriculum for more training.

Chancellor Peggy Cha celebrated at the lab's blessing with dignitaries including UH Interim President David McClain, Sen. Daniel K. Inouye, Boeing Integrated Defense Systems' President and CEO Jim Albaugh and Envisioneering President Jim Kuga. The Kaua'i students treated attendees to a tour of the lab and a laser demonstration.

Like other UH community colleges, the Kaua'i campus works with the dual focus of providing industry with trained employees and island residents with the skills they need to compete for productive jobs. Takahashi says, "This program is in direct response to growing industry needs on Kaua'i." The photonics training program will give island students a firm foundation to enter the expanding high-tech job market that is opening up right in their own backyard.

Learn more about electronics technology and other programs offered by Kaua'i at http://kauai.hawaii.edu/program_desc/. 

by Tracy Matsushima (BA '90 Mānoa), an External Affairs and University Relations publications specialist



Photo by Shirley Tani

Kaua'i students, from left, Shaun Arakaki, Brandon Allard and Bryson Seman conducted a laser demonstration for Sen. Daniel K. Inouye and other guests at the photonic laboratory dedication



UH team tackles the question of

Life on Mars?

by Cheryl Ernst

Bring astronomers, chemists, computer scientists, geologists and oceanographers together, and Mars is the limit...

or, rather, the beginning. An interdisciplinary UH Mānoa group commissioned by NASA's Astrobiology Institute is one of 16 astrobiology lead teams in the nation seeking extraterrestrial life. The UH group is unique in two ways—it is the only team with all members on one campus, and it coalesces around the theme of water with a \$5 million research budget for five years.

It's the water

"Water is the medium of life and the major component of cells," explains the Institute of Astronomy's Karen Meech, UH team leader. Liquid at a wide range of temperatures, it sustains life functions, regulates geologic activity and creates favorable environmental conditions, she says. Water interacts in the rising, cooling and sinking of Earth's crust, keeping it from getting stiff. Thermal currents in the ocean buffer the continents, keeping land habitats suitable for life.

So the search for life is the search for water. And there is evidence that there is, or was, water on Mars. It is certainly present in the polar ice caps. Elsewhere on the red planet, evidence is circumstantial. Mapping by orbital surveyors depicts gullies and moraines like those associated with glaciers on Earth. In computer models, tectonic activity alone cannot fully explain the formation of Valles Marineris, a feature six times the depth of the Grand Canyon and the length of the United States. Gamma ray analysis indicates there

is more hydrogen—the H in H₂O—on Mars than expected, perhaps as permafrost in the upper layers of soil, says planetary geophysicist and astrobiology team member Scott Anderson. Thermal emission spectrometry detected an area the size of Connecticut strewn with microscopic pebbles of hematite called blueberries.

"There are many ways to form hematite, and many of them involve water," says geologist Victoria Hamilton, one of several UH faculty members pursuing Mars research outside of the astrobiology effort. Hawai'i Institute of Geophysics and Planetology colleague Peter Mouginis-Mark, who is following the progress of the Mars rovers *Spirit* and *Opportunity*, says jarosite also appears to be present, a mineral that forms over long periods of time in water. Ripples and sedimentary layers recorded by the rovers' cameras may also be signs of a once-shallow sea on a now dusty Martian plain.

Where did the water come from? It is found in the interstellar medium and the denser molecular clouds that give rise to star-forming regions. It was present in our universe when grains clumped together to form planetary bodies. The Institute for Astronomy's Bo Reipurth is examining the interstellar medium while Meech and David Jewitt pursue the evidence preserved in the comets. Since the planets formed a few billion years ago, these "big dirty snowballs" have held the "leftover junk" in cold storage, says Meech. Under the cosmically weathered surface, the pristine interior holds a chemical record of our early planet. NASA's Deep Impact mission, set to launch Jan. 8 and collide with comet Tempel 1 in July, aims to give scientists a peek. Meech is a co-investigator on the mission.

Co-investigators, from left before the building-long thermal image mural of the Mars equator in POST, include Kimberley Binsted, Jeffrey Taylor, Michael Mottl, Jonathan Williams, David Jewitt, James Cowen, Scott Anderson, team leader Karen Meech, Alexander Krot, Ed Scott, Rolf Kudritzki. Not pictured, Eric Gaidos, Julia Hammer, David Karl, Mary Kadooka, Klaus Keil, Gary McMurtry, Bo Reipurth



There's more to life

Water, alone, is insufficient for life. An energy source is a must, and the sun isn't always available. Life may have originated near high-temperature water-rock interactions, now occurring in places like Yellowstone geysers and undersea vents near Lō'ihi. James Cowen, David Karl and Michael Mottl from the School of Ocean and Earth Science and Technology are studying the microbiology and geochemistry of seafloor thermal vents to understand the life-forms there and on early Earth.

Mars and Jupiter's satellite Europa, the other habitats in the Solar System where life might exist, are cold and icy, however. "In the search for analogous environments on Earth, what you're looking for is ice and volcanoes," says SOEST geobiologist Eric Gaidos. He finds both in Iceland. The island is ideally situated—on the arctic circle and above the mid-Atlantic ridge. It is home to Vatnajökull, the largest ice sheet in Europe, which lies atop Grimsvötn, one of the most active volcanoes in the world. Eruptions beneath the aptly named "water glacier" melt large amounts of ice, creating subglacial lakes that occasionally burst from under the ice in massive floods.

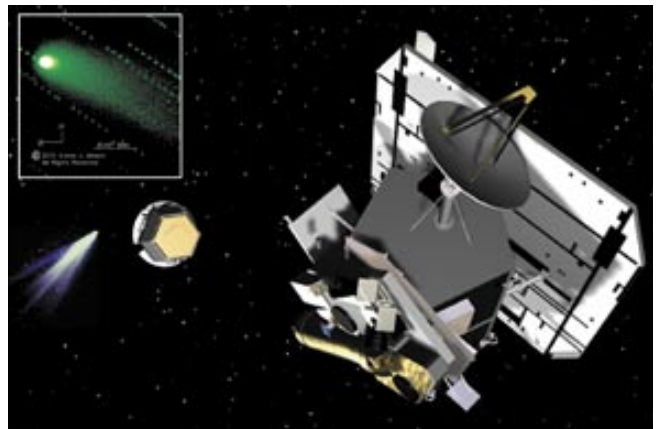
Grimsvötn is a plausible small-scale analog for Mars, and it harbors life. In 2002, Gaidos and his U.S. and Icelandic colleagues drilled through the ice. They found a microbial community in the water and sediment below. DNA studies show a microbe population distinct from that of nearby snow, ice and hot springs.

"They're not contamination from another source, they actually grow there," says Gaidos, a physicist with a bent for biology. The lake isn't completely sealed from the outside world—surface snow is compacted and buried, eventually cycling down and melting. Still, the ice acts as a bottleneck through which microbes must pass to colonize this extreme environment. So the focus isn't on how life originates or evolves, but how it colonizes, how it survives and, ultimately, what "footprints" it leaves behind. These become the signs to look for in exploring extraterrestrial environments for life.

If there's life on Mars, it's not going to jump up and introduce itself," says Gaidos. "The signature may be very subtle."

A carbon copy

Life also requires a source of carbon and potential nutrients. These too can be found in comets, suggesting their presence in the pre-planet solar nebula. They may also have been delivered to Earth, and possibly Venus and Mars, via meteorite. Klaus Keil and others at UH are slicing and examining meteorites to identify when and where they formed and how much material they delivered to earth. The National Science Foundation and NASA fund an annual meteorite hunt in Antarctica; Joseph Boyce is the latest UH participant, spending Christmas 2004 on the ice.



In the laboratory (top), co-investigator Ralf Kaiser's group simulates the conditions in space and on planets to identify environments that can form the molecules necessary for life. Other scientists rely on data gathered remotely by space telescopes, orbiters, the long-running Mars rovers and NASA's scheduled Deep Impact mission. Karen Meech captured the image of target comet Tempel 1, inset on NASA's depiction of the impactor departing the flyby craft.



Fourth rock from the Sun

Mariner 4 was the first of 19 NASA missions to Mars, taking pictures as it flew by in 1965

NASA plans 6 more Martian missions, including the *Mars Sample Return Lander* proposed for launch as early as 2011

Although small at only 4,222 miles in diameter—Mars is home to the Solar System's largest volcanic mountain, 88,583-foot-high Olympus Mons

Water at the surface would simultaneously exist as a liquid, boil into vapor (because of the low pressure) and freeze into ice (because of the low temperature)

Unlike the sliding plates on Earth, Martian tectonism appears to be vertical

The Martian day is 24.62 hours, it's year, almost 687 Earth days

Surface temperature ranges from -125 to 23 °F and the entire planet is periodically engulfed in giant dust storms

Mars has two moons, Phobos and Deimos



In the field, scientists investigate the extraterrestrial-like conditions of extreme Earth environments from mountain top lakes to seafloor vents. Above, a drill rig was used to sample bacteria living under Iceland's Grimsvötn glacier during a 2002 expedition led by astrobiology co-investigator Eric Gaidos.

Most meteorites are very old, Hamilton says, but the 32 known Martian meteorites are relatively young, at age 1 billion or so. Zagami, whose fall was documented in Nigeria in the 1800s, provides evidence of Mars' volcanic activity and gas bubbles that yield samples of the Mars atmosphere. Hamilton uses thermal emission spectrometry to determine the fingerprint for earthly and meteoritic minerals and rocks. Her spectra of Martian meteorites helped identify similar spectra on Mars, and she hopes to use the complete catalog as a basis for comparison with spectra readings from throughout the solar system.

Anderson uses similar technology to sample for complex organic compounds such as hopanes, isoprenoids and steranes, common building blocks of cell walls on Earth. During three weeks on the Arctic ice in fall 2001, he and colleagues successfully tested Cryobot, a self-contained drilling robot that melts its way through the ice to sample what's below. The team is now working to miniaturize a mass spectrometer and the electronics to run it, capable of running on solar energy and surviving a drop onto Mars.

Why not fly samples back to existing Earth-based labs, à la moon rocks? Anderson, who helped operate the *Odyssey* orbiter at NASA's Jet Propulsion Laboratory before coming to UH, says a return spacecraft would probably increase costs five-fold. (Relatively cheap one-way missions cost taxpayers about 15 cents a year.) Until we know more about what's there, he adds, we don't know the "right" rock to bring back.

It takes chemistry

Excitement mounted when carbon was found in a meteorite a few years ago and methane detected on Mars more recently. Neither was proof of life. Both elements could have originated in either biologic or standard chemical processes, says

Ralf Kaiser, an astrochemist inspired by the popularity of *Star Trek* in his native Germany. The cold clouds of space contain 130 different molecules. Many, including sugars and amino acids, are important to life. Kaiser's Reaction Dynamics group in the Department of Chemistry uses laboratory equipment to simulate conditions of space, planets or even combustible flames. They can condense H₂O and CO₂ ice, create temperatures from 10 to a few hundred degrees Kelvin and duplicate the particle-charging effect of solar wind. The group seeks to answer questions such as whether H₂CO₃, an acid that is unstable under standard conditions on Earth, might influence the pH balance on other planets, affecting the geochemistry by dissolving different minerals. Radiation is an important factor too, given the thin atmosphere on planets like Mars.

"When you understand which environment can form the molecules necessary for life, then you can predict where they might form," Kaiser says. "To be 100 percent sure life is present, you have to find life."

The future

Looking beyond Mars, Gaidos studies Jupiter's moon Europa, and Anderson is interested in Venus. Kaiser eagerly awaits results from the *Huygens* probe, due to drop from the *Cassini* orbiter Jan. 14, parachute through the thick atmosphere of Saturn's moon Titan and look for molecules and chemical interactions similar to what took place on early pre-biotic Earth.

"The next generation will reap the rewards of our work. We'll tell them where to go," says Gaidos. Among the up-and-comers are eight postdoctoral researchers Meech calls "the glue that holds it all together." Manned missions will come in time, and new targets. There are 110 planets outside our solar system, so far identified only by the gravitational tug they exert, Meech points out.

Mars is just the beginning. ☽

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

Learn more

UH's Astrobiology Lead Team, www.ifa.hawaii.edu/UHNAI/
NASA Astrobiology Institute, <http://nai.arc.nasa.gov/>
NASA missions, <http://solarsystem.nasa.gov/missions/>

UH's David Karl delves into the ocean's mysteries

Deep Sea-crets

by Janine Tully

Just when oceanographers thought they had a handle on marine life, discovery of new microorganisms and metabolic systems sent them back to the field and the lab to rework models of the ocean's ecosystem. Among them is David Karl, an internationally known oceanographer with Mānoa's School of Ocean and Earth Science and Technology. The \$40-million man (a tally of his research grants) has published dozens of articles and participated in 100 cruises and dives that encompass most of the world's oceans.

Karl attributes the new findings to several factors: the HOT (Hawai'i Ocean Time-series) Program, focusing on carbon cycling, climate changes and marine life; advances in technology and molecular biology and sheer luck. "Some of these discoveries were made by accident, because of ignorance of things we never even thought about," he explains.

Microbes come of age

The study of microorganisms has greatly evolved since Dutch toolmaker Antonie van Leeuwenhoek invented the first microscope and used it to observe what he called "little animals" in 1670. Still, marine biologists continue to be surprised by how little they still know about these infinitesimal sea creatures.

Since the establishment of HOT in 1988, scientists have found two microorganisms that have changed the way they think about the ocean's ecosystem. One is a tiny cell called *Prochlorococcus*, a form of plant life that produces oxygen and consumes carbon dioxide. The other is *Archaea*, a type of microbe that was once thought to live only in extreme environments—hot thermal vents and salt ponds. Both organisms are found to grow in abundance in the ocean.





Calling Karl “one of the leading figures in oceanography,” Woods Hole Oceanographic Institution officials presented him with its highest honor in 2004. The Henry Bryant Bigelow Award in Oceanography has been awarded just 13 times since it was established in 1960. “Karl’s work and vision have influenced the directions and perspectives of several disciplines,” including studies of climate change, microbial biology, ocean engineering and oceanography in general, said Woods Hole Director Robert B. Gagosian.

“We didn’t even know *Prochlorococcus* existed until 1988,” says Karl. “So how could we possibly put together a conceptual model of the food web, of the energy flow, of the carbon flow when we didn’t even know about the most abundant form of plant life on the planet?”

To make matters even more exciting, marine scientists recently found that certain ocean bacteria make a protein that allows them to absorb light, not unlike the protein in our eyes. “In the past we thought that the only organisms that used light energy were plants,” Karl says. “Now, we may have a new metabolic pathway to supplement photosynthesis. The open ocean, it turns out, is a huge solar collector!”

The fact that these microorganisms are abundant and can process light opens a whole new world of marine microbiology with impact on the environment, marine industries and medicine. “You could find an organism with a unique composition that is anti-cancerous.” While the human genome is made of 30,000 genes, the bacterial genome is estimated to have a million times more, so there’s more diversity, he points out.

Several awards, most recently the Woods Hole Oceanographic Institution’s prestigious Bigelow medal hang in Karl’s corner office, which overlooks Diamond Head. “I’m humbled by this,” he says, referring to the recent honors. “The award does not make the scientist’s career; it’s the legacy and knowledge you leave behind that’s important.”

That’s why he’d like to transform a \$3.85 million grant, part of the 2004 Gordon and Betty Moore Foundation Investigator in Marine Science award, into the first UH Center for Microbial Oceanography. Toward this legacy, Karl and a team that includes three other Moore award recipients submitted a 10-year, \$40 million proposal to the National Science Foundation. If funded, the center is expected to begin research operations and student training by July 2005.

Karl also looks forward to the day when he can turn over his project on global carbon cycling to a “younger generation of scientists.”

The carbon dioxide conundrum

For the last 16 years Karl has studied the global carbon cycle and its impact on the ocean. Data collected at HOT’s Station ALOHA, 60 miles north of O’ahu, indicate that as carbon dioxide in the atmosphere goes up (adding to the “greenhouse effect”) so does it go up in the ocean. Scientists predict that in three to five years the ocean “won’t take it anymore.”

Short of reducing the use of fossil fuels, scientists have proposed three alternatives for disposing of CO₂—trapping it in the atmosphere, turning it into liquid and dumping it in the ocean or burying it in the ground where oil has been pumped out.

Another option involves adding nutrients to the ocean to stimulate the growth of planktons. The idea is that if you stimulate the metabolism of these microorganisms, they will grow, take up carbon dioxide and eventually sink to the bottom of the ocean. “Conceptually this would work,” Karl says, “but to do something like this is pretty scary, because up until 20 years ago we didn’t even know who the dominant plant plankton were.”

The lure of the ocean

Karl’s interest in the ocean began early in life. His mother, a Cheektowaga, N.Y., librarian, brought home books about the ocean, including Jacques Cousteau’s classics. At 17, he saw the ocean for the first time. “In that moment I changed my plans (of becoming a wildlife biologist) and decided to become

an oceanographer.” He majored in biology at University College at Buffalo, N.Y., and received an MS in biological oceanography from Florida State University followed by a PhD in oceanography from University of California San Diego in 1978, a year he calls a “benchmark” in his life.

During an expedition to the Galapagos Rift, he and colleagues discovered strange, worm-like creatures living in thermal vents that were able to survive because of local bacterial based production. “I was one of the first people to see these giant tube worms and say, ‘Gee this is weird, why are these things on the bottom of the ocean?’”

The year was also marked by tragedy. A newly hired assistant professor, Karl was to rendezvous with colleagues on the Big Island. The research vessel *Holo Holo* “was too small, and I couldn’t go,” he says. The ship never made it to port. Among the 10 people lost were three UH scientists. “It was a major setback for our program here and in the nation.”


Karl was involved in reestablishing a campus memorial garden honoring his fallen comrades, and he has created a CD on the history of oceanographic research at UH. He has also worked with Boy Scouts and supported school science programs, a continuation of community service that began in college, when he volunteered to

We didn’t know the most plentiful form of plant life

teach mentally handicapped children and later prison inmates. For the past decade, he has helped manage the population of abandoned and feral cats on

the Mānoa campus through approved trap-neuter-release procedures.

“Things have come full circle,” says Karl. “I have a strong commitment to give back to the public and to education.”

At 55, having spent most of his life in and out of the ocean, Karl is ready to explore firmer ground on his new Harley Davidson. “I’ve been riding motorcycles for 40 years; it’s the only continuity in my life. I expect to be riding as long as I can so that I can take one or more cross country trips to see what I have missed so far.” 

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

story and photos by Jennifer Crites

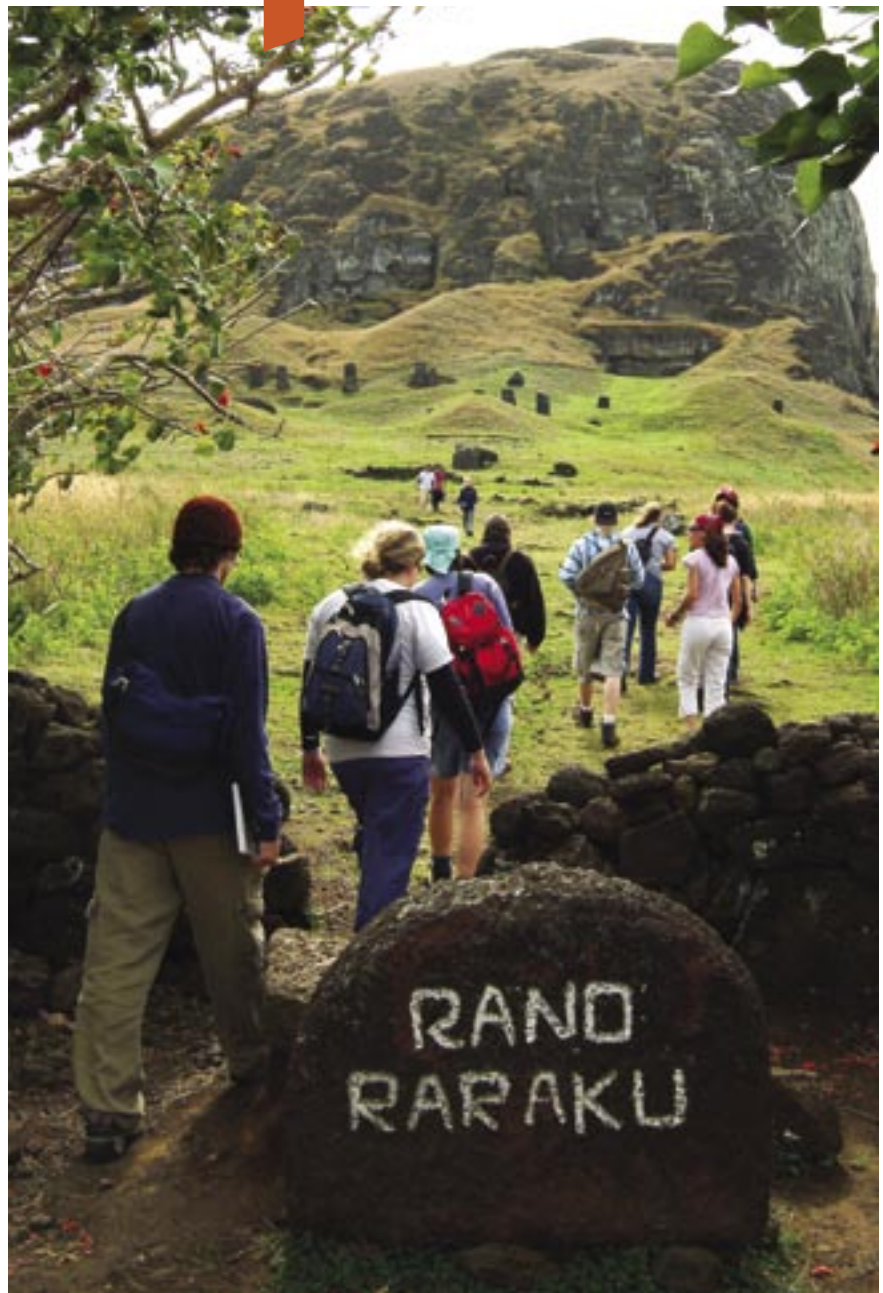
Work by a UH archaeologist sheds new light on the history of this mysterious island

Rethinking Rapa Nui

At the bottom of an 8-foot-deep pit, teaching assistant Kelley Esh shovels sandy brown earth into a bucket. With a grunt, she hoists the heavy container to the waiting hands of another worker on a ladder. Several students painstakingly sift through the bucket's contents, unearthing chunks of animal bone, charcoal and obsidian; others sort and record the findings in a log. Nearby, a young Rapanui boy playfully gallops his horse across the shifting sand and several people picnic in a grove of palm trees. Silently observing it all, gigantic stone moai of Rapa Nui stand guard as they have for more than a thousand years.

"This island is one of the archaeological treasures of the world," reflects UH Mānoa Associate Professor of Anthropology Terry Hunt, who has organized this field class for the past three summers. "We're looking at the oldest intact archaeological deposit on the island. We're the first ones to touch something that the original

Students enter the quarry site on a field trip to view unfinished moai. Above, artwork related to the birdman cult, associated with post-moai governance





The island's oldest moai watches over the tent-shaded dig near Anakena Beach, where the first inhabitants settled, and a replanted palm grove that serves as present-day picnic grounds

people here touched and used. We're gathering the evidence to find out what those people were doing, and it's telling a very different story."

Digging at Anakena Beach, the landing and settlement site of Rapa Nui's first inhabitants, Hunt's team has found dolphin and seal bones as well as pieces of obsidian once fashioned into tools. But the most surprising find has been an abundance of rat bones. Not just any rat, according to Hunt, but tiny, furry Polynesian rats brought here as an alternative food source by the original settlers. The rats, says Hunt, played a significant role in Rapa Nui's history, a role that until recently has been overlooked.

Hunt challenges the notion that moai building caused the Rapanui's decline

History and Mystery

About the size of Kaho'olawe, the 64-square-mile island of Rapa Nui lies alone in the Pacific Ocean at a remote corner of the Polynesian triangle—4,300 miles south of Hawai'i and roughly 2,500 miles equidistant from Tahiti to the west and the South American continent to the east. Since the Easter Sunday 1722 visit by Dutch explorer Admiral Jacob Roggeveen (hence the Easter Island name) Rapa Nui has intrigued the rest of the world. Where did the Rapanui people come from? How did they get to this isolated spot? Who built the mammoth stone statues and how were they moved?

Over the years, theories have come and gone, including outlandish claims involving outer-space aliens and the lost

continent of Mu. In 1947, adventurer Thor Heyerdahl sailed the *Kon-Tiki* raft from Peru to Polynesia in an attempt to prove that Pacific Islands such as Easter were originally settled by Incas from South America. Since then, studies of language, DNA, oral histories and archaeological findings indicate that seafaring Polynesians, not Incas, inhabited Rapa Nui. They arrived around 700 AD, probably from the Austral Islands in what is now French Polynesia.

As for the moai—those stern-faced statues said to represent a revered chief or ancestor, a visit to the island's Rano Raraku quarry provides proof enough of their origins. Enormous stone carvings weighing an average of 25 tons each lie about in various stages of completion. Some are still attached to their volcanic womb. Others need only finishing touches. Still others stand expectantly at the quarry's base, waiting for a moving day that will never arrive. An exhibit at Rapa Nui's Sebastian Englert Museum displays tools used to carve the behemoths: crude and dull-edged basalt chisels, one of the few implements available to a stone-age society.

It's commonly believed that during 900 years of moai building, the Rapanui people chopped down all the island's trees, using them as rollers or support beams to transport each moai across the island to its ahu (ceremonial platform). The lack of trees supposedly led to declining food production, warfare, cannibalism and near annihilation.

By 1877 only 111 Rapanui remained from an estimated, late-prehistoric population of 10,000. But the culprit "was not a mania for moai," Hunt points out. Moai building stopped more than a hundred years before Roggeveen's arrival. Yet according to the admiral's log, even without most of their trees the island's inhabitants appeared well-fed and thriving. Less than 160 years later, the Rapanui found themselves near extinction thanks in large part to diseases introduced by sailors on whaling ships, a smallpox epidemic and slave trade that carried off Rapa Nui's king, priests and civilians to labor in Peru.

What about the rats? "The Rapanui may have chopped down trees to move the moai," says Hunt, "but the



growing number of rats played a part in deforestation. As recent work in Hawai'i shows, rats have an appetite for seeds that are the hope of the next generation of trees." Including, he adds, the coconut-flavored nut of the *Jubaea* palm, once one of Rapa Nui's most plentiful species. Without seeds, new trees couldn't grow.

Charcoal found at the beach dig also provides a clue to the island's once treeless state. "Accidental fires could have taken much of the forest down," says Hunt, "and severe droughts may have contributed to the fire problem."

Build Moai and Prosper

Hunt also challenges the assumption that moai building created a food shortage. "Just the opposite," he insists. "According to evolutionary theory, if a civilization invests its energy into erecting giant statues or other cultural elaborations, its people have less energy for procreation and surplus food production. Thus by creating moai instead of offspring and the means to support them, the Rapanui kept their population down to a level that could be sustained by

the island's available resources. And they didn't just survive, they prospered."

Clues come from satellite imaging and traditional digs

Even without trees, the Rapanui were able to adapt to their harsh environment using ingenuity and the one resource they had in abundance—rocks. On the island's steep and rugged northwest coast, several of Hunt's students measure manavai, circular enclosures made of stacked rocks that protected crops from the island's pervasive winds. Some extend, like a patio garden, from hillside caves once used as shelter. Others are freestanding—rock circles amid a rock-strewn sea of tall grass.

On the way to a manavai site, Hunt stops at a moai that fell from its carrier during transport. How the massive

Terry Hunt's research on moai, like the late-design top-knotted giants at Ahu Nau Nau, has scientists reconsidering the origin of Rapa Nui's people and the role of the giant stone statues





Students measure a fallen moai that lies face down along one of four roads leading from the quarry

moai were moved is still a mystery. A few theories have been tested with limited success, but “no one has ever systematically examined and documented the evidence to find out if these or other methods could have actually been used,” says Hunt as he measures the moai’s size and the slope of the ground, records the giant’s position (face down, in this case) and takes a soil sample from beneath the moai for luminescence dating (measuring stored energy in minerals to determine when they were last exposed to sunlight). The test provides a fairly accurate estimate of when the moai toppled off its transport vehicle. Aided by satellite imagery, Hunt and his students will locate and examine all the fallen moai along four ancient moai-transport roads leading from Rano Raraku quarry.

With plans to return again in the summer of 2005, Hunt is eager to fit together more pieces of the Rapa Nui

puzzle. “Every little detail is a witness to what happened here,” he says, “and we’re uncovering those details. I’ve spent so much time in the remains of the ancient peoples’ living areas that there’s a sense of how many of them were once here, like a ghost town. In a way it feels like they’re still here, watching us.” 📷

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

What happened to the trees?

The first western visitors to Rapa Nui found an island bare of native trees. But new research suggests Easter Island’s state had less to do with improvident actions of the inhabitants than with its fragile environment. Writing in the Sept. 23, 2004, issue of *Nature*, Mānoa anthropologist Barry Rolett and a UCLA geographer identify nine variables that predispose a Pacific island to deforestation. Like the equally barren Northwest Hawaiian Islands of Necker and Nihoa, Easter Island is old, low, dry and small—factors that reduce soil fertility and plant diversity. All three are located far both from trading partners (increasing dependence on local resources) and from sources of windborne dust or volcanic ash that can replenish soil nutrients. Pacific islands with more advantageous conditions and locations retained more of their tree cover.



A Rapanui woman, in white, and UH students examine a manavai built to provide shelter from the wind on the rugged and remote northwest coast

Deforestation has been linked to societal decline. Rolett believes the environmental vulnerability model could help explain why Fertile Crescent and Mayan societies collapsed while Japan and highland New Guinea thrived. He and his colleague hope to further refine their analysis and test it on additional locations.

—Cheryl Ernst

The Big Island university turned an administrative challenge into a challenging opportunity for students in the arts



HILO PERFORMS

by John Burnett

Just when it seemed that dwindling enrollment in music might silence Hilo's remarkable theatre, a small but extremely talented and dedicated group of faculty members responded with an innovative new degree program that consolidates music, dance and drama. Success was evident in the graduation of the first performing arts graduates last spring.

Drawing on similar baccalaureate programs at Iowa State, University of San Francisco, St. Mary's and Fairfield, the program offers a major in performing arts with an emphasis in music,

dance or drama as well as technical theatre. "Students have the opportunity to get a degree in performing arts in



which they are required to take a certain minimum number of credits as a core in all three disciplines," says maestro Ken Staton, associate professor of music and chair of the performing arts department.

"It was a huge honor for me to be a part of the first graduating class," says Lani Anderson, who received her BA in performing arts with a music emphasis in piano in May 2004.

Performing arts students combined talents in December's production of *Amahl and the Night Visitors*, above, and performance of Handel's *Messiah*, conducted by maestro Ken Staton, left.



Students from the dance concentration

“The degree required a well-rounded educational experience, and I feel that its ‘interpersonal’ qualities better prepared me for the real world.” Anderson is a paid church pianist, piano teacher and an accompanist—“all of which directly relate to my area of study,” she says.

One of about 40 declared majors, Chris Ramos is a talented young tenor taking the vocal music emphasis.

“This program is awesome because no matter your emphasis, you still have to take core classes in dancing, drama, music and technical theatre,” he says. “You don’t get bored here. There are always things to do. And as this program grows, so will the opportunities.”

Improved presentation skills and confidence help in any future career

UH Hilo performing arts majors hone their chops in the many community performances staged in the 600-plus seat facility soon to be renamed the University of Hawai‘i at Hilo Performing Arts Center. They also take their show on the road with a performance tour of Big Island high schools. “We put on a little show, very upbeat, and recruit—specifically for the performing arts program, but also for the university at large,” Staton explains.

In addition, Staton is working with Hilo-based videographer Lynn Richardson to create a DVD about the program for distribution to high school guidance counselors. “We’re cutting it down and putting the finishing touches on it,” he says. “It’s short, about six minutes long; it’s flashy and it has the quick-cut MTV video style that young people gravitate to.”

Staton believes the performing arts degree is a great base even for students who aspire to law school, graduate school in a non-arts discipline or even an entry-level white-collar professional position. “Students not only learn specific performance skills, their confidence and self-esteem are strengthened,” he explains. “They learn both how to work within a group and how to lead a group. They learn how to work in front of people and to give presentations without being intimidated by the process of public speaking. These are skills that employers and grad school recruiters value in applicants.”

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

Spring Performances

April 9–10: 100 Years of Broadway, featuring the University Chamber Singers directed by Ken Staton, University Dance Ensemble directed and choreographed by Celeste Anderson Staton, and members of the University Drama Program directed by Jackie Pualani Johnson

May 1: Spring choral concert production of Beethoven’s Mass in C performed by the combined singers of the University Chorus, University Chamber Singers and Hilo Community Chorus, vocal soloists and the Ho‘ulu Pila Chamber Orchestra, directed by Ken Stanton

May 4: Great Leaps, a performance featuring students from the UH Hilo dance program and UH Hilo Dance Ensemble, directed and choreographed by Celeste Anderson Staton

Leopards and beefsteak and hair plants... Oh, my!

Eight gardens in one delight young visitors to the Urban Garden Center

It may not be an octopus's garden in the shade, but there is an octopus tree...not to mention a leopard tree, cat's whisker plant and kangaroo fern. The College of Tropical Agriculture and Human Resource's whimsical new Children's Garden is actually eight theme gardens on 55,000 square feet of the Urban Garden Center in Pearl City. After surviving the Animal Garden—



where 45 plants feature distinctive traits of animals and insects from the air, sea, farm and jungle—families can check the time and admire the precision of the Sun Dial Garden or explore the bog-like wilds of the 180-foot-long Boardwalk Garden.

The House Garden, with its fairy tale cottage, offers a royal flush plant in the


bathroom, cup-and-saucer plant in the kitchen and sandpaper vine in the garage. The academically inclined can visit the Hawaiian Alphabet Tree Garden, which features a tree for each letter of the Hawaiian alphabet.

For a complete experience, the Sensory Garden celebrates unique shapes, colors, smells and textures. Imagination comes into play in the Butterfly Garden, where a curving 50-foot caterpillar tunnel opens to convex mirrors that reflect the visitor with insect features, while plants like butterfly bush and butterfly weed attract the real thing. And nothing builds up an appetite like viewing the pepper, pineapple, onion, tomato and herb plants in the wedges of the Pizza Garden.

Urban Garden Center Manager Dale Sato originated the Children's Garden concept in 1999. It was built with the help of 200 center and community volunteers who were inspired by young visitors. It received the 2004 Betty Crocker Landscape Award of Excellence in the Community Garden category.

Project manager Steven Nagano appreciates the honor, but is happy to satisfy an even more critical crowd. "More than 1,500 children tour the Urban Garden Center's vegetable, herb, ground cover and fruit collections each year. Now they have a set of gardens built especially for them," he says.

The Urban Garden Center is located at 955 Kamehameha Highway. Enter from the Diamond Head side of the Home Depot/ Public Storage parking lot. For information, call 808 453-6050.

Meanwhile at Windward, faculty members Angela Nishimoto and Steve Moulden have targeted an older audience, bringing college students' textbooks to life. The pair created a garden of plants native to Hawai'i or introduced by its earliest inhabitants. Leeward faculty donated plants for the garden, which is located in front of the agricultural building on the Kāne'ohe campus. 



photos by Carl Okuda

UH event teams local food producers with celebrity chefs to offer

A Taste of the Hawaiian Range



Charlene Nakagawa was about to throw away the figs from her garden when she thought of donating them to Mealani's 2004 A Taste of the Hawaiian Range, the Big Island food festival that promotes local produce and grass-fed meats. "I tried selling them at markets," says Nakagawa, "but ripe figs are so perishable and there's not much of a market for them." Enter festival participant Chef George Mavrothalassitis who took one look at Nakagawa's figs and ordered all she could supply, on an ongoing basis, for his Honolulu restaurant, Chef Mavro.

That's just one of many success stories arising from the spirit of cooperation that defines this annual culinary extravaganza sponsored by Mānoa's College of Tropical Agriculture and Human Resources. "We wanted to provide a way for Island farmers, ranchers, chefs and all those in the food business to support each other and educate consumers about the Big Island's high-quality produce, products and forage-based meats," says Glen Fukumoto, a county extension agent for CTAHR's educational outreach arm, the Cooperative Extension Service. Fukumoto spearheaded the first "Range" in 1996 along with CTAHR Mealani Research Station Manager Milton Yamasaki.

That first festival in Waimea started with a dozen restaurants, six food vendors and approximately 350 guests. These days the numbers are considerably higher. More than 1,900 eager food lovers descended on the Hilton Waikoloa Village's Grand Ballroom and Lagoon Lānai on Sept. 24 for the festival's ninth

incarnation, and they weren't disappointed.

Beef hearts skewered with mushrooms and cocktail onions, concocted by the Life Care Center of Hilo, vied for attention with a mouthwatering kālua goat, goat cheese and oven dried tomato pizza from Four Seasons Resort

Continued on page 30

More taste treats

Sample farm-to-restaurant fare on O'ahu with the Culinary Institute of the Pacific's tasty tour. Includes a dim sum brunch, narrated walking tour of Chinatown markets, visit to Nalo Farm's micro-greeneries and a hands-on cooking class in the professional kitchen at Kapi'olani Community College using ingredients from the tour. "This is the most complete culinary experience," says Ron Takahashi, chair of Kapi'olani's Culinary Arts Department. Cost of \$119 per person (\$79 for kama'āina) includes transportation and a souvenir chef's toque. Reservations are first-come first-served; call 808 734-9483 or book through authorized Waikiki travel agents.

Try menu-enhancing gourmet seasonings and sauces developed by Kapi'olani chef-instructors to raise money for the culinary program. Carrying the Kapi'olani Culinary Arts label are Honey-Cardamom Vinaigrette Dressing and Asian Seasoned Salt by Grant Sato, Pineapple Chutney from Kusuma Cooray, Sweet and Spicy Rub from Edward Fernandez and Hawaiian Passion Hot Sauce by Henry Holthaus. Available at the farmers market held each Saturday in Kapi'olani's Diamond Head parking lot or on-campus restaurants. —Karla Brown

The Album: Snapshots of Active Alumni

Volcano observer: Jim Kauahikaua (MS '76, PhD '82 Mānoa) is now scientist-in-charge at the U.S. Geological Survey's Hawaiian Volcano Observatory, where he has conducted research since 1988. The singing scientist (he performs with the Volcano Festival and Kamehameha Alumni Choruses) recovered from nasopharyngeal cancer, prompting his family to observe that he's gone from sick to SIC (the insiders' acronym for his new position).



Caring for Cuba: Naples, Fla., teacher and musician Ken Carper (PhD '00 Mānoa) is also a musical ambassador. The trumpet player was part of an American United Methodist delegation that delivered medicine, assistance and goodwill to sister churches in Cuba. Carper performed with numerous groups from Havana to the small harbor towns of Antilla and Mayarí at the eastern tip of the island, and then donated his trumpet to a small, rural sister church in the Holguín district.



Terrific teacher: Hilo Intermediate School science teacher Pascale Creek Pinner (BA '87, PD '91 Hilo) was one of 95 teachers in the nation to receive the 2004 Presidential Award for Excellence in Teaching Math and Science. Recipients attended a banquet hosted by the secretary of education and private tour of the White House, where President George W. Bush thanked them for making "major contributions to our country and to young people." Pinner was also congratulated by state Schools Superintendent Pat Hamamoto and Gov. Linda Lingle.



Diving lowdown: Kyle Nakamoto (BArch '90 Mānoa) is president and executive producer of Red Sea Ocean Adventures and Honolulu cable network OC16's new TV show, *Hawai'i Skin Diver*. The half-hour show features free diving and spearfishing. See www.redseaoccean-adventures.com. Nakamoto promotes conservation and education through diving, fishing and surfing adventures throughout the Pacific.



Photo by Andrew Shimabuku

Actors Darryl Tsutsui, below left, Stan Egi and Kati Kuroda reunited on the Kennedy Theatre stage in October in *Mānoa Valley*, fellow alum Edward Sakamoto's story of statehood-era Hawai'i.

Pictured above in Kennedy file photos from *Mānoa Valley*'s 1982 premiere, Egi is pursuing UH graduate studies in directing after acting on Broadway and in film, Kuroda tours as a stage actress and Tsutsui remains active in community theatre on O'ahu.

UHAA Activities

www.uhf.hawaii.edu/uhalumni/calendar.htm

Feb 18 UH Hilo Distinguished Alumni and Distinguished Service Awards Banquet; contact Yu Yok Pearing, yuyok@hawaii.edu or www.uhh.hawaii.edu/~alumni

Mar 2 UHAA Life Member Luncheon, Honolulu Country Club; contact 1-877-UH-ALUMS or alumnews@hawaii.edu or see www.uhalumni.hawaii.edu

Apr 2 Hawai'i Community College Alumni and Friends 10th Annual Chancellor's Golf Tournament, Naniloa Country Club, 6:30 registration; contact Bobby Yamane, 808 974-7368 or yamaner@hawaii.edu

Apr 29 UHM College of Education 18th Annual Recognition Dinner, Hilton Hawaiian Village; contact 808 956-6219 or coe@hawaii.edu or see www.hawaii.edu/coe

Apr 29 UH Hilo Alumni and Friends Second Annual Alumni and Friends Golf Tournament, Hāpuna Golf Course; contact Yu Yok Pearing, yuyok@hawaii.edu or www.uhh.hawaii.edu/~alumni

May 10 UH Distinguished Alumni Awards, see below

UH Alumni Association Distinguished Alumni Awards

2005 Distinguished Alumni

Charles Araki, BEd '57, PD '61
Elmer Botsai, ArchD '00
Frederick Duennebie, MS '68, PhD '72
Robert Hiam, BA '69
Carole Kai Onouye, BA '66
Jong-Wook Lee, MPH '81
Gary Okamoto, BA '66

2005 Founders' Awardee

Ronald E. Bright, BEd '56, PD '57, MEd '73

Gala Awards Dinner

Tuesday, May 10
Sheraton Waikiki Hotel
1-877-UH-ALUMS
alumnews@hawaii.edu

UH 'Ohana

Hawaiian Islands

At Homecoming Week in October, the Class of 1954 celebrated its 50th reunion. Sports enthusiasts enjoyed a convivial pep rally with Warriors Football Coach June Jones and Athletics Director Herman Frazier. ASUH sponsored a fun-filled evening of games, food and music, and the team beat San Jose State.

Graduates of the John A. Burns **School of Medicine** class of 1994 celebrated their 10-year class reunion Aug. 21–22. Highlighting the weekend was a continuing medical education seminar, Wellness into the 21st Century.

The **TIM International** Inc. Sept. 14 "Celebrate a Legacy in Tourism" fundraiser honored Richard Kelley, chairman of Outrigger Enterprises. "We were thrilled to raise \$42,000 for TIM's Learning Center, scholarships and other programs," commented chapter President Ren Hirose (BBA '85 Mānoa).

For the first time, **Hawai'i Alpha Delta Kappa** International sorority sponsored a 2004 scholarship recipient—Estonian Ave Rannik, second from right, a graduate student in education at Mānoa.

Deadline for nominations for the **College of Education** Alumni Association 2005 Distinguished Alumnus is Jan. 28. Contact Donald Nugent, dnugent@hawaii.rr.com, for a nomination form.

International

UH hosted a reception for nearly 80 guests July 26 at Paradise Cafe in Xintiandi, the newly renovated upscale entertainment district of Shanghai. Cafe staff greeted guests—including U.S. consular officials and representatives from UH partner institutions in the area—wearing aloha attire and lei and serving Blue Hawai'i cocktails.

More than 150 alumni attended an alumni reception in Tokyo in conjunction with the Hawai'i East-West Center's International Conference. UH President David McClain spoke on the system's strategic initiatives.

Mainland

Across the U.S. mainland, alumni chapters held send-offs for new students and their families. **Los Angeles/Orange County** hosted more than 30 UH-bound students from California with local food and games, right. **Las Vegas** threw a Hawaiian-style potluck dinner. **Pacific Northwest** held a picnic in Bellevue, Wash., complete with a Hawaiian word-on-the-nametag game and a handout of helpful hints.

The **National Capital Region** Chapter Aloha Invitational Golf Tournament drew 95 contestants Sept. 13 at Andrews Air Force Base in Maryland. Money raised supports internships.

UHAA-East extended aloha to visitors on Mānoa's Colleges of Arts and Sciences Alumni Association fall tour. Participants were treated to a daytime tour of Carnegie Hall and opening night performance. Metropolitan Museum curators provided a museum overview.

UHAA-Midwest was delighted to visit with and welcome Mānoa's cross-country team at the Loyola Lakefront Invitational competition Oct. 2 in Chicago.





The word from these communicators: Reconnect with UHAA

Current position Susan Doyle is president and chief professional officer for Aloha United Way and communication chair for the UH Alumni Association. KHNL-TV news anchor Howard Dashefsky serves as a UHAA director and member of Doyle's committee.

Education Hers: Punahou School, MBA '82 Manoa; His: BA '84 Mānoa

Career highlight Hers: Seeing her visions come true for 'Ōlelo: The Corporation for Community Television and the YWCA's renovated Camp Kokokahi with a Hawaiian cultural focus; His: piloting a Blue Angels FA-18 Hornet and carrying the Olympic torch

Her guilty pleasure A lazy bath with scented candles and a book

His recent accomplishment Two slumber parties in two weeks for his 7- and 9-year-old daughters, complete with chocolate chip pancakes, M & M's and fingernail painting

Effective communication It's important, whether you're sharing breaking news on the air or encouraging people to support important causes. So the skills "Dash" and "Su" bring to the UHAA Board of Directors are particularly valuable as the organization continues to grow.

Why UHAA? Susan first joined to fulfill a promise to a colleague who helped her with a YWCA project. She stayed on because "I have consistently been impressed with the quality of our alumni leadership in UHAA representing our alumni body in general."

A different kind of gratitude drives Howard. "UH gave me everything I have. It allowed me to excel in sports like baseball and in life," he says. "I would like to do what I can so that people after me can have the same opportunities that I've had."

Join Dash and Su in what they call an "increasingly vibrant" organization.

Make the connection

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

M / F Circle

Mailing address

City

State

Zip

Country

Telephone (home, work, fax)

Email

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, O'ahu

☐ \$60 Joint, O'ahu

☐ \$25 Single, Mainland/Neighbor Island/International

☐ \$35 Joint, Mainland/International

☐ \$45 Joint, Neighbor Island

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

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 ʻĀnuenue Alumnae Association
UH Founders Alumni Association
Te Chih Sheh

REGIONAL CHAPTERS

UHAA-Beijing	UHAA-Maui Club
UHAA-East	UHAA-National Capitol Region Chapter
UHAA-Greater Midwest Region	UHAA-San Diego
UHAA-Hong Kong	UHAA-San Francisco Bay Area
UHAA-Las Vegas/Southern Nevada	UHAA/EWCA-Florida Chapter
UHAA-Los Angeles/Orange County	



Be included

The UH Centennial Alumni Directory

Celebrating 100 years of higher education in

Hawai'i, 1907–2007

There will only ever be one UH Alumni Centennial Directory.

Please provide your information, when contacted, to update your UH 'ohana on what's happening with you.

Questions? Call 1-800-UH-ALUMS or e-mail alumnews@hawaii.edu

What will your legacy be?

The University of Hawai'i experience leaves a lasting impression. Why not leave your lasting impression with an inscribed brick placed on the Legacy Path at UH Mānoa.

The Legacy Path is an opportunity to display your alumni pride, express your gratitude, or pay tribute to someone you love or admire.

4" x 9" Legacy Path bricks are

- open to alumni, friends, family, and other university supporters
- available for \$300, \$200, and \$100, depending on location (The cost is fully tax-deductible.)
- inscribed with your personal message (Inscriptions can be up to 3 lines of 16 spaces each—include punctuation and spaces in count.)
- placed together upon request when orders are submitted together

For an order form or more information, contact the UH Foundation Office of Alumni Relations at (808) 956-2586, toll-free 1-877-UH-ALUMS or alumnews@hawaii.edu.

Become part of the Legacy!



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

2000s

Della Au Belatti (JD '03 Mānoa) was recently published in the He Mau Mo'olelo Kawaioka'ina Hawai'i Environmental Law Program paper series.

Ellen Eichberg (LLM '04 Mānoa) married Eric Meurer in August, and they live in Germany.

Kao Kim Hourn (PhD '01 Mānoa) is president of the University of Cambodia and secretary of state for the Ministry of Foreign Affairs and International Cooperation.

Mandi Kwock (BS '01 Mānoa) was appointed special projects coordinator by the School of Travel Industry Management at Mānoa, where she will coordinate the monthly newsletter and run alumni and industry-related events and the school's lecture series.

Kristy Odamura (BA '00, BA '03 Hilo) competed in the Summer Olympics for the Canadian softball team.

Nico Leilani Schnitzler (BA '03 Mānoa) was promoted to coordinator of alumni communications at the UH Foundation Office of Alumni Relations, where she coordinates the monthly e-newsletter, *Nūpepa*, the online community and print directory projects.

Rep. Maile Shimabukuro (JD '00 Mānoa) was photographed at the Democratic National Convention roll call.

Kiera Silva (JD '03 Mānoa) recently passed the Washington bar exam.

Scott Suzuki (JD '04 Mānoa) and **Jill Hasegawa** (JD '04 Mānoa) have been invited to join the William S. Richardson School of Law Alumni Association board.

1990s

Betty Burdick (MFA '98 Mānoa), who is on the faculty at Hawai'i Pacific University and Leeward Community College, directed the February 2004 show *Betty's Summer Vacation* at Mānoa's Kennedy Theatre.

Michael K. Cox (BBA '92 Mānoa), previously of GE Capital Hawai'i, was named senior property manager for CB Richard Ellis Hawai'i with responsibility for Kamehameha Schools Bishop Estate Kalihi Portfolio Properties.

Mirasol C. Espanola (AAT '91 Leeward; BA '93 Mānoa) received a doctor of education from the University of Southern California in May and was pro-



moted to dean of undergraduate academic advising and personal counseling at Hawai'i Pacific University.

David Gere (MA '91 Mānoa) recently published a book, *How to Make Dances in an Epidemic: Tracking Choreography in the Age of AIDS*.

Puja Hudelist (BA '95, MA '98 Mānoa) is running her own public relations company, Hudelist Communications.

R. Hokulei Lindsey (BA '99 JD '02 Mānoa) was named the William H. Hastie Fellow and LLM candidate by the University of Wisconsin Madison Law School.

Lani Kwon Meilgaard (BA '91 Mānoa) is pursuing a master's degree in social work and living in Michigan, where she is a crisis line advocate with Domestic Violence Project/Safe House.



Ray Ming (PhD '95 Mānoa), a plant molecular geneticist at the Hawai'i Agriculture Research Center, received the Distinguished Research Scientist Award from the Hawai'i Academy of Science in September.

Kyle Nakamoto (BArch '90 Mānoa) is president and executive producer of Red Sea Ocean Adventures and Honolulu cable network OC16's new TV show, *Hawai'i Skin Diver*.

Sean Sherwood (BA '99 Mānoa) is a first lieutenant with the Army Reserves currently stationed in Iraq.

Noenoe K. Silva (BA '91, MLIS '93, PhD '99 Mānoa), assistant professor of political science and Hawaiian language at Mānoa, has published the book, *Aloha Betrayed*, which documents Native Hawaiian resistance to cultural and economic domination prior to the 1897 annexation.

Yoav Wachsman (MA '99, PhD '03 Mānoa) is teaching at the Wall College of Business at Coastal Carolina University.

Kimi Mikami Yuen (MA '99 Mānoa) was promoted to associate at landscape company PBR Hawai'i.

Ting (Allison) Zhou (MA '99, PhD '03 Mānoa) is working as a trader/quantitative analyst for Evolution Capital Management in Honolulu.

1980s

Donna M. Binkiewicz (AS '83 Maui), who teaches history at California State University, Long Beach, recently published an analysis of American arts policy called *Federalizing the Muse: United States Art Policy and the National Endowment for the Arts, 1965-1980*.

Walea Constantinau (BA '85 Mānoa) celebrated the 10th anniversary of the Honolulu Film Office, the central coordinating agency for productions shot on city property, which she founded in 1993.



Erin deNeeve Baum

Helping moms get fit

Business: Baby Boot Camp® manager and instructor

Motivation: "If I had free time, I wanted to spend it with my son, not in the gym!"

Roots: Mililani, O'ahu

UH degrees: BS '97 Mānoa

Family: Husband Lenny, toddler Alexander

Top workout tip: Find an activity you enjoy so exercise will become a regular habit.

Guilty pleasure: Chocolate!

Best thing about being a mom: "Loving another person more than I ever thought possible is amazing, and that little head resting on my shoulder is priceless."

Even a certified athletic trainer finds it challenging to get back into shape after giving birth. So after having her first child in March 2003, Erin deNeeve Baum, who has a background in healthcare as a physical therapist, brought Baby Boot Camp® to Hawai'i. The national company provides six-week programs of strength training and power walking—strollers and breaks to care for baby welcome—along with education on proper body mechanics. The program quickly expanded to five locations on O'ahu.

After earning an MS in physical therapy from Duke University, deNeeve Baum returned to Hawai'i. She works at a clinic specializing in orthopedics, sports and women's health and volunteers at a local high school. "I find it extremely rewarding to help individuals achieve their own goals for fitness and health," she says.



Lauren Moriarty

APEC ambassador

Career: U.S. senior official for Asia-Pacific Economic Cooperation

Hawaiian name: Kaheaokekai

UH degree: BA in economics '76 Mānoa

Family: Husband James, also a career diplomat; children Mana and Kanani

Recent award: State Department's 1993 Arnold L. Raphel Award for leadership and mentoring of subordinates

Languages: Mandarin, French, some Hawaiian

Hobbies: Sailing, hiking, religious studies

A member of Hālau o 'Aulani in Washington, D.C., Lauren Moriarty enjoys studying about her Hawaiian heritage. As the nation's ambassador to the Asia-Pacific Economic Cooperation organization, her focus is on the 21 nations that account for more than a third of the world's population and nearly half its trade. Fortunately, Moriarty draws on 26 years of international experience, including stints as head of the economic sections at the U.S. Embassy in Beijing and the American Institute in Taiwan and assignments in Pakistan and Thailand. It should be no surprise that she knows her way around the U.S. capital city—long before she was director of the State Department's Office of East African Affairs or a deputy director in the Bureau of Economic, Agricultural and Business Affairs, she was the daughter of David Peters, former executive assistant to Sen. Daniel Inouye.

Moriarty received her MALD from the Fletcher School of Law and Diplomacy in Massachusetts.

Stan Egi (BA '82 Mānoa), after many years of successful acting on the mainland, returned to Honolulu to study and teach at Mānoa (see page 23).

Ursula Garrett (BA '85 Mānoa) is an assistant professor of special education at Dakota State University.

Eddie Maruyama (BEd '88 Mānoa) is athletic director of 'Iolani School.

Irma H. Nicola (BA '80 Hilo), serials coordinator for Azusa Pacific University, has two daughters, one in high school and another doing undergraduate study in social work. She lives in California with her husband Ray, who works for the U.S. Department of Agriculture.

E. Bruce Reynolds (PhD '88 Mānoa), history professor at San Jose State University, is the editor of the recently published book, *Japan in the Fascist Era*.

Arlene Tanaka (BA '89 Mānoa) is an account manager for Atlas Insurance.

Dave Waller (MBA '89 Mānoa) was promoted to vice president of customer solutions at Hawaiian Electric Company, where he has worked since 1989. His business philosophy is to be demanding of himself and relentless in the pursuit of new horizons.



1970s

John Bourbeau (BBA '77 Mānoa), having worked for the Executive Office of the President, Walter Reed Army Medical Center, Naval Sea Systems Command and seven years with the Pentagon, now works for the Army at Redstone Arsenal in Huntsville, Ala. He just received a PhD from Virginia Tech for research on privatization.

Christine Carter (MS '75, PhD '79, MPH '82 Mānoa) has three daughters and is director of surgical research and professor of surgery at George Washington University in Washington, D.C. She previously worked for the National Institutes of Health and Celera, the human genome company.



Boisse Correa (MSW '72 Mānoa) was named Honolulu Police Department's ninth chief of police in August after 34 years with the force.

Eddie Flores Jr. (BBA '70 Mānoa), president of L&L, opened the 100th L&L Drive Inn in New York City, a few blocks from Madison Square Garden.

Susan (Nakamura) Harada (BS '77 Mānoa) was appointed director of operations for Dole Plantation in September.

Leslie Henriques (MPA '79 Mānoa) runs Ulysses Press with her husband, Ray Riegert, author of *Hidden Hawai'i*.

Jerry Kalua ('72-'75) was promoted to plant manager at Island Princess, a Honolulu-based farm-to-shelf macadamia nut firm.

Karen "Sue" Kenwolf (AAT '79 Honolulu; BEd '81 Mānoa), webmaster at CB Richard Ellis Hawai'i, was awarded by her employer for her work.

Mike Kinoshita (BBA '77 Mānoa) joined Atlas Insurance as vice president with responsibility for new business development and client service.

Kati Kuroda (BFA '71, MFA '83 Mānoa) recently toured

Singapore, Taiwan and the mainland with *Wedding Banquet*, a new musical based on Ang Lee's movie. (See page 23.)

Patti Nakagawa (BS '77 Mānoa) was promoted to senior vice president, area office leader by Coldwell Banker.

Paul Okimoto (BBA '72 Mānoa) works with his wife, Cheryl, publishing a local Christian directory, *Island Christian Guide*.

Greg Reuter (MFA '73 Mānoa) is professor of sculpture at Texas A&M University at Corpus Christi.

Patricia Tam (BA '72 Mānoa) has assumed expanded duties as Halekulani Corp.'s vice president of standards and corporate relations. Tam, who first joined Halekulani Hotel staff when it opened in 1983, served as general manager of it and sister Waikiki Park Hotel. She was named Independent Hotelier of the World by *Hotels* magazine and one of 200 Most Powerful Women in Travel by *Travel Agent Magazine* and served as chair of the Hawai'i Hotel Association.

1960s

Ramon S. de la Pena (MS '64, PhD '67 Mānoa), a retired UH Mānoa professor, was named Kaua'i representative to the UH Board of Regents in September.

Linda M. Delene (MBA '68 Mānoa) is provost of Western Michigan University.

Amy Endo (BEd '65 PDUH '65 Mānoa) is master optician with Edwin Y. Endo, O.D., and Associates in 'Aiea, Hawai'i.

Barry Fukunaga (BBA '68, MPA '92 Mānoa) was appointed deputy director of transportation—harbors for the Hawai'i State Department of Transportation.



Send Class Notes information and photos to alumnews@hawaii.edu or *Mālamalama*, 2444 Dole St., BA 2, Honolulu HI 96822. Please include the campus(es) you attended and year(s) you graduated, and indicate if your name has changed.

Dennis Gonsalves (BS '65, MS '68 Mānoa) directs the award-winning ARS Pacific Basin Research Center.

Maj. Gen. Eugene Imai (BA '68, MBA '71 Mānoa) was hired by Hawai'i Rep. Neil Abercrombie to be his military liaison in Honolulu.

Howard Karr (BBA '66 Mānoa), chair of the UH Foundation Board of Trustees and a 1977 College of Business Administration Alumni Hall of Fame honoree, recently received the Order of the Rising Sun award from the Consulate-General of Japan for "outstanding service and achievements in strengthening the bonds of friendship between Japan and Hawai'i."

1950s

Abraham St. Chad Kikiakoikaliolu Pi'ianai'a (BA '53, MA '55 Mānoa) posthumously received The Kamehameha Schools' Ke Ali'i Pauahi Legacy Award for service to the school and Hawaiian community. The Mānoa professor emeritus was a gifted geographer, scientist and ocean explorer.



Dick Spangler (BA '59 Mānoa) lives in California, where he produces documentaries, corporate videos and business commercials for CNBC and other TV outlets.

Julia "Auntie Julie" Stewart Williams (BE '52 Mānoa) received the 2004 Order of Ke Ali'i Pauahi award for service to the school and Hawaiian community. She is a retired Kamehameha Schools teacher and kūpuna with Ka 'Ike O Nā Kūpuna Program.

1930s

Leon Thevenin (BS '37 Mānoa), a graduate in sugar technology who ran a sugar plantation, is running again as unofficial mayor of Puakō on the Big Island. He offers the following advice to current undergraduates: "Count your blessings for the good education you receive at the University of Hawai'i."

In Memory

UH Distinguished Alumnus and Founder's Lifetime Achievement Award recipient **Hiram Leong Fong** (BA in political science '30 Mānoa) died Aug. 18. The former U.S. senator was a lawyer, entrepreneur, tycoon and statesman under five American presidents. Fong served as editor of the *Kā Leo* newspaper and associate editor of *Kā Palapala* yearbook. He helped found the law firm of Fong, Miho, Choy and Robinson and Finance Factors.



Patricia Calhoun Bibby (BA in journalism '87 Mānoa) died July 8. Born April 16, 1961, in Carmel, Calif., Bibby lived on and off in Hawai'i starting in 1966. She attended Mid Pacific Institute and graduated from Radford High School. She worked for Associated Press and held a position as adjunct professor at the University of Southern California, training future journalists.

Alberta 'Pua' Hopkins (BA '60, MA '60 Mānoa) died Sept. 15. The scholar, author and mentor to the Hawaiian language community was a Mānoa professor of Hawaiian language for more than two decades and served as acting dean of students. She wrote the widely used beginning Hawaiian language text *Ka Lei Ha'aheo* and received a 1989 Regents' Medal for Excellence in Teaching and 1996 Ke Kukui Mālamalama for Excellence in Hawaiian Education from the Office of Hawaiian Affairs.

Ross Unebasami ('02-'04) died June 25 at the age of 22. He was one of the state's top high school saxophonists and an active student leader while attending Roosevelt High School and an accomplished member of the UH Mānoa Jazz Ensemble.

Arthur James Wriston III (BS in agriculture '79 Hilo) died July 25. Vice president for Maui real estate for the Kā'anapali Development Corp., the Punahou School graduate worked with fellow residents to create a plan for development of the Kā'anapali area in line with their wishes.



Russell Y. J. Chung

Lauded landscape architect

Career: Executive vice president and principal, PBR Hawai'i

Roots: Wahiawā, O'ahu

UH degree: BArch '80 Mānoa

Family: Wife Merrie, children Zachary and Alyx

First job: Picking pineapples

Hobbies: Golf, travel

Design approach: "Unrepressed vision—always take creativity past good enough"

Current challenge: Creating a distinct environment without taxing the pristine rural charm of existing surroundings at Kukui 'Ula, a large resort community in Koloa, Kaua'i

Russell Y. J. Chung received landscape design awards for clients at Ko Olina Resort, the Orchid at Mauna Lani Hotel, Wailea Outrigger and Honolulu's Fort Street Mall. In 2003, the American Society of Landscape Architects designated him a fellow for his design work and contributions to the profession. A trustee of the ASLA Hawai'i chapter, Chung helped create a scholarship for landscape architecture students. He promoted continuing education requirements as chair of the Hawai'i state Board of Professional Engineers, Architects, Surveyors and Landscape Architects.

Employers at Hawai'i Design Associates, where Chung worked during college, encouraged him to pursue landscape architecture. After earning a master's from California State Polytechnic University, he continued to work on the mainland. Chung observes, "I am fortunate to be able to maintain a viable landscape architectural practice here in Hawai'i, because there is no place like home."

Dods, Tsunoda honored by Japanese emperor

Two UH Distinguished Alumni Award recipients have been honored by the emperor of Japan for contributions to Japan-U.S. relations. Walter Dods Jr., Hawai'i chairman of the Japan-Hawai'i Economic Council and newly retired CEO of BancWest Corp. and First Hawaiian Bank, received the Order of the Rising Sun, Gold and Silver Star, for promoting friendship and economic exchange, according to an announcement from the consulate-general of Japan. Joyce Tsunoda, retired UH senior vice president and chancellor for community colleges, received the Order of the Rising Sun, Gold Rays with Neck Ribbon for promoting academic exchange and mutual understanding. See Class Notes for previous recipient Howard Karr.



Golden Scholars create book

Graduates of the class of 1954 are the first UH alumni to participate in a new tradition—helping create a memory book to record their reminiscences and honor their achievements. “Seeing pictures of friends and reading what they have accomplished in the interim was most enjoyable and illuminating,” commented Ethel Maxson (BA ’54 Mānoa) after receiving her book at an on-campus luncheon.

Since 2000 UH has held an annual celebratory event to honor its Golden Scholars, graduates of 50 or more years. Members of the 50-year reunion class receive a medallion. This year’s reunion alums were also offered a page in the memory book on which to display text and photos illustrating the past five decades.



Golden Scholar Annie May Lee Chun-Mow then and now, with UH President David McClain, left, and Mānoa Chancellor Peter Englert

“The response confirmed how important family and community is to our graduates,” observes Kevin Takamori (BA ’88 Mānoa), UH Foundation associate vice president for alumni relations. The book also illustrates the impact the university had on the lives of its ’54 grads. A UH education contributed to successful careers in a variety of fields—including entertainer and restaurateur Don Ho, Mark Development President Mark Watase and Tit Mun Chun, chairman of Hawai‘i State Federal Credit Union. Friendships formed on campus are still strong, and many graduates met their future spouses at UH. Fond memories described in the book include cheering for the football team at the “Termite Palace,” socializing in the snack bar, surviving classes and, of course, graduation.

The book was assembled by the UH Foundation Alumni Relations Office and sponsored by UH Federal Credit Union and by UH Alumni Association. 🍷



Taste pairs creative chefs with local livestock and produce

Taste of Hawaiian Range continued from page 22

Chef Graham Quayle. Students from Hawai‘i Community College’s UH Center in West Hawai‘i offered up potless lamb potpie with parsnip potato puree, sugar snap peas and baby carrots (I went back for seconds). And everyone was anxious to find out what Chef Daniel Thiebaut, from the Waimea restaurant of the same name, would do with his assigned meat—Kohala mountain oysters, more accurately but perhaps less appetizingly known as bull testicles.

At the heart of the festival is a culinary challenge that allows participating chefs one week to come up with inspired recipes using various parts of available livestock. Buffalo sausages were on the menu, as were tripe stew, beef-tongue soup and even beef cheek. It wasn’t all oddball cuts of meat, however. Chefs served sirloin tip, top round, flank and brisket in elegant and tasty style along with free-range chicken, pork, mutton. Big Island vendors arrived with an assortment of wines, vegetables and salads (Kamuela Grown’s Chinese cabbage salad and won ton chips came with a take-home recipe for the ono dressing). Desserts included Makalapa lime pie, malasadas, and, of course, plenty of chocolate.

What about those mountain oysters? Seared and served with roasted garlic and sweet-pepper coulis, they earned the nickname “zesty testes.” Personally, I’d have to say it’s an acquired taste. But A Taste of the Hawaiian Range...that’s a treat everyone can enjoy. 🍷

Save the date: the 10th Taste of the Range is set for Sept. 16 at the Hilton Waikoloa Village.

Story and photos by Jennifer Crites (AA ’90 Windward, BA ’92 UHWO), a Honolulu-based freelance writer/photographer and food aficionada

Student booster group is just a bunch of Maniacs

Stand up! The band's playing *Hawai'i Five-O*!

A block of green-clad Mānoa Maniacs rise as one and paddle furiously with ti leaves to the beat of the famous, if unofficial, UH theme song.

"We really get the crowd going," says Ryan Nagano with evident satisfaction. "We work with the band and the cheerleaders, and we have a lot of fun doing this." The Maniacs inspire camaraderie among all fans, regardless of age. "We just try to support the athletic teams as students," says Nagano (BA in political science '04 Mānoa), who initiated the student spirit group.

Students from any UH campus can be part of the Maniacs simply by purchasing season tickets for a Mānoa sport. The program started with football (\$21) and women's volleyball (\$70 for 17 matches). It is expanding to men's and women's basketball, men's volleyball and baseball as tickets become available. "Each sport has

a special quality," Nagano says. "You can't choose among all the sports here."

Still, the system lacked unity and spirit, observes co-founder Kevin Hirano, a senior expected to receive his BA in philosophy in December. Encouraged by the Mānoa Athletic Department to start a tradition that would instill pride in the school, Nagano, Hirano and other students founded Mānoa Maniacs complete with mission statement: "Our goal is to create an atmosphere at athletic events and on campus that is exciting, positive and energized. We hope to be the bridge that unites the student body with University of Hawai'i athletic teams and players." The group is supported by the faculty and alumni association, Hirano adds.


It's just all very fun.

"We all love the university. Students come from a long week of school, ready to unwind. Our attitude for the rest of the week-

end kind of depend on whether we win or not," he says with a laugh.

There are about 500 Maniacs. About 30 sit in the designated section at any game. They also get green shirts with the Mānoa Maniac logo, a membership card that provides discounts at RainBowTique and on Pepsi products and weekly e-newsletters. "On the mainland, students pay a monthly fee and they can get into games for free or at a very discounted price. We'd like to be able to start something like that here," Hirano says.

He and Nagano encourage all students to support the teams, band and cheerleaders. "We're all students. We all pay our dues. We have to support each other equally," Hirano says. In turn, he says, athletes should support the other organizations as well.

And there's nothing crazy about that. 

by Stacy Harada, External Affairs and University Relations student writer



EQUANIMITY

When the noise
the churning on the surface
stops
on the inbreath
there is silence
even though
the low rumble
of the ocean
the everlasting, ever mindless surf
washes in and out
at the imperfect boundary
the girdle of rocks
at the margins.
Inside the ring of young rocks
the pale green lagoon
is rippled by the surge
but not essentially changed;
only on the worst days
storm days
is it truly perturbed
and even then
when the storm passes,
as it always does,
after the momentary foam
it reappears
transparent and clear.

by Kenith L. Simmons
Professor of English and Chair
of Humanities, UH Hilo
Publication pending in *Poetry Motel*

Aloha for the Keiki

Donald Deneau caught his first glimpse of Hawai'i from the deck of a U.S. Navy vessel in the years following World War II. That was as close as he would get until the 1980's, when he arrived for the first of many visits.

After spending more time visiting the islands, concerned about Hawai'i's shortage of nurses and the future of Hawai'i's keiki, Mr. Deneau established a fund to respond to critical needs at UH Mānoa's School of Nursing and Dental Hygiene. He named it the Friendship Endowed Fund, in the hope that others will also feel the need, contribute, and help grow the endowment.

The story doesn't end there. Mr. Deneau also made a provision in his Will to further endow the Friendship Endowed Fund at his passing. Thanks to Mr. Deneau, Hawai'i's future keiki will have more nurses to care for them.

If you would like more information about including the University of Hawai'i Foundation in your Will or revocable living trust, please contact, in confidence, Susan Lampe at (808) 956-8034, email giftplanning@uhf.hawaii.edu, or return the form at right.

If you have already named the UH Foundation in your estate plan, please notify us so we may thank you and welcome you to our Heritage Society.



In the spirit of aloha, Angela Sisk, Friendship Endowed Fund scholarship recipient, places a lei on a visiting keiki to the UH Mānoa campus.

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- ☐ I would like information on making a bequest to the University of Hawai'i Foundation for the benefit of the University of Hawai'i.
 - ☐ I have already named the Foundation in my ☐ Will ☐ trust or ☐ retirement plan. Please send me information about the Heritage Society.

Name

Address

Daytime Phone (optional)

E-mail (optional)

RETURN TO: University of Hawai'i Foundation, Office of Gift Planning, P.O. Box 11270, Honolulu, HI 96828.

Note: Please consult your advisor about such a gift.

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arts etc.



LECTURES

Jan 24–Feb 2

Genocide and Racism, a series of lectures with Hebrew University Professor Yehuda Bauer; Mānoa, littman@hawaii.edu or 808 956-4173

Jan 25

Paleontologist and *Jurassic Park* movie consultant Jack Horner in Mānoa Distinguished Lecture Series; 808 956-9405 or www.hawaii.edu/uhm/dls



Jan 26

Ke Ka'ana 'Ike seminar with retired Professor of Oceanography Richard Grigg on the origin of the Hawaiian Archipelago; Mānoa Campus Center Executive Dining Room, RSVP to 808 539-3836 or gaylenea@hawaii.edu

Feb 15

Gifford Distinguished Lectureship in Real Property with Lance Liebman of Columbia University; Mānoa School of Law, 808 956-8636 or caroll@hawaii.edu

Apr 9

Theatres of Terrorism, panel discussions, performances and lecture by Northwestern University Professor Samuel Weber; Mānoa Earle Ernst Theatre, 808 956-2600 or wessendo@hawaii.edu

Apr 21

University of California, Berkeley philosopher and author John Searle in Mānoa Distinguished Lecture Series; 808 956-9405 or www.hawaii.edu/uhm/dls



EXHIBITS

thru Feb 10

All Things Large and Small, paintings and sculpture by Mary Mitsuda and Lori Uyehara; Kapi'olani Koa Gallery, 808 734-9375

thru Feb 11

Faculty Exhibition; Mānoa Art Gallery, 808 956-6888, gallery@hawaii.edu or www.hawaii.edu/artgallery

Feb 15–Mar 11

Ceramics and paintings by Paul Nash and Noreen Naughton; Kapi'olani Koa Gallery, 808 734-9375

Feb 15–Apr 15

Pacific Rim International Print Exhibition; Hilo Campus Center Gallery, 808 974-7307 or wmiyamot@hawaii.edu

Mar 6–Apr 15

Labor and Leisure, artwork from Honolulu collections; Mānoa Art Gallery, 808 956-6888, gallery@hawaii.edu or www.hawaii.edu/artgallery

Mar 16–Apr 16

Annual fine arts lifetime achievement award; Kapi'olani Koa Gallery, 808 734-9375

Apr 21–May 11

Student Show; Kapi'olani Koa Gallery, 808 734-9375

Apr 24–May 13

BFA Exhibition; Mānoa Art Gallery, 808 956-6888, gallery@hawaii.edu or www.hawaii.edu/artgallery

FUN STUFF

Mar 14–18

International Festival with song, dance, food, presentations; Kapi'olani, hefner@hawaii.edu or 808 734-9715

Apr 1

CSI@HCC sleuthing night, tickets available Feb 1–Mar 18; Honolulu, 808 845-9227

May 7

Honolulu student fashion show; Ocean Club at Restaurant Row, 808 845-9203

MAINLAND

thru Feb 5

Gauguin's Zombie, a large scale installation by Mānoa Associate Professor of Art Debra Drexler; White Box Annex Gallery, New York, drexler@hawaii.edu or www.whiteboxny.org/home.html

PERFORMANCES

Jan 23

Louis Hayes and the Cannonball Adderley Legacy Band; Kaua'i, 808 245-8270 or www.kauai.hawaii.edu/pac.htm



Jan 28–Feb 6

Luck and Loss: Manandin's Gamble, a traditional Indonesian Randai folk play; Mānoa Kennedy Theatre, 808 956-7655 or www.hawaii.edu/kennedy

Jan 28, 30

Ladysmith Black Mambazo and Vusi Mahlasela; Leeward, 808 455-0385 or http://lcctheatre.hawaii.edu; Hilo, 808 974-7310 or http://performingarts.net/Theatre



Feb 12, 19

Les Yeux Noirs, a Paris-based octet; Leeward, 808 455-0385 or http://lcctheatre.hawaii.edu; Hilo, 808 974-7310 or http://performingarts.net/Theatre



Mar 4–13

Swoop, Tumble, Fly: The Art of Motion, traditional African and contemporary African-American and modern dance; Mānoa, Kennedy Theatre, 808 956-7655 or www.hawaii.edu/kennedy

Mar 12

St. Petersburg String Quartet with guitarist Paul Galbraith; Kaua'i 808 245-8270 or www.kauai.hawaii.edu/pac

Apr 9, 10

100 Years of Broadway, a musical review; Hilo 808 974-7310 or http://performingarts.net/Theatre



Apr 21–24

Songs for a New World; Kapi'olani Maile Performing Arts Theatre, 808 734-9748 or doo@hawaii.edu

Apr 22–May 1

twelf nite o' WATEVA! a pidgin retelling of Shakespeare; Mānoa Kennedy Theatre, 808 956-7655 or www.hawaii.edu/kennedy

Apr 22, 23

LCC Dance Festival; Leeward, 808 455-0385 or http://lcctheatre.hawaii.edu

Apr 24

LCC Guitar Concert; Leeward, 808 455-0385 or http://lcctheatre.hawaii.edu

