University looks to reduce energy costs

by Ken Hupp

Any financial expert will agree that budgeting is not a precise science but an educated guess based on the best available projections of revenues and expenditures. That task has become a lot more complicated and expensive at UH Hilo due to the rising cost of energy.

Combined utility costs for Fiscal 2011-2012 overshot the amount budgeted by approximately $450,000 as total spending approached $5.5 million, with electricity accounting for roughly $4 million. Currently, the University faces projected utility costs of $6.2 million for Fiscal 2012-2013, with the power bill expected to come in around $5 million.

With a rising utility bill and a tight operating budget, something had to give. So Chancellor Don Straney asked Vice Chancellor for Administrative Affairs Marcia Sakai to take a hard look at the University’s energy use to find ways of reducing and stabilizing costs. While Sakai believes the effort will be successful, she cautions that it won’t necessarily mean more money for other programs or positions.

“We could increase energy efficiency and reduce consumption yet still end up paying more if the price per kilowatt hour goes up, so we may not actually achieve savings in this sense,” Sakai said. “What we’re actually looking at is avoiding even higher energy costs.”

Sakai cited a review of electric bills for calendar years 2010 and 2011 for the school’s main meter on Nowelo Street, which provides about 84 percent of the power on campus. Staffers found spending had risen by 25 percent, with only 4 percent related to higher usage and 21 percent due to higher energy charges.

Part of the University’s strategy for reducing and managing energy costs will involve planning for energy conservation measures through an energy performance contract. Sakai says the Office of Facilities Planning is presently drafting a Request for Proposal (RFP) that will go out by the end of the year, with a vendor selected by May 2013.

The vendor will be responsible for performing an energy audit

Putting some STEAM into STEM programs at UH Hilo

by Chancellor Don Straney

At the University of Hawai‘i at Hilo, we are keenly aware that our island and state need a professional workforce to fill the urgent skills gap in a number of fields. They include business, especially innovative entrepreneurial enterprises, and teaching, as well as science, technology, engineering and mathematics, or STEM.

UH Hilo is preparing students to meet workforce needs, and we’ve developed several highly successful programs to attract more students to pursue careers in these fields.

There is growing evidence that creative components are important to fostering a competitive and innovative workforce, and inclusion of the arts and humanities is increasingly being recognized as important to STEM disciplines. In response, we are broadening our reach to include creative skills within traditional STEM programs, such that it becomes Science, Technology, Engineering, Art, and Math (STEAM).

At this year’s County Fair held last month, UH Hilo had a booth that included art within traditional STEM displays. Faculty, staff and students tending the booth highlighted UH programs for future students, shared UH Hilo STEAM initiatives that are linked to the community, and promoted UH Hilo as a go-to resource for the broader community.

Chancellor Don Straney
Energy Costs
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as well as planning, designing, financing and implementing energy conservation measures throughout the campus and at various University properties. The contract language will also obligate the contractor to pay the difference any time that avoided costs fall short of guarantees.

The University has already taken some steps with the installation of Photovoltaic (PV) systems atop the building housing Kipuka, the Campus Center, the Science and Technology Building, and at the North Hawai‘i Education and Research Center. The panels have added 170 kilowatts of generating capacity to the existing power grid, resulting in energy use reduction from the grid and an estimated $104,000 a year in avoided costs.

Additional units are being installed at various locations, including the new Student Services Building, the College of Hawaiian Language Building, the old Student Services Building, the Theatre, and Mookini Library, which will add another 485 kilowatts of generation and place the University near the maximum capacity allowed under Hawai‘i Electric Light Company’s guidelines by early 2013. These 655 kilowatts will produce an estimated 1,000,000 kilowatt hours per year, accounting for about 8 percent of UH Hilo’s annual consumption.

Building sub-meters have also been installed throughout campus that provide building-level measurements of energy use. The baseline data will come in handy when monitoring the impacts of any future energy management initiatives.

The other key component will focus on adopting more energy efficient practices. Heading that effort is Campus Sustainability Coordinator Cam Muir, who sees a target-rich environment.

“We can eliminate a lot of our wasted energy use without causing anyone a big inconvenience if we are willing to make some behavioral changes,” Muir said.

One area receiving a lot of attention will be so-called “vampire” use, or energy consumed during periods when buildings aren’t being used. A one-day meter reading on September 2011 revealed the University used no less than 750 kilowatts during any given hour of the day.

“Copiers and fax machines are examples of equipment that constantly draw power as long as they are plugged in, regardless of whether they are in use,” Sakai said. “So we may need to take a hard look at how we use these machines.”

Estimates of “vampire” usage run as high as 20 percent of the University’s daily use. A clearer picture should emerge this month when teams of faculty, staff and students conduct a “vampire” hunt in conjunction with Make a Difference Day and the Student Activities Council’s Haunted House. The teams, armed with thermal guns, light meters and in some cases, dressed in Halloween costumes, will be measuring energy loads at various campus locations on Friday and Saturday, October 26th and 27th.

Muir, who is currently expanding representation from different units on the University’s Sustainability Committee, believes the “vampire” hunt’s findings will be eye opening. He hopes to leverage that emotion to encourage more energy efficient practices on the part of faculty, staff and students.

“People freak out when they discover the true cost of energy. For example, it costs $420 a year to keep a coffee pot plugged in for four hours a day, five days a week over 52 weeks,” Muir said. “A push pump or insulated pot will keep your coffee hot over that same period for about $50. Now that $370 may not sound like a lot, but multiply that by 550 offices throughout the University and it adds up.”

Muir will also encourage adoption of more energy efficient practices like avoiding over-lighting fluorescent fixtures, not leaving lights on unnecessarily, keeping the doors closed while air conditioners are running, and turning off printers when not in use. Those steps and others will be driven home via a newly-created Website, hilo.hawaii.edu/sustainability, special seminars, workshops and advertising.

And students will have the opportunity to play leading roles through various partnership initiatives that include a mentoring collaboration on practical sustainability analysis with the Cornell Graduate School of Engineering and development of student research projects like cost-benefit analysis of Smart Sockets.

“Our goal is to show how easy it is to reduce the amount of energy wasted,” Muir said. “We’d all like to devote more of our resources to educating students but it’s hard to do that when more and more of our operating budget is required to keep the lights on.”

(Editor’s note: Ken Hupp is a public information officer.)
Student Health and Wellness receives grant to address suicide prevention

The Department of Student Health and Wellness Programs within the Division of Student Affairs received a three-year grant award of $261,000 to support UH Hilo’s Counseling Services in its efforts of suicide prevention. The grant program is authorized under the Garrett Lee Smith Memorial Act, which is named in honor of former Senator Gordon Smith’s son who died by suicide, and is operated by HHS’ Substance Abuse and Mental Health Services Administration (SAMHSA).

“The goal of this grant project is to prevent suicide and improve the mental health of UH Hilo students through a peer-to-peer outreach and support network,” explained Sulma Gandhi, director for Student Health and Wellness. “Additionally, we will build infrastructure to improve communication networks and knowledge among key staff and gatekeepers who come in contact with students who may benefit from counseling services.

“The UH Hilo Suicide Prevention Grant serves a widely diverse student body that reflects multicultural Hawai‘i,” she added. “Targeted sub-populations of students are those at high risk for depression and suicide, such as veterans, LGBTQI students, Native Hawaiians, students with disabilities, and students who stigmatize mental health help. Over the course of three years, we will provide semester-long workshops to train peers from these targeted groups on how to identify, support, and refer students in distress.”

“Recent survey data from UH Hilo indicates that our students do experience notable levels of anxiety, distress and depression – all of which can be risk factors for suicide,” noted Vice Chancellor for Student Affairs Dr. Luoluo Hong. “With Dr. Gandhi now here on campus to initiate our inaugural health promotion and wellness programs, it is timely that we have received this generous grant to educate the campus community.”

According to a Fall 2010 UH Hilo student survey administered by the American College Health Association:

- 46% of students felt overwhelming anxiety within the last year
- 60% felt very sad within the last year
- 33.8% of students felt so depressed that it was difficult to function within the last year
- 6.6% seriously considered suicide within the last year

Aloha,

Donald P. Stanley

In preparation for the fair, UH Hilo’s Office of Research and Economic Development extended an invitation to UH Hilo departments, programs, student clubs, and organizations to participate in our STEAM booth. Participants included:

- Department of Art displaying art that incorporate technology into the creation process
- Spatial Data Analysis Lab with a remote operated vehicle display
- Pacific Island Programs for Exploring Science (PIPES) sharing information about K-20 outreach programs and engaging young students in microscope viewing, a marine life stage game, and a protect-your-coral-reef board game
- Hawai‘i Apiary Program sharing information on honey bees with honey tasting and a honey comb display
- National Community Pharmacists Association, the UH Hilo Student Chapter, with a putty compounding activity and information on UH Hilo pharmacy programs
- Center for Study of Active Volcanoes (CSAV)
- Connections Public Charter School displaying Makery project products, which are an infrastructure to design and build objects from wood, some of which were a product of a UH Hilo Department of Art collaboration
- Pacific Aquaculture and Coastal Resources Center with an aquaponics display and a training workshop sign-up

UH Hilo recognizes that the state’s workforce in STEM and other high-need fields will grow stronger if we attract more students to pursue careers in these fields. Providing students in the STEM fields the chance to participate in hands-on learning opportunities will make them more marketable to future employers.

The recognition and incorporation of art and other humanities fields as an important component to traditional science, technology, engineering and math programs—putting some STEAM into STEM—prepares our students even better to work effectively in these careers. That kind of preparedness is something employers highly value.

Aloha,
Hats off to...

**Chris Frueh**, Professor, Psychology, was senior author on “More than black and white: Differences in predictors of obesity among Native Hawaiian/Pacific Islanders and European Americans.” Obesity 2012; 20:1325-1328.

**Sarah Smith**, Nursing Lab Coordinator, has the following publications in press: “Nurse competence: A concept analysis,” International Journal of Nursing Knowledge, and “Using a human patient simulator to study the relationship between communication and student nurse-team performance,” Journal of Nursing Education. Smith co-wrote the latter with colleagues in the School of Nursing.


**Susan Jarvi**, Associate Professor, Pharmaceutical Sciences, was awarded a Medical Research grant from the Hawai‘i Community Foundation on “Efficacy of a vaccine against Angiostrongylus costaricensis to A. cantonensis in rats from Hawai‘i.” She was also awarded a UH Hilo Research Council Seed grant for “Development and optimization of quantitative PCR and ELISA tests for the detection of Hawai‘i Angiostrongylus cantonensis (rat lungworm) in blood using a rat model.” Further, she has four co-written papers in press: “Quantitative PCR estimates Angiostrongylus cantonensis (rat lungworm) infection levels in semi-slugs (Parmaion martensi),” Mol. Biochem and Parasitology (2012); “Evidence for the role of elevation and vector density in the distribution of trap alleles of Plasmodium relictum,” Malaria Journal (2012); “Efficacy of a commercial canarypox vaccine for protecting Hawai‘i Amakihi from field isolates of Avipoxvirus,” Journal of Zoo and Wildlife Medicine (2012); and “Vaccination of captive Nene against West Nile Virus using a protein-based vaccine (WN-80E),” J of Wildlife Diseases (2012).


**Ben Chavez**, Assistant Professor, Pharmacy Practice, organized a peer-reviewed abstract submission and poster session at the Hawai‘i Pharmacists Association (HPhA) annual meeting. Chosen abstracts were published in the June issue of the Hawai‘i Medical Journal.

**Mahavir Chougule**, Assistant Professor, Pharmaceutical Sciences, received $8,600 for his seed grant proposal on “Development of targeted nanocarrier system for the treatment of lung cancer” from the UH Hilo Research Council. He was also co-author on the paper, “Pharmacokinetic evaluation and In Vitro-In Vivo Correlation (IVIVC) of novel methylene-substituted 3,3’ diindolylmethane (DIM),” published in The European Journal of Pharmaceutical Sciences.

**Ghee Tan**, Assistant Professor, Pharmaceutical Sciences, was selected for the Teacher Recognition Award by the national organization, Graduate Women in Science (GWIS), and the Student Equity, Excellence and Diversity (SEED) program at UH Manoa. She was recognized at the 55th Hawai‘i State Science and Engineering Fair.
Hats off
Continued from page 4

held at the Hawai`i Convention Center
on O`ahu for mentoring a Hilo High
School senior.

Jiren Feng, Assistant Professor,
Chinese/Japanese, has been invited by
the Science Culture Research Center,
Seoul National University, to the In-
ternational Workshop on “Science and
Confucian Statecraft in East Asia,” to
be held in December in Seoul, South
Korea. Feng will present “Construction
Craftsmanship as Government
Order and Indoctrination: The Con-
fucian Promotion of Standardized
Architectural Knowledge in Premod-
ern China.”

Avis Masuda, Assistant Profes-
sor, Education, had “Critical Literacy
and Teacher Identities: A Discursive
Site of Struggle,” published in Criti-
cal Inquiry in Language Studies, 9:3,
220-246.

UH Hilo enrollment
reaches all-time high

Enrollment at UH Hilo continues to inch forward as the Fall 2012 count eclipsed last year’s previous high. Preliminary opening credit enrollment figures from the University of Hawai`i System show UH Hilo’s enrollment grew by 23 students or 0.6% to 4,172 compared to 4,149 a year ago.

“We’re pleased that growing numbers of students are enrolling at UH Hilo, which we believe validates the quality of our programs, faculty and staff,” said Chancellor Don Straney. “We look forward to working with these students to help them achieve their educational goals.”

Students of Native Hawaiian ancestry total 992 or 23.7% of the overall student body. The Fall 2012 figures show women comprise 59% of UH Hilo’s total enrollment, while men account for just over 40%. Nearly 7 out of every 10 students or 2,898 come from Hawai`i and 30% or 1,274 are from out-of-state.

College of Pharmacy unveils book that chronicles history of its creation

The College of Pharmacy has documented the history of creating the first college to train pharmacists in the Pacific region in a hardcover book published this summer called Emergence of the University of Hawai`i at Hilo College of Pharmacy.

CoP Librarian Amy Knehans and Maggie Morris, editor of the CoP magazine Kawili La`au, scoured the archives for every milestone and event that led to the creation of the College. Besides chronicling the newsworthy details of the first five years, the book gives first-hand accounts from people who supported building a pharmacy school in Hilo from the beginning, such as Senator Daniel K. Inouye, former Chancellor Rose Tseng, Director of University Relations Gerald De Mello, and Hawai`i State Representative Jerry Chang.

Jerry Johnson, former dean of the UH Hilo College of Arts and Sciences, was in the trenches along with former CoP Director of Community Partnerships Ron Taniguchi, and they were able to fill in the blanks on creating something from nothing for most of the events prior to admitting students in 2007. “In Hawai`i, the informal steps can mean more than the formal steps to get things done,” Johnson said as he outlined the myriad procedures. “We had to convince [UH administration] there was a local need, there’s a national need, and that UH Hilo can do it.”

The book also contains nearly 100 photos as well as a timeline and an appendix that includes student composite photos of the first four classes, a Map of Student Residency, Testimony Presented before the House, Minutes of the Regents’ Committee, Graduate Survey, Organizational Charts, Economic Impact Report, CoP’s Strategic Plan and an Honor Roll of Donors.

“It has been an honor to be involved in creating such a work,” Knehans said. “I really enjoyed listening first-hand to the personal perspectives from key supporters of the College. I learned a great deal about the history of the island as well as the UH System. The College has come a long way in a short time.”

Emergence is freely available online at http://pharmacy.uhh.hawaii.edu/news/press/. Hard copies may be obtained by contacting the editors at knehans@hawaii.edu or morrismm@hawaii.edu.
Grant will establish Center for Applied Learning at UH Hilo

UH Hilo was recently awarded a supplemental development Title III Native Hawaiian-Serving Institution grant to support student learning and student success through applied learning experiences. The two-year grant request was in excess of $3.2 million, with first-year funding of $761,807 beginning October 1, 2012.

The program will focus on activities in support of three competitive preference priorities of the grant: increasing postsecondary success particularly Native Hawaiian and other student success, enabling more data-based decision-making and improving productivity. Activities include creating a Center for Applied Learning to develop and support faculty in offering applied learning opportunities for students.

The Principal Investigator for the grant is Chancellor Don Straney and the Program Director is Gail Makuakâne-Lundin, interim executive assistant to the chancellor. The first-year award includes funding to hire staff to work on activities such as the renovation of campus facilities for the Center for Applied Learning.

2012 UH Hilo Alumni Scholarship Golf Tournament is Oct. 20

The UH Hilo Alumni & Friends Association hosts its 9th annual Golf Tournament on Saturday, October 20 at the Waikoloa Kings Course in Waikoloa, Hawai’i. The tournament begins at 8 a.m. and is open to anyone who possesses an established handicap. The fee of $175 includes merchandise, green fees, cart, mulligans and lunch.

UH Hilo’s Alumni Golf Tournament was initiated in 2004 to raise scholarship funds for students attending UH Hilo. Scholarship recipients are selected based on academic merit. Applicants must be an alumni of UH Hilo or have an immediate family member who is an alumni of UH Hilo. Twenty-five scholarships have been awarded thus far.

Those interested in participating in the tournament as a golfer or as a sponsor should call 974-7643, 974-7501, or visit the alumni golf Website at http://www.üh.hawaii.edu/alumni/golf.

UH Hilo dedicates Makali’i sculpture

A dedication ceremony was held last month for the Makali’i sculpture located at the gateway entrance to the UH Hilo campus. The ceremonial structure was created by artist Albert Paley to celebrate the identity, mission and purpose of the University through its various elements and symbolism. Paley’s work incorporates various cultural references to capture the character and unique qualities of the Hawaiian culture and its people.
Eddie Palmieri – Brian Lynch Jazz Quartet opens PAC season Oct. 4

The UH Hilo Performing Arts Center kicks-off its 2012-13 season with the Eddie Palmieri - Brian Lynch Jazz Quartet on Thursday, October 4 at 7:30 p.m. The quartet is the latest manifestation of the 20-plus-year musical relationship between Brian Lynch and Eddie Palmieri along with bassist Luques Curtis and Grammy-nominated drummer/composer Dafnis Prieto.

“The National Endowment for the Arts (NEA) recently bestowed the 2013 NEA Jazz Masters, the nation’s highest honor in jazz, to nine-time Grammy Award winner and Latin music icon, Eddie Palmieri,” said Lee Dombroski, PAC manager. “Known for his charismatic power and bold innovative drive, Eddie Palmieri has a musical career that spans over 50 years as a bandleader of Salsa and Latin Jazz orchestras.

“Brian Lynch is a respected insider within both the hard-core straight ahead and Latin Jazz communities,” Dombroski added. “A 2007 Grammy Award winner, he is as comfortable negotiating the complexities of clave with Afro-Caribbean pioneer Eddie Palmieri as he swings through advanced harmony with bebop maestro Phil Woods. And Dafnis Prieto, whose revolutionary drumming techniques have had a powerful impact on both the Latin and jazz music scene, locally and internationally, completes the quartet along with bassist Luques Curtis. This is going to be a fantastic way to start the 2012-13 season!”

Tickets are reserved seating and priced at $25 General, $20 Discount and $12 UH Hilo/HawCC students and children, up to age 17, and are available by calling the UH Hilo Box Office at 974-7310 or ordering online at artscenter.uhh.hawaii.edu.

Uplifting and innovative Red Grammer performs Oct. 26

Red Grammer, armed with nothing more than a stunning voice, a guitar, and some of the best songs ever written for children and their families, performs at the University of Hawai‘i at Hilo Performing Arts Center on Friday, October 26 at 6:30 p.m.

“Red lifts his audiences to a place where everything is possible. He is bursting with energy and is an irrepressible joy that engages his listeners, young and old,” said PAC Manager Lee Dombroski. “He is a Grammy-nominated recording artist who has set the gold standard for writing and performing contemporary children’s music.

“Red and his wife (co-lyricist Kathy Grammer) have created a treasure trove of music for families that has a universal appeal and cuts across generations, backgrounds, ethnicity and religions,” she added.

Tickets are reserved seating and priced at $15 General, $10 Discount and $5 UH Hilo/HawCC Students and Children, up to age 17, and are available by calling the UH Hilo Box Office at 974-7310 or ordering online at artscenter.uhh.hawaii.edu.
Campus Events

October

1  Priority deadline to apply for Spring 2013 graduation
4  Eddie Palmieri – Brian Lynch Jazz Quartet, 7:30 p.m., PAC, Admission
12  Last day to drop a class online with “W”
26  Red Grammer, 6:30 p.m., PAC, Admission
26, 27  Halloween Vampire Hunt