



the GREEN U

[@ UC Irvine]

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Save the Date:

- Wednesday, 3/5/08:
Green Campus holds a CFL exchange in Middle Earth

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Focus the Nation

By Courtney Gill

On January 31, 2008, UC Irvine participated in a historical event. Focus the Nation was a national teach-in that included over 1,000 college campuses across the United States. Every campus spent the day talking about global climate change, its impact and how we can take steps toward preventing it.

The Green Campus Program was excited to be involved in this groundbreaking event. One way they participated at UC Irvine was by taking part in an Environmental Expo held on Ring Road. Local Businesses, school clubs and representatives from different departments had booths for students to visit. These booths provided information on anything from climate change, recycling and conservation, to sustainability. There were also many free items, including reusable grocery bags and



From left to right: Samantha Kao, Chancellor Michael V. Drake, Courtney Gill, Kong Sham, Vice Chancellor Wendell C. Brase, Alyssa Penacho

organic cotton t-shirts. The Green Campus Program handed out educational material, the UC Irvine Sustainability Map, as well as 35 CFL's! We hope that people who visited our booth realized that one of the major ways they can combat climate change is to save energy. It's as easy as changing a light bulb.

Another highlight for Green Campus that day came from the Sustainability Showcase poster contest. Groups created posters and entered them in different categories ranging from climate change research to environmental clubs. Green Campus, of course, entered in with the environmental clubs on campus. Our display covered some of our current and successful projects including the fume hood campaign, exit sign auditing and

the Green Room. Despite the tough competition, Chancellor Michael V. Drake awarded the Green Campus Program a plaque for our poster in our category.

Other events that day included workshops and speakers discussing different aspects of climate change and the environment. Many Green Campus members attended and all greatly appreciated the huge effort put in by Students for Sustainability, OC-SCB (what's this?), and the administration that all worked to make the day possible.



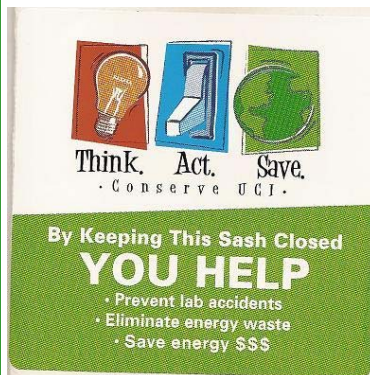
Green Campus members Jessica Lin (left), Alyssa Penacho (middle), Liz Seward (right) and Courtney Gill (top) table at the Environmental Expo on Ring Road.



Chancellor Drake announces award winners while event organizer Erin Lane looks on.

Lab Competition Update

By Samantha Kao



Based on the successes of the Spring '07 and Fall '07 fume hood competitions, Green Campus is excited to announce plans for a continuation and expansion of the fume hood campaign in UCI's laboratories during Spring Quarter 2008.

In preparation for the expanded version of the previous, one-building competitions, Green Campus interns will be conducting fume hood audits in various buildings on UCI's Main Campus to ascertain

baseline data prior to the competition. Once the information has been obtained, we hope to put on a fume hood campaign that will encompass laboratories in several buildings in the Physical Sciences so that we can incorporate even more participants in our energy-saving endeavors.

By opening this competition to researchers on different parts of campus, we can move forward with the fume hood campaign to add even more energy savings for the UCI community. The positive feedback from researchers and professors alike give us

strong encouragement that this renovated competition will be even more successful and show even more savings than previous competitions. The winner of the competition will be presented with an energy-efficiency certificate that acknowledges their exemplary behavior as well as the amount of energy and money that they saved.

The preliminary fume hood audits will be completed by the end of Winter Quarter this year and we look forward to informing you about the participants for this future competition.

“Green Campus intends to measure the energy usage of the offices and provide new appliances and technologies that will help save energy”

LARC Office Audits

By Andrew Sata

An entirely new project for UCI's Green Campus Program, office energy audits aim to update technology and change habits to conserve energy in the offices on campus.

This February, Green Campus will pilot the program in the Learning and Academic Resource Center. LARC is a tutoring center for students

from all majors. With over 20 small offices and lots of student traffic, the LARC office provides a great venue to promote energy efficiency.

The preliminary audit took place Friday, February 8th. Green Campus intends to measure the energy usage of the offices and attempt to provide new appliances and technologies that will help save energy. In addition, we will suggest energy

friendly habits such as using natural sunlight and turning off power strips when not in use.

With the help of the LARC office manager Ronald Mudd and the campus energy manager Paul Wingco we hope that this project will be a success in saving energy on campus and eventually grow to include other offices on campus.

Mesa Court CFL Exchange

By Kong Sham

This quarter's CFL exchange was held in Mesa Court on Wednesday February 13, 2008. It was our most successful CFL exchange yet!

Green Campus was able to give out all 85 CFL's that we brought to students on their way to dinner at the dining commons. With each CFL we gave away we received

in return a signature pledging that the CFL will be used and not wasted.

The good news does not stop there. We also had a great turnout from our club. That night, 10 of our club members came out to help table for the event and to pass out CFL's. They were a great help, and they also showed the strength of the Green Campus Program by exhibiting student initiative for energy conservation on campus.

Because of this success, we plan to schedule another CFL exchange on the other side of campus in Middle Earth on March 5. We hope that we will be even more successful than before!



Green Campus members pass out CFL's in Mesa Court

Inter-building Fumehood Competition

By *Samantha Kao*

Congratulations to the researchers of Dr. Blum and Dr. Heyduk’s laboratories! These two groups won the fume hood competition for their efforts in two separate categories—greatest reduction in inches and overall energy efficient behavior. Both of the winning groups received a free lunch and dessert, compliments of the UCI Green Campus Program.

The winners in Professor Heyduk’s lab had both the greatest reduction in inches of open sash height as well as percentage of closed fume hoods. In comparison to our baseline data, these labs decreased the inches of their sash height by 3.5 inches and had 48% more fume hoods closed when not in use then they did prior to the competition.

The total amount of energy saved from the competition was 83,790 kilowatt hours per year, decreasing from 540,832kWh per year to 457,042kWh per year. Among the seventy-five fume hoods we surveyed, we

calculated that the average amount of savings per fume hood came out to 1117.2kWh/yr, equating an average 15.5% reduction of energy used per fume hood. With these calculations and using the Lawrence Berkeley National Laboratory Fume Hood Model, we estimate that the Physical Science departments on the third and fourth floors of Reines Hall achieved a total annual savings of \$11,270.

Moreover, the Green Campus interns offered an optional survey for the participants of the competition in order to obtain feedback about the perception of the competition. Based on the results, we found that all of the competitors who took the survey felt that the fume hood competition was effective to some degree, and over 83.3% found the auditing process to be of no inconvenience at all. Every participant who answered the survey supported the idea of having another competition, anywhere from once a year to once a month.

The overwhelmingly gratifying results of the

Hard Metrics	
Initial Yearly kWh:	540,832
Post-Competition Yearly kWh:	457,042
Savings in Yearly kWh:	83,790
Avg annual kWh Savings per Fume Hood	1117.2
Avg. % reduction of annual fume hood energy use (kWh)	15.49
Total Annual \$ Savings	\$11,270

Calculations based on LBNL online fume hood calculator

competition give us great confidence that the UCI community will continue and improve even further their current energy-efficient behavior, particularly in these energy-intensive areas of campus. We would also like to acknowledge the invaluable aid of Physical Sciences Safety Coordinator, Rama Singh, and the support from UCI’s Department of Environmental Health and Safety. With the

level of participation and support from participants and staff alike, we look forward to further efforts in our fume hood campaign.

UC Irvine’s Sustainability Map

By *Samantha Kao*

In light of the continual consciousness and expansion of UC Irvine’s sustainable behavior, Green Campus intern Courtney Gill and graphic design intern Conan Thai collaborated to create a map of UCI highlighting various aspects of campus that have been recognized as environmentally conscious, sustainable, and energy efficient.

The map, based on

the setup of UCI’s main campus map, is accompanied by a key that offers short descriptions of the buildings and areas noted on the map. Some of the features included UCI’s Green Room, the Hydrogen Fueling Station, and UCI’s co-generation plant.

As part of our tabling for the Focus the Nation event, Green Campus team members passed out copies of the map to various visitors and stakeholders who stopped by our booth on Ring Road. Maps

were also passed out during the main event.

For those who would like a copy of this sustainability in the near future, please refer to the UCI Sustainability web page at www.sustainability.uci.edu.

We are proud to support and publicize the sustainable endeavors of UCI, by staff and students alike, and anticipate adding to the map in the future. Special thanks go to Erin Lane who made the creation of the map possible.

“The map highlights aspects of the campus that have been recognized as environmentally conscious, sustainable, and energy efficient”



The Green Campus Program

The Alliance to Save Energy's "Green Campus Program" is funded by the California ratepayers under the auspices of the California Public Utilities Commission. Strategic Energy Innovations is a Sub-contractor of the Green Campus Program.



CONTACT GREEN CAMPUS:

Samantha Kao .
kaos@uci.edu
Courtney Gill .
cgill@uci.edu
Andrew Sata .

Energy Efficiency Summit

By Samantha Kao

From February 10 to 11, Green Campus interns from campuses across California, including new teams from Stanford University and Cal Poly San Luis Obispo, convened to participate in the Green Campus Energy Efficiency Summit, a conference addressing the goal of creating partnerships for an energy and climate secure tomorrow. Compared to the first conference four years ago, where there were about twenty interns in attendance, the Alliance to Save Energy was proud to acknowledge all seventy undergraduate and graduate interns from their thirteen respective schools.

The first day of the conference compiled various workshops and panels regarding issues and features of the Green Campus Program for the interns. As a new focus of the formerly titled "Mid-Year Meeting," the conference also offered a Green Campus alumni panel on career paths and a workshop covering the basics of résumés, cover letters, and interviews. Corresponding with the theme of partnerships, the conference this year made a point of allowing Green Campus interns to network with each other and establish stronger relations with programs on other campuses. The UCI interns were excited to learn that the Green Campus Program is looking to start up at CSU Long

Beach, and we are eager to work together with the developing program as it establishes itself on our neighboring campus.

The second day of the competition, where Alliance to Save Energy and Green Campus members were joined by stakeholders from various businesses and campuses, took place at San Diego State University. The day-long schedule gave attendees a chance to listen to speakers such as Peter Garforth—president of Garforth International, LLC, an environmental consulting group—and Jamais Cascio, a writer on the environment and ethics. To contribute to the theme of partnership in sustainability, there was also a panel that showcased new projects at HSU, UCSD, and Chico State for ideas at other campuses. Some of the new initiatives brought up were an energy efficiency program for campus copy machines, research partnerships with faculty and students, and a thermostat resolution.



Green Campus and UCI Stakeholders say "ZOT!"
From left to right: Andrew Sata, Jim Hay, Paul Wingco, Paul Howland, Peter Jenkins (top), Samantha Kao, Courtney Gill (bottom)

UCI Green Campus interns are happy to say that we had one of the biggest turn-outs in terms of campus staff attendance at the summit.

The conference ended with a segue into the end of the year Sustainability Conference, which will be held at the end of July at Cal Poly SLO. We are excited for the upcoming conference and anticipate applying our new knowledge at our favorite Green Campus, our very own UCI!

Current Green Campus Schools:
UC Irvine, UC Berkeley, UC San Diego, UC Merced, UC Santa Barbara, UC Santa Cruz, Cal Poly Pomona, Cal State San Diego, Cal State Long Beach, Cal State Chico, Cal State Santa Barbara, Humboldt State University, Cal State San Luis Obispo (new), Stanford University (new)

Hiking in the Newport Back Bay

By Kong Sham

On February 23, the Green Campus Club from UC Irvine went to the Peter and Mary Muth Interpretive Center in the Newport Harbor Back Bay.

The day started out great with the sun out bright and early. That day, we went hiking for about an hour around the bay and saw the local wildlife which included hawks, ducks, and

an assortment of other birds. The weather took a turn for the worse later in the day with dark clouds forming overhead. However, the Peter and Mary Muth Interpretive Center had an indoor educational facility where we then spent the rest of our visit. Inside, we watched educational videos and interactive displays which showed the life cycle of certain plants and the environment of different

creatures. They also had a great children's section where they had live reptiles on display and fun activities for the children to enjoy.

The Peter and Mary Muth Interpretive Center was a great place to seek and hike around, it would make a great place to bring children for an outdoor adventure that is equally educational as it is fun.



Green Campus Members in the Newport Back Bay