

EnviroNews

Newsletter of Santa Clara University Environmental Studies Institute

Volume XXVII

Fall 2006

ESI's New Home

The Environmental Studies Institute moved over the summer from the Nexus House on campus to a more spacious Victorian house on Lafayette Street, known as the Montgomery House. This move provided space for ESI faculty and staff that were previously housed in other offices across campus. The new building features a conference space for small classes and meetings, and a small computer lab area which will be used for GIS classes. Now that everyone is under one roof, it makes it easier to collaborate! The new ESI offices are located at 874 Lafayette Street, near the corner of Homestead Road and Lafayette Street.

ESI Welcomes New Faculty

ESI is extremely pleased to welcome Dr. Iris Stewart-Frey to our faculty. Dr. Stewart-Frey is trained as a hydrologist and brings new areas of expertise to SCU's faculty. Her research has examined the effects of climate change on the amount and timing of stream flow in the Sierra Mountains. This spring, she will be teaching ENVS 13 Soil, Water, and Air, which will count as a natural science lab course for the University core. Next year, Dr. Stewart-Frey will also offer an upper-division course in Geographic Information Systems (GIS).

We are also very pleased to have Dr. Leslie Grey join the ESI faculty with a 100% appointment. Previously Dr. Grey's position was split 50/50 with Political Science. Although Dr. Grey will continue to teach many of the same courses (e.g., POLI 50), her office has moved from Arts and Sciences to ESI's new location at 874 Lafayette Street.

Study Abroad Week

October 23-27, 2006

Science Majors Abroad Info Session

Thursday, October 26, 2006

5:00 - 6:30 p.m.

Daly Science 202

Come learn about how you can study science through SCU's International Programs. Featured in our presentation will be a variety of programs provided by foreign universities, study abroad programs such as the School for Field Studies, and Santa Clara University itself.

Listen to students and faculty as they discuss their experiences and learn about the different opportunities to obtain science credit. Topics for study range from health care to applied ecology to evolutionary biology in the Galapagos to molecular genetics in Denmark, and much more. You can sign up for home-stays to experience a new culture, learn a second language, experience exotic wildlife, conduct community service, or explore in-depth laboratory sciences at world class universities.

Programs and countries of special interest for this presentation include School for Field Studies, SCU's Costa Rica Program (Summer 2007), IES's Ecuador program, Australia, DIS in Denmark, Lund University, and many others.

For complete schedule of Study Abroad Week, visit www.scu.edu/studyabroad

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Fall 2006 Restoration Work Days at Ulistac Natural Area

October

Saturday, 10/7. 9:00 am - 1:00 pm

Sunday, 10/15. 9:00 am - 1:00 pm

November*

Saturday, 11/4. 10:00 am - 2:00 pm

Sunday, 11/19. 10:00 am - 2:00 pm

December

Saturday, 12/2. 10:00 am - 2:00 pm

Sunday, 12/17. 10:00 am - 2:00 pm

*Note the change to the fall/winter hours! Only heavy rain will cancel a work day.

Make sure to wear long pants and sturdy work shoes. Sunscreen and hats or jacket are recommended. Bring a snack and water. Gloves, tools, and instruction are provided. Visit <http://www.scu.edu/envs/ulistac> for more information.

Field Trip Leaders Needed!

Do you like working with kids? Do you want to get involved with habitat restoration? Do you want to gain volunteer, leadership, and/or informal teaching experience?

The Outreach Center at Ulistac Natural Area is looking for volunteer Field Trip Leaders. Learn how to lead a group of 20 elementary or middle school students on an educational field trip to Ulistac. Field trips are typically scheduled on weekday mornings. Contact the Ulistac Outreach Coordinator (ulistac@scu.edu) for more information.

The Ulistac Natural Area is the only 41 acres of habitat in the entire of Santa Clara. When restoration of the park is complete, it will contain seven California native habitats, including a ¼-acre Bird and Butterfly Garden, oak woodlands and wetlands. Directions to Ulistac are on the Restoration Project's website: www.scu.edu/envs/ulistac



Fall 2006 ESI Seminar Series

September 26

"Native Perspectives on Western Science and Environmentalism"

Patricia Cochran, Alaska Native Science Commission

September 29

"Darfur: Political Crisis or Environmental Crisis?"

Leslie Gray, Environmental Studies Institute, SCU

October 13

"Replenishment of Reef Populations: Contrasting Effects of Climate Variability along the US West Coast"

Bernardo Broitman, National Center for Ecological Analysis and Synthesis

October 27

"Environmental Justice in Silicon Valley"

Terry Trumbull, Environmental Studies Institute, SCU

November 10

"New Approaches to Managing Coastal Marine Ecosystems"

Carrie Kappel, National Center for Ecological Analysis and Synthesis

December 1

"Challenging the Chip: Environmental Justice in the Global Electronics Industry"

Chad Raphael, Communications Department, SCU and Ted Smith, Silicon Valley Toxics Coalition

Seminars begin at noon, and are held in the ESI Conference Room. Light refreshments are served from 11:45 am. The ESI Conference Room is at 874 Lafayette Street (near the corner of Homestead and Lafayette).

Contact the ESI office at (408) 551-7086 if you have any questions or if you have a disability and require a reasonable accommodation.

Need Help with Library Resources?

Contact Michal Strutin, Science Librarian
mstrutin@scu.edu, x7021

An online library resource guide is being assembled for the Environmental Studies Institute, with web resources in categories such as Climate, Sustainability, and Conferences. Have any must-include web links? Please email them to Michal Strutin.

Environmental Studies/Science online databases are available at:
http://www.scu.edu/library/resources/databases/subject/environmental_studies/

ENVS Course Update

Three new classes are being offered next quarter, and fulfill requirements for environmental Science and/or Studies majors and minors:

ENVS 12: Introduction to Environmental Studies

Keith Douglass Warner OFM

TR 3:40-5:25 pm

The field of environmental studies is a relatively new, interdisciplinary field that draws heavily from the social sciences to propose ways society can develop environmental solutions. This course will introduce students to:

1) the major environmental problems facing human societies; 2) the key social science disciplines and their contribution to the field of environmental studies; 3) the methodologies used by these disciplines and the way they shape understanding of nature/society relations; 4) the importance of ethics and leadership in the developing environmental solutions.

This is a survey course that will enable students to understand the composition and evolution of environmental studies as a field, and provide them tools to interpret environmental problems and solutions at a local, national and global scale.

ENVS 110 (cross-listed with BIOL 160): Statistics for Environmental Science

Michelle Marvier

MWF 9:15 - 10:20 am

A course in applied statistics for biologists planning to conduct manipulative experiments. Biologists gain training in experimental design and quantitative analyses in cases where specific experimental hypotheses are to be tested. Theory and concepts are covered in lectures and readings. Laboratory sessions provide practical experience in computing statistical procedures by hand and with statistical software. Examples used in lectures and lab assignments are derived from medical research, physiology, genetics, evolution, ecology, and environmental risk assessment.

ENVS 156 (cross-listed with BIOL 156): General Ecology

Virginia Matzek

MWF 1:00-2:05 pm

Quantitative study of the interrelationships of organisms with their biotic and abiotic environments. Emphasis on population dynamics, interspecific relationships, community structure, and ecosystem processes. Prerequisite: Biology 23 and Math 11.

Other courses offered in Winter:

ANTH 140 Food, Culture and the Environment

ECON 1E Principles of Microeconomics

ENVS 10 Joy of Garbage

ENVS 101 Capstone

ENVS 120 Intro to Environmental Law & Regulation

ENVS 163 Faith, Ethics, & Biodiversity Crisis

ENVS 198C Environmental Vocation Internship

Winter pre-registration will be available for declared majors and minors for ENVS courses only. Please contact the ESI office for details (408-551-7086).



ENVS 141 goes to Costa Rica - Summer 2007!

ESI is proud to announce a new summer study abroad program in Costa Rica. ENVS 141, Environmental Biology of the Tropics, will be paired with ARTS 39, Drawing from Nature. The program will operate during the first university summer session, June 25-July 23, and include a three-week field trip to Costa Rica. The focus of the class will be on tropical biology, restoration ecology, and sustainable agriculture, with drawing assignments inspired by our fieldwork. Students will work on a montane tropical forest restoration project in southern Costa Rica, track monkeys in lowland tropical forest, visit sustainable agriculture projects, observe crocodiles and wetland birds in mangroves, do homestays with coffee farmers shifting to organic/fair-trade agriculture, tour a wildlife rehabilitation center, and study ecotourism in the Golfo Dulce region, among other planned activities.

All majors are welcome to apply for the course via International Programs; biology and environmental science majors who need upper division lab credit for this course should check with the instructors before applying. Program fees, including room, board, and tuition will be approximately \$4,200. For more information, please contact Virginia Matzek, vmatzek@scu.edu or Edward Rooks, edwardrooks@comcast.net.

Solar Decathlon is Underway at SCU

by Heidi Williams, School of Engineering

SCU was selected by the U.S. Department of Energy as one of only 20 colleges and universities in North America and Europe (the only one on the west coast, or even west of Colorado!), to participate in the 2007 Solar Decathlon--a program promoting sustainable living. Each of the participating schools will build a 500 sq. ft. solar-powered house for the competition to be held on the National Mall in Washington, DC (for more details on the competition see http://www.eere.energy.gov/solar_decathlon/).

The SCU Solar Decathlon Team is comprised of about 40 undergraduate students from all disciplines within engineering working with expert faculty advisors. The team will design, build, and transport an energy efficient solar home to the competition site in Washington, where they will be a part of a "solar village" visited by thousands of people, from ordinary citizens to leaders in the field of alternative energy.

The SCU solar house will use cutting-edge technologies and sustainable materials. Not only will the finished product be a showcase for sustainability in the United States, it will also incorporate elements that are adaptable for the developing world. Another exciting aspect is that this project extends well beyond the Solar Decathlon to support program development in Sustainable Engineering Studies at Santa Clara University, educating students in the area of alternative energy, as well as initiating outreach programs for the community, thereby making a strong impact on the global society.

The SCU Solar Decathlon team is truly committed to being a part of the solution to building a sustainable society, and they recognize the fact that the success of this project is highly dependent on the support (expertise, equipment, and cash sponsorship of approximately \$600,000) from individual and industry partners. They invite support and participation in this success.

If you would like further information, please see the team's website, <http://www.scusolar.org> , and feel free to contact any of the following people involved in the project:

Dr. Timothy Hight, 408-554-6870, thight@scu.edu
Dr. Jorge Gonzalez-Cruz, 408-554-4459, jgonzalezcruz@scu.edu
Dr. Timothy Healy, 408-554-5309, thealy@scu.edu
James Bickford, jbickford@scu.edu
Landon Reese, lreese@scu.edu
Leman Ethem, SCU Development Office, 408-554-2724, Lethem@scu.edu



SCU Grad Wins Fulbright

Catherine Kilbane '05 left in August on a Fulbright grant to monitor debt-for-nature transactions in Peru, she is now living out her dream. But that dream may never have reached fruition without the helpful prodding of some of her SCU professors—particularly Leslie Gray, assistant professor in environmental studies and political science, and Jane L. Curry, professor of political science.

Although for more than a decade, Kilbane dreamed of working in conservation in Latin America, she never imagined applying for a distinguished award to make that goal a reality. Despite her success in the University Honors Program and her mastery of material in her double major in environmental studies and Spanish studies, she notes, "I never even would have considered applying for a Fulbright had Dr. Gray not first brought it up and then pushed me to go for it." Curry's help in crafting the application was also invaluable, she says.

The prestigious Fulbright Program for U.S. Students awards about 1,200 grants annually (from a pool of more than 5,600 applications this year) to enable recipients to undertake research projects, advanced study, or teaching opportunities for an academic year in more than 140 countries. Established in 1946 and administered by the U.S. Department of State, the Fulbright Program aims to foster international goodwill through cross-cultural interaction and education.

Kilbane's is one of just 10 grants awarded for study in Peru this year. The debt-for-nature swap program, on which she will focus, has become an increasingly popular conservation tool. A creditor country (such as the U.S.) reduces the debt of a country (such as Peru) in exchange for the debtor country's commitment to funding tropical forest conservation programs within its own borders. Ideally, it's a win-win situation, Kilbane explains, but very little documentation exists on how effective the swaps are in attaining conservation goals.

-excerpted from the June 1st issue of fyi, SCU's Faculty-Staff newsletter, with permission from the Office of Marketing and Communications, Santa Clara University. For the rest of the article, please visit <http://www.scu.edu/fyi/jun0106.cfm>.

Sustainability Corner

SCU becomes a Sustainable Silicon Valley Partner

Santa Clara University recently joined Sustainable Silicon Valley's Carbon Dioxide Emissions Reduction Initiative. As a Partner, SCU has committed to setting a goal for CO2 emissions reduction, and to report our progress and yearly CO2 emissions to Sustainable Silicon Valley. Other SSV partners include Adobe, County of Santa Clara, NASA Ames Research Center, San Francisco International Airport, and Toyota Sunnyvale. For a complete list of partners and more information about SSV, visit: <http://www.sustainablesiliconvalley.org>. Don't forget: SSV will be holding a conference at SCU on October 25th to celebrate the release of its CO2 report 2006. Participation for SCU faculty and staff is \$40. Students may register for \$20.

Campus Sustainability Assessment Begins

The SCU Campus Sustainability Assessment project began this summer. The student run project, focused on reducing the university's environmental footprint, will explore SCU's use of water, fossil fuels, and toxic chemicals, as well as the university's production of waste. This summer, Sustainability Assessment Intern Brandon Ridley '06 began the assessment by searching for baseline data. He spent the summer e-mailing, calling, and interviewing individuals on campus to gather records. The next Intern will focus on identifying gaps in the available data and conducting or proposing research to fill those gaps.

Sustainability Events

Tour the Commons at Kennedy Mall

What's so cool about blue jeans and straw bales? Learn about SCU's sustainable design demonstration building.

- Friday, October 27th, 11:00 am - 11:45 am
- Friday, December 1st, 11:00 am - 11:45 am

Meet at the Service Desk in the Commons at Kennedy Mall for a 45-minute tour of the sustainable design features of the Commons.

Rummage Sale 10/7, 9:00 am - 4:00 pm

- SCU Women's Basketball Team Fundraiser
 - Leavey Center Parking Lot
- Help support the team and promote the re-use of items!

Green Practices in the Workplace 10/10, 12:00 pm - 1:30 pm

HR Workshop for staff and faculty to learn how easy it can be to make more sustainable choices Please RSVP through HR's Calendar.

Campus Sustainability Day, 10/25, 8:30 am - 7:00 pm

- **8:30 am – 1:30 pm A Favorable Climate for Climate Action** (A Sustainable Silicon Valley event)
Location: California Mission Room, Benson Center
Keynote Speaker: Jon Krosnick, Stanford University
Admission: \$20 for SCU students*; \$40/person for SSV Partners, \$75/person all others
* A few students can attend for free in exchange for volunteering at the event. Contact the Sustainability Coordinator (lcromwell@scu.edu) if you are interested.
- **9:30 am – 11:30 am Campus Sustainability Day Webcast**
Location: Wiegand Room, Arts and Sciences Building
Learn about the sustainability efforts and achievement of Arizona State University, Harvard University, Grand Valley State University, and Pima Community College.
- **1:00 pm – 5:00 pm Sustainability Fair**
Stop by the Commons at Kennedy Mall and learn about the sustainability related projects of fellow community members at SCU.
- **7:00 pm Movie in the Swig Sky Lounge**
"Birdsong & Coffee: A Wake-up Call" focuses on the ecological and human benefits of shade-grown, organic, and fair-trade coffee. Free fair-trade coffee (purchased directly from the farmers in the movie) will be provided - snacks too!

Faculty Announcements

Sean Watts' course, ENVS 1 - Intro to Environmental Science, was identified as a top example of best practices in a national study of Environmental Science courses conducted by the Center for Educational Policy Research (CEPR) on behalf of the College Board. In addition to being identified as using best practices overall, the course was further designated an "exemplary practice" course in Environmental Science. This is the highest designation awarded in this study.

Lita Kurth began a Masters of Fine Arts program in creative writing and this summer met the wonderful Alaskan environmental writer, Sherry Simpson. She also stated with pride that during the summer she "very assiduously used [her] solar cooker for making: beans, sausage, 'broiled' tomatoes, pork, chicken, and even chocolate cake"!

Nancy Unger authored an article entitled, "The 'We Say What We Think' Club: Rural Wisconsin Women and the Development of Environmental Ethics," *Wisconsin Magazine of History* vol. 90, no. 1 (Autumn, 2006): 16-27. (Cover feature)

Internship Opportunities

These internship opportunities have recently come up. For more opportunities, please check the ESI website or get on the ESI mailing list for regular announcements.

◆ Sustainability internship at ESI

ESI will hire an intern to work on the campus sustainability assessment during fall quarter. The primary responsibilities of the intern will be to 1) identify gaps in the data available to assess the environmental impact of the SCU campus, and 2) propose and/or conduct research to fill those data gaps. An understanding of sustainability issues and practical knowledge of the campus' ecological footprint are important, as are familiarity with university courses in which student research could potentially take place. Hours are flexible. All majors are welcomed. Renewal of the internship in future quarters may be possible.

To apply, submit a resume, two references with phone numbers (faculty or work supervisors), and a one-page cover letter in which you state why you want the job, what skills you would bring to it, and how this job fits into your future career plans. Email to lcromwell@scu.edu or drop off at ESI, Montgomery House (874 Lafayette St.) by October 13.

◆ Living Ocean Initiative, Monterey

This winter, ENVS 163, Faith, Ethics & the Biodiversity Crisis, will be partnering with the Living Ocean Initiative, a year-long interfaith effort bringing together religious leaders and ocean

scientists to promote ocean stewardship and conservation on California's Central Coast. Cosponsored by the National Marine Sanctuary program, the Monterey Bay Aquarium and Upwellings Ministry of Environmental Stewardship, the initiative is inviting teams of clergy, educators and lay people from fifty inter-religious congregations (Protestant, Catholic, Jewish, Muslim, Buddhist and interfaith) for an all day conference/retreat and follow-up activities. If you are interested in interning with the Living Oceans Initiative, contact Keith Warner at kwerner@scu.edu.

◆ The Nature Conservancy

The Nature Conservancy's Worldwide headquarters seeks interns year-round for its Government Relations Department to assist with research, writing, and administrative tasks. As fully integrated members of the Government Relations team, interns will be given the opportunity to research grant opportunities, compile information on conservation-related public policy, assemble appropriations notebooks, and attend hearings on Capitol Hill. This is an unpaid volunteer internship. However, a stipend of up to \$1000 is offered upon the completion of the internship and a monthly transportation benefit. Academic credit is strongly supported.

Please submit a complete application by November 17, 2006 for the Spring position. Hiring decisions will be made in early December. Please provide a cover letter, resume, three professional references, & college transcripts to: The Nature Conservancy, Government Relations, Attn: Internship Program, 4245 N. Fairfax Drive, Arlington, VA 22203
Email: grjobs@tnc.org or Fax: 703-841-7400

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EnviroNews is prepared by Jeannette Sacman. Comments or Suggestions? Send to jmsacman@scu.edu.

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