Governor announces revisions to 2009 budget

By RICHARD VEILLEUX

Connecticut Gov. M. Jodi Rell on Feb. 6 unveiled adjustments to the state’s budget for fiscal year 2009 that leaves intact UConn’s original appropriation, leaves untouched a $6.5 million appropriation that addresses the Health Center’s academic gap, and adds $10.9 million to the Health Center’s budget for fiscal year 2008 to cover a current year shortfall.

The academic gap refers to the difference between what it takes to fund the medical and dental schools and the amount the state appropriates to the University.

The budget also continues into 2009 $2 million each for both the Eminent Faculty Program and the Center for Entrepreneurship, and the $1 million for faculty hiring, new in 2008, is now incorporated into the 2009 base budget for Storrs-based programs.

“Gov. Rell’s willingness to deal with the Health Center’s shortfall so early in the process is much appreciated,” says Lori Aronson, vice president and chief financial officer. “With our 2009 budget intact, we will be able to continue our work to enhance undergraduate education, build our research base, and contribute to the state’s economy in a meaningful way.”

The two-year budget was set during last year’s legislative session, but the governor and lawmakers traditionally tweak the package during the off-year, responding to changes in the marketplace or to cover the costs of new legislation.

Rell’s budget presentation and state of the state address opened the legislature’s 2008 session, which is scheduled to end on May 7.

The package must now be approved by the full legislature.

“One of the reasons I chose to come to Connecticut was the tremendous support the University receives from the General Assembly,” says University President Michael J. Hogan. “That support is evidenced by this budget, which recognizes the important role the University plays in the state while also addressing several of our unique contributions.”

Those contributions include the role the Health Center plays in the correctional managed care health program. Rell’s budget takes

Panel discusses University’s efforts to promote environmental sustainability on campus

By RICHARD VEILLEUX

Against a backdrop framed by the knowledge that the environment will be one of three focus areas in Provost Peter Nicholls’ new Academic Plan, and a pledge from President Michael Hogan that UConn will become a leader in the environmental movement, a panel of faculty on Jan. 31 discussed what UConn can do to promote environmental sustainability on campus.

“The Academic Plan’s focus on the environment, as a blueprint of what we need to do, is very promising,” said David Wagner, a professor of ecology and evolutionary biology. “Right now, there’s a chance we’ll see action from the top down and from the bottom up. I’m very encouraged by the EcoHusky group [a student group promoting environmental awareness and activities on campus]. We have a real opportunity to change the campus climate.”

The evening panel discussion in Konover Auditorium capped three days of movies, teach-ins, and other events at UConn as part of Focus the Nation, a countrywide climate change awareness event. More than 60 UConn faculty members at Storrs and the regional campuses took part in the event, devoting their classes to a discussion of climate change and greenhouse gases, and what can be done to stanch global warming and improve the outlook for the future.

The Jan. 31 panel, moderated by Veronica Makowsky, vice provost for undergraduate education and regional campus administration, and Gregory Anderson, vice provost for research and dean of the Graduate School, kept its focus local and, for the most part, discussed small steps that could contribute to the greater good. Lyle Scruggs, an associate professor of political science, offered a look at the University’s carbon footprint. He showed a slide indicating that in 2006, 51 percent of the greenhouse gases emanating from Storrs were produced by energy generated on campus, and another 26 percent by electricity produced by external suppliers. Another 16 percent was created by vehicles, he said.

Scruggs offered some ideas that would lower those numbers, including improving the efficiency of the co-generation plant.
**UConn joins national recycling contest**

By Richard Veilleux

UConn’s environmentally conscious students are at it again. Fresh from coordinating Focus the Nation, a successful campus-wide awareness event, the EcoHuskies organization has signed on to join a nation-wide competition, Recyclemania – which involves not only students, but faculty and staff too.

The EcoHuskies are a student group promoting environmental awareness and activities. At the same time, students intern in the Office of Environmental Policy have begun planning another round of EcoMadness, a biannual competition that pits residence halls against each other for a month of curtailing water and energy use.

The recycling contest, which began Jan. 27, has grown to include about 400 colleges nationwide, including seven in Connecticut. UConn students are competing in two of the four categories – the Per Capita Classic, which divides the total amount recycled by the number of students, faculty, and staff on campus, and the Gorilla Prize, which is based on total tonnage recycled.

The contest runs for 10 weeks. Each week, every university’s results will be posted on the national Recyclemania website at Recyclemania.org/results.asp. The Daily Campus also will publish UConn’s results weekly, along with a photo of a student, faculty, or staff member who is caught ‘green handed’ putting into a recycling bin.

Recycled paper, bottles and cans, and corrugated cardboard all count toward the total, says Alyssa Lembo, who is coordinating the project. Lembo also is a co-chair of the EcoHuskies. “We’re hoping to increase our recycling by 50 percent, compared to last year,” Lembo says. “We’re working closely with Residential Life, the Student Union, and Babidge Library to promote it – they’re the largest areas where people recycle. And we’ll be getting more posters and signs out wherever we can. We’re also putting out more recycling bins.”

The EcoMadness competition was held in the fall among three freshman residence hall complexes, where it was a big success. This time, environmental policy interns are hoping to test upperclassmen.

In a contest scheduled to run from March 18 until April 18 (roughly the same time the NCAA Division I men’s and women’s basketball teams compete in March Madness), EcoMadness will move to residence complexes tradition- ally reserved for upperclassmen – Hiltopper and Charter Oak apart- ments, South Campus, and the Greek Village.

“It’s not set in stone,” says Jessica Lallucca, an intern at the Office of Environmental Policy who is coordinating this spring’s contest. “We still have to make sure the sub-meters are working in all the buildings, but that’s where we want to go.”

Sub-meters, which have been installed in about 60 percent of buildings on the Storrs campus, provide automated, digitized monitoring of a building’s electricity, water, sewer, and steam consumption, and provide real-time data. They better allow researchers to figure out what to charge grant- ing agencies for indirect costs, and also help the University track util- ity in residence halls and other buildings.

They also make it possible for the Office of Environmental Policy and the EcoHuskies to sponsor contests aimed at instilling water- and energy-conserving behavior. Last fall, in a competition between 13 residence halls in three complexes, residents of Shippey Hall won the contest for curtailing energy use, using more than 16 percent less energy during the one-month contest than had been expended the month before. Resi- dents of Hanks Hall in Northwest Campus won the water conserva- tion contest, using more than 50 percent less water than they had the previous month.

“We were pleasantly surprised,” said Richard Miller, director of environmental policy. “We even reckoned the metering data with Facilities Operations, but everything was OK. They just did a great job there.”

Miller calculates that the contest kept more than 20 tons of carbon dioxide out of the atmosphere. As part of the prize (along with an ice cream social featuring UConn Dairy Bar ice cream), his office also purchased carbon offsets, ef- fectively matching the greenhouse gas emissions avoided by Shippey residents during the competition, and awarded Shippey with a framed certificate of ownership for eight hours of carbon offsets.

Miller says the fall contest was “one of our more successful initia- tives.”

“It’s really about behavior modification,” he says. “If we can create systemic change through mechanical, electrical, and plumbing retrofitting that result in lasting reductions, combined with this kind of behavioral change, we can really reduce our carbon footprint and educate students about it at the same time.”

Besides slowing carbon emis- sions, Miller says the cutbacks saved the University an estimated $3,000 in utility costs during the one-month contest.

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**Three engineering faculty receive recognition**

By Nan Cooper

Three engineering faculty members have been selected by the Institute of Electrical and Electronics Engineers (IEEE) to receive honors: Yaakov Bar-Shalom and Bahram Javidi, both of the electrical & computer engineering department, and Sanguthevar Rajasekaran of the computer science & engineering department. Bar-Shalom and Javidi will receive their awards in the fall.

Bar-Shalom, the Marianne E. Klewin Professor in Engineering and a Board of Trustees Distinguished Professor, was selected to receive the IEEE Dennis J. Picard Medal for Radar Technologies and Applications. The award honors his contributions to “techniques for radar target tracking in clutter.”

An expert in estimation theory and target tracking, Bar-Shalom is credited with originating the probabilistic data association filter for target tracking in a low sig- nal-to-noise ratio environment, pioneering the theoretical infor- mation limit for estimation in the presence of false measurements and an algorithm which meets this limit; and developing the optimal track-to-track fusion equations for real-world asynchronous decentral- ized surveillance systems. These tools and tracking paradigms are used worldwide for target detec- tion and tracking by military and national defense organizations. He has published more than 350 schol- arly journal papers and conference proceedings as well as seven books. Bar-Shalom’s work has been cited more than 10,000 times.

Bahram Javidi, a Board of Trustees Distinguished Profes- sor, was one of five collaborators selected for the 2008 IEEE Donald G. Fink Prize Paper Award. Javidi’s award was published on the paper, titled “Three-Dimensional Imaging and Processing Using Computational Holographic Imaging,” were Yann Frasset, Thomas Naughton of the, Osmu Matoba, and Enrique Tajahuerce. All were post-doctoral students who worked in Javidi’s laboratory at UConn. The paper appeared in the Proceedings of IEEE in March 2006. The award is presented for the most outstanding survey, review, or tutorial paper published among more than 130 IEEE publications in the preceding year.

Javidi is an expert in three-di- mensional optical imaging, display, recognition, and computational biology, whose research also encompasses secure information systems, au- tomated visualization, and recogni- tion of biological micro/nano organisms using optical systems, biomedical image analysis, photon counting imaging, and communica- tions. His research has applications in image sensing and recognition, homeland security, medicine, and military uses.

Javidi is inventor and co-inven- tor on 18 U.S. patents. He has authored or co-authored eight books and 45 book chapters, more than 230 archival journal articles, and more than 290 conference proceedings. Sanguthevar Rajasekaran, the UTC Chair Professor of Computer Science & Engineering and direc- tor of the ECE Booth Engineering Cen- ter for Advanced Technology, was among selected for elevation to the rank of IEEE Fellow, effective Jan. 1. IEEE cited him for “contribu- tions to sequential, parallel, and randomized algorithms and to bioinformatics.” His areas of exper- tise encompass applied algorithms, particularly parallel, randomized algorithms and computational geometry. His work on packet routing is considered seminal, and his studies in integer sorting have helped pioneer new methodolo- gies. Rajasekaran has now expand- ed his work into bioinformatics and computational biology.

Rajasekaran has co-authored two textbooks, Computational Algo- rithms/C+ + (1997) and Computer Algorithms (1998), and co-edited five books on algorithms and re- lated topics. He has also authored 21 book chapters and more than 125 archival journal publications and conference proceedings. He has secured nine U.S. patents, alone and in collaboration with other researchers.
Safe lifting initiative at Dempsey Hospital minimizes risk of injury to patients, staff

BY KRISTINA GOODNOUGH
Lifting, transferring, or repositioning patients manually is hard work, and it takes its toll on health care workers and their backs. It also can have an impact on patients, if their skin is fragile or if tubes and devices are knocked away as they are moved.

To minimize the risk of injury to both patients and staff, the Health Center has adopted a policy to reduce manual lifting except in emergencies, and has provided every department in the hospital with equipment to help.

The tools range from sheets and straps to power-assisted stretchers and motorized lifts that can support and transfer up to 600 pounds.

“Nurses, aides, and other health care staff handle people every day,” says Patti Wawzyniecki, industrial hygienist in the Office of Research Safety. “The constant, repetitive, and forceful movements can lead to injuries over time. We are trying to reduce the number of injuries, the severity of injuries, and the number of days of work lost to injuries.”

Wawzyniecki worked with Kim Harris, a physical therapist in Rehabilitation Services, to help launch the safe lifting program at the Health Center four years ago, with funding from the state Department of Administrative Services.

“Patient-handling equipment makes moving and repositioning much safer for patients,” says Wawzyniecki. “The patient is more secure relying on equipment rather than a caregiver for support.”

“Take, for example, the fairly common case of a caregiver helping a patient walk after surgery. The patient complains suddenly of lightheadedness and collapses to the floor. That fall could mean serious injuries for the patient. For the caregiver, it could mean a sudden wrenching motion, with injuries to joints and muscles.

The hospital is now equipped with lifts that allow a patient to walk while supported. Other lifts can help move a patient safely from the floor to a wheelchair or a stretcher.

“This is a safety initiative for both patients and for employees,” says Donna Pryor, nurse manager for the hospital’s oncology floor.

“We all want the best care for our patients and we also want to protect our employees from disabling injuries.”

According to the National Institute for Occupational Safety and Health, the recommended maximum safe lifting weight is 51 pounds, with all lifting conditions perfect – minimal forward reach, steady load close to the body, straight back, load between knees and shoulders, and good grips.

The American Nurses Association estimates a nurse may lift up to a total of 1.8 tons during one eight-hour shift, in conditions that are seldom perfect.

Even when two to four nurses or paraprofessionals are available to do manual lifting together, says Nick Warren, ergonomics coordinator at the Health Center’s Ergonomic Technology Center, they still risk herniated discs, serious sprains, and heart attacks.

Such injuries may cause nurses to leave the profession. The American Nurses Association estimates that about 12 percent of those who leave nursing every year do so because of back or other musculoskeletal injuries.

Reducing injury rates and the severity of injuries also helps reduce the cost of workers’ compensation. Between October 2002 and March 2007, workers’ compensation costs for seven departments at Dempsey Hospital with significant patient handling responsibilities decreased by 22 percent, from $240,956 to $188,157. The average cost per injury decreased 39 percent, from $15,568 to $9,500.

“Our goal,” says Pryor, “is to get everyone working together to use these safe handling devices routinely.”

International studies journal comes to UConn

BY CINDY WEISS
Two political science faculty are the new co-editors of the International Studies Review, a journal of the International Studies Association that will be housed at UConn for the next five years.

Mark Boyer, professor of political science, and Jennifer Sterling-Folker, associate professor, became the co-editors in January.

The International Studies Review “gives landscapes of the political science international field,” says Boyer.

The quarterly journal was previously housed at Syracuse University. It will remain at UConn until 2012. The move here was supported by the College of Liberal Arts and Sciences Dean’s Office, the Graduate School, and the Department of Political Science.

It is the second scholarly journal to move to the political science department recently. The Journal of Human Rights, edited by political science professor Richard Hiskes, came to UConn in 2006 from Wellesley College.

The ISR includes peer-reviewed essays synthesizing current literature in the field and mapping future developments, and it has reviews of new books, says Sterling-Folker. It also provides a forum for debate about issues in international studies in which scholars describe their research agendas.

It is widely read by international studies scholars and is frequently assigned as a staple in graduate seminars, Boyer says.

Laura Janik, a Ph.D. student in political science, serves as the managing editor.

Boyer, who has been on the faculty at UConn since 1988, specializes in research on international cooperation and conflict. His most recent book is Defensive Internationalism. In March, he will receive the Ladd Hollist Service Award from the International Studies Association in recognition of his service to the organization. He was also recently elected as ISA vice president for 2008-09.

Sterling-Folker came to UConn in 1994. She specializes in international relations theory and international organization, and is the author of Theories of Cooperation and the Primacy of Anarchy (2002) and editor of Making Sense of International Relations Theory (2006).

Board approves degree in African American studies

BY KAREN A. GRAU
A new bachelor’s degree in African American studies – the first to be offered at a public university in Connecticut – was approved recently by the Board of Trustees.

The major will help the University establish strategic partnerships with other institutions in Connecticut and the nation, and will complement course work already offered in Asian American, human studies, Puerto Rican and Latino studies, and women’s studies.

The major also may pursue employment in federal, state, or local government and non-profit agencies.

“Offering the major puts the University in the company of outstanding public institutions such as the Universities of California, Virginia, and Wisconsin. Although students can major in African American studies now, they do so as individualized majors. The new program expects to enroll 12 students a year into the major.”

Options for students who graduate from the program include graduate school in areas including African American studies, history, sociology, or psychology, or law or business school. Graduates with the major also may pursue employment in federal, state, or local government and non-profit agencies.

Christine Delgrande of the rheumatology department and Patti Wawzyniecki of the Office of Research Safety demonstrate one of the lifts used to move and transfer patients at John Dempsey Hospital.
Longevity, baby boomers intensify impact of aging on society, says expert

Waldo Klein, professor of social work and vice chair of the Connecticut Commission on Aging, during an interview.

Q: Why is it important for us to be discussing aging right now? What are we facing?

A: It’s important to be thinking about and talking about aging because it is a reality in which we’re embedded. When we talk about aging, we’re talking about you or I experience as individuals, and at the same time we’re talking about the reality that we are in a larger society that is aging itself. Our mean age is going up. What it means to be old is changing.

We need to speak up about these things to make us comfortable with them.

Q: What is happening now with the baby boomers?

A: Baby boomers are people born between 1946 and 1964. At that time, FHA loans and veterans’ benefits provided an encouragement and support for families to grow. Now those people are moving towards their older adult years.

Q: There’s a lot of talk these days about long-term care. Can you speak about that a little? What about Medicare?

A: Long-term care is much more inclusive than ‘nursing homes.’ It’s family care and community-based services as well. And when 78 million baby boomers are knocking on the door of advanced old age – 80 or 85, and older – that presents a very significant social issue with which policy makers are currently wrestling.

The baby boom is perhaps the biggest single dynamic that pushes this, but our longevity contributes to it as well. There are simply going to be older adults who are going to need more services. Among older adults, chronic illness and other long-term issues are much more profound considerations.

Long-term care needs to be understood not as something that happens in a place, but rather as a set of services that are needed to help people meet their maximum functional ability. Whether that happens in an institution like a nursing home, whether one is living in his or her own home with professional support, or whether that long-term care is provided through the loving attention of family members can vary. So the best long-term care insurance, I tease my students, is a daughter, and the second best is a daughter-in-law. But in fact I really should amend that, because the most significant single group of informal long-term care provid- ers is spouses.

In our society, women have tended to marry men older than they, and women tend to be in better health. Consequently, you often end up with this advanced-age couple, where he experiences the kind of ailments and needs for care that we’re talking about, and she becomes the informal caregiver. It’s estimated that between 65 percent and 80 percent of all long-term care is provided informally by family and friends. This is huge.

Q: Who pays for professional long-term care?

A: People don’t understand that the average private-pay nursing home rate in our state costs $109,000 a year. So when people say, “I’m saving for my long-term care,” they might mean that they have $5,000 or $20,000 or $40,000 or $50,000 set aside. This is not going to be enough to address the need.

In this state, we are fortunate to have the Connecticut Partnership for Long-Term Care, which is the state, in cooperation with the private sector and the federal government, creating a long-term care insurance product that has a number of significant benefits.

Q: What about Medicare?

A: Something in the neighborhood of half of the folks in a recent study in Connecticut conducted by researchers at the UConn Health Center indicated that they were counting on Medicare to pay their long-term care needs. They are mistaken. Medicare is a federally-funded insurance program for people who are 65 years of age and older or disabled, but it does not cover long-term care.

It will cover 100 days of nursing home care following a qualifying hospitalization, but it will not be there for you for your chronic care needs. It wasn’t designed that way. So what happens is that people go into nursing home and they start paying their own way, and given the rates of nursing home costs, they very quickly deplete their resources. They become, in a word, poor.

Once they are poor, they qualify for Medicaid, a combination federal and state program that provides health care services to people who are poor. The asset limit for Medicaid participation is $1,800 dollars – that’s poor.

Q: What does the immediate future hold?

A: In the state of Connecticut, we are currently advancing the conversation, the shorthand for it is ‘rebalancing the system.’ Right now, with our Medicaid program, both nationwide and in Connecticut, we spend about one-third of our dollars for home and community-based care for a little over half of the people, and we spend the other two-thirds of the dollars for nursing home care for a little less than half of the people.

Overwhelmingly, people prefer to get services in their own homes. Yet we have chosen a policy path here that has a very strong institutional bias, and this is not said at the expense of nursing homes. Nursing homes have a very, very important place in the long-term care continuum, but so do community and home-based services.

Rebalancing is about bringing those two pieces of the long-term care pie back into some more reasonable relationship.

Q: When should we start planning for aging?

A: Certainly, by the time a graduate takes that first job out of an undergraduate program, for the traditional student, we’re talking about the young 20s.

For the price of a few lattes, they should begin saving for retirement. The future value of money saved that way will be great. It’s the magic of compounding. When young people take that first job, if they pay attention to the 401Ks or the IRAs or other retirement saving opportunities that are there for them, their future children and their future grandchildren will say thank you. And they as individuals will be better able to live the kinds of lives in their old age that they would like.

Listen to audio clips of the interview on the Advance web site: advance.uconn.edu.

Broccoli good for the heart, study shows

BY KEITHNA GOODDOUG

Eating broccoli, long believed to reduce cancer risk, can also protect the heart, according to a new study by Health Center researchers.

Graduate student Subhendu Mukherjee, working with Dipak Das, professor of surgery, in his lab in the Cardiovascular Research Center, fed rats an extract of steamed broccoli for a month and then measured the animals’ heart muscles. Compared to rats fed a regular diet, the hearts of broccoli-fed rats functioned better.

“There was abundant epidemiological evidence that eating broccoli helped reduce the risk of cancer,” says Das. “But because broccoli contains selenium and sulfur-containing compounds known as glucosinolates that can produce a cardio-protective protein thiooxidin, we wanted to see if eating broccoli could also be beneficial to the heart.”

Mukherjee, “Our study indicates consumption of broccoli activates several survival proteins. If the broccoli is overcooked, however, it loses a lot of its protective effect.”

Das, who has long been interested in the health benefits of food, last year published a study that showed white wine has the same heart-healthy benefits as red. He also recently established the Institute of Medicinal Food and Applied Nutrition at Jadavpur University in his native India, to promote research on the subject.

Governor’s budget continued from page 1

those costs into account through a $6.9 million addition to the Department of Correction’s budget for inmate medical services. This amount will be transferred to the Health Center to pay for the services.

In addition, the budget for the Department of Economic and Community Development includes a proposed $500,000 allocation for a grant program promoting collaborative research between Connecticut universities and industry and nanotechnology.

The Governor’s capital budget includes $5 million for the Department of Economic and Community Development for the purchase of equipment by public and private universities in the area of nanoscience.

The budget also includes a proposal to provide tuition waivers at UConn, the Connecticut State University system, and the state’s community colleges for surviving spouses and children of military personnel killed in action; and a $300,000 loan forgiveness program for Connecticut engineers who work in Connecticut.

Rell also has asked the University’s Board of Trustees to name the library at the School of Law the Thomas Meskill Law Library, in honor of the late Connecticut governor, who served from 1971 to 1975.
Researchers examine prenatal nutrition among low-income Latinas

BY ELIZABETH OBAMA-OTUNNU

A study of prenatal nutrition among Latinas in Connecticut shows that food insecurity, and maternal weight gain during pregnancy that is lower than recommended by the national Institute of Medicine, are both independently linked with low birth weight.

"Food insecurity -- the inability to access nutritional food in suf- ficient quantities -- and insufficient weight gain during pregnancy predict a 'low birth weight baby," says Rafael Pérez-Escamilla, professor of nutritional sciences and director of UConn's Center for Eliminating Health Disparities among Latinos (CEHDL), which conducted the study. Low birth weight is, in turn, a predictor of a child's long-term health.

The study also found that there are major differences in quality of diet between Latinas who have recently arrived in this country and those who have been here longer.

Longitudinal study

Working in collaboration with the Hispanic Health Council, Hartford and St. Francis hospitals, and other community agencies, the researchers recruited pregnant Latinas mostly during their second trimester. On two occasions during the pregnancy and once after the infant's birth, bilingual/bicultural interviewers collected data including the participants' dietary intake, food security status before and during pregnancy, meal-skipping patterns, pre-pregnancy body mass index, gestational weight gain, and infant birth weight.

Only 25 percent of the study participants gained the recommended amount of weight during pregnancy. Approximately 30 percent gained less than the recommended amount, while 45 percent gained more than the recommended amount. Women were at increased risk of gaining excessive weight during pregnancy if they experienced household food insecurity.

The highest rates of excessive gestational weight gain were seen among those women who were overweight or obese before preg-
nancy. Forty-three percent of the women in the study were over- weight or obese before pregnancy, with more than 80 percent of overweight women and 50 percent of obese women gaining more weight than recommended during pregnancy.

"Being overweight is an ex- tremely serious problem during pregnancy," says Pérez-Escamilla, who is currently serving on an Institute of Medicine committee to revise the national guidelines on weight gain during pregnancy. "It can lead to gestational diabetes and to either low birth weight or macrosomic -- very large -- babies. Individuals born with either low or high birth weight are more likely to develop diabetes and other diseases later in life."

A mother's excessive gestational weight gain can also adversely affect an infant's weight at birth and subsequent growth. Even though these associations were not examined in this study, Pérez-Escamilla says other studies have shown that gaining an excessive amount of weight during preg-
nancy causes hypertension (high blood pressure), which limits the blood supply to the fetus. With inadequate nutrition, the fetus becomes 'programmed' to live in an environment where there isn't enough food. Yet a baby born in the U.S. is born into an environ-
ment where an enormous amount of calories are available. "If a child has a low weight at birth and gains weight rapidly dur-
ing the first couple of years, that's a pretty lethal combination for the future," he says. "These popula-
tions are at high risk of developing various chronic diseases as a result of this early programming."

But steps to reduce weight need to be taken before, not after, a woman becomes pregnant, he notes. "It may be too late to start doing something about a woman's weight when she's already preg-
nant, because of the risk to the fetus. It's really important to enter pregnancy with a healthy weight." Inter-group differences

The study also found that Latinas who have recently arrived in this country have a significa-
cantly better diet than those who have been here longer. The recent immigrants in the study came mostly from Mexico and Central and South American countries, whereas those who were more established were mostly of Puerto Rican descent.

The researchers found that the non-Puerto Rican Latinas pre-
made more meals from scratch, including fresh vegetables, and ate fast food less often, despite being extremely poor and generally hav-
ing no access to programs such as food stamps.

"Those who have moved here recently bring with them a lot of dietary habits from their home countries," says Pérez-Escamilla. The non-Puerto Rican women, who have lived here on average 15 years, have been more exposed to U.S. dietary patterns."

Due to financial, cultural, and environmental stressors, the non-Puerto Rican women also had a more extensive social support network than the Puerto Ricans.

He predicts, however, that with-
out efforts to preserve these, these positive characteristics will be eroded by exposure to U.S. culture. From research to advocacy

Pérez-Escamilla hopes to use the findings to advocate for more federal and state funding for pre-
and peri-conceptual and infant nutrition. "If you educate a woman before she gets pregnant about good nutritional habits and how to ac-
quire nutritional foods, then it's not going to happen unintentionally, there will be less chance of a poor pregnancy outcome," says Hromi-
Fiedler. Angela Bermúdez-Millán, also a principal investigator on the project, the coordinator of the community core for CEHDL, and a postdoc with Pérez-Escamilla, says efforts to improve the nutritional status of Latinas must involve nutrition educators and community agencies, hospitals, schools, and the WIC program.

In addition, she says, to be effective, an intervention must take into account many factors, including the women's length of stay in the U.S., social support, number of children, participation in programs such as food stamps and WIC, and access to a grocery store.

"There are many factors that can influence prenatal nutrition and birth outcomes," says Bermúdez-
Millán, director of the CEHDL.

CEHDL has developed a prena-
tal nutrition guide in Spanish and English, featuring photos of Latina women, as well as foods popular among the Latino community, such as plantains.

The study was funded by CEHDL, a National Institutes of Health, National Center on Minor-
ity Health and Health Dispari-
ties-funded center, and the University of Connecticut Research Founda-
tion. The Center, established in 2005, recently received the 2007 C. Peter Magrath/W.K. Kellogg En-
gagement Award for the northeast region.

"We first started to notice climate change around 1945," says Scinai. "But the real prob-
lems took a long time to get going, and it will take 100 years to clean it up.""Repairing that damage can start in the classroom, Wagner suggested. Returning to the news that the provost's academic plan will have a specific environmental component, he said, "The climate and the timing are here, and I look forward to seeing the culture of campus change."
The following lists of patents received and licenses and options granted were supplied to the Advance by the Center for Science and Technology Commercialization.

### U.S. Patents Granted to the University in 2007

<table>
<thead>
<tr>
<th>Inventor(s)</th>
<th>Title</th>
<th>Patent#</th>
<th>Date Issued</th>
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<td>Goutopoulos, A., Khanolkar, A., Guiotopulos, A.</td>
<td>Cannabinimetric Lipid Amides as Useful Medications</td>
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<td>Receptor Selective Cannabinimetric Aminoalkylindoles</td>
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<td>Mathet, P., Liu, C., Chun, S., Coughlin, B.</td>
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<td>Taylor, G., Duncan, S.</td>
<td>Semiconductor Devices Employing at Least One Modulation Doped Quantum Well Structure and One or More Etch Stop Layers for Accurate Contact Formation</td>
<td>7,273,293</td>
<td>02/06/07</td>
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<tr>
<td>Srivastava, P., Binder, R.</td>
<td>Alpha 2 Macroglobulin Receptor as a Heat Shock Protein Receptor and Uses Thereof</td>
<td>7,279,462</td>
<td>02/20/07</td>
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<td>Mather, P., Liu, C., Campo, C.</td>
<td>Blends of Amorphous and Semicrystalline Polymers Having Shape Memory Properties</td>
<td>7,208,550</td>
<td>04/24/07</td>
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<td>Javidi, B.</td>
<td>Method and Apparatus for Encryption Using Partial Information</td>
<td>7,212,830</td>
<td>05/01/07</td>
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<td>Javidi, B., Tajahuerce, E.</td>
<td>Information Security Using Digital Holography</td>
<td>7,221,760</td>
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<td>Makriyannis, A., Deng, H.</td>
<td>Cannabinimetic Indole Derivatives</td>
<td>7,244,799</td>
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<td>Erkey, C., Hara, H.</td>
<td>Process for Making Aerogel-Electrolyte-Metal Composites</td>
<td>7,247,299</td>
<td>07/10/07</td>
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<td>Besman, M., Bjornson, E., Jameel, F., Kashi, R., Pikal, M., Tchessalov, S., Carpenter, J.</td>
<td>Albumin-Free Factor VIII Formulations</td>
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<td>Taylor, G.</td>
<td>Imaging Array Utilizing Thyristor-Based Pixel Elements</td>
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<td>Chen, T., Chen, M.</td>
<td>Anti-Tumor Activity of EA-4 Peptide of Pro-IGF-1</td>
<td>7,250,169</td>
<td>07/31/07</td>
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<td>Pattipatti, K., Luo, J., Qiao, L., Chigusa, S., Taylor, G.</td>
<td>Intelligent Model-Based Diagnostics for System Monitoring, Diagnosis and Maintenance</td>
<td>7,260,501</td>
<td>08/21/07</td>
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<td>Chigusa, S., Taylor, G.</td>
<td>Tic Detection Employing Modulation Doped Quantum Well Device Structures</td>
<td>7,260,429</td>
<td>08/28/07</td>
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<td>Brand, M.</td>
<td>Panicum Plant Named “RR1”</td>
<td>PP27,944</td>
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<td>Makriyannis, A., Liu, Q., Guiotopulos, A.</td>
<td>Retro-Anandamides, High Affinity and Stability Cannabinoid Receptor Ligands</td>
<td>7,267,613</td>
<td>10/02/07</td>
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<td>King, G., Sollad, B.</td>
<td>Insecticidal Compounds and Methods for Selection Thereof</td>
<td>7,279,647</td>
<td>10/09/07</td>
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<td>Goodman, S., Makriyannis, A., Nikas, S., Khanolkar, A.</td>
<td>Bicyclic and Tricyclic Cannabinoids</td>
<td>7,285,689</td>
<td>10/33/07</td>
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<td>Hansen, M., Deshpande, A.</td>
<td>Mammalian Early Developmental Regulator Gene</td>
<td>7,309,281</td>
<td>12/18/07</td>
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### Licenses and Options Granted by the University in 2007

<table>
<thead>
<tr>
<th>Inventor(s)</th>
<th>Technology</th>
<th>Company</th>
</tr>
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<tr>
<td>Smith, T.</td>
<td>Monoclonal Antibody Clone BR4 Directed Against CD13</td>
<td>Santa Cruz</td>
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Monday, February 11, to Tuesday, February 19

Lectures & Seminars
Monday, 2/11 – Norman Hascoe Distinctive Language in Physics. “A Quantum Information Perspective of Many-Body Physics,” by Ignacio Cirac, Max Planck Institut für Quantenoptik, Garching, Germany. 4-5 p.m., Room P38, Gant Science Complex.

Monday, 2/11 – History Lecture, “Luther and the Household,” by Yndral Reper, University of Oxford. 4:30 p.m., Konover Auditorium.


Tuesday, 2/12 – Stanford Campus Faculty Colloquium, “Address in Early Modern England, or Shakespeare in Love Revisited,” by Pam Brown, Professor, NOE, GE Global Classroom, Stanford Campus.

Tuesday, 2/12 – Ecology & Evolutionary Biology Seminar. “The Ecology of Red Migration in East Asia, with Implications for Conservation and the Spread of Disease,” by Hironori Higuchi. 4 p.m., Room 130, Physics/Building.


Wednesday, 2/13 – Statistics Colloquium, “Preparing for the Job Market,” by Scott Evans, Harvard University, and Nattie Bing, Pfizer Inc. 4 p.m., Room 344, CLAS Building.

Wednesday, 2/13 – Recent Cases Law Lecture. A Law School course in which a different faculty member each week presents a recent case of interest. Lectures are open to the community. 5 p.m., Room 110, Chase Hall, School of Law.

Thursday, 2/14 – Comparative Pathology Seminar. “The Corpus Luteum as a Transitional Tumor,” by John McCracken. 11 a.m., Room A001, Henry Low Learning Center, Health Center.


Thursday, 2/14 – Address by FDIC Chairman Sheila Bair. 4:30 p.m., William Starr Hall, Law School.


Tuesday, 2/12 – Marine Sciences Lecture. “Fisheries Management Policy.” 7:30–9:30 p.m., Room 103, Marine Sciences Building, Avery Point Campus.

Thursday, 2/14 – William Bayern Lecture. “Leadership, Ethics, and Mezzanine lobbies.” 4 p.m., Thursday, 2/14 through Friday, 2/15


Through Friday, 3/7 – Homer Babbidge Library, Design for the Real World. Student Work in Communication Design at the University of Connecticut. Gallery on the Plaza; Photographs at a Different Wave Length, by Manca Reid Randt, Stevens Gallery. For hours, see Libraries section. Opening reception Sunday, 2/23, 2-4 p.m.

Wednesday, 2/13 – Celeste LeWitt Gallery, Abarce of a Glance, paintings by Emese Es Bissalat Pásztor, and Wild America, photographs by Gary Myersohn.

Daily, 8 a.m.-9 p.m., Health Center.
Health center service offers pre-travel advice, immunizations

BY CINDY WEISS
Six students in the College of Liberal Arts and Sciences can be counted among the elite of shipwreck archaeology, after spending the winter intersession in an unusual new Study Abroad program.

They were the first undergraduates ever allowed to work on the "Cadillac" of shipwrecks, the nearly 400-year-old warship Vasa in Stockholm, Sweden.

"It was a magnificently beautiful ship. Pictures do not do it justice," says Robinson. "It opened a new wing of my interest." She now plans to work in maritime archaeology, with a focus on the conservation of artifacts.

The ship was built without a blueprint, a common practice at the time. The UConn students were the first to document the Vasa in detail, and recorded more than 1,200 data points that will be used in creating a plan of the ship.

"When we started, we didn't know much about the ship," says Robinson. "But as we worked, we learned more and more about it."