UNIVERSITY OF CONNECTICUT Advance

Volume 27, No. 3 September 8, 2008 www.advance.uconn.edu



Students congregate on campus at the beginning of the school year.

Researchers develop new method of detecting heart failure

BY CHRIS DEFRANCESCO

A simple blood test can indicate whether a patient's heart is failing, according to doctors at the Health Center's Pat and Jim Calhoun Cardiology Center.

Evidence from a continuing clinical research study being conducted at the Health Center suggests that a failing human heart releases the peptide, or protein fragment, identified as Caspase-3 p17.

Rather than use an invasive surgical procedure to confirm suspicions about a deficiency in the heart's ability to circulate blood to the rest of the body, cardiologists can check a blood sample for the peptide, believed to be a marker, or indicator of heart failure.

"It's a peptide that we think is released from injured tissue, such as the heart during an acute episode of congestive heart failure," says Dr. Bruce Liang, director of the Calhoun Cardiology Center. "[Checking a blood sample for this peptide is] a novel method that we've developed. We're the first and only ones doing this."

Liang, the lead investigator, presented his research at the American College of Cardiology's annual scientific session in Chicago earlier this year. The study was published in

see Blood test page 5

by David Bauman

A recent UConn graduate has won national recognition for research that examined how the expansion of Wal-Mart Supercenter stores into food retail markets affected prices at competing grocery stores.

Rebecca Cleary, who earned her master's in agricultural and resource economics, received the 2008 "Outstanding Master's Thesis Award" from the Agricultural & Aption, a regional professional association, and the Food Distribution Research Society's 2008 William Applebaum Memorial Scholarship Award for a master's thesis.

"Wal-Mart's retailing strategy has always intrigued me," says Cleary, now a Ph.D. student at the University of Wisconsin-Madison. "They have such a simple concept, but it's so innovative."

"The AAEA is the flagship academic organization of our profession," says Professor Rigoberto Lopez, head of the agricultural and resource economics department, who was Cleary's advisor. "We're very proud of Becky. She's won the top three awards in our field. "Becky selected a relevant and timely topic," he adds, "and used rigorous economic analysis to examine Wal-Mart's pricing

Recent grad wins thesis awards | Law students to practice before U.S. patent and trademark office

BY MICHAEL KIRK

Students in the School of Law's intellectual property clinic will now have the opportunity to practice law before the U.S. Patent and Trademark Office.

UConn is one of six institutions nationwide selected to participate in a new twoyear pilot program launched by the Office

Office "ratifies the wisdom of the governor and the Connecticut General Assembly in investing in the law school's important new program aimed at invigorating our state's economy and training our students in this vital area of the law."

UConn's Intellectual Property and Entrepreneurship Law Clinic is part of the

plied Economics Association (AAEA).

Her thesis, "Is Wal-Mart Good for Competition? Evidence from Milk Prices" found that the expansion of the retail giant's Supercenters increases competition and is good for consumers.

Cleary's thesis also won the Outstanding Thesis Award from the Northeastern Agricultural and Resource Economics Associa-

see Master's thesis page 8

this fall.

Students in the program will practice under the guidance of supervising attorneys. They will choose to practice either patent or trademark law, and will have the opportunity to draft and file applications, responses to office actions, and briefs in appeals.

Jeremy Paul, dean of the law school, says the selection of UConn's intellectual property clinic by the Patent and Trademark University's Connecticut Center for Entrepreneurship and Innovation. Established by the state legislature, it is designed to strengthen Connecticut's economy with innovative new programs aimed at supporting emerging companies. Law students counsel Connecticut's innovators on patent, trademark, copyright, and trade secrecy issues, as

see Patent law program page 6



4 Divorce study



5 Tracking cicadas



8 Traditional medicine



PHOTO BY JESSICA TOMMASELL

Lauren Cunningham, a sophomore majoring in physiology and neurobiology, donates a wooden nickel to the Green Campus Fund at the UConn Co-op. The Co-op Cares Bag Program is designed to reduce plastic bag use.

Slavery is topic of Constitution Day events

BY ALEXA BUCKWOLD

A Harvard law professor will give a talk and the captain of the ship Amistad will join a panel discussion during Constitution Day on Wednesday, Sept. 17. The events will take place in the Konover Auditorium at the Thomas J. Dodd Research Center, from 3 to 5 p.m.

This year, Constitution Day will comprise a series of events focused on the 13th Amendment to the Constitution, the amendment that ended slavery.

Veronica Makowsky, vice provost for undergraduate education and regional campus administration, says the purpose of Constitution Day is to educate the University community, particularly undergraduates, about an aspect of the Constitution, its history, and its relevance to current national and state issues.

"Constitution Day at UConn is becoming a well established tradition and a much-anticipated event, with this our fourth annual celebration," she says. "The celebration helps us to learn, enjoy, and be inspired by the U.S. Constitution and its legacy."

This year's agenda will include:

• A panel discussion on the Amistad Freedom Voyage, with Professor Mary Sarah Bilder of Boston College, and UConn student Erica Whyte, who served on board as one of the crew. The captain of the Amistad, Eliza Garfield, will make a special guest appearance. The panel will begin at 3 p.m.

 Guest speaker Professor Charles J. Ogletree Jr. of the Harvard School of Law, a civil rights attorney and educator, who will speak at 4 p.m. Ogletree is the author or co-author of several

books on topics such as race and the death penalty and the first half century of Brown v. Board of Education. His most recent book is When Law Fails: Making Sense of Miscarriages of Justice (New York University Press 2009). He also serves as co-chair of the Reparations Coordinating Committee, a group of lawyers and other experts researching a lawsuit based upon a claim of reparations for descendants of African slaves. There will be a book signing from 3 to 3:45 p.m. at the UConn Co-op.

• The movie Amistad will be shown in the Student Union Theatre, on Sunday, Sept. 14, at 2 p.m. and Wednesday, Sept. 17, at 7 p.m.

Constitution Day was first celebrated nationally in 1997 to represent the anniversary of the signing of the Constitution on Sept. 17, 1787 in Philadelphia.

Co-op shoppers boost Green Campus Fund

BY JENNIFER HUBER

Co-op shoppers who want to do their part for the environment and support UConn's sustainability efforts now have the opportunity to do both at the register.

The Co-op Cares Bag Program, launched in April, is intended to reduce the use of plastic bags and promote environmentalism. For each customer who declines a bag, the Co-op will donate 5 cents - the average cost of a plastic bag - toward one of four charities, including the UConn Foundation's Green Campus Fund.

Customers are given a wooden token to put in collection bins for the charity of their choice. The four charities, selected by the Co-op's board of directors, include the Green Campus Fund, which supports sustainable building, water conservation, recycling, and other environmental initiatives at UConn; the Carlee A. Wines Memorial Scholarship Fund, named in memory of a UConn freshman who was killed in a car accident in 2007; SoundWaters; and the

Joshua's Tract Conservation and Historic Trust.

Customers who need to use bags may still participate. Marcia Firsick, marketing manager for the Co-op, says that some shoppers have been purchasing the nickel tokens or simply dropping cash in the collection bins. She also notes that customers can feel better about the bags they're using because the Co-op is now using bags made of 100 percent recycled materials; they also are 100 percent recyclable.

Firsick modeled the Co-op Cares Bag Program after a similar one at New York University. She says it has been a great success so far. By Sept. 3, a total of more than 22,300 tokens - worth more than \$1,100 - had been collected, including 9,560 tokens (\$478) for the Green Campus Fund.

To support the Green Campus Fund, call 800-269-9965 or 860-486-1173.

Research forum Sept. 16 to focus on multiple myeloma

A collaborative clinical, basic, and translational research forum focusing on issues related to contemporary clinical and investigative approaches to multiple myeloma will take place on Tuesday, Sept. 16, from 6 to 8:30 p.m. in the Low Learning Center at the UConn Health Center.

Presenters will include faculty from the Neag Comprehensive Cancer Center and the Department of Pathology and Laboratory Medicine. All interested Health Center faculty, nursing staff, graduate students, and research fellows in the basic sciences, clinical attendings, residents, fellows, medical and dental students, and members of the University community at Storrs are welcome to attend the presentations and participate in the discussions that follow.

An opportunity to compete for internal grant funding for start up/pilot research projects will be announced and information concerning submission of proposals will be available on site.

A light buffet dinner will be available for all who attend, free of charge, beginning at 5.45 p.m.

Babbidge Library to offer lunchtime talks by faculty

Interested in learning more about tapeworms in sharks? Maybe the prospect of traveling back in time appeals to you? Or, if you prefer to stay rooted on Earth, how about some tips on battling "boomer-itis?"

Homer Babbidge Library will sponsor a new monthly lunchtime much is known about tapeworms, she says.

On Thursday, Oct. 16, Ronald Mallett, professor of physics, will talk about "Time Travel: The Possibilities and Promise."

In his latest book, Time Traveler - a Scientist's Personal Mission to Make Time Travel a Reality, Mallett tells how a childhood trauma - the death of his father when he was 10 years old – inspired his quest to build a time machine so he could return to an earlier time and save his father's life. Director Spike Lee has recently acquired the film rights to the book, and will co-write the script and direct the film. The UConn Co-op will have signed copies of Mallett's book available for purchase at the event. On Wednesday, Nov. 5, William Kraemer, professor of kinesiology, will speak on "The Physiology of Aging: Fighting the Aging Process with Strength Training."

appointments as a professor in the Department of Physiology and Neurobiology and as a professor of medicine in the School of Medicine.

Recipient of the University's highest research award, the Provost's Research Excellence Award, he has also been honored by the



series featuring faculty discussing these and other topics in a program titled "Research Highlights @ Noon."

Janine Caira, Board of Trustees Distinguished Professor of Ecology and Evolutionary Biology, will kick off the series on Thursday, Sept. 18 with the talk, "The Denizens of the Deep Reveal Their Secrets: a Global Look at Shark and Stingray Tapeworms."

Caira recently won a \$3 million National Science Foundation Planetary Biodiversity Inventory grant to oversee a worldwide network of specialists to study the biodiversity of tapeworms, her research specialty.

Although present in the bowels of all classes of vertebrates, not

An internationally renowned expert in exercise physiology, sports medicine, and strength and conditioning, Kraemer holds joint

National Strength and Conditioning Association, the leading authority on strength and conditioning worldwide, which attached his name to its most prestigious research award.

All the talks, which are sponsored by the Academic Liaison Librarians, will take place at noon in the Class of '47 Lecture Room, across from the library's south entrance, and adjacent to Bookworms Café on the library's plaza level. A question and answer session will follow the talks. Those who plan to attend are invited to bring a lunch.

For further information, please contact Frances Libbey, sciences bibliographer, at 860-486-2521 or Frances.Libbey@uconn.edu.

Auvance				
Elizabeth Omara-Otunnu				
Editor				
Contributing Writers Sherry Fisher, Michael Kirk, Colin Poitras, Mark J. Roy, Richard Veilleux				
Health Center Writers Chris DeFrancesco, Kristina Goodnough, Maureen McGuire, Carolyn Pennington				
Designer Betsy J. Surprenant				
Calendar Editor Tracy Maheu				
Photo Editor Peter Morenus				
Student Photographers Frank Dahlmeyer, Jessica Tommaselli				
Manager, Media Communications Karen A. Grava, APR				
Manager, Media Relations David Bauman				
Proof Reader Sheila Foran				
The <i>Advance</i> is published weekly during the academic year, except during breaks. It is distributed free to faculty, staff, and students at the University of Connecticut.				

Published by University Communications, 34 North Eagleville Road, Storrs, CT 06269-3144. Phone: 860.486.3530. Periodical permit (ISSN 0746-3170, USPS 703-730) at Storrs, CT. POSTMASTER: Send address changes to the Advance at the above address. Advance website: http://www.advance.uconn.edu E-mail: advance@uconn.edu

Students, University, town residents benefit from off-campus director's work



President Michael J. Hogan visits with students living off campus at Celeron Square Apartments, during a recent door-to-door tour by University and town officials. In the foreground is Mansfield Mayor Betsy Paterson.

BY RICHARD VEILLEUX

When Jim Hintz arrived at UConn from Ohio University in May 2007, there were sighs of relief in several University departments. Staff there would soon be freed of extra duties that had been added to their work loads because there was no specific office set up to handle them.

"We picked up pieces from all over the place," says Hintz, the first director of the fledgling Office for Off-Campus Student Services. "People did what they could, but most of this stuff was outside the scope of their duties. So we consolidated a lot of programs and services that we offered our offcampus population, and increased, improved and built upon what was already there. We are a one-stop shopping opportunity for off-campus services."

Hintz helps students look for housing, match roommates, and understand their leases. He also gives advice on their rights as tenants and responsibilities as members of the community – and hosts the occasional barbecue and Wiffle Ball game.

On the other side, Hintz works

with town officials to keep them abreast of what his office is doing, and to lend a hand when community members complain about students' behavior. He serves on the Mansfield Community Campus Partnership, which is dedicated to improving the quality of life for all members of the Mansfield community, and on the University/Town Relations Committee, which provides a forum for formal communication between town and University officials on issues of mutual interest.

And he works with property managers and landlords.

"Jim is the best addition to campus/community relations since I don't know when," says longtime Mansfield Mayor Betsy Paterson. "He understands the issues, he's great with the kids, and he's very easy to work with. He understands the impact of students on the community, the residents' expectations of the kids living off campus, and he makes sure the students recognize they have both rights and responsibilities."

About 6,000 students live off campus in about 10 apartment complexes and an increasing number of single family homes or with their parents in nearby communities. More than 700 students showed up for Hintz's first offcampus housing fair last year.

To deliver his messages to such a diverse, wide-spread group, Hintz isn't averse to old fashioned marketing. He, his program assistant, and a graduate student have offered hot chocolate in the primary commuter parking lots. They also ride on the buses regularly, handing out information packets to the student riders, who are mostly commuters.

"I want to raise awareness not just about my office, but also about all the other educational opportunities and services that are available to these students," he says. "I've asked a lot of other departments what they want the off-campus students to know – library hours, Senior Year Experience, career services."

He also expanded an ongoing effort by the Mansfield Community Campus Partnership to bring University and town officials on a door-to-door tour of as many offcampus apartment complexes as possible over a three-day period. This year, he convinced President Michael Hogan to join the group.

Students at Celeron Square poured out of their apartments when they noticed Hogan and a group of television cameras heading across a field.

"I looked through my peephole and said 'hmmm. I don't know any of these people,' said Adam Soklow, a senior from Burlington. "Then I opened the door and President Hogan and the Mayor are standing there. I think it's great."

Zack Roday of Orange agreed. "It's a great thing he's doing," Roday said, "especially during the first week of school. It's a great tradition."

Hintz has also added new programs, most recently the Community Leader Program, which is similar to one he ran in Ohio. He hired eight students – two at Carriage House, three at Celeron Square, one each at Hunting Lodge and Clubhouse apartments, and one to work at single family homes at the corner of North Eagleville and Hunting Lodge roads - who are responsible for communicating information from Hintz's office to the students living in their area, and vice versa. Each has a small budget to organize activities, including cook-outs and games.

"If the students in these complexes get to know each other," says Hintz, "they'll start to respect each other and respect the community they live in."

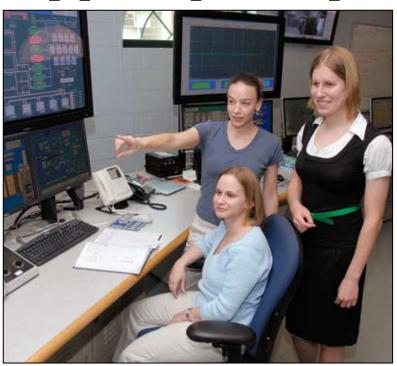
"It's hard to believe Jim has only been here a year," says Dean of Students Lee Williams, to whom Hintz reports. "He's accomplished a tremendous amount in that time. Because of his work, both our off-campus students and Mansfield residents are seeing benefits."

Engineering students to help power plant improve efficiency

BY NAN COOPER

Three engineering students, under the supervision of chemical engineering professor Douglas Cooper, began a research study over the summer aimed at helping the UConn power plant perform more efficiently. The team seeks to fine-tune the operation of the plant, which is already highly efficient, with the goal of reducing consumption of natural gas and fresh water while still meeting the electrical, heating, and cooling team will collaborate with the plant utilities manager Ronald Gaudet and power plant supervisor Tim Grady to: reduce natural gas usage and carbon emissions through improvements in overall plant efficiency; reduce water usage through identification of alternative designs and operational practices; and lengthen equipment life and reduce equipment maintenance costs through decreased cycling.

"This effort promotes University President Michael Hogan's objec tive of a more environmentallysustainable campus," says Cooper. "It reinforces UConn's position as a leader in researching, demonstrating, and supporting solutions to urgent global challenges." The in-plant performance study is supported by the Office of the Associate Vice President for Administration & Operations. Gaudet says a combined cycle power plant burns fuel - natural gas or fuel oil - only once but generates electricity in two ways. At the UConn cogen plant, the fuel is first burned in what are essentially jet engines - three large gas turbines - turning electric generators in the process. The hot exhaust gases exiting each turbine then enter steam boilers, called



for analyzing control signals and improving control system performance without the need to "bump" or deliberately disrupt the plant as required by current industrial practice.

Przybylek, an honors student, will perform an overall energy and carbon balance analysis that will form the basis of her senior honors thesis. Tweedie will build upon her experience as a summer intern with UTC Power to perform an overall water balance analysis. Both will participate in other tasks as needed to the benefit of the plant. Lee Langston, professor emeritus of mechanical engineering, who encouraged the University to build the cogeneration plant, explained that after electricity generation, there is plenty of lowpressure steam left over to heat campus buildings, kitchens, and laboratories in the winter. During the warmer months, when heating loads are greatly reduced, the lowpressure steam drives refrigeration compressors to supply chilled water to air conditioning units in these buildings. "The result," says Cooepr, "is that UConn's new facility is among the most versatile and efficient academic cogeneration plants in the country."

requirements of the Storrs campus.

The combined-cycle cogeneration plant supplies electricity to the entire campus, from dorms and academic buildings to administration and service facilities. It also provides steam heating in the winter and chilled water cooling in the summer. Before the plant came online in 2006, the University purchased electricity from a utility company, and steam was generated on-campus in an old-style boiler house.

The student team includes Rachelle Howard, a doctoral candidate in chemical engineering, and two undergraduate students, seniors Michelle Przybylek, an environmental engineering major, and Melissa Tweedie, a chemical engineering major. The research

PHOTO BY MOHAMED FAIZAL

Engineering students Melissa Tweedie, seated, Rachelle Howard, left, and Michelle Przybylek, in the control room of the cogeneration plant.

heat recovery steam generators, to produce both high pressure and low pressure steam. The high pressure steam turns a steam turbine generator to produce additional electricity, without burning extra fuel.

Howard's tasks focus on the control system, testing and documenting new methods for plant performance evaluation and loop tuning where the cogeneration plant operation is the primary focus and beneficiary. The control system is the computer "brain" of the plant. It receives hundreds of temperature, pressure, flow, and other sensor signals, and rapidly adjusts valves, pumps, compressors, and other elements so the plant runs safely and efficiently. Howard has developed a method



PHOTO BY FRANK DAHLMEYER

Edna Brown, assistant professor of human development and family studies, outside the Family Studies Building.

Couples have differing perspectives on why they divorced, says researcher

by Sherry Fisher

Divorced men and women are miles apart when it comes to understanding why their marriage failed, according to Edna Brown.

Brown, an assistant professor of human development and family studies in the College of Liberal Arts and Sciences, is studying the implications of race and gender among some 200 people who are divorced. She says males and females have completely different perceptions about what happened during their marriage and why they separated.

Females gave more varied reasons for the divorce.

"Women said their marriages were abusive, that they fought and argued a lot, had value differences, and that there were alcohol and drug problems," says Brown. Males gave one reason for the divorce: family interference.

Brown says that it's not surprising that women gave more reasons for marital discord. "Females tend to be more attuned to what's going on in the marriage," she says. "They seem to detect when something is wrong in the relationship more easily and more quickly than men do."

Brown says that after listening to narratives of men and women who were formerly married to each other, she could not tell that they were in the same marriage.

"We asked them questions about what led up to the divorce, what was happening during the divorce, and what happened immediately after the divorce. We thought we would hear the same story from the husband and wife, but we didn't. There really are 'his' and 'her' divorces," she says.

Brown, who came to UConn in fall 2007, is using data for her research from the Early Years of Marriage Study at the University of Michigan's Survey Research Center, where she was a postdoctoral fellow in developmental psychology. The long-term study started in 1986 with a sample of white American and black American couples whose marriages were studied, in some cases, over a period of up to 18 years.

Participants in the study were asked about their coping strategies during the divorce.

"Women said they went to marriage counselors, kept journals or diaries, talked to friends, or read self-help books," Brown says. "Men, more often than anything, said they used alcohol, probably to avoid dealing with the issues."

She also examined race differences. "White couples were more likely to say they 'grew apart' than black couples," she says. They also used different coping strategies: white couples tended to use marriage counselors and black couples went to religious counselors.

Brown is now examining how the reasons people give for getting divorced, and the coping strategies they used, relate to their current adjustment.

"I'm interested in people's psychological well being, such as whether they have depression and anxiety," she says. "For example, is coming from an abusive marriage related to depression levels for that person today? Or is it related to anxiety or health problems?"

She says the research has important implications.

"The findings indicate that when you're trying to help people whose marriages are in trouble, you have to talk to both the husband and wife," she says. "Just talking to one member of the couple isn't enough. You want everyone's perspective."

Could marriages be saved if certain strategies were followed?

Brown says getting couples to a counselor is the first step. "I think our research can help counselors understand that men and women think differently about their marriages, but not everybody is willing to get the help they need."

Alum's gift promotes global health studies at Health Center

by John Sponauer

Students at the UConn Health Center who wish to carry on a long institutional tradition of studying global health issues may now have private financial support to do so, thanks to a scholarship funded by a School of Medicine alumnus.

Dr. Edward Hargus, M.D. '73, and his wife Maria have made a gift to provide assistance for students participating in global health education activity through the Center for International Community Health Studies in the School of Medicine.

To recognize the work done by Judy Lewis, director of the Global Health Education program and ported with private giving.

"I come from a blue-collar family," he says. "I was one of the first to go to college and I couldn't have done it without the scholarships I received. I once received a note with my scholarship that told me which donor supported it. When you actually see that name, you realize that the money comes from someone else's generosity." Lewis says Hargus's gift fits perfectly with the increasing realization of – and interest in – global health issues.

"A majority of incoming students express a desire to participate in global health issues, but many do not because of financial considerations," she says. "The UConn Health Center has been fortunate to have some funding for summer research projects, but has been limited. The gift from Dr. and Mrs. Hargus is an important beginning, providing students with the means to participate in global health programs."

GHE seeks to respond to global health needs with an education that focuses on understanding and responding to the problems and needs of underserved com-



munities worldwide; learning and implementing the principles of primary health care across cultures and nations; and encouraging medical, dental, master of public health, and Ph.D. students to enter fields of primary care and community health.

Hargus says that although he never traveled as a student, he sees a clear benefit to doing so.

"It's a big world. I think exposure to other cultures is very good for students, or anyone who wants to be involved in helping the poor," he says. "It's good for the school. And it's good for the country.

"Either by sending our students to other countries, or supporting people to come here and get their medical education, I think we're taking great steps to improve the lives of people everywhere," Hargus adds.

professor in the departments of community medicine and pediatrics, the fund is named the Maria and Edward P. Hargus M.D. Professor Judy Lewis Global Health Education Scholarship.

Since 1985, more than 300 medical, dental and public health students have taken part in global health studies, including language study, research, clinical care, and community health improvement projects. The programs have allowed UConn students to collaborate with local community research programs in more than 60 countries to improve patient care and public health.

Hargus says the inspiration to fund a scholarship springs from his own education, which was supPHOTO SUPPLIED BY JUDY LEWIS

Burcin Uygungil '06 studied in Haiti while earning a medical degree and master's in public health at the School of Medicine. She is now a senior resident in pediatrics at Connecticut Children's Medical Center in Hartford.

Lewis also believes that exposure to global health issues creates better physicians.

"Citizens from underserved communities have voiced their encouragement of global health immersions as part of preparing culturally skilled health care practitioners," she says. "There is no substitute for our students experiencing being 'the other."

For more information about the Center for International Community Health Studies and the Global Health Education program, go to http://www.commed.uchc.edu/ cichs/education.htm

Biologists track, map cicada distribution across nation

BY MICHAEL KIRK

Periodical cicadas – the noisy creatures that pop up once every 13 or 17 years – were out again this year. And two researchers in the Department of Ecology and Evolutionary Biology, John Cooley and Chris Simon, set out to track and map their distribution across the nation, with support from the National Geographic Society.

Cooley, a research associate at UConn, organized a large team of scientists to conduct the work, including researchers from Simon's lab and others from Pennsylvania, Ohio, Maryland, Massachusetts, and Japan. The team also relied on volunteer cicada enthusiasts to help cover ground and track the creatures.

Simon, a professor of ecology and evolutionary biology, monitored the effort from her UConn lab, providing feedback to the team in the field and answering inquiries about the emergence of the periodical cicadas, a species known as *Magicicada*.

This year's emergence was of one particular brood of cicadas, known as Brood XIV, which is on a 17-year cycle. The next emergence, three years from now, will be of Brood XIX.

Cooley adapted new mapping and GPS technologies that facilitate rapid assessment by 'cicada SWAT teams' and instant plotting onto maps.

He also set up a website: http://

magicicada.org/ that shows current cicada mapping and also includes information about species, behavior, broods, and frequently asked questions for anyone who is curious.

Some of the maps showing where periodical cicadas emerge date from as far back as the 19th century and are, not surprisingly, outdated, says Simon. They also overestimate periodical cicada range limits.

The UConn lead team spent much of May and June on the road, living out of their cars, locating and mapping the distribution of the cicadas. They found dense populations from the mountains of Northern Georgia to the oak forests of Cape Cod.

The researchers say the work has ramifications beyond updating the maps. "The questions involved are not trivial," they wrote on the web site. "Periodical cicada responses to deglaciation may provide insights into the possibility that they are useful for monitoring forest and ecosystem health, while the biogeography of broods and species may provide critical insights into the general nature of species, speciation processes, and gene flow between species. Modern transportation, highly accurate base maps, GPS technology, and a better understanding of periodical cicada biology provide unprecedented opportunities for accurately mapping Magicicada



PHOTO BY FRANK DAHLMEYER

Research associate John Cooley and Christine Simon, professor of ecology and evolutionary biology, with a Global Positioning System that Cooley and his brother assembled to track periodical cicadas.

populations."

To date, the team has surveyed and mapped more than 10,000 localities where the periodical cicadas have emerged, using detailed base maps and GPS technology.

In an effort to involve the public, people living in or visiting the regions that are home to the cicadas were invited to report cicada sightings via the Magicicada web site. The data collected through the web was kept separate from that gathered by the research team, and later checked for accuracy. "The outpouring of interest and support from the public was greater than we could have expected," says Cooley. "The public's reports on the web site helped us plan and prioritize our efforts, and the custom GPS data-loggers [computers mounted to the vehicles used by the team] helped our researchers obtain extremely accurate and detailed distribution information."

UConn is one of the leading universities in the field of cicada research. Connecticut's cicadas are restricted to the coast and central valley regions and although the state did not have a population of cicadas this year, it does have one population – Brood II – that is due to emerge in the Connecticut River Valley in 2013.

"The map we generate this year will help us understand how the distributions of these species change over time," says Cooley, "possibly helping us understand the extinction of one of our local broods in 1954 and suggesting ways that we can preserve the remaining Connecticut brood."



Cardiology center adds physicians

BY CHRIS DEFRANCESCO The Pat and Jim Calhoun Cardiology Center added five physicians this summer, including two electrophysiologists to run the Heart Rhythm Program.

Drs. Heiko Schmitt and Christopher Pickett are codirectors of the Heart Rhythm Program. Both completed fellowships in cardiology and cardiac electrophysiology at Beth Israel Deaconess Medical Center in Boston.

"Drs. Schmitt and Pickett are both highly trained specialists with expertise in heart rhythm conditions such as atrial fibrillation, and slow and fast heart rhythms," says Dr. Bruce Liang, director of the Calhoun Cardiology Center. "They offer medication treatment as well as device-related therapies such as internal defibrillators, specialized pacemakers for heart failure patients, and ablation [removal] of the origin of heart rhythm abnormalities." "Dr. Ferris Senatus, with her expertise in women's heart health and lipid disorders such as cholesterol problems, adds significantly to our preventive cardiology program," Liang says.

Avelar, director of non-invasive cardiac imaging, comes to the Health Center from Massachusetts General Hospital, where he received advanced cardiac imaging training in cardiac magnetic resonance imaging, echocardiography, and the use of a multi-slice CT (computed tomography) scanner for CT angiograms of the coronary arteries.

Ryan, who earned both his medical doctorate and master's in public health degree at the UConn Health Center, returns with postdoctoral training from Beth Israel Deaconess. His expertise is in echocardiography and cardiac magnetic resonance imaging. Says Liang, "Drs. Avelar and Ryan add not only breadth but also depth in visualizing the inside of blood vessels and the heart in a non-invasive manner, using the latest heart imaging technology." James Thornton, director of Dempsey Hospital, says, "The addition of this group of physicians demonstrates our commitment to strengthening our already very strong cardiology program."



Photo by Janine Gelineau

Front row, from left, Drs. Erick Avelar, Anjanette Ferris Senatus, and Heiko Schmitt, and, back row from left, Drs. Christopher Pickett and Jason Ryan, have recently joined the Calhoun Cardiology Center.

Blood test continued from page 1

the Journal of the American College of Cardiology.

"This test appears to be helpful in detecting all degrees and all forms of heart failure, which gives it broad potential clinical utility," Liang says. "For people who have already had heart failure, it might predict how well they will do in the future. For people who have symptoms consistent with heart failure but may not have heart failure, a simple blood test could diagnose it. Or it could rule it out."

A biomarker for acute heart failure would be both a diagnostic and prognostic tool for physicians. Scientific proof of the study's findings could lead to an approved clinical testing method that can influence therapy and clinical decision making.

Although the research is still at an early phase, the test may even benefit patients involved in the study, Liang says, because it can yield additional information about a heart's health.

"The beauty of the blood test is it's simple and it's quick and it's non-invasive," Liang says. "This is like any other lab test that we do, except unlike any other lab test that we do, this one gives us a window on the viability of the heart." Dr. David Hager, Dr. Michael Gavin, Kim Dodge, Jayne Schumacher, and Mary Beth Barry collaborated on the research.

Drs. Anjanette Ferris Senatus, Erick Avelar, and Jason Ryan specialize in non-invasive cardiology.

Ferris Senatus joins the Health Center from the Cleveland Clinic Foundation, where she cared for patients in clinical cardiology, preventive cardiology, and the Women's Cardiovascular Center. First-year law students undertake maintenance projects at the Hartford Children's Theater during the Law School's Service Day, part of its orientation program.



PHOTO BY SPENCER SLOAN

GRANTS

The following grants were received through the Office for Sponsored Programs (OSP) in June 2008. The list represents only new proposals awarded, and excludes continuations. The list is supplied to the Advance each month by OSP.

Principal Investigator	Department	Sponsor	Amount	Award Period
Amico, K. <i>Antiretrovira</i>	Center for Health, Intervention & Prevention l Adherence and HIV Drug Resi.	Abbott Laboratories/ Yale University stance Outcomes in Clinica	\$31,308 al Care	4/08-4/09
	. Pharmaceutical Sciences of Corepressor Recruitment by	American Foundation for Pharmaceutical Educ Nuclear Retinoid Recepto		9/08-8/09
Anwar, A. <i>Training and</i>	School of Engineering Office of Dean <i>Research for Advanced Nation</i> a	Dept. of Homeland Security al Security for Inter-Modal	\$2,000,000 <i>Transportat</i>	
Asandei, A. <i>Synthesis of</i>	Institute of Materials Science Fluorinated Graft Copolymers f	Dept. of Defense/ Cornell University for Antifouling Applications	\$70,000 s	4/08-4/09
Auster, P. <i>Linking Mari</i>	National Undersea Research Center <i>ne Biodiversity to Ecosystem M</i>	Sloan (Alfred P.) Foundation/Univ. of S. M anagement Goals in the Gu		4/08-12/08 Region
	Natural Resources Mgmt. & Engineering ssment: Surveillance of Chroni and Distribution of New England		e-tailed Deer	
Best, S. <i>Low Income</i>	Center for Survey Research & Analysis Family Study	Univ. of Colorado at Denver	\$20,000	12/07-4/08
Bogner, R. <i>Chemical Sta</i>	Pharmaceutical Sciences ability of Pharmaceuticals Amore	American Foundation for Pharmaceutical Educ phized with Silicates	\$6,000 :.	9/08-8/09
Bucklin, A. <i>Research Ve</i> s	Marine Sciences ssel Connecticut Charter by Big	Bigelow Laboratory for Ocean Sciences elow Lab for Survey Work	\$18,648	5/08-5/08
Bucklin, A. 6/08-6/08 <i>Research Ve</i> s	Marine Sciences ssel Connecticut Charter for Se	Seaforth Engineering Gr aforth Geosurveys Inc.	oup Inc.	\$109,000
	Pathobiology & Veterinary Science Iza Live Bird Market Surveilland	U.S. Dept. of Agric./ Conn. Dept. of Agric. <i>ce 2008</i>	\$171,476	2/08-1/09

Cournoyer, M	. Extension	Cumberland Farms /National 4-H Council	\$1,400	3/08-10/08		
Youth In Action Grant						
Cui, J. A Networkin	Computer Science & Engineering g Perspective: Towards Reliable	Dept. of Defense/ Navy/Office of Naval Rsc	\$339,999 h.	6/08-5/11		
Denegar, C. <i>Vital Wrap Tr</i>	Physical Therapy reatment in Osteoarthritis	VitalWear	\$125,937	5/08-5/09		
Frisman, L.	School of Social Work Instruction & Research	Conn. Dept. of Mental Health & Addictio	\$20,000 on Svs.	4/08-3/09		
Shaken Baby	Syndrome Prevention					
Frisman, L.	School of Social Work Instruction & Research	Conn. Dept. of Mental Health & Addiction Svs.	\$198,579	4/08-8/09		
Conn. Freque	ent Users of Jail and Shelter Pil	ot Evaluation				
Grant, D.	Pharmaceutical Sciences for Pharmaceutical Educ.	American Foundation	\$6,000	9/08-8/09		
Metabonomi	c Analysis of Polyamines to Mul	tiple Sclerosis				
Gray, P.	Extension	Episcopal Diocese of Connecticut	\$5,000	5/08-4/09		
Bishop's Fun	d for Children					
Jordan, E.	Institute of Materials Science	Dept. of Defense/ Navy/Office of Naval Rsc	\$727,093 h.	4/08-4/09		
Dual Beam F	IB/SEM System for Nano Mater	ials Research and other D	OD-Related	Activities		
Kim, Y.	Computer Science & Engineering	Conn. Dept. of Children & Families	\$37,950	3/08-1/09		
Design and D	Development of a Web-Based Ap		es Survey			
Kraus, C.	Center for Survey Research & Analysis	Conn. Div. of Special Revenue/YPARTNERSHI	\$150,000 P	5/08-12/08		
Conn. Survey on Gambling						
Lei, Y.	Chemical, Materials & Biomolecular Engineering	Dept. of Homeland Security	\$229,000	7/08-6/09		
Novel Explosives Sensor Using Signal-Amplifying Molecularly Imprinted Conducting Polymer						
Mason, R.	Marine Sciences	Mallinckrodt Inc./ ENVIRON International (\$88,908 Corp.	12/06-12/08		
Penobscot River Study						
Naigles, L.	Psychology	Nat'l Insts. of Health/ Nat'l Inst. on Deafness & Other				
Language Development and Outcome in Children with Autism						
Osleeb, J.	Geography	Conn. Dept. of Public	\$12,776	6/08-12/08		

Health

Carstensen, F. Connecticut Center for	EASTCONN	\$30,000	8/07-7/08
Economic Analysis			
Connecticut Next Steps			

Carter, M. **Center for Regenerative** Evergen Biotechnologies \$61,557 5/08-4/09 Biology Inc. Production of Transgenic Rabbits Expressing Human CD4 and CCR5 for the Development of Microbicides to Prevent HIV Infection of Women

U.S. Dept. of Educ./ Chafouleas, S. Educational Psychology \$732,134 8/08-7/12 Inst. of Educ. Sciences Postdoctorate in Behavioral Education and Research

Chazdon, R.	Ecology & Evolutionary	Blue Moon Fund	\$194,000	8/08-7/10
	Biology			
Valuing the Carbon and Biodiversity of Secondary and Mature Tropical Forests				

Colbert, R.	Educational Psychology	Lynch (David) Foundation	\$7,905	1/07-6/08
Effectiveness of Consciousness Based Education				

Cote, R.	Physics	National Science Foundation	\$7,000	7/08-6/09
Student Sup	port to Attend ICAP 2008			

7/08-6/09 Cote, R. Physics Dept. of Defense/Army \$7,000 Invited Speakers Support to Attend ICAP 2008

Patent law program continued from page 1

well as related business law matters.

Health Information

Because innovators encounter challenges arising from both the law and the marketplace, the Connecticut Center for Entrepreneurship and Innovation partners the law school's intellectual property clinic with the business school's Innovation Accelerator. Hillary Greene, the clinic's director, says "The IP Clinic provides students with the unique opportunity to counsel innovatorentrepreneurs on an extensive range of intellectual property issues. This is a tremendous opportunity for our students, and also for the law school, which has a broad-based commitment to clinical education, an innovative approach to the study of intellectual property law, and a dedication to serving the people of Connecticut."

Other participating law schools are the

American University Washington College of Law; The John Marshall Law School in Chicago; the University of Maine School of Law; Vanderbilt Law School; and William Mitchell College of Law, an independent law school in St. Paul, Minn.

Jon Dudas, under secretary of commerce for intellectual property and director of the U.S. Patent and Trademark Office, says, "We look forward to providing a real-world experience for the students so they will be well prepared to tackle the complexities of intellectual property law that are so important in today's economy."

Students applying for the patent and trademark programs must have certain legal prerequisites, and those wishing to practice in the patent program must also have certain scientific and technical prerequisites.

CALENDAR Monday, September 8, to Monday, September 15

Items for the weekly *Advance* Calendar are downloaded from the University's online Events Calendar. Please enter your Calendar items at: http://events.uconn.edu/ Items must be in the database by 4 p.m. on Monday for inclusion in the issue published the following Monday. **Note:** The next Calendar will include events taking place from Monday, Sept. 15 through Monday, Sept. 22. Those items must be in the database by 4 p.m. on Monday Sept. 8.

If you need special accommodations to participate in events, call 860-486-2943 (Storrs), or 860-679-3563 (Farmington), or 860-570-5130 (Law School).

Academics

Monday, 9/8 – Courses dropped after this date will have a "W" for withdrawal recorded on the academic record.

Monday, 9/8 – Add/drop via the Student Administration System closes.

Monday, 9/8 – Last day to add/ drop courses without additional signatures.

Monday, 9/8 – Last day to place courses on pass/fail.

Monday, 9/15 – Last day for students to make up incomplete or absence grades

Libraries

Homer Babbidge Library. Monday-Thursday, 7:30 a.m.-2 a.m.; Friday, 7:30 a.m.-10 p.m.; Saturday, 10 a.m.-10 p.m.; Sunday, 10 a.m.-2 a.m. Dodd Center. Monday, 10 a.m.-7 p.m.; Tuesday-Friday, 10 a.m.-4 p.m.; Saturday, noon-4 p.m.; closed Sunday.

Pharmacy Library. Monday-Thursday, 8:30 a.m.-10 p.m.; Friday, 8:30 a.m.-4:30 p.m.; Saturday, 10 a.m.-5 p.m.; Sunday, 1-9 p.m. Health Center Library. Monday-Thursday, 7 a.m.-11 p.m.; Friday, 7 a.m.-7 p.m.; Saturday, 9 a.m.-5 p.m.; Sunday, noon-10 p.m. Law Library. Monday-Thursday, 8 a.m.-11 p.m.; Friday, 8 a.m.-9 p.m.; Saturday, 9 a.m.-5 p.m.; Sunday,

1-9 p.m. Avery Point Campus Library. Monday-Thursday, 8:30 a.m.-7 p.m.; Friday, 8:30 a.m.-5 p.m.; closed weekends.

Greater Hartford Campus Library. Monday-Thursday, 9 a.m.-9 p.m.; Friday & Saturday, 10 a.m.-5 p.m.; closed Sunday.

Stamford Campus Library. Monday-Thursday, 8 a.m.-9 p.m.; Friday, 8:30 a.m.-4 p.m.; Saturday, 11 a.m.- 4 p.m.; closed Sunday. **Torrington Campus Library.** Monday-Thursday, 9:30 a.m.-6:30 p.m.; closed Friday-Sunday. **Waterbury Campus Library.** Monday-Thursday, 8:30 a.m.-7 p.m.; Friday, 10 a.m.-4 p.m.; closed weekends.

University ITS

Help Desk: Call 860-486-4357, Monday-Friday, 8 a.m.-5 p.m.

Ph.D. Defenses

Thursday, 9/11 – Polymer Science. *The Characterization of States of Water in Nafion and the Relationship between States of Water and Nafion Properties,* by Donghun Koo (adv.: Sung). 3 p.m., Room IMS159, Gant Science Complex.

Thursday, 9/11 – Anthropology.

Explaining the Demographic Transition in Otayalo, Ecuador: A Comparison of Three Models of the Demographic Transition, by Howard Kress (adv.: Erickson). 3:30 p.m., Room 14, Ryan Refectory. Monday, 9/15 – Neag School of Education. College Persistence: A Comparative Analysis Across Conventional and Less-Common Cohorts, by William Gammell (adv.: Sheckley). 10 a.m., Room 412, Gentry Building.

Meetings

Monday, 9/8 – University Senate. 4-6 p.m., Room 7, Bishop Center. Thursday, 9/11 – Joint Audit & Compliance. 10-11:30 a.m., Room 7, Bishop Center. Monday, 9/15 – Health Center Board of Directors. 8:30 a.m.-noon, Room EG013, Academic Research Building.

Lectures & Seminars

Tuesday, 9/9 – Institute for African American Studies. "Reading Spirit: Manifestations of Spirituality in Africana Literary Texts," by Georgene Bess Montgomery, Clark Atlanta University. 4 p.m. Room 330, Student Union Ballroom.

Followed by a book-signing. **Tuesday, 9/9 – Counseling & Mental Health Services.** Suicide Prevention Week keynote speaker Ross Szabo, National Mental Health Awareness Campaign. 7 p.m., Jorgensen Center for the Performing Arts. Free admission.

Wednesday, 9/10 – Stem Cell Seminar. "Cardiovascular Development of ES Cells," by Dr. Zack Wang. 10:30 a.m., Room CG076, Henry B.C. Low M.D. Learning Center, Health Center. Video at Storrs, Room 109, Advanced Technology Laboratory.

Wednesday, 9/10 – Rainbow Center. "Out of Sight, Out of Mind: America's Response to the HIV/AIDS Pandemic, 1981-2008," by John-Manuel Andriote, author. Noon, Room 403, Student Union.

Thursday, 9/11 – Puerto Rican & Latino Studies Lecture. "Latinos, Media, and Politics: Informing the Future in the Age of Pluralism," by Federico Subervi, Texas State University-San Marcos. 4-5:30 p.m., Class of '47 Room, Babbidge Library.

Exhibits

Through Monday, 9/15 – Alexey von Schlippe Gallery. Paintings by Melissa Smith; sculpture and mixed media/watercolors by Leda Starcheva; mixed media sculpture and drawings/watercolors by Annie Lobbies. Also, through Wednesday, 9/24, *Recent Paintings*, by Donald Moss and *Real Tales*, paintings by Janice Hechter. Daily, 8 a.m.-9 p.m., Celeste LeWitt Gallery.

Through Friday, 10/10 – Babbidge Library. Migration Route, a Journey Through Art, collage photographs by George Jacobi, Gallery on the Plaza; 4 in Prints by Claudia Fieo, Margot Rocklen, Kim Tester, and Carmela Venti, Stevens Gallery; A Reason to Remember, traveling exhibit of the Hatikvah Holocaust, West Alcove. For hours, see Libraries section. Opening reception 9/14, 2-4 p.m., Stevens Gallery.

Through Friday, 10/10 – Dodd Center. Celebrating the Sculptural Book: The Challenge of Structure. For hours, see Libraries section. Through Friday, 10/10 – Contemporary Art Galleries. Alumni Biennial (One). Hours: Monday-Friday, 10 a.m.-4 p.m. Free admission. Opening reception 9/8, 5:30 p.m.

Through Sunday, 11/30 – The



PHOTO BY RUTHERFORD WITTHUS

"Crumpling a Thin Sheet," part of the Celebrating the Sculptural Book exhibit at the Thomas J. Dodd Research Center. See Exhibits.

Varnot; and paintings and drawings by Christopher Zhang. Wednesday-Sunday, noon-4 p.m. Free to members and students, all others \$3 donation. Branford House Mansion, Avery Point Campus.

Through Friday, 9/19 – Student Union Art Gallery. *Be Aware,*

Show You Care. Suicide Prevention Week interactive art exhibit. Daily, 11 a.m.-7 p.m., Third Floor, Student Union.

Through Wednesday, 9/17 – Health Center. Four Seasons of the Valley, photography by Carol Lowbeer. Daily, 8 a.m.-9 p.m., Main and Mezzanine

Ballard Institute & Museum of

Puppetry. Puppets through the Lens. Depot Campus, Friday-Sunday, noon-5 p.m. Free admission, donations welcome.

Through Friday, 12/19 – Benton Museum. Sera: The Way of the Tibetan Monk; also, The Photographs of Sheila Rock. Also, Tuesday, 9/2 through Sunday, 10/12, 43rd annual art department faculty exhibition. Tuesday-Friday, 10 a.m.-4:30 p.m.; Saturday & Sunday, 1-4:30 p.m.; Ongoing – State Museum of Natural History & Connecticut Archaeology Center. Human's Nature: Looking Closer at the Relationships between People and the Environment. Hours: Tuesday-Saturday, 10 a.m.-4 p.m.; Sunday & Monday, closed. Free admission, donations welcome.

7

Performing Arts

Friday, 9/12 – Faculty Recital. Peter Kaminsky and friends. 8 p.m., von der Mehden Recital Hall. Free admission, donations accepted. Saturday, 9/13 – Suicide Prevention Week Concert. A cappella concert by Take Note! 7:30 p.m., St. Mark's Episcopal Church.

Monday, 9/15 – Puppet Forum. Puppets on the Edge, with Jim Napolitano & Tim Lagasse. 7:30 p.m., Ballard Institute, Depot Campus. Free admission. Forum preceded at 7 p.m. by guided tour of Puppets Through the Lens exhibit.

Films

Monday, 9/8 - Puppet Film. Handmade Puppet Dreams, Volume *I*, by Heather Henson. 7:30 p.m., Student Union. Free admission. Monday, 9/8 - Suicide Prevention Week Film. Girl, Interrupted. 6:30 p.m., Women's Center. Thursday, 9/11 - Suicide Prevention Week Film. Wristcutters: A Love Story. 6 p.m., Student Union Theatre. Thursday, 9/11 - Suicide Prevention Week Film. The Sea Inside. 6:30 p.m., Puerto Rican & Latin American Cultural Center. Friday, 9/12 – Suicide Prevention Week Film. Love and Suicide. 2 p.m., Rainbow Center. Friday, 9/12 - Suicide Prevention Week Film. The Virgin Suicide. 10 p.m., Student Union Theatre.

Athletics

Friday, 9/12 – Women's Soccer vs. UCLA. 7:30 p.m., Morrone Stadium. Saturday, 9/13 – Football vs. Virginia. 7:30 p.m., Rentschler Field. Sunday, 9/14 – Field Hockey vs. Princeton. 1 p.m., Sherman Family Sports Complex. Sunday, 9/14 – Women's Soccer vs. Penn State. 2:30 p.m., Morrone Stadium.

Potpourri

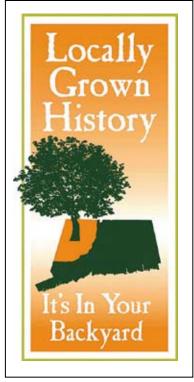
Wednesday, 9/10 – Suicide Prevention Week Service. Service for anyone who has been impacted by suicide or would like to help. 7:30 p.m., steps of Wilbur Cross Building.

Thursday, 9/11 – Suicide Prevention Week Student Panel. "What Can We Do To Help?" 5:30 p.m., African American Cultural Center. Mondays – Al-Anon. Twelve-step meeting. Noon-12:50 p.m. For more information, call 860-486-9431.

Torrington professor leads project promoting local history

by Karen A. Grava

A project designed to give the public a new, enticing view of Litchfield County's historical treasures, and to help educators and public historians use the region's historic sites effectively is now underway. The project, "Locally Grown History - It's In Your Backyard," is led by Robert Forbes, an assistant professor of history at the Torrington campus, who organized a group of educators, directors, curators, and volunteers from many local historic and cultural organizations to collaborate on the event. "Northwest Connecticut is a treasure trove of historical gems. We want to help make the public aware of them, and to guide educators in how to teach with them," says Forbes. "Locally Grown History is an opportunity to bring educators and public historians



students with these irreplaceable sites and artifacts." Since Litchfield County is geographically large, the project

same time, it aims to help re-brand Northwestern Connecticut as a vibrant tourist destination and cultural site on a par with Massachusetts and New York – not just a pretty passage between them. on Labor Day and features prizes for people who visit the sites and keep track of the visits on "passports." It culminates on Oct. 18 and 19 with special exhibits and a forum on the Torrington campus that will include workshops and panel discussions. The program on Sunday, Oct. 19 will include addresses by Connecticut State Historian Walter Woodward, an assistant professor of history, and by Carl Nold, president of Historic New England. There will also be workshops on the use of historical letters and the impact of geography, religion, and immigration on the state, and a roundtable discussion on "Teaching with Local Treasures: The World in Your Backyard."

together to explore the most effective and interesting ways to reach packages the area's historical assets (historical societies, museums, historic sites, and traditional artisans) and agricultural resources (vineyards, orchards, farms, farmers markets, and farm stands) into a "trail" so that visitors can easily move from one to another as a day or weekend destination.

"While many of the sites that are part of this project are exceptional, only a few constitute a destination in and of themselves," says Forbes. "Viewed collectively, however, the whole is far greater than the sum of its parts."

He notes that the project hopes to create a revenue base for the historic sites and build networks among personnel at the sites for problem-solving, sharing ideas, and obtaining resources. At the "This project will provide itineraries that are both geographical and thematic for tourists and provide a fuel-conserving alternative to distant travel," Forbes says. "When the sites are viewed as stories – many of them related to each other – rather than as individual places, they become much more interesting to the public. This is where scholars can be helpful: locating the sites in a larger context and drawing the connections among them."

The project also encourages integrating the historical resources with educational programs at institutions from K-12 to higher education.

"Locally Grown History" began

For more information about Locally Grown History, visit www. locallygrownhistory.org or contact Melissa Flaherty at 860-626-6802.

Students travel to China to learn about traditional medicine

BY SHERRY FISHER

A group of UConn students traveled across the globe this summer to learn about medical practices that have existed for thousands of years.

Seven students from the School of Pharmacy and six from other academic disciplines spent five weeks in Beijing, China studying traditional Chinese medicine.

They took field trips to herb farms and pharmaceutical groups, watched acupuncture performed on patients, and studied Mandarin. They also visited hospitals that prescribe herbal medicine and the factories that produce it.

"It was an amazing experience," says Grzegorz Rdzak, who is in UConn's Pharm.D. program. "I never would have done something like this on my own. I learned a lot about the culture and many aspects of herbal medicine."

UConn Study Abroad and the School of Pharmacy sponsored the program. Courses were conducted at the Peking University School of Pharmaceutical Sciences, which has had a "sister" relationship with UConn's School of Pharmacy since 2007. The students lived at the university's health sciences campus in the center of Beijing.

Although Western medicine is practiced in China, most citizens rely heavily on traditional Chinese medicine, says the program's director, Diane Burgess, a professor of pharmaceutical sciences.

"Traditional Chinese medicine covers a range of medicinal practices that developed over thousands of years, including herbal medicine, massage therapy, and acupuncture," she says. "Our program focused on herbal medicine, which is becoming a popular method of treatment in the West. We wanted our students to see how this other type of medicine is such an accepted part of the Chinese culture, to learn more about it and how well it works."

Students earned six credits for the program, which included seminars that covered the history and the basic theories of traditional Chinese medicine. They also studied the morphology and chemistry of Chinese herbs and minerals, quality control, and the clinical use of the medicines. Faculty at Peking University presented the lectures. The students were also required to take 28 hours of instruction in Mandarin.

Students visited pharmaceutical groups and observed the preparation of Chinese herbs. They were shown ancient and modern processing methods, and learned how the major dosage forms are manufactured, including pills, powders, tablets, and capsules. At herb farms, students learned how to identify plants and prepare sample specimens.

Visits to hospitals and other community medical facilities gave students exposure to physicians prescribing and dispensing herbal medicines.

Rdzak was impressed by the quality control in the production of herbal medicines.

"The quality control was far more than I expected, and I really appreciated that," says Rdzak, who studied analytical chemistry as an undergraduate before going into pharmacy.

"The Chinese know absolutely every single piece of each extract," he says. "They have a standardized list of what to follow from the very beginning, with checkpoints along the way. Everything was done perfectly. They wanted to show us that they really care about analytical chemistry and quality control of their herbal products."

Alexandra Mooney, who is also in the Pharm.D. program, says the experience offered an opportunity to "see what health care is like in another country. The Chinese have been using herbal medicine for thousands of years, and health care in the West is changing and incorporating some of that."

Mooney says the program was more than just learning about traditional Chinese medicine: "It was a wonderful cultural experience as well." Ross Lewin, director of the Study Abroad Program, says the program in China is "a huge step forward in international education at UConn. It is not only our first pharmacy program, but one of the first in the United States. It also marks the beginning of UConn's relationship with one of the top universities in China – Peking University – and exemplifies the way in which Study Abroad can provide a curriculum and a pedagogy that cannot be carried out on our own campus."

Adds Burgess, "You couldn't offer anything like this in this country. It would have to be in China."



PHOTO SUPPLIED BY DIANE BURGESS

UConn student Ana Charalambides looks at herbs in the traditional Chinese medicine pharmacy in Peking University Third Hospital.

Master's thesis continued from page 1

strategies."

The largest retailer in the world, Wal-Mart pursues a low pricing strategy that has helped trim consumers' household budgets for many years. The addition of Supercenters to its portfolio made groceries more affordable to lower income households, but also sparked debate about the impact on competing grocery stores.

Some policy-makers have opposed Wal-Mart by trying to impose "living-wage" laws on the retailer or limit its entry into markets via "anti-big box" legislation.

Since 1988, Wal-Mart has opened an average of 100 Supercenters per year. Yet research was needed to determine the effect of the rapid expansion of these stores on the pricing strategies of existing food-retailing competitors. Cleary's study focused on Wal-Mart's entry into the Dallas/Fort Worth market and the subsequent shifts in the demand for and price of milk as a way to determine whether the increased competitive pressure on existing supermarkets resulted in lowered prices. Using scanner data for milk from the Dallas/Fort Worth supermarket chains, provided by UConn's Food Policy Marketing Center, Cleary found that Wal-Mart's entry "disciplined the collusive non-competitive milk pricing behavior of existing supermarkets" and caused a 22.5 percent drop



Rebecca Cleary, a recent master's

Neag faculty train teachers to help kids solve verbal math problems

by Robert Frahm

Most public school students can do simple math such as multiplication and division, but many have trouble applying those skills to real problems, according to teachers attending a University of Connecticut seminar.

About two dozen Hartford teachers worked with professors from the Neag School of Education during a week-long summer seminar on strategies to help students solve problems requiring them to read, choose an appropriate mathematical approach, and explain their work.

"When they see a word problem, a lot of students just look at it and say, 'I can't do it," said veteran teacher Meg Borowski, a math coach at Hartford's Batchelder School. through eight and the Connecticut Academic Performance Test for grade 10 – the chief benchmarks of academic progress in the state's public schools.

Those problems, designed to test students' reasoning ability, have proven to be some of the most difficult on the annual statewide tests. Across the state, 60 percent of last year's eighth-graders, for example, were unable to master the "mathematical applications" part of the Mastery Test. In poor, urban schools, the results were worse. In Hartford, 88 percent of eighthgraders missed the mark.

"We contend that if you help

"Even though it's math, language is a primary issue. As soon as we deal with word problems, it all falls apart."

In addition to outlining strategies to help non-English speaking students, UConn educators taught lessons on topics such as algebraic reasoning and proportional reasoning.

Staples, the project co-director, said the ACCESS program will continue during the school year, as teachers form teams and meet regularly to discuss strategies and create new problem-solving lessons. The lessons will be posted on the website of UConn's Center for Research in Math Education. Teachers in the project are from Batchelder, Kennelly, and Bulkeley public schools and Watkinson, a private school in Hartford. UConn's Neag School has had a longstanding partnership with Hartford schools. The ACCESS project, supported by a \$112,000 grant from the Connecticut Department of Higher Education, is an expansion of a program that operated on a small scale last year at Batchelder and Bulkeley schools. "We saw great improvement in our kids' responses," Paige Calhoun, a fourth-grade teacher at Batchelder, said during the summer workshop. "It worked so well last year that I wanted to come back."

graduate, wrote her thesis on the impact of Wal-Mart Supercenters.

in milk prices over the six-year period examined in the study.

"This study documents strong consumer gains upon Wal-Mart entry into markets, in spite of its negative effect on existing businesses," Cleary wrote. "In effect Wal-Mart acts like a trust buster, forcing prices down, and causes incumbents to adopt more competitive pricing behavior."

Legislation to limit Wal-Mart Supercenter expansion or prohibit its future entry in a market, she added, "would favor incumbent [stores] at the expense of consumers." Borowski and others played mathematical games, practiced problem-solving techniques, and created new classroom lessons under the direction of UConn math educators Megan Staples and Mary Truxaw. Staples and Truxaw are co-directors of a project known as ACCESS (Academic Content and Communications Equals Student Success).

A key goal of the project is to improve student performance on open-ended, multiple-step math problems on the Connecticut Mastery Test for grades three kids with language and higherorder thinking ... it will help to promote the higher test scores the districts are concerned about," Truxaw said.

"A huge issue is language and mathematics," she said. "In Hartford schools, in particular, English is not the first language of many of the students."

Understanding language is critical on tests that not only require students to read the problem accurately, but to provide written explanations of their work, teachers say.

"Almost all my students are English language learners or second generation immigrants," said Steve Gengel, a geometry teacher at Hartford's Bulkeley High School.