Economics major awarded prestigious Marshall Scholarship

BY CINDY WEISS

A senior economics major in the College of Liberal Arts and Sciences is one of 40 new Marshall Scholars named on Dec. 1 by the British government.

Michelle Prairie, a Presidential Scholar from Vernon, with a perfect 4.0 grade average, will spend the next two years in the United Kingdom studying for two master’s degrees in development economics.

She is the only student at a public institution in New England chosen for a Marshall Scholarship, named after Harry Truman’s secretary of state, he George C. Marshall. In 1947, as President of America’s first five-star Army general, he created the prestigious Marshall scholarship, named after the British government.

Marshall Scholars named on Dec. 1 by Cindy Weiss

She is UConn’s second student to win a Marshall Scholarship. Economics major awarded a fellowship for a master’s degree in economics in 1965, is co-chair of the task force, together with Chief Financial Officer Richard Gray and Chief Operating Officer Barry M. Feldman.

She plans to become a professor of development economics, focusing her research on income inequality, particularly in Latin America, and on the effects of trade, aid, and government policies on the distribution of wealth. Eventually she hopes to be a policy analyst for the United Nations, the World Bank, or the U.S. government.

She is UConn’s second student to win a master’s degree in economics in 1965, is co-chair of the task force, and a way for individuals to submit suggestions electronically. Those making suggestions may choose whether or not to identify themselves.

"We are open to any and all suggestions, long-term and short-term, big and small in scope," said Provost Peter J. Nicholls, who established a web site – http://core.uconn.edu – with information about President Hogan’s charge to the group, the principles that will guide the group’s decision-making, and a way for individuals to submit suggestions electronically. Those making suggestions may choose whether or not to identify themselves.

"We are open to any and all suggestions, long-term and short-term, big and small in scope," said Provost Peter J. Nicholls, who is a co-chair of the task force, together with Chief Financial Officer Richard Gray and Chief Operating Officer Barry M. Feldman.

More than 6,000 people are expected to attend the mid-year ceremony. The decision to add a December graduation in 2003 to complement the traditional May commencement was made against a backdrop of the increasing number of students graduating during the school year, which strained the ability of Gampel Pavilion – even with two undergraduate ceremonies – to hold them. It also recognized that more students, due to work pressures, internships, study abroad programs, or for academic reasons, were completing their studies at the end of the fall semester.

Since then, an increasing number of students – to hold them. It also recognized that more students, due to work pressures, internships, study abroad programs, or for academic reasons, were completing their studies at the end of the fall semester.

In 1947, as President Harry Truman’s secretary of state, he created the prestigious Marshall scholarship, named after the British government.

"I’m forever grateful for what a UConn education has meant in my life," says McCarthy. "In my younger days, UConn was there for me and gave me a great start on life." More than 6,000 people are expected to attend the mid-year ceremony. The decision to add a December graduation in 2003 to complement the traditional May commencement was made against a backdrop of the increasing number of students graduating during the school year, which strained the ability of Gampel Pavilion – even with two undergraduate ceremonies – to hold them. It also recognized that more students, due to work pressures, internships, study abroad programs, or for academic reasons, were completing their studies at the end of the fall semester.

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Collaborative research teams funded

BY ELIZABETH OUMA-OTUNNU

New grants intended to encourage collaboration between researchers at Storrs and the Health Center have recently been awarded to 11 research teams.

The year-long grants — known as UCHC/Storrs and Regional Campus Incentive Grants, or UCGR — are approximately $50,000 each. They were jointly funded from the research budgets at Storrs and the Health Center, using money derived from indirect costs on extramural grants.

Applications for UCGR funding were peer reviewed by a committee comprising four researchers from Storrs and four from the Health Center. The group was co-chairs by Suman Singh, interim vice president for research and graduate education at Storrs, and Mark McArthur, associate dean for research, planning, and coordination at the Health Center.

The committee received 45 proposals and made 11 awards. Criteria for evaluating the proposals included the potential to attract extramural funding after the current grant expires, the interdisciplinary nature of the project, and the project's capacity to support the University’s application for a Clinical and Translational Science Award — a National Institutes of Health program intended to speed up the translation of scientific research into practical applications in the medical field.

Board of Trustees Distinguished Professor of Molecular and Cell Biology Debra Kendall, a member of the review committee, says she was pleased with the response to the request for proposals: “There were many meritorious applications. Some of the ideas may not pan out in the end, but you never know. The grant has given the opportunity to initiate collaborations and test new research directions.”

She says she has exciting advances in research come at the interface of different fields. She says it is key that the grants are large enough to enable the research teams to gather sufficient evidence to make sure their projects are feasible and bring them to the point where external funding can be applied for.

Kendall notes that the grant competition comes at a significant time for UConn. “It's important that, even in very challenging budget times for us all, the University devoted funds to this new research initiative,” she says. “We cannot be without support in our research — no matter what the time — not at a Research 1 university. We may have to be more efficient, make more choices, prioritize, but it's critical that funds have been devoted to the research endeavor.”

The award-winning proposals are:

- A High Throughput Screen to Identify Novel Anti-Cancer Agents
  -- Dennis Wright, School of Pharmacy (PI)
  -- Rachel O'Neill, Molecular & Cell Biology (Co-PI)
  -- Brenton Grovely, Genetics & Developmental Biology, Health Center (Co-PI)
  -- Theodore Rasmussen, Animal Science, College of Agriculture & Natural Resources (Co-PI)
  -- Yufeng Wu, Computer Science & Engineering, School of Engineering (Co-PI)

- The Mechanism of Phenytoin(Phx) Drift in SES Cells
  -- Rachel O'Neill, Molecular & Cell Biology (PI)

- Genes and Environment: Copper and Ascorbate in Fruit Elderly Men
  -- Elizabeth Eippert, Molecular, Microbial, & Structural Biology, Health Center (PI)
  -- Jonathan Cowalt, Psychiatry, Health Center (Co-PI)
  -- Anne Kenny, Medicine, Health Center (Co-PI)
  -- Jane Kerstetter, Allied Health Sciences, College of Agriculture & Natural Resources (Co-PI)
  -- Robert Mains, Neuroscience, Health Center (Co-PI)

- Osteoarthritis: Immune Responses in Pediatric Inflammatory Bowel Disease
  -- Francisco Sylvestre, Pediatric Gastroenterology, Health Center (PI)
  -- Juan Salazar, Pediatrics, Infectious Disease, Health Center (Co-PI)

- Phase Transformations to Control Morphology and Cell Behavior in Polymer Scaffolds for Tissue Engineering
  -- Jon Goldberg, Reconstructive Sciences, Health Center (PI)

- The Effect of Psychotropic Medication Dosage on Symptom Control for Inmates Diagnosed with Bipolar Disorder
  -- Deborah Shetron, Nurse Instruction & Research, School of Nursing (PI)
  -- Megan Ehret, Pharmacy Practice, School of Pharmacy (Co-PI)

- A Behavioral Intervention for Reducing Obesity
  -- Nancy Petry, Medicine, Health Center (PI)
  -- Rafael Perez-Escamilla, Nutritional Sciences, College of Agriculture & Natural Resources (Co-PI)
  -- Linda Pescatello, Kinesiology, Neag School of Education (Co-PI)
  -- William White, Cardiology Center, Health Center (Co-PI)

- Stem Cell Database
  -- Craig Nelson, Molecular & Cell Biology, College of Liberal Arts & Sciences (PI)
  -- Martin Schiller, Molecular, Microbial & Structural Biology, Health Center (Co-PI)
  -- Michael Gerk, Molecular & Structural Biology, Health Center (Co-PI)

- Computational Modeling of Muscle Injury Recovery to Cancer Therapy
  -- Rakesh Lal, Oral Health & Digestive Sciences, Health Center (PI)
  -- Ranjan Srivastava, Chemical, Material & Biomolecular Engineering, School of Engineering (Co-PI)
  -- Lesse Loew, Cell Biology, Health Center (Co-PI)
  -- Douglas Peterson, Oral Health & Diagnostic Sciences, Health Center (Co-PI)

- Black Raspberry Components as Anti-Inflammatory Agents for Inflammatory Bowel Disease
  -- Daniel Rosenberg, Molecular Medicine, Health Center (Co-PI)
  -- Novo Pharmcoacoustics/Ultrasonic Imaging System for Non-invasive Ovarian Cancer Detection and Characterization
  -- Qiu Gong, Electrical & Computer Engineering, School of Engineering (Co-PI)
  -- Molly Brewer, Cancer Center, Health Center (Co-PI)

- The Assessment of Vaccination Practices for Inmates Diagnosed with Bipolar Disorder
  -- Theodore Rasmussen, Animal Science, College of Agriculture & Natural Resources (Co-PI)
  -- Jonathan Cowalt, Psychiatry, Health Center (Co-PI)

- Interdisciplinary Developmental Pathology of Drift in hES Cells
  -- Robert Weiss, Chemical, Materials & Biomolecular Engineering, School of Engineering (Co-PI)

- The Assessment of Vaccination Practices for Inmates Diagnosed with Bipolar Disorder
  -- Theodore Rasmussen, Animal Science, College of Agriculture & Natural Resources (Co-PI)
  -- James McCarthy, Psychiatry, Health Center (Co-PI)

- The Role of Viral and Host Interactions in the Development of AIDS
  -- James McCarthy, Psychiatry, Health Center (PI)

- The Effect of Psychotropic Medication Dosage on Symptom Control for Inmates Diagnosed with Bipolar Disorder
  -- Deborah Shetron, Nurse Instruction & Research, School of Nursing (PI)
  -- Megan Ehret, Pharmacy Practice, School of Pharmacy (Co-PI)

Public invited to comment on UConn Police Department

BY KAREN A. BREA

A team of assessors from the Commission on Accreditation for Law Enforcement Agencies (CALEA) will arrive Dec. 13 to examine the UConn Police Department’s policies and procedures, management, operations and support services.

As part of the on-site assessment for re-accreditation, UConn employees and members of the community are invited to offer comments during a public information session at 7 p.m. on Dec. 15, in the South Campus Ballroom.

Individuals unable to attend the public information session may provide comments by telephone on Dec. 15, between 1 and 5 p.m. by calling 860-486-5183 or 860-486-3197. Telephone comments will also be received by assessment team members.

Verification by the assessment team that the police department has met the commission’s state-of-the-art standards is part of a voluntary process to gain international accreditation — a highly prized recognition of law enforcement professional excellence, says Chief Robert S. Hudd.

The department received initial accreditation in 2000, and was re-accredited in 2003 and 2006. Telephone comment form as appearances at the public information session are limited to 10 minutes and must address the agency’s ability to comply with the CALEA standards. A copy of the standards is available upon request on the Commission’s website at http://wwwCALEA.com. As a result, Chief Hudd says, the university is asking members of the community to review the assessment team’s report and submit their comments.

The assessment team comprises law enforcement practitioners from throughout the United States.

Those who wish to offer written comments about the department’s ability to meet the CALEA standards for re-accreditation are asked to write to the Commission on Accreditation for Law Enforcement Agencies Inc. (CALEA), 10302 Easton Place, Suite 100, Fairfax, VA 22030-2215, or call CALEA at 1-800-368-3757, and ask for Mary Mitchell.

The assessment team comprises law enforcement practitioners from throughout the United States. The assessors review written materials, interview employees, observe operations. Upon completion of the assessors’ review, a written report is submitted to the CALEA commission.

The CALEA commissioners will review the assessment report and determine whether the agency is to be awarded re-accreditation status.
Ancient grave unearthed in Israel

**BY MICHAEL KIRK**

A 12,000-year-old grave unearthed in the Middle East contains the remains of a woman who provides some of the world’s earliest evidence of a religious prac-
tice, according to a recently published study by researchers from Israel and the University of Connecticut.

The woman was one of the Natufians, the first people to routinely bury their dead. She is one of 28 people buried in an ancient cave site in Israel, but her grave is distinct from the others: she is surrounded by 50 complete tortoise shells and select parts of a wild boar, an eagle, a cow, a leopards, and two martens – as well as a complete human foot that is not her own.

A site set apart

According to the researchers, the interment rituals and the methods used to construct and seal the grave suggest that it is the burial site of a shaman – one of the very earliest on archaeological record and the oldest ever found in that region.

“What sets her grave site apart from others is the multitude of animal parts placed near and around her,” says UConn archaeologist Natalie Munro, one of the authors of the paper. “This provides strong evidence that she held a unique position in her society and is very likely an early shaman.” Munro is an associate professor of anthro-

Health Center a key player in statewide colonoscopy pilot

**BY CHRIS DEFRANCESCO**

The UConn Health Center is a leading partner in a state pilot program that by next fall will have provided colorectal cancer screenings for up to 600 uninsured or underinsured Connecticut residents.

The Connecticut Colorectal Cancer Screening Demonstration Project, funded by a state grant, is screening its first patients this month.

**Prevention tool**

“The colonoscopy is a major prevention tool, but not every-

7.000 years ago - an advanced age for the time. Her body is buried in its own separate grave within a stone structure. Carbon dating of the site established the period when the woman lived.

The results of the research were published in the most recent edition of the journal Proceedings of the National Academy of Sciences. Leore Grosman and Anna Beller-

Cohen of the Hebrew University of Jerusalem are co-authors of the paper, along with Munro. The grave was discovered in 2005 and the researchers conducted their work there from 2005 to 2008.

**Special care**

The researchers say it would have taken a great effort to travel to the grave site with the body and assemble all the animals needed – particularly the tortoises, who would have had to be caught indi-

vidually before being buried with the body. Special care was taken to prepare the grave site, with mud collected and plastered on the walls. Small limestone slabs were pressed into it and also lined the floor, creating a foundation. At the time of burial, 10 large stones were placed directly on the head, pelvis, and arms of the body. The woman’s spinal column, pelvis, and right femur were placed against the curved southern wall of the oval-shaped grave, with the legs spread apart and folded inward at the knee.

“That’s a lot of effort for one woman,” says Munro. “This was no run-of-the-mill burial. It points to her respected place among her people.”

**Sedentary lifestyle**

The Natufians lived in what is now Israel, Jordan, Syria, and Lebanon. They were the first society to adopt a more sedentary lifestyle with greater reliance on agriculture – representing a major change in the way people lived.

The authors write: “The unique grave at Hazilonz Tachtit cave provides us with rare concrete evi-
dence for those processes in their initial stages, at the termination of the Paleolithic on the eve of the Neolithic revolution.”

Notes Munro. “Ritual behavior coincides with the beginning of agriculture, which made groups less nomadic.” These were people who were part of a more perma-

nent community and had a good deal of contact with one another on a day-to-day basis, which makes sense that ritualized religious behaviors also began to develop around this time.”

The full paper is available at http://www.pnas.org/content/early/2008/10/31/0806030105.
Psychotherapy professor an expert on post-traumatic stress disorder

BY CAROLYN PENNINGTON

Julian Ford has been highly prolific over the past year. The associate professor of psychiatry has four co-edited books bearing his name—all of them dealing with post-traumatic stress disorder in adults or children.

PTSD affects more people than you may think, says Ford. It’s not just the soldiers coming home from Iraq and Afghanistan or the children who experience horrific tragedies like 9/11. Children who grow up in dangerous or impoverished environments can experience chronic trauma, such as prolonged abuse or family violence. “These children have to be little soldiers,” he says. “Even when parents and the community do the best they can, they still live in what amounts to war zones.”

Survival mode

Ford’s co-edited book Treating Traumatized Children: Risk, Resilience and Recovery (Routledge) looks at children internationally and how they’ve adapted to trauma. “Sometimes they can flourish and prosper in spite of traumatic circumstances,” he says. “In those cases, you don’t want to interfere, but support them in their positive ways of coping.”

Why do some people handle traumatic events better than others? In his book Posttraumatic Stress Disorder: Science and Practice (Elsevier), Ford cites socio-economic resources, community and societal support, and also genetics. Some people are more prone to anxiety and distress. But no matter how smart, healthy, or strong you are, anyone can be thrown into a biological survival state if the situation is horrific enough.

“Your body automatically shifts into a self-protective survival mode,” says Ford. The first stage is a freeze reaction, you’re assessing the danger and scoping out your options. The second stage is flight. If you can’t flee, then you fight, which is the third stage. If the danger persists, your body goes to the fourth stage which is actually a kind of paralysis, your body basically shuts down. An example is a prolonged sexual assault, when the victim stops fighting back even though his or her brain wants to continue fighting. The body is doing this for two reasons—conserving biological resources so the victim doesn’t die, and potentially fooling the predator into thinking they’ve subdued their opponent and move on.

Understanding trauma

Someone who experiences only the earlier stages of trauma will be less likely to have a long-term disorder, Ford says. The more serious problems are related to more prolonged and severe stressors. Other factors, such as socioeconomic status, intelligence, and anxiety proclivity, may also play a role but they are secondary to how much, how badly, and how long the victim was exposed to the trauma.

In order to better treat PTSD, you need to understand it. Ford says his co-edited book The Encyclopedia of Psychological Trauma (Wiley) has “everything you wanted to know about psychological trauma but were afraid to ask.” The book is geared to health care professionals and educators, but is written in a way that students and lay persons can understand and may find useful if they suspect someone they know is suffering from PTSD.

Some people will experience delayed PTSD, notes Ford. This often happens in life transitions, when the person experiences another small or large stressful situation that disrupts relationships or throws a person’s emotions out of balance. Treatment helps the person to understand that this is an aftermath and not the earthquake all over again,” says Ford.

Managing emotions

Ford says the key to recovery from PTSD is not “getting over” the memories, but understanding how they affect you now and what you can do to manage your emotions, when new stressors turn on your brain’s survival alarm.

“It’s exactly what we teach in the therapy I’ve developed in my work at UConn,” he says, which is called “Trauma Affect Regulation: Guide for Education and Therapy” and is copyrighted by UConn.

Ford deals with the most severe cases in his co-edited book Treating Complex Traumatic Stress Disorders: An Evidence-Based Guide, which includes people who experienced psychological trauma as a child—family abuse, neglect, years of violence, or separation from parents due to substance abuse, incarceration, or hospitalization.

In those instances, kids grow up learning how to make adaptations they don’t even realize. Adaptations include being depressed, angry, abusing drugs and alcohol, or engaging in risky behaviors such as cutting oneself.

“To treat those conditions,” Ford says, “you need to help people manage their bodies and emotions, as well as helping them to deal with anxiety.”

In the therapy approach Ford developed, the therapist teaches emotion regulation skills such as the “SOS,” which stands for slow down, orient, and self-check.

“It’s like providing them with a mirror so they can see how their body reacts,” he says. “Trauma forces us to focus externally, but life needs both looking out and looking in. It may take a while, but therapy restores that balance. It’s something that is possible, even after the worst kinds of trauma.”

Safety comes first, says UConn’s director of scientific diving

BY KAREN A. GRAVA

His job has a simple bottom line. Or rather, line to the bottom. Everyone who goes down must come up.

But for Jeffrey Godfrey, director of scientific diving for UConn’s marine sciences programs in the College of Liberal Arts and Sciences, getting to the bottom and back up again requires planning, training, and more planning. Training and more training. Testing and re-testing of equipment. And even calling the dive off when things don’t look exactly right.

Ensuring safety

Godfrey says safety is the first order of business on any of the 400 to 500 scientific dives undertaken each year by UConn faculty, graduate students, and undergraduates.

The dives take place in locations around the world, including Japan, Antarctica, Australia, the Caribbean, the Gulf of California, and even Long Island Sound: “Anywhere there’s water,” Godfrey says.

Hazards to divers include running out of air, diving too deep or too long for the equipment, wildlife, and especially boats, which may not be painted red and white flag that warns of divers below.

The problems vary with the location of the diving. Training dives, which take place right off Avery Point, face hazards from murky water, boats, and potentially also airplanes from nearby Groton-New London Airport.

“It’s easy to get separated in the water in Long Island Sound,” Godfrey says. “It’s not like diving in the Caribbean, where there’s 100 feet of visibility.”

Scientific divers must be certified, and the regulations are more stringent than those for recreational divers. Certification requires 100 hours of training, one open water snorkel dive, and four deep water dives to ensure safety.

Godfrey joined UConn nine years ago from the Utah State University Fish and Wildlife Cooperative Research Unit, where he was a research diver. He is current president of the American Academy of Underwater Sciences, which sets the standards for university diving programs. He teaches two courses in scientific diving, which are open both to graduate students and undergraduates, and often accompany UConn faculty on dives.

Although practice dives are often in only seven feet of water, many go deeper.

One of Godfrey’s dives involved going down 240 feet to help revise the site map of the U.S.S. Monitor. The wreck of this armored turret gunboat, which sank in a storm in 1862 off Cape Hatteras in North Carolina, is now a marine sanctuary.

During another of his dives off the East Coast, a sphyhoplane—the world’s longest animal—swam by. Closely related to a jellyfish, the one he saw was 70 or 80 feet long, he says.

A dive off Deception Island in the Antarctic revealed piles of whale bones sitting on the bottom, left over from the days of a whaling station there.

Survival instinct

Was he ever afraid? Not exactly, he says, “but there are times when your survival gene kicks in.” For example, once at Montauk Point, Long Island, where records show the largest great white shark was caught, he watched the striped and blues running as hard as they could instead of following their normal pattern of circling and pausing.

“I just put my head down and kept working,” Godfrey says. “I wondered what was on the other end of the school, but figured it was something I didn’t need to see.”

Peter Auster, associate professor of marine sciences, says he occasionally sees and interacts with dolphins, large sea turtles, sea lions, and whales underwater.

“We’re down there studying the marine life,” he says, “and they are sometimes studying us.”

Auster says he brings Godfrey along on expeditions that are technically challenging.

“His job is to make sure that the same number of people who go underwater come back,” he says. “But he’s a scientist as well, and aids in the success of our work.”

Godfrey notes that planning is critically important.

“We’ve never had an incident,” he says. “It’s a hazardous environment, so we go out of the way to do training and dive planning.

Our goal is to be very safe as well as efficient. And if something’s not right—the water is rough or something isn’t going according to plan—we call the dive off and come back another day.”
Cell biologists to study gene transfer and evolutionary descent

BY CINDY WEISS

John and Cindy Gogarten, professor of molecular and cell biology in the College of Liberal Arts and Sciences, will begin work in January on projects that would help to unravel the "roots" of the Darwinian Tree of Life. The project is funded by a $2.5 million grant from the National Science Foundation.

The research is the first in the select group of "Assembling the Tree of Life" grant program to examine how microbes fit into the pattern of evolutionary descent. Gogarten said the early evolution of life for more than 20 years, says that most of the project will involve computational biology - his specialty. His research team will systematically search for clues, ancient and modern, of microbes transferring genes horizontally, events that complicated the picture of evolutionary heredity, which is usually depicted as the tree of life.

First, the collaborators will build a database of gene transfer events to reveal the impact of horizontal gene transfer on evolutionary history.

Challenging a concept

While prokaryotes, the bacteria and archaea, are at the root, or beginnings, of the evolution of life on earth, the process of their evolution may not fit the Darwinian idea of "natural selection." Gogarten's research has shown.

In the "tree" metaphor, species branch off from a common trunk, limbs may reach dead ends, and new branches develop, giving rise to new lineages.

In announcing the Tree of Life grant program in 2002, NSF referred to Charles Darwin's concept that all life, from the smallest microbe to the largest vertebrate, is connected through genetic relatedness.

"This Tree of Life summarizes all we know about biological diversity and underpins much of modern biology, yet many of its branches remain poorly known and unresolved," the agency pointed out.

But evidence is mounting that microbes frequently transfer genes horizontally, causing much more rapid changes in genomes than the vertical, or familiar parent-to-offspring, transfer of genes would allow. This method of development challenges the concept of shared ancestry that the tree of life depicts.

Horizontal Gene Transfer (HGT) presents a complicated picture, with microbes transferring genes among themselves, trading traits within a generation, across species, and even between domains of life.

It may mean that the "tree" of life is more like a network or a web, as Gogarten describes it. Even Darwin wrote in his notes that the "tree" of life might not be the most descriptive metaphor, he points out.

In the past 30 to 40 years, the implications of HGT have caused many biologists to take another look at the way evolution works. Gogarten became interested in the topic in the late 1980s when he was a postdoctoral fellow at the University of California at Santa Cruz. An unintended consequence of his research got him interested in looking at the evolution of life.

He noticed in studying genetic sequences that types of microbes thought to be distinct appeared to have swapped genes with each other. "Genomes change much more rapidly than anyone assumed before," says Gogarten. "The sheer amount of gene swapping that goes on in the microbial world caught us by surprise."

Building a database

One problem with the notion of HGT is that it is sometimes hard to distinguish whether a trait is the result of horizontal or vertical gene transfer. In building a database of HGT for the NSF project, Gogarten will use sophisticated analytical techniques and complex computational programs to analyze more factors and offer a more definitive clearinghouse of information that other scientists can build on. It will enable scientists to recognize patterns in horizontal gene transfer and expand the picture of how evolution occurs in the web of life be discerned?"

Eleven researchers will be involved in the project, including two other co-principal investigators at UConn and co-principal researchers and at the University of Georgia and East Carolina University. Postdoctoral fellows, graduate students, and undergraduate students also will work on the project.

Kenneth Noll, professor of molecular and cell biology in CLAS and a co-principal investigator, will study the Thermotogales use archaeal genes.

R. Thane Papke, assistant professor of molecular and cell biology, and associate PI, works with prokaryotes, the bacteria that thrive in extreme heat and are considered prime examples of horizontal gene transfer. As many as a quarter of their genes seem to have come from archaea, organisms that were first defined as a separate domain of life from bacteria in 1977.

Noll will analyze data to see the impact of HGT on archaea and to find out how Thermotogales use archaeal genes.

Donna Fournier, professor emerita of physiology, died

BY SHERRY FISHER

Donna Fournier, professor emeritus of physiology, died Nov. 12. She was 72.

Fournier, who lived in Glastonbury, graduated from UConn in 1962 with a bachelor’s degree in zoology/biology.

She went on to study physiology at the University of Connecticut Health Center in Farmington, receiving her doctorate in 1969.

She taught at the Health Center in the School of Medicine as an instructor and then as assistant professor through 1973, when she joined the School of Pharmacy at Storr's as assistant professor of physiology. In 1995, she was appointed associate dean for academic affairs in the School of Pharmacy. She retired in 2002.

The period of her tenure as associate dean was one of intense academic activity, encompassing the planning and development of the new Doctor of Pharmacy degree program, the accreditation of the program, and the admission of the first degree candidates.

Andrea Hubbard, associate dean for the School of Pharmacy, says when Fournier joined the pharmacy school, there were few female faculty. "She paved the way for others to join," says Hubbard.

"As an associate dean," Hubbard adds, "Donna demonstrated patience, compassion, and a real talent for task management." Michael Gerald, former dean of the School of Pharmacy, says Fournier played a major role in getting the Pharm.D. program successfully on the ground.

He says she was "a fine teacher with high standards, who was very committed to the academic process." She was enjoyed by her students, Hubbard adds, and they voted her "Teacher of the Year" in the pharmacy school.

"The award meant a lot to her," she adds, "because it was a recognition of the work and caring she put into the preparation and delivery of her courses."

During her career at UConn, Fournier served on many academic and administrative committees and was a member of the University Senate. She also served as interim director of the UConn Honors Program.

Fournier maintained a lifelong commitment to gardening and cycling, and enjoyed gardening. She is survived by her husband Joseph, a sister and two brothers.
A. Engineering Certification and Acceptance Testing of Electronic Voting Equipment


Simbayi, L. Psychology Nat’l Insts. of Health $152,000 7/08-6/10

Suik, S. Chemistry Transient/Decomposition Catalysts for Biorefinery Production Rohm & Haas Co. $30,000 8/08-1/09

Swaminathan, Educational Psychology H. Migrant Education Program Evaluation Conn. Dept. of Education $151,714 7/08-6/09

Tabor, W. Psychology Nat’l Inst. of Health/ Nat’l Inst. of Child Health & Human Development Self-Organized Sentence Processing and Reading Ability $81,691 1/09-12/11


Tzingounis, A. Physiology & Neurobiology Foundation for the Connecticut Center for Economic Analysis Molecular Components of the Calcium Activated Stow After Hyperpolarization PHS/Natl’ns Insts. of Health $734,178 9/08-8/11

Valiquette, E. Extension Services City of Danbury, Conn. $4,193 7/08-8/09


Whittach, R. Marine Sciences Marine Sciences Nat’l Science Foundation $24,975 8/09-8/09

Windsor, A. Marine Sciences Studies on the Benthic Biology of Mushrooms in New England Nat’l Science Foundation $345,545 9/08-8/11

Yelin, S. Physics City of Danbury, Conn. $20,000 9/08-8/09


ds listed is supplied to the Advance each month by OSP. Additional grants received in September were published in the Dec. 1 issue.

The following grants were received through the Office for Sponsored Programs (OSP) in September 2008. The list represents only new proposals awarded, and excludes continuations. Deans already is scouting for candidates for next year’s national scholarship opportunities.

"We have all these amazing students. They don’t know how amazing they are," she says. "UConn is out there and it’s being done now," she says. "I’m so appreciative that UConn has given me these opportunities."
History professor emeritus John Greene dies at 91

by SHERRY FISHER

John Greene, emeritus professor of history, died Nov. 12. He was 91.

Green, who lived in Pacific Grove, Calif., joined the UConn faculty in 1967 and retired in 1987. His research included the history of evolutionary ideas in Western thought, early American science, and the historical relations of science, religion, and world view.

He turned a longstanding dialogue with two renowned evolutionary biologists into a book, Darwin/Darwin: Adventures of a Scholar (1999). The book focuses on what sparked his interest in the history of evolution and evolutionary thought, and how he came to know 20th-century evolutionary biologists Ernst Mayr and Theodosius Dobzhansky.

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New interdisciplinary format for BGS degree program

By Richard Velleux

The Bachelor of General Studies program has entered a new era. UConn’s 30-year-old BGS program this semester implemented a new format that requires all students to create an interdisciplinary major, falling broadly under one of seven approved themes. “The model we’ve used in the past was based on an individualized major that required students to have a ‘focus,’ while the new program is based on an interdisciplinary major and curricular themes,” says Peter Diplock, director of the BGS program.

Diplock says the primary difference between focuses and themes is that themes offer students an opportunity to select from a broader array of existing UConn courses, while at the same time ensuring they come away with an interdisciplinary education by requiring them to select courses from multiple academic disciplines.

Breadth and depth

The move is consistent with a number of recent developments including an emphasis on interdisciplinary education in UConn’s new academic plan and the increased value being placed by employers on interdisciplinary education.

“The new interdisciplinary major in the BGS program combines the best of both worlds,” says Diplock. “Students realize curriculum breadth through an interdisciplinary design, while being able to realize definition and depth through a tighter emphasis within a particular theme and through pursuit of various existing UConn minors.”

Students admitted to the program prior to fall 2008 who have maintained continuous registration are still eligible to graduate from the new BGS curriculum, he says. “They can talk about the contemporary view of ethnicity and the challenges and opportunities of diversity, and serve as role models for other students in relation to balancing competing life courses. “It’s a journey of significance, of persistence,” Diplock says. “One student received a degree last year 20 years after he started college. Some have been away from school for 10 years; some took courses at five or six schools; others are following a spouse or serving in the military. What binds them is a passion for a quality educational experience.”

The new curriculum, he says, will enhance that experience. “The themes we now have will offer additional options to our students,” says Joel Blatt, an associate professor of history at the Stanford Campus, who has taught hundreds of BGS students during the past three decades. “This lets them obtain a good UConn education, gives them a little more flexibility, and adds options for the students.”

Veronica Makowsky, vice provost for undergraduate education and regional campus administration, agrees. “Interdisciplinarity is now a hot topic in academia and is central to UConn’s recently approved academic plan, she says. “Returning adult students are walking exemplars of interdisciplinarity because of their varied work experiences and educational backgrounds. The new interdisciplinary format for the BGS degree allows these returning adults to further widen their experiences, while organizing their studies according to a broad interdisciplinary theme.

“BGS is central to workforce development,” she adds, “and the new BGS curriculum will help make experienced workers even stronger and more productive.”

The average BGS student comes to UConn with a minimum of 60 earned credits or an associate’s degree, and a GPA of nearly 3.0, says Diplock. But they bring much more to the table. “They bring such rich context for other students in the classes,” he says. “They can talk about the nuances of organizational life, the reality of ethics in the workplace, and the challenges and opportunities of diversity, and serve as role models for other students in relation to balancing competing life commitments.”

Jewish/Christian interfaith marriages focus of sociologist’s study

By Michael Kirk

Professor Arnold Dashefsky, head of the University’s Judaic Studies program, and a team of researchers interviewed nearly 150 mixed Jewish/Christian couples throughout the nation for a study on interfaith marriage in the U.S. Their focus was on what tends to draw interfaith couples to Judaism and what drives them away.

The study explains how intermarriage runs against the established Jewish religious tradition, and explores the tension between that tradition and the way people are living now, with intermarriage having risen steadily since the 1970s, according to Dashefsky, a professor of sociology in the College of Liberal Arts and Sciences.

A key finding in the research was that interfaith couples — who often struggle for acceptance from family and the Jewish community — diverged from the typical interfaith couple in that they were actually more observant of many Jewish traditions than the overall Jewish population.

Participants in Dashefsky’s study, interviewed between 2001 and 2005, exceeded respondents in the most recent National Jewish Population Survey (2000-2001) on a number of measures related to spirituality and religious observances, including lighting Hanukkah and Shabbat candles, attending a Passover Seder, and visiting Israel. Respondents in this survey were also more likely than those in most surveys of the Jewish population to report that their children were being raised as Jews: 72 percent, compared to the national average of one-third.

“These findings,” says Dashefsky, “point to the diversity of experiences among the intermarried, and the need for a diversity of responses to this phenomenon.”

Respondents for the study were taken from four cities in different regions of the nation: the North-east (Boston), the Midwest (Saint Louis), the West (San Francisco Bay Area), and the South (Atlanta). While not a statistical public opinion poll, the study provides important information on the relationship between intermarried couples, Judaism, and the Jewish community today, says Dashefsky.

Asked what pushes them away from Judaism, many interfaith respondents cited perceived rejection by rabbis, family members, and/or the Jewish community; the need to raise their children as Jews; and the questioning of the children’s Jewish identity by extended family members, rabbis, and others.

Those with more positive experiences cited the perceived warmth of the community; the availability of Jewish education classes; acceptance of intermarriage without conversion; and reduced tensions for interfaith couples with Jewish community acceptance.

The study also found that when contemplating marriage, half of all Jewish respondents were concerned about their parents’ reaction to interfaith marriage and whether there might be a problem later about raising the children as Jews. Also, half of Jewish respondents reported that they had a Christmas tree, and about 75 percent said they exchanged Christmas presents.

Based on this study, Dashefsky says, in order to make these couples feel more welcome, “the Jewish community must turn away from the partners of interfaith marriage to the contemporary view of embracing a gentler, more nurturing environment for them, in order to strengthen communal continuity and personal identity.”

The study was presented last summer at the annual meeting of the Association for the Sociology of Religion in Boston. The theme of the conference this year was “Religion Crossing Boundaries.”