

BULLETIN

Volume LXXVIII, Number 11

Friday, February 23, 2007

www.ncsu.edu/BulletinOnline/

NC STATE UNIVERSITY

News for the North Carolina State University Community

'Hot' topic comes to forefront at NC State

Millennium Seminar to address global climate change ...

Dr. Waleed Abdalati, head of NASA's Cryospheric Sciences Branch at the Goddard Space Flight Center (GSFC) in Greenbelt, Md., will discuss global climate change during a Millennium Seminar Series presentation on Wednesday, March 14, at 2 p.m. in Stewart Theatre.

Abdalati is one of the world's pre-eminent experts in the study of global climate change, overseeing NASA-funded research efforts on glaciers, ice sheets, sea ice, and polar climate with the objective of increasing our understanding of changes in the Earth's ice cover. He conducts research on high-latitude glaciers and ice sheets using satellite and airborne instruments and has led or participated in eight field expeditions to remote regions of the Greenland ice sheet and ice caps in the Canadian Arctic.

Since 2000, he has been manager of NASA's Cryospheric Sciences Program and for the last four years he has served as program scientist for NASA's Ice Cloud

and land Elevation Satellite (ICESat). Abdalati has also held positions as head of the Oceans and Ice Branch at NASA GSFC, NASA program scientist for various projects, science analyst for various organizations and a professor of remote sensing, climatology and environmental systems. He has taught and lectured at Johns Hopkins University and the University of Colorado.

Abdalati has received numerous NASA awards including the NASA Exceptional Service Medal, NASA Goddard Space Flight Center (GSFC) Special Act Award, and the NASA Agency Group Honor Award. He also received a Presidential Early Career Award for Scientists and Engineers and recognition from the American Geophysical Union's International Glaciological Society.

Abdalati received his bachelor's degree in mechanical engineering from Syracuse University in 1986, his

SEE MILLENNIUM, PAGE 3

... as will Feb. 26-28 symposium

In light of a recent report issued by many of the world's top scientists concluding that global warming is almost certainly a human-made problem that must be addressed immediately, NC State will hold a symposium on global climate change from Monday, Feb. 26, to Wednesday, Feb. 28.

The three-day event, titled "Global Climate Change: Interdisciplinary Responses," is free and open to the public. The complete schedule is available at www.chass.ncsu.edu/chass/global_warming.

Elizabeth Kolbert, staff writer for *The New Yorker* and author of the book, *Field Notes from a Catastrophe: Man, Nature, and Climate Change*, will kick off the symposium with a keynote address on Monday, Feb. 26, at 7 p.m. in Campus Cinema.

SEE KOLBERT, PAGE 3

Decision made on Hillsborough

It's been a long time coming, but after years of discussions and several postponed votes, the Raleigh City Council voted 6-2 on Tuesday, Feb. 20, to approve a revitalization plan for Hillsborough Street.

The plan, referred to as "H-3," calls for roundabouts at the Pullen Road/Hillsborough Street and Oberlin Road/Groveland Avenue intersections, as well as streetscape improvements such as lights, sidewalk curbs and a raised median in the street. The plan also would add more parking spaces on Hillsborough and bury utility lines.

NC State has been a proponent of the Hillsborough St. project. Chancellor James Oblinger praised the council's decision.

SEE STREET, PAGE 7

Pooles donate \$3M toward golf course

A \$3 million gift from Lonnie C. Poole Jr. and his wife, Carol Lynn Poole, has moved NC State's Centennial Campus golf course a step closer to reality.

The lead gift to the golf course campaign – a key component of the \$1 billion Achieve! Campaign – will allow construction to begin on what will be called The Lonnie Poole Golf Course. Work could begin as early as June, pending the final planning steps. The Palmer Course Design Company has completed the design.

"This course will bring a broad range of benefits to NC State, our students and the community," said Chancellor James Oblinger. "The golf course will support

SEE GOLF, PAGE 3

SENATE, NC STATE LEADERS MEET



Sen. Marc Basnight, majority leader in the N.C. Senate, talks with Chancellor James Oblinger (background) and members of the NC State Board of Trustees during the board's meeting on campus Feb. 16. Basnight visited the board to learn more about the issues that make up the university's list of legislative priorities for the 2007-09 biennium. (Photo by Roger Winstead)

Three to receive Watauga Medal

Elizabeth Johnson Aycock, former N.C. Gov. Robert Scott and the late Randall B. Terry Jr. will be recognized with Watauga Medals at the North Carolina State University Founders' Day Dinner on March 7 at the McKimmon Center.

The Watauga Medals, the highest nonacademic honor bestowed by the university, will be presented by Chancellor James Oblinger. Dr. Oscar Fletcher, former dean of the NC State College of Veterinary Medicine, will accept the award on Terry's behalf.

The Watauga Medal was established in 1975 by the Board of Trustees to honor people who have made significant contributions to the advancement of the university. This year's event – which commemorates the 120th anniversary of the founding of NC State – will begin with a reception at 6:30 p.m. followed by dinner at 7 p.m. Tickets are \$50. Call 919/513-1682 for reservations. Additional information is available online at www.ncsu.edu/watauga.

Aycock, a native of Johnston County who lives in Raleigh, was instrumental in the formation of Research Triangle Park (RTP) and has been a supporter of NC State for more than 70 years. She worked diligently with national and world business and government leaders to help mold RTP into the success that it is today. She also played an integral role as an advocate for the creation

SEE WATAUGA, PAGE 3

Basketball court named in honor of Yow

Following approval by NC State's Board of Trustees, the university announced on Feb. 16 that the Reynolds Coliseum basketball court has been named in honor of longtime women's basketball coach Kay Yow. The surface was christened "Kay Yow Court" prior to the Wolfpack's 72-65 upset victory over No. 2 North Carolina.

In her 32 years at the helm of the Wolfpack women's program, Yow has guided her teams to a 646-303 record. For her 36-year career, she has posted a 703-322 mark.

Yow was coach of the women's gold medal team at the 1988 Olympics in Seoul Korea.

On Sept. 27, 2002, Yow was inducted into the Naismith Memorial Basketball Hall of Fame alongside Earvin "Magic" Johnson, coaches Larry Brown and Lute Olson, and the world-famous Harlem Globetrotters.

"No one in the history of NC State athletics has brought more honor to this university than Kay Yow," said Chancellor James Oblinger. "She is truly deserving of this recognition."

"This is a unique and fitting tribute," added Lee Fowler, director of athletics. "We are proud to be able to commemorate all of the success she has enjoyed and the years of hard work she has put in by naming the court in her honor."

Following the victory over North Carolina, Yow said she was humbled by the honor of being the second women's college basketball coach to have a court named in her honor. Tennessee's Pat Summitt is the other.

"I didn't know what to think," Yow said. "There have been so many great



NC State women's basketball coach Kay Yow stands on the Reynolds Coliseum court that has now been named in her honor. (Photo by Tim Peeler)

coaches and great players who have played in this arena and I just hope that with the court named after me that I would represent them in a class way. I hope it says a lot for everybody who has been in this building. I always wanted to add to

and grateful to be a part of it. Spending 32 years in Reynolds Coliseum means a lot to me. I think of her as a grand old lady and one of my best buddies."

Yow's Wolfpack teams have advanced to 19 of the 25 NCAA Tournaments, a mark which ranks 10th among active Division I coaches. She directed NC State to the 1998 Final Four and to 10 "Sweet 16" appearances.

Entering this season, Yow had averaged 20 wins a year with the Wolfpack women, and on Feb. 5, she became just the sixth Division I women's basketball coach to earn 700 career victories.

This season has been a particularly tough one for Yow and the program. She was forced to take a leave of absence in November after her doctor detected a progression of her breast cancer. Yow missed 16 games before announcing her comeback on Jan. 22. ■

"No one in the history of NC State athletics has brought more honor to this university than Kay Yow."

— CHANCELLOR JAMES OBLINGER
REGARDING NC STATE WOMEN'S BASKETBALL COACH KAY YOW

Reynolds' legacy. I remember my dad bringing me to the Dixie Classic when I was a little girl. So I have memories for a long time here. It's quite exciting.

"I don't know that I am worthy of it, but I am certainly honored, and humbled,

Arts NC State honors Greggs with naming, endowment

The Gallery of Art & Design has been renamed the John N. and Nancy C. Gregg Museum of Art & Design in memory of the late John Nathan Gregg Sr. and in honor of his wife, Nancy C. Gregg, Arts NC State has announced.

A privately supported \$750,000 endowment was also created in the Greggs' name to support the exhibition, care and further development of the museum's textile collection. The naming ceremony will take place at noon on Sunday, April 29, at the museum, followed by a champagne brunch sponsored by Arts NC State and the Friends of the Gregg Museum Board of Directors.

John Gregg was a distinguished graduate of the College of Textiles (1955) and served the university and the textiles industry in a variety of leadership roles. He was a professor in textiles, and served as chair of the university's Board of Trustees (1989-1990), and president of the NC Textiles Foundation board (1985). He was the recipient of the Textiles Distinguished

Service Award in 1983 and the Watauga Medal, the university's highest non-academic honor, in 1985. Gregg was CEO and chairman of Avtex Fibers from 1976-1990, a regional textile business with more than \$200 million in annual sales.

Nancy Gregg is an active volunteer in the Raleigh arts community, having served as a member of the Raleigh Fine Arts Society, a docent at the North Carolina Museum of Art, the Friends of the Arts NC State Board of Advisors and president of NC State's Friends of the Gallery Board of Directors. In 2004, Arts NC State awarded her the Bowers Medal of Arts, which is presented to individuals and organizations that have demonstrated excellence and leadership to the visual and performing arts programs at NC State.

John Gregg was instrumental in the creation of the Gallery of Art & Design. He championed a museum focused on the university's curricula – textiles, design, engineering, and humanities and social sciences – that would enable faculty and

Textiles receives \$1M software gift

Researchers in the College of Textiles have received a software donation valued at more than \$1 million from Alignment Software that could help shape the future of the nonwoven textiles industry and enhance the common, everyday products associated with it.

Textiles researchers hope the donation of Vision Strategist software, along with assistance from Roadmapping Professionals Inc., will help them create interactive technology roadmaps for the nonwovens industry. Industry technology roadmaps are strategic plans that help to align research, development and the application of technology with business goals.

The nonwoven fabrics industry is one of the fastest growing sectors of the textile business, and generates products from a variety of fields including hygiene, medical, transportation and building applications. Business leaders utilize roadmaps to determine industry direction by using computer models to help analyze and assess technology developments based on factors such as raw materials, workforce, innovation and infrastructure.

The goal of the roadmapping project is to bring together university and business leaders from the nonwoven textiles industry to assess and identify current and future technology needs and trends for industry growth. The roadmapping process allows organizations to collaborate on ideas for future products and technologies and implement a plan to achieve their objectives.

The College of Textiles houses the Nonwovens Cooperative Research Center (NCRC), which enables textiles faculty and students to work directly with industry professionals in developing technology roadmaps. Several other companies and organizations, including Corning, Honeywell, Lockheed Martin, Motorola, NASA and the U.S. military, have utilized Alignment Software's products to develop technology and product plans. ■

students to create unique educational experiences. Gregg was directly involved in raising funds for building the museum as well as helping to assemble the museum's diverse textile collection.

Gregg expected the museum to develop a national presence that would call attention the state's significant textile history. While textiles have always been a large part of the museum's collection, its assets have grown to more than 25,000 pieces that include ceramics, furniture, glass, metal, photography, works on paper, visionary art and important industrial design objects. ■

BULLETIN

North Carolina State University
Raleigh, North Carolina
Dr. James Oblinger, Chancellor



The *Bulletin*, NC State University's faculty and staff newspaper, is produced by NC State News Services. It is published every third Friday during the academic year and once per month during the summer.

Editor

Benny Benton

Contributors

Claire Ashby, Chad Austin, Chelcy Boyer, Lauren Gregg, Art Latham, Mick Kulikowski, Keith Nichols, Kathi McBlief, Tracey Peake and Tim Peeler

Distribution to faculty and staff

Office managers should notify the *Bulletin* staff in writing to change the number of copies received at their campus box numbers.

Deadlines

Information may be sent by mail to *Bulletin*, Box 7504, by fax to 515-2556 or by e-mail to bulletin@ncsu.edu. Deadline is noon Tuesday 10 days before publication. The deadline for the March 16 edition is March 6. For information, call 515-3470 or visit www.ncsu.edu/BulletinOnline/

Golf

CONTINUED FROM PAGE 1

teaching and learning, research, economic development and recreation in many ways. We are excited about this opportunity to recognize and thank our longtime friends and supporters, Lonnie and Carol Lynn Poole."

"North Carolina State University has been good to our family and to so many North Carolina families," Lonnie Poole said. "Carol Lynn and I feel very fortunate to be in a position to make a gift that will support and enhance the academic and athletic programs related to the golf course."

Lonnie Poole graduated from NC State in 1959 with a Bachelor of Science in civil engineering. He founded Waste Industries USA Inc. in 1970. Poole has been active on several boards

and foundations at NC State and has contributed to several fund-raising campaigns. He currently serves on the NC State Foundation Board and is former chair. He also is a member of the Board of Trustees of The Endowment Fund of NC State University.

The Arnold Palmer Signature Course is planned as an 18-hole, 7,025-yard, par-71 public course. In addition to serving as a recreational amenity, it will enhance the academic and programmatic mission of the university, provide a critical research and teaching tool, serve as a living laboratory for the university's nationally recognized turfgrass program, provide a home for the university's PGA-sanctioned Professional Golf Management program and also serve as a venue for the NC State golf teams. The course is particularly important to the teaching of golf course professionals and will be a boost to the turfgrass program. The university is one of only 16

schools in the nation accredited by the PGA of America to offer a Bachelor of Science in professional golf management (PGM). PGM students learn how to combine the best practices for managing the business of golf with the best stewardship of natural resources. The turfgrass program is one of the largest and best known in the country.

The environmentally friendly course and facilities will cover about 200 acres in the southern portion of Centennial Campus. Eventually, the facility will include a clubhouse and a 12,000-square-foot building that will house classrooms, working labs, meeting and conference rooms, and offices.

The plan is to open the golf course in spring 2009. NC State continues to raise funds for the project, which carries a total cost of about \$11.6 million – all of which will be raised through private donations. ■

Watauga

CONTINUED FROM PAGE 1

of NC State's College of Veterinary Medicine.

Aycock has served on numerous boards and commissions – including the NC State Education Foundation – and was a charter member of the advisory board of ENCORE, an NC State program for lifelong enrichment. She was recently named a lifetime honorary member of the North Carolina 4-H Development Fund. Aycock also served on the NC Employment Securities Commission Advisory Council, the regional board of Wachovia Bank and the Triangle Universities Center for Advanced Studies Inc. as a trustee on the board, and as corporate secretary and assistant treasurer.

Scott, a native of Haw River, received his bachelor's degree from NC State and then served in the U.S. Army for three years. He served as North Carolina's lieutenant governor from 1965 to 1969 and then went on to serve as governor from 1969 to 1973. During his term as governor, he presided over the formation of the 16-campus University of North Carolina system and was instrumental in ensuring NC State's status as one of the two flagship universities in the system. Scott also included funding in his 1969-71 budget proposal for the construction of the Jane S. McKimmon Center for Extension and Continuing Education and was instrumental in the development of NC State's College of Veterinary Medicine.

In 1977, President Jimmy Carter appointed Scott as federal chairman of the Appalachian Regional Commission, which worked to improve water and sewer infrastructure as well as provide business and farming incentive grants. Scott served as president of the North Carolina community college system from 1983 to 1995. He was also an adjunct professor in NC State's Department of Adult and Community College Education.

Terry, a native of High Point, established three scholarship funds in the NC State College of Veterinary Medicine. He also served as president of the college's board of directors for two years. Terry provided one of the largest single gifts to the college by creating the RBT Challenge Fund in 1999 with a cash gift totaling more than \$3.1 million. He also pledged \$25 million over 10 years to help build the Randall B. Terry Jr. Companion Animal Veterinary Medical Center on the college's campus.

Terry represented the College of Veterinary Medicine as a member of the Campaign Steering Committee for Achieve!, the Campaign for NC State. The former president of High Point Enterprises and former director of the International Home Furnishings Market, Terry also served as director of the University of North Carolina Journalism Foundation and as a trustee at Woodberry Forest School in Virginia. He received his bachelor's degree from Duke University and his MBA from UNC-Chapel Hill. ■

Millennium

CONTINUED FROM PAGE 1

master's degree in aerospace engineering from the University of Colorado at Boulder in 1991 and his doctorate in geography (arctic climatology and remote sensing) from the University of Colorado at Boulder in 1996.

Mary P. Easley, first lady of North Carolina and a senior lecturer at NC State, coordinates the Millennium Seminars series. The series provides opportunities for students to interact with world leaders from diverse backgrounds. Presentations address world issues from the speaker's perspective, placing local and national events in a global context. The seminars are designed to engage, encourage and inspire students to reach beyond borders and think more globally about what they have learned, and what their role will be as they move into the workforce. This year's theme is "Innovation, Leadership and Higher Education." ■

Kolbert

CONTINUED FROM PAGE 1

Kolbert will share her experiences in reporting and writing *Field Notes from a Catastrophe*. The book chronicles Kolbert's global travels from Alaska to Iceland to the Netherlands as well as her conversations with scientists and politicians in an attempt to get at the heart of the debate over global warming.

In addition to Kolbert, other leading authorities on global climate change from a variety of disciplines will share insights and address various aspects of the issue over the course of the symposium. On Tuesday, Feb. 27, Dr. Rick Kearney, director of NC State's School of Public and International Affairs, will moderate a panel discussion that will address the social, political and economic issues related to the impact of climate change in various world regions. The panel includes

Elizabeth Bast, international policy analyst for Friends of the Earth in Washington, D.C.; Dr. Andrew Jorgenson, assistant professor of sociology at Washington State University; and Dr. Chris Russell, assistant professor of rhetoric at the University of Minnesota. The panel begins at 4 p.m. in NC State's Talley Student Center Ballroom.

An NC State Arts Now Series concert – which will include compositions inspired by environmental concerns – will follow the panel at 7 p.m. Composers include J. Mark Scearce and Rodney Waschka of NC State, and Thomas Clark of the North Carolina School of the Arts.

On Wednesday, Feb. 28, Dr. David Archer, professor of geophysical sciences at the University of Chicago, will lead a panel along with faculty members from NC State's Department of Marine, Earth and Atmospheric Sciences on understanding the science behind global warming. Archer will make a presentation that involves humor, understandable examples and analogies to convey key global warm-

ing concepts. NC State faculty members who are participating include: Drs. Anantha R. Aiyyer, David J. DeMaster, Daniel L. Kamykowski, Nicholas Meskhidze and Yang Zhang. The panel begins at 3 p.m. in Witherspoon Cinema.

NC State's "Global Climate Change" symposium comes just weeks after the United Nations' Intergovernmental Panel on Climate Change released a report that concluded that global warming has begun, resulting in higher temperatures and increases in sea levels. The panel also concluded that global climate change is "very likely" a problem created by humans, and that the problem "would continue for centuries." The report warned that immediate action must be taken to prevent harmful consequences.

The three-day symposium is sponsored by a number of departments and programs within NC State's College of Humanities and Social Sciences and College of Physical and Mathematical Sciences. ■

EDUCATIONAL SUMMIT



U.S. Secretary of Education Margaret Spellings speaks with Chancellor James Oblinger (right) and former Gov. Jim Hunt (center) during the annual Emerging Issues Forum at the McKimmon Center on Feb. 1. (Photo by Roger Winstead)

Engineers develop 'fat into fuel' conversion process

New biofuels technology developed by NC State engineers has the potential to turn virtually any fat source – vegetable oils, oils from animal fat and even oils from algae – into fuel to power jet airplanes.

The technology – called Centia™, which is derived from “crudus potentia,” or “green power” in Latin – is “100 percent green,” as no petroleum-derived products are added to the process. Centia™ can also be used to make additives for cold-weather biodiesel fuels and holds the potential to fuel automobiles that currently run on gasoline.

NC State received provisional patents to use the process to convert fats into jet fuel or additives for cold-weather biodiesel fuels. The technology has been licensed by Diversified Energy Corp., a privately held Arizona company specializing in the development of advanced alternative and renewable energy technologies and projects.

Dr. William Roberts, professor of mechanical and aerospace engineering and director of the Applied Energy Research

Laboratory at NC State, developed the

Research Roundup

biofuels process with Dr. Henry Lamb, associate professor of chemical and biomolecular engineering; Dr. Larry Stikeleather, professor of biological and agricultural engineering; and Tim Turner of Turner Engineering in Carrboro.

Roberts says that besides being “100 percent green,” the new technology has some key advantages over other biofuel projects.

“We can take virtually any lipid-based feedstock, or raw material with a fat source – including what is perceived as low-quality feedstock like cooking grease – and turn it into virtually any fuel,” Roberts says. “Using low-quality feedstock is typically 30 percent less costly than using corn or canola oils to make fuel. And we’re not competing directly with the food supply, like ethanol-based fuels that are made from corn.”

Engineers develop new plastic recycling technology

Chemical engineers have developed a more efficient way to chemically recycle your soda bottles back into new ones.

Polyethylene terephthalate (PET) is a common plastic used in beverage bottles. Most beverage bottles collected for recycling are reprocessed into non-food products such as fiber and strapping. Only a small percentage of beverage bottles are reprocessed into food-grade PET, or plastic packaging, including beverage bottles. Although there is a demand for recycled bottle-grade PET, the high cost of cleaning post-consumer beverage bottles, strict FDA requirements and old technology

have favored the use of virgin PET over recycled bottle PET in the manufacturing of beverage bottles.

As part of a National Science Foundation grant, Dr. George W. Roberts, retired professor of chemical and biomolecular engineering, Dr. Saad Khan, professor of chemical and biomolecular engineering and director of the chemical engineering graduate program, and Joan Patterson, doctoral student in chemical and biomolecular engineering, have developed a new chemical reprocessing method that can more efficiently convert post-consumer bottle-grade PET into a resin suitable for food-grade applications.

All plastics, including PET, are synthetic polymers. A polymer is a high-molecular-weight chemical compound made up of linked subunits of molecules called monomers. The combining of monomers to form a polymer is called polymerization. Reversing the process is called depolymerization.

Roberts, Khan and Patterson have demonstrated that they can take PET and depolymerize it back to target levels and end up with a material that can be cleaned and repolymerized into bottle-grade PET. “This is one of the few ways of taking food-grade polymers and recycling them back into food-grade applications,” Roberts said.

Engineers create self-propelling microdevices that move in liquid

Dr. Orlin Velev, associate professor of chemical and biomolecular engineering, graduate student Suk Tai Chang and their colleagues have figured out a method to supply microscopic devices with enough energy to not only allow them to propel themselves through liquid – a difficult function in its own right – but also to perform some other functions, like emitting light.

The findings – published in *Nature Materials* – have the potential to lead to “smart devices” or “microrobots” that can interact with their environment and perform certain tasks – like moving, sensing other materials, including biological materials, lighting up and spinning – on their own. The millimeter-sized devices can be controlled externally and have the potential to be powered by radio waves.

“There are very few ways to make microdevices move around, especially in



The new NC State chemical reprocessing method can convert post-consumer PET bottles (center) into a material called a low-molecular-weight oligomer (right), which is suitable for recycling into bottle-grade PET resin (left).

liquid, because as you scale down the size of the device, viscosity plays a more important role. It’s somewhat like swimming in molasses,” Velev said. “We have shown how to provide devices with external energy from electrical fields, which the devices convert into directional motion that can be controlled electronically.”

The researchers took various types of millimeter-sized diodes, or electronic devices containing two electrodes, and placed them in a liquid-filled dish with two external electrodes placed on the outer edges of the dish. The researchers applied alternating electric fields to the electrodes at the outer edges of the dish, which provided energy for the diodes to move on their own. The diodes absorb the



Tiny, self-propelling diodes move (top); move and light up (middle); and spin around (bottom) in liquid.

external field energy and convert it into motion in a process called electro-osmosis.

But the researchers’ self-propelling microdevices do more than just move through liquid. The voltage induced within the devices’ electrodes can be used to perform other functions, like emitting light or spinning around. Velev and his colleagues also controlled the speed at which some diodes move by directing a laser beam at the tiny devices, proving further that the devices can sense their environment and act in certain ways.

This sensing function could be very important, Velev says, if it can be used to separate biological molecules, such as looking for a particular protein and analyzing it. He also envisions future tiny devices that can move through biological fluids for applications like drug delivery or microsurgery.

It's a girl! It's a boy! For confused crustaceans, research finds it's both

Reports of blue crabs exhibiting both male and female sex characteristics in the Chesapeake Bay and other water systems raise a red flag about the environment in which the crabs live, says Dr. Gerald LeBlanc, professor of environmental and molecular toxicology.

And while the definitive cause for these crustaceans’ sexual confusion is unknown, LeBlanc and post-doctoral student Allen Olmstead decided to do some tests on their lab-friendly crustaceans – daphnia, or water fleas – to ferret out some clues to what’s going on in surface waters containing sexually ambiguous crustaceans.

They found that exposing water fleas to moderate levels of a specific hormone – methyl farnesoate – promoted gynandromorphism, or the exhibition of dual sex characteristics, and that the effect was heightened when water fleas were exposed to warmer temperatures at the same time. In addition, numbers of gynandromorphic daphnia rose when they were exposed to a particular pesticide – pyriproxyfen, used to keep pests like mosquitos from breeding – and the effect was increased when the water fleas were also exposed to warmer temperatures.

Economically important animals – crab, lobster, shrimp and crayfish populations – have also been affected by this phenomenon, albeit in low numbers, LeBlanc says. But if these confused animals produce fewer babies – and LeBlanc says studies of these ambiguous animals indeed show reduced baby broods – the impact could eventually be significant.

“The incidence of gynandromorphism seen in the environment is too low to endanger crustacean populations, but something is going on when we see these sexually compromised animals,” LeBlanc says. “It’s a warning signal that something is happening in the environment.” ■

Parking permit increase for '07-08 will be smaller than expected

NC State's faculty, staff and students received a nice Valentine's present from the university's Transportation Department this year.

Citing better efficiency in the use and sale of existing parking spaces, savings from paying off the debt on the Dan Allen Deck earlier than expected, and other cost-saving measures, Transportation officials earlier this month announced that the requested increase in parking permit fees for 2007-08 would be much less than previously projected.

The department had originally anticipated the need for a 7 percent increase in fees for 2007-08 and 2008-09 but, based on the cost savings it has generated, has now recommended a much more modest increase for 2007-08 of around 3 percent for most permit holders – or between 75 cents and \$1 per month.

"We are pleased that the decisions we made and the measures that we have taken have resulted in a cost savings that we are able to pass along to our permit holders," said Tom Kendig, director of Transportation. "We will continue to work to make the system more efficient and minimize the impact of parking costs on NC State's employees."

One area that Transportation hopes to revamp for 2007-08 is the permit classifications for service and departmental vehicles. Officials note that the number of "AV" permits issued in 2006-07 has increased by 13 percent

and the number of "SV" permits has gone up by 11 percent, but no new spaces have been added for either category. These increases have put a strain on AV/SV parking, and also increased the frequency of – or perception of – abuse.

Transportation has proposed creating five specific and distinct permit designations for service and departmental vehicles, based on whether or not the vehicle carries a state license plate, and whether or not the vehicle is used to "provide maintenance and/or repair to campus buildings, equipment and/or infrastructure."

A "load/unload permit/gate card combo" would be established to meet short-term loading and unloading needs (maximum of 30 minutes). Departments would be allowed to purchase a "U" (universal) pass that allows parking in unreserved spaces on a short-term temporary basis to serve department needs, but would no longer be allowed to purchase SV (for individual use), AV, B, C, E or F permits.

The goal of the changes is to shift service/departmental vehicles into areas of lower parking demand, when such a move does not severely cripple those workers' abilities to perform their jobs.

In another notable change, beginning this fall, permits will be issued for a period of three years rather than one year. Transportation anticipates a considerable savings on the costs associated with producing and distributing the permits. ■

Senate mulls online evaluations, GLBT center

The Faculty Senate discussed a number of important topics in their last two meetings, including electronic course evaluations, the establishment of a Gay Lesbian Bisexual Transsexual (GLBT) Center, and more.

University Planning and Analysis (UPA) is leading the design and implementation of a single online system for end-of-course evaluations. Karen Helm, director of UPA, discussed the preliminary results of a pilot process implemented for the fall semester in December. "Overall, the students found the process easy, and out of the 11,000 students who could have participated, we received only 19 Help Desk calls," Helm said.

The pilot process involved seven departments, and each department's response rate ranged from 46 to 74 percent. "We still have a long way to go until we have achieved a satisfactory response for the whole system," Helm said.

UPA plans to work on developing strategies for improving the response rate, including the use of incentives such as allowing students to get their grades earlier if they fill out the evaluation.

UPA is analyzing the data and debriefing the pilot departments, and plans to ask participating students for feedback on making the process better. Helm said the next step is to finish evaluating the pilot process and decide how far to scale up the process in the spring semester.

Helm noted that centralizing the data collection system would improve the quality of the data, and putting it online would make

the data collection far more efficient.

Helm said a that primary goal for the system is insuring data security for both students and faculty. Students want to know that their responses will remain anonymous, while faculty members want to be assured that the results – which are part of the faculty members' personnel file and protected by law – will remain private.

The senate also voted unanimously to support a proposal to establish a Gay Lesbian Bisexual Transsexual (GLBT) Center on campus.

Dr. William Swallow, professor of statistics and primary author of the proposal, told the senate that "the center would serve faculty, staff and students in a variety of ways, and will hopefully create a more welcoming campus climate."

The proposal, developed through the work of the University Diversity Advisory Committee, outlines the need to establish a GLBT Center to provide resources and support for GLBT members of the university community, as well as programs to increase the awareness and sensitivity of the rest of campus.

In other senate business:

The senate voted to endorse the establishment of the Department of Elementary Education.

An issue of concern was raised before the senate about an ongoing debate over whether or not the university should accept donations from the John William Pope Foundation. The senate decided not to take a position on the matter.

BULLETIN BOARD

Calendar entries may be impacted by time change

Daylight Saving Time (DST) begins on March 11 this year, 3 weeks earlier than usual, and ends on Nov. 4, one week later than usual. The Information Technology Division (ITD) strongly recommends that during the four weeks of extended DST, users of calendar software confirm meeting times and include the time in the title of meetings posted in their calendars for these dates. Most computer systems in use on campus should be automatically updated before March 11. However, some meetings previously posted for the extended DST period (March 11-April 1 and Oct. 28 – Nov. 4) may be displayed in calendar software at incorrect times. For current information and DST updates for various operating systems and software, visit <http://itd.ncsu.edu/dst/> or contact the University Help Desk at help@ncsu.edu or 515-HELP.

Skinner retiring after 24 years of service

Doug Skinner, business and technology specialist with Enterprise Application and Database Services, is retiring from the university after 24 years of service. A reception will be held for Skinner on Monday, Feb. 26, from 2-4 p.m. in the Caldwell Hall Lounge.

Symposium planned as memorial to Rose

A daylong symposium will be held on Wednesday, March 14, in memory of Dr. Randy Rose, a member of the NC State toxicology faculty who passed away last May. The symposium, titled "Human Metabolic Interactions of Environmental Chemicals," will bring together invited toxicologists from around the country who share Rose's field of research, and with whom he collaborated. Keynote speakers include Dr. Frank Gonzalez of the National Cancer Institute and Dr. F.P. Guengerich of Vanderbilt University. A complete schedule of speakers is available online at www.tox.ncsu.edu/. A poster session will also be on display. To register for the symposium, contact susan_olsen@ncsu.edu. The symposium is free. Payment for a buffet lunch will be collected on site. To donate to support the symposium, make checks payable to the North Carolina Agricultural Foundation with note "For Toxicology Science Fund" and mail to Campus Box 7645.

Sheldon retiring from Poultry Science

Dr. Brian Sheldon, department extension leader and professor of poultry science, is retiring after 30 years of service. A reception will be held in his honor on Tuesday, March 6, at 3:30 p.m. in the conference room at 216 Scott Hall.

Registration to begin for Spanish business certificate

The Chamber of Commerce and Industry of Madrid and the University of Alcalá de Henares will offer a Spanish business certificate exam at NC State on Thursday, April 19. Registration for this exam will be held Wednesday, March 14 through Monday, March 19 in 313 Withers Hall. Cost is approximately \$120, payable by check or money order. A photocopy of participants' personal ID is required at registration. For more information, contact Ana E. Gray at 515-9311 or gray@social.chass.ncsu.edu.

Student speaker sought for graduation

The student speaker selection process is open to any interested senior graduating at the 2007 Spring Commencement Exercise. Faculty and staff are asked to encourage qualified students to apply by completing the Application for Student Speaker form available in 1008 Harris Hall or at www.ncsu.edu/registrar/graduation/. Qualified applicants will be required to audition on Monday, March 26. Application forms are due by Thursday, March 22. Questions regarding the selection process should be directed to Louis Hunt at 515-1428 or Martha O'Donnell at 515-1427.

Phi Kappa Phi announces nomination criteria

NC State's chapter of the National Honor Society of Phi Kappa Phi, which recognizes and promotes academic achievement in all disciplines for undergraduate and graduate students, has announced its academic criteria for spring nomination:

- Seniors: top 10 percent of class, 3.821 GPA;
- Juniors: top 7.5 percent of class, 3.879 GPA; both classes with at least 45 NCSU hours.
- Graduate students: 4.0 GPA, minimum of 18 letter-graded NCSU graduate hours, no grades less than A-, no grades of U, NR, LA, or IN (If IN or LA grades later clear and the student becomes eligible, contact david_shafer@ncsu.edu).
- DVM Students: 4th year, top 10 percent of class, 3.842 GPA; 3rd year, top 7.5 percent, 3.978 GPA.

Deans have received lists of eligible students, and students have been invited to membership. Those aware of any undergraduates who are eligible, are not already members, and who were not invited should contact Grace Finkle at 513-1846.

The annual induction ceremony will be held on Wed., March 21, at 7 p.m. in Stewart Theatre. Faculty, staff and students are invited to attend.

Faculty and Staff Notes

Of Note

Dr. Keith E. Gubbins, chemical and biomolecular engineering, has

been selected to receive the 2007 American Chemical Society (ACS) Joel Henry Hildebrand Award in the Theoretical and Experimental Chemistry of Liquids



GUBBINS

in recognition of his distinguished contributions to the study of basic and applied statistical mechanics of liquids. He will receive the award in a ceremony on March 27 at the 233rd ACS national meeting in Chicago.

Dr. Christine McGahan, molecular biomedical sciences, has been appointed by U.S. Department of Health and Human Services (DHHS) Secretary Michael Leavitt to a four-year term on the DHHS National Advisory Eye Council. The council is comprised of 12 members charged with making policy recommendations concerning the research, training, public health information, and other national programs involved in blinding eye diseases, visual disorders, preservation of sight, and the health problems of individuals with visual impairments.

Dr. Kathryn Moore, College of Education, was recently elected chair of the Board of Trustees of the Institute for the International Education of Students (IES). The IES is a non-profit study-abroad consortium serving more than 120 colleges and universities.



MOORE

Dr. Marco Buongiorno Nardelli, physics, has composed "Finzione di Interudio" (Fiction of an Interlude),

which will premiere as part of the Raleigh Civic Chamber Orchestra's concert on Sunday, Feb. 25, in the Talley Student Center Ballroom.

Speaking Of...

Marc Amos, human resources, will present a workshop on hiring international employees at the Southern Region Conference of the College and University Professional Association for Human Resources (CUPA-HR) in New Orleans in March.

In Print

Dr. Holly Brewer, history, was awarded the 2006 William Nelson Cromwell Foundation prize for the best work by a junior scholar in the field of American legal history for her book, "By Birth of Consent: Children, Law, and the Anglo-American Revolution in Authority."

Dr. Carl Meyer, mathematics, has been awarded an honorable mention award in the computer and information science category by the Association of American Publishers for a book he co-authored titled, "Google's PageRank and Beyond: The Science of Search Engine Rankings." The award was one of just two given nationally in the category.

Dr. Michael Young, computer science, began service as editor-in-chief of the *Journal of Game Development* in January. The journal is a leading peer-reviewed publication on game development, serving both the game development industry and academic community by presenting original research in areas such as artificial intelligence, computational models of physics, networking, graphics, audio, simulation and real-time performance related to game development.



YOUNG

Grad program in analytics launched

In today's data-driven society, there's a strong need for trained professionals who can make sense out of the vast jumbles of numbers, whether it is uncovering fraud in banking transactions, improving the quality of health care received by patients or predicting which customers will respond to a marketing campaign.

That's what NC State's newly authorized graduate degree program in analytics plans to provide.

NC State's Master of Science in Analytics (MSA), which has begun accepting applicants for its inaugural class,

is an intensive 10-month professional degree that focuses exclusively on the tools, methods and applications of data analytics. The degree consists of an integrated curriculum created specifically for students in the program, beginning with a July "boot camp" that will expose students to the same advanced analytics software tools used in industry today.

The program is offered through the Institute for Advanced Analytics, a newly established unit that will formally open its doors on Centennial Campus later this spring. ■

WINTER WELCOME



The structure on Western Boulevard that serves as a gateway to campus welcomes visitors with an unusual dusting of snow on Thursday, Feb. 1. (Photo by Roger Winstead)

Soil science names head

Dr. Michael Wagger has been named head of the Department of Soil Science in the College of Agriculture and Life Sciences.

His appointment, announced recently by Dr. Johnny Wynne, dean of the college, is retroactive to Dec. 1, 2006. Wagger had served throughout 2006 as interim department head.

"We appreciate Dr. Wagger's leadership during this period," Wynne said.

Wagger, a professor of soil science since 1997, was associate professor from

1991 to 1997 and assistant professor from 1989 to 1991 in the same department. From 1985 to 1989, he was assistant professor in the Department of Crop Science. Prior to that he was a specialist/researcher with North Carolina Cooperative Extension in the Department of Crop Science from 1983 to 1985.

A member of the American Society of Agronomy, both the Soil Science Society of America and of North Carolina, Gamma Sigma Delta and Sigma Xi, Wagger received the university's Faculty Resource Development Award in 2002. He also was named an American Society of Agronomy fellow in 2002.

Wagger holds a doctorate in soil fertility from Kansas State University, a master's degree in soil science and a bachelor's degree in agronomy from the University of Kentucky. ■



WAGGER

Gertrude Cox awards given

The Gertrude Cox Award for Innovative Excellence in Teaching and Learning with Technology annually honors faculty members who have made creative contributions to teaching, learning, and technology at NC State during the previous academic year.

The award was endowed in Fall 2002 and named for "The First Lady of Statistics," who came to NC State in 1940 to establish the university's distinguished Department of Statistics.

This year's award was presented to Carolyn Quarterman in the Department of Foreign Languages and Literatures. Quarterman's American English Pronunciation course (an English as a Second Language, or ESL, course) is rich in multimedia and interaction, and effectively utilizes many of the capabilities of the Web for instructional purposes. These include videos, Flash productions, Breeze productions and many uses of audio materials. She includes several interactive components in the course.

Runner-up for the award was Kimberly Ange-van Heugten in the Department of Animal Science for her online course, Principles of Animal Science Nutrition. A special merit award was given to Martha Scotford in the College of Design for her course, History of Graphic Design, GD 342.

The top Project Award for a major Web tool was awarded to all the team members who developed WebAssign. Dr. John Risley of the Department of Physics accepted the award on the team's behalf. WebAssign was recognized for "its very high level of capability, flexibility, security, and visual appeal in the delivery of homework, testing, and exercises for students over the Web."

An honorable mention in the category was awarded to The Expertiza Platform, which was developed by Dr. Edward Gehringer in computer science. The Expertiza platform is a system, including software, for managing student evaluations of one another's work. ■

Alumni given key leadership roles in Afghanistan, Iraq

Two NC State alumni have assumed leadership positions in Afghanistan and Iraq.

Gen. Dan K. McNeill took command of more than 35,000 U.S. soldiers in Afghanistan in early February. He is the highest-ranking U.S. general to lead troops there. In December, Army Lt. Gen. Raymond T. Odierno, took command of day-to-day operations on the ground in Iraq.

McNeill is one of only 11 four-star generals in the U.S. Army. Last fall, President Bush chose McNeill as commander of the International Security Assistance Force for the North Atlantic Treaty Organization (NATO) in Afghanistan. He served as commanding general of U.S. Army Forces Command at Fort McPherson, Ga.,

before his NATO appointment.

His military career has included command of airborne infantry units at the company, battalion, brigade and corps levels. McNeill commanded the 82nd Airborne Division and later the 18th Airborne Corps at Fort Bragg. In 2000, under his command, Fort Bragg won recognition as one of the two top army posts in the nation. McNeill also commanded almost all of the 7,000 U.S. forces and coordinated the efforts of coalition forces from Canada, Britain and other countries in the fight against terrorism in Afghanistan.

McNeill has completed tours of duty in Vietnam, Korea, Italy, Saudi Arabia, Iraq, Afghanistan, and numerous state-side posts. He has received numerous

awards for his military service including the Legion of Merit Award, Bronze Star Medal and Distinguished Service Medal just to name a few.

McNeill earned a bachelor's degree in wood technology from NC State in 1968 and was commissioned as a second lieutenant through the university's ROTC program. He received an honorary degree from NC State in December 2003.

Odierno serves as the commanding general of Multinational Corps in Iraq and is also the commanding general of U.S. III Corps at Fort Hood, Texas. From 2004 to 2006, Odierno was at the Pentagon serving as the assistant to the chairman of the Joint Chiefs of Staff.

Odierno has a long military career and has served in various roles includ-

ing being assigned to the XVIII Airborne Corps Artillery at Fort Bragg. He was also assigned to Fort Hood as the Commanding General of 4th Infantry Division (Mechanized) from October 2001 to June 2004 during which he deployed the division to Operation Iraqi Freedom and oversaw the capture of Saddam Hussein.

Odierno has received numerous awards including the Army Distinguished Service Medal, Defense Superior Service Medal, Legion of Merit Award, Bronze Star Medal, Army Commendation Medal, and the Army Achievement Medal.

Odierno received his bachelor's degree from the United States Military Academy at West Point in 1976. He received a master's degree in nuclear engineering from NC State in 1986. ■

Libraries offers evening shuttle

The NCSU Libraries has begun an evening shuttle service for patrons leaving D.H. Hill Library.

A six-passenger electric cart will pick up and drop off riders at the Hillsborough Street Wolfline stop, circle the perimeter of the building, and make another stop at the Patterson Hall parking lot during late hours each evening.

The service will run from 7 p.m.-4 a.m., Sunday through Thursday, and 7-10 p.m. on Friday nights.

To access the shuttle or learn more about this service, stop by the express desk at the entrance to D.H. Hill Library or call 515-3364.

The new service is the result of a joint effort by the Libraries and student government, and is a reflection of the university's commitment to student safety. ■

FEBRUARY FREEZE DOESN'T DETER LAKE LEAPERS



Even though the temperature hovered around 35 degrees and the wind chill dipped into the 20s, these brave souls followed through on their commitment to take the "Polar Plunge" into Lake Raleigh on Saturday, Feb. 10. The second annual plunge helped raise money for N.C. Special Olympics. (Photo by Edward Farmer)

EEED announces seed grant award recipients

Each year, the Office of Extension, Engagement and Economic Development sponsors a grant program to encourage faculty and students to become more engaged in addressing the needs of North Carolina's citizens, communities, schools, businesses, industries and governments.

Six projects have been selected to receive University Extension, Engagement and Economic Development Grants ranging from \$9,000 to \$10,000. The projects awarded funding this year are:

- "Physics on the Road" – This project will upgrade the demonstration program used by the Science House to encourage middle and high school students around the state to take physics classes. The enhanced program will develop content and present lively demonstrations throughout the state to show that physics is both exciting and fun
- "Reading Fluency" – Last year, 30 elementary school students participated in a reading program designed by Dr. John

Begeny, assistant professor of psychology, and implemented by NC State students. This grant seeks to expand the program to reach 70 Johnson County second-graders during the current school year.

- "Rural Safety and Health Education Program for Latino Families" – This project, led by Dr. Andrew Behnke in the College of Agricultural and Life Sciences (CALs), will develop and evaluate a community-based rural health and safety program for Latino families in Western North Carolina, and disseminate a program starter-kit through workshops for county extension educators and others in the northeastern and southeastern regions.

- "Camp Woodbine: A Program for Hearing-Impaired Children and Their Families" – This grant to the University Honors Program serves the special needs community through a plan to develop Camp Woodbine, a non-profit program facility serving hearing-impaired children and their families. The camp, located on 115 wooded acres in North

Raleigh adjacent to Falls Lake, encourages the development of communication and social skills, provides education and offers emotional support.

- "On-Farm Conversion of Sweet Sorghum Juice to Bioethanol" – This grant, awarded to Dr. Mari Chinn in CALs, will assist in developing an on-farm sorghum-to-ethanol production system utilizing a crop provided by Gerard Sykes in Nash County. The grant is expected to produce a working on-farm system for N.C. growers interested in supplying their own fuel.

- "Piloting an 'Engaged College' Program" – This grant, awarded to Dr. Patti Clayton, coordinator of NC State's service-learning project, will enhance the capacity of the College of Natural Resources to systematically connect students and faculty with community partners through service learning. This project will serve as a pilot for the development of a new, college-based model for service learning. ■

Street

CONTINUED FROM PAGE 1

"We thank the council members for their hard work on this plan to revitalize Hillsborough Street," Oblinger said. "NC State also is grateful to the voters for their show of support in passing the referendum on Hillsborough. The work that will begin soon is a partnership between the city, the taxpayers and the university. The university is certainly willing to do its part, and we're anxious for the work to get started."

The council had been deadlocked over an earlier version of the plan. Mitchell Silver, the city's planning director, proposed the H-3 compromise. Silver told *The Technician* that renovations could begin as early as the end of this semester or as late as the summer of 2008.

"We'd like to do this while students are out of school, because we don't want to disturb the traffic," Silver said.

The project budget is about \$6 million. In 2005, voters approved about \$3 million for renovations. ■

Feb.-Mar.

23 Friday

Music@NC State Concert

British Brass Band, 7 p.m., Stewart Theatre. Tickets are \$10, <http://ticketcentral.ncsu.edu> or 515-1100

24 Saturday

Women's Tennis Match

Wolfpack vs. University of South Carolina, noon, J.W. Isenhour Tennis Center

25 Sunday

Men's Tennis Match

Wolfpack vs. University of Louisville, 1 p.m., J.W. Isenhour Tennis Center

Music@NC State Concert

Raleigh Civic Chamber Orchestra, 4 p.m., Talley Student Center Ballroom. Tickets are \$10, <http://ticketcentral.ncsu.edu> or 515-1100

26 Monday

Entomology Seminar

"Chemical Communication in the Cabbage Looper Moth: Insights Into the Evolution of Species Specificity of a Signal," Dr. Ken Haynes, University of Kentucky, 11:15 a.m., 2405 Williams Hall

Genetics Seminar

"The Common Sequence Polymorphisms of *Arabidopsis thaliana*," Dr. Richard Clark, Max Planck Institute, Tuebingen, Germany, 1:30 p.m., 2215 Williams Hall

Horticultural Science Seminar

"Ultra-Rapid, Systemic Wound Responses: The First 5 Minutes," Dr. Eric Davies, NC State, 3 p.m., 121 Kilgore Hall

27 Tuesday

Baseball Game

Wolfpack vs. University of North Carolina-Wilmington, 3 p.m., Doak Field

Faculty Senate Meeting

Regular meeting No. 12, 3 p.m., Faculty Senate Chambers, D.H. Hill Library

Plant Biology Seminar

"Mitochondrial Genomes in Maize and its Relatives," Dr. Kathy Newton, University of Missouri, 4 p.m., 101 David Clark Labs

Arts Now! Series Event

Free concert featuring the premiere of "The Fourth Angel," 7 p.m., Talley Student Center Ballroom

Book Reading

Soldier-poet Brian Turner, author of "Here, Bullet," 7:30 p.m., Caldwell Hall Lounge

28 Wednesday

Soil Science Seminar

"Wheat, Triticale and Rye Cover Crops for Continuous Cotton in Conservation Tillage," Mike Carrol, NC State, 3:40 p.m., 2215 Williams Hall

Men's Basketball Game

Wolfpack vs. Wake Forest University, 9

Calendar Submissions

NC State-sponsored events are published in the calendar. Submissions should state the time, date, place, sponsor and title of event, the name of the speaker and his or her affiliation, the admission cost and the name and telephone number of the contact person.

Send items to bulletin@ncsu.edu. You may also mail items to **Calendar Editor, NC State News Services, Box 7504**, or fax to **515-2556**. The deadline is noon, Tuesday, 10 days before the publication date. For the March 16 calendar, the deadline is March 6.

p.m., RBC Center

1 Thursday

Zoology Seminar

Dr. Chris Haney, Defenders of Wildlife, 3:45 p.m., 101 David Clark Labs

Biochemistry Seminar

"The Role of the S2 Accessory Gene of Equine Infectious Anemia Virus in Disease Expression," Dr. Fred Fuller, NC State, 4 p.m., 128-A Polk Hall

Philosophy Seminar

"Objectivism and Relational Good," Dr. Connie Rosati, University of Arizona, 4 p.m., 344 Withers Hall

Softball Games

Wolfpack vs. Elon University, 4 p.m. doubleheader, Walnut Creek Softball Complex

2 Friday

Economics Seminar

"Firms, Bureaucrats and Organized Crime: An Examination of Illicit Interactions," 3 p.m., 4210 Nelson Hall, Dr. Larry Chavis, University of North Carolina-Chapel Hill

3 Saturday

Wrestling Meet

Wolfpack in ACC Championships, all day, Reynolds Coliseum

Men's Tennis Match

Wolfpack vs. U.S. Naval Academy, 10 a.m., and University of North Carolina-Charlotte, 2 p.m., J.W. Isenhour Tennis Center

Softball Games

Wolfpack vs. Florida State University, 1 p.m. doubleheader, Walnut Creek Softball Complex

4 Sunday

Softball Game

Wolfpack vs. Florida State University, noon, Walnut Creek Softball Complex

Women's Tennis Match

Wolfpack vs. Winthrop University, 1 p.m., J.W. Isenhour Tennis Center

5 Monday

Spring Break

No classes scheduled

6 Tuesday

Spring Break

No classes scheduled

7 Wednesday

Spring Break

No classes scheduled

Staff Senate Meeting

Regular meeting No. 8, 10 a.m., Faculty Senate Chambers, D.H. Hill Library

Baseball Game

Wolfpack vs. North Carolina A&T University, 3 p.m., Doak Field

8 Thursday

Spring Break

No classes scheduled

Molecular Biomedical Sciences Seminar

"Development and Application of Canine Genomic Microarrays for Molecular Cytogenetic Analysis of Cancer," Dr. Rachael Thomas, NC State, 12:15 p.m., R101 CVM Research Building

9 Friday

Spring Break

No classes scheduled

Baseball Game

Wolfpack vs. University of Maryland, 3 p.m., Doak Field

Gymnastics Meet

Wolfpack vs. University of Arizona, James Madison University and the College of William & Mary, 7 p.m., Reynolds Coliseum

10 Saturday

Baseball Game

Wolfpack vs. University of Maryland, 2 p.m., Doak Field

11 Sunday

Baseball Game

Wolfpack vs. University of Maryland, 1:30 p.m., Doak Field

12 Monday

Genetics/Bioinformatics Seminar

"Exploring the Causes of Regulatory Variation in Humans," Dr. Manolis Dermitzakis, Wellcome Trust Sanger Institute, Cambridge, England, 1:30 p.m., 2215 Williams Hall

13 Tuesday

Baseball Game

Wolfpack vs. Valparaiso University, 3 p.m., Doak Field

Faculty Senate Meeting

Regular meeting No. 13, 3 p.m., Faculty Senate Chambers, D.H. Hill Library

Ag/Resource Economics Seminar

"Use of Response Surface Modeling to Assess the Cost Effectiveness and Efficiency of Agricultural Ammonia Controls in Addressing Ambient Particulate Matter Pollution in the U.S.," Dr. Bryan Hubbell, U.S. Environmental Protection Agency, 3 p.m., 4210 Nelson Hall

Plant Biology Seminar

"The Maize Retinoblastoma Pathway and its Role in Endoreduplication During Endosperm Development," Dr. Brian Larkins, University of Arizona, 4 p.m., 101 David Clark Labs

14 Wednesday

Baseball Game

Wolfpack vs. Valparaiso University, 3 p.m., Doak Field

Soil Science Seminar

"Agriculture in the Mountains – Farmers

Dig Soil Science," Dr. Greg Hoyt, NC State, 3:40 p.m., 2215 Williams Hall

15 Thursday

Zoology Seminar

"Developing Comprehensive Strategies for Conserving Freshwater Biodiversity: An Example from Missouri," Scott Sowa, University of Missouri, 3:45 p.m., 101 David Clark Labs

Biochemistry Seminar

"Plant Virus Models for Ecology and Evolution," Dr. Marilyn Roossinck, The Samuel Roberts Noble Foundation, 4 p.m., 128-A Polk Hall

16 Friday

Baseball Game

Wolfpack vs. Virginia Tech, 3 p.m., Doak Field

Gymnastics Meet

Wolfpack vs. University of Pittsburgh, 7 p.m., Reynolds Coliseum

Center Stage Concert

Anoushka Shankar, Indian classical sitarist, 8 p.m., Stewart Theatre. Tickets are \$32-\$36, <http://ticketcentral.ncsu.edu> or 515-1100

Ongoing

Crafts Center Gallery Exhibit

"A Show for Students," through March 21, Crafts Center Gallery

Campus Cinema

- "Casino Royale," Feb. 23 and 25, 9 p.m.; Feb. 24, 7 p.m.
- "Ghostbusters," Feb. 23 and 25, 7 p.m.; Feb. 24, 10 p.m., free
- "Earthlings," March 1, 8 p.m., free
- "Black Gold," March 14, 7 p.m., free

College of Design Exhibit

"Jeremy Ficca's Recent Work," through March 3, Brooks Hall Gallery

Gallery of Art & Design Exhibits

"Intern Picks," through March 2, "The Natural World," through May 13, and "Exquisite Entomology: The Beauty of Bugs," March 15-May 13, Gregg Museum of Art & Design

Agenda

Faculty Senate Meeting

Tuesday, Feb. 27
Faculty Senate Chambers
3 p.m. Call to Order

Welcome and Announcements

Approval of Feb. 13 Minutes

Remarks: Dr. Larry Nielsen, provost

Review of Faculty Survey: Nancy Whelchel, University Planning and Analysis

Issues of Concern

Old Business: Revision of Article II of the General Faculty Bylaws

New Business

Reports

Adjournment

Employee Appreciation Week set for March 5-9

The university has chosen "NC State Employees – Caring About North Carolina" as the theme of this year's Employee Appreciation Week, which will be held March 5-9.

Employees will have the opportunity to show how much they care by giving blood, participating in a run/walk to help fight illiteracy, donating canned goods to a local food bank or charity, and learning more about local charities.

"It is our way of acknowledging your dedication, commitment and generosity that helps touch the lives of our students,

our alumni and your fellow North Carolinians," Chancellor James Oblinger said in announcing the week's theme.

As always, the festivities will be highlighted by the Employee Appreciation Day and Benefits Fair, which will take place on Tuesday, March 6, from 10:30 a.m.-2 p.m. at the McKimmon Center.

The event will include free food, drinks and ice cream (while they last), live performances, prizes and much more, including free 10-minute chair massages. Vendors will again be on hand to share information on benefits and perks avail-

able to university employees, and an "Innovation at NC State Room" will showcase the work of various campus departments. Shuttles and buses will be available to take employees to and from Employee Appreciation Day.

Other events during the week include an employee photography contest and ACC basketball tournament viewing party, as well as a number of activities held in conjunction with NC State's baseball game on Wednesday, March 7.

For a complete schedule of events and more, visit www.ncsu.edu/hr/eaw. ■