

## New Curriculum for the the Environment and Ecology will formalize, expand undergraduate and graduate programs

With the creation of the UNC Institute for the Environment in 2007, the University began the process of transferring into the College of Arts and Sciences the administration of two degree programs previously administered by the Institute's predecessor, the Carolina Environmental Program: the BS in Environmental Science and the BA in Environmental Studies. Together with the existing graduate Curriculum for the Ecology, these undergraduate programs will form the basis of the new Curriculum in the Environment and Ecology.

This change comes at the recommendation of a task force commissioned by the Executive Vice Chancellor and Provost Bernadette Gray-Little and the former Interim Dean of the College of Arts and Sciences Madeline Levine to recommend how to handle the increasingly popular environmental academic programs. While the College-based Curriculum will deliver the academic program and confer the degrees, the Institute for the Environment (IE) will

continue to provide the field study experiences, Capstone projects, internships and other experiential learning opportunities that are so important to students' education. (The Bachelor's in Environmental Health Science will continue to be administered through the Gillings School of Global Public Health.)

Dr. David Moreau, who chairs the new Curriculum (see article below), said job one is to use his experience and connections within the College and throughout the University "to bring together faculty in related departments to cooperate on deliver-

ing a rational program of study for undergraduates and graduates. Over the next three years, I want us to give the Curriculum more structure and develop a solid set of courses and improved guidance for students."

Moreau plans to provide more structure by building on courses that students can count on to be offered at regular intervals, primarily in the College of Arts and Sciences, but also drawing on offerings in other UNC schools.



BERNADETTE GRAY-LITTLE

"In a time of limited resources, this move will give us the best opportunity to revitalize these programs. I would like for us to build more integrated, core courses, and to rely more on tenured professors to teach our courses throughout the University," said Moreau, who anticipates several new joint faculty positions between the Curriculum and other departments.

"The development of the Curriculum formalizes Arts and Sciences' commitment to the undergraduate and graduate environmental programs with permanent, shared lines, mobilizing experienced faculty from key departments and creating new faculty and staff lines to support these programs," said IE Director Larry Band. "While we are in a difficult economic situation, this coordination provides us with the ability to strengthen and extend the educational part of the Institute's and the Curriculum's missions with a more diversified, deeper and more comprehensive undergraduate experience."

"The new Curriculum for the Environment and Ecology within the College of Arts and Sciences will build on an already rich portfolio of educational opportunities available to undergraduate and graduate students at UNC," said Gray-Little. "With the Institute for the Environment continuing to provide experiential learning experiences through their field sites, internships and research opportunities for students, environmental education at Carolina continues to expand in its breadth." ❁



DAVID MOREAU

### MOREAU COMES OUT OF RETIREMENT TO CHAIR NEW CURRICULUM

In January, Dr. David H. Moreau, a professor in the Department of City and Regional Planning from 1977 to 2008, became the first chair of UNC's new Curriculum for the the Environment and Ecology in the College of Arts and Sciences. The Curriculum will bring together the administration of two undergraduate environmental degree programs with the graduate Curriculum in Ecology. (See article on new Curriculum above.)

Moreau, a former department chairman and senior associate dean in the College of Arts and Sciences, is a noted expert in water resources and

environmental management. He decided to come out of retirement to accept this challenge, and has been enjoying "meeting with the other departments, sharing the enthusiasm that is there for the Curriculum, and building the key relationships."

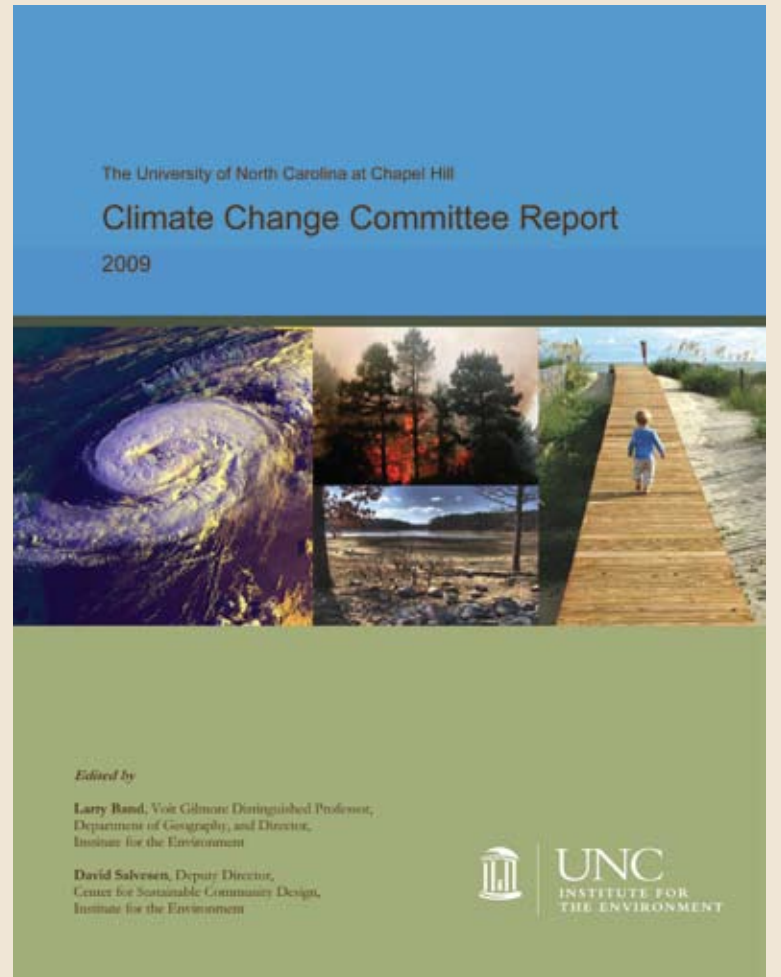
Moreau is former director of the Water Resources Research Institute of the University of North Carolina system, and a member and former chair of the N.C. Environmental Management Commission. He has served on two committees

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# State Senate and UNC General Administration request system-wide climate change report



LARRY BAND



CLIMATE CHANGE COMMITTEE REPORT COVER

In August 2008, the University of North Carolina General Administration and the North Carolina State Senate, in an attempt to better understand the possible future impacts of climate change on the state, asked every school in the UNC system to complete an independent report on climate change. At the request of Executive Vice Chancellor and Provost Bernadette Gray-Little, the Institute for the Environment spearheaded the creation of UNC-Chapel Hill's report.

"The IE was the natural group to turn to, as any comprehensive study of climate change impacts on North Carolina requires an interdisciplinary team from across the campus to handle the complexity and interactions inherent in this challenging issue," said IE Director Larry Band. "As a state we need to

recognize the major threats from climate change, and also the opportunities and options we can work with to mitigate and adapt to a potentially very serious disruption."

The 200-page report was developed by a committee of faculty and staff, and edited by Band and Center for Sustainable Community Design Deputy Director David Salvesen.

"I was very pleased how quickly we were able to assemble a first-class team from multiple departments and schools who were willing to contribute time, energy and talent to produce an impressive and comprehensive product, despite their very busy schedules," Band said. "This is a testament to our faculty's abilities and their dedication to work together to advise deci-

sion makers and improve North Carolina's resilience and quality of life."

"The Institute for the Environment helped spearhead the creation of a report that can have an important impact on the environmental policy decisions being made by state legislators in North Carolina," said Gray-Little. "The faculty who contributed to the report did so in their spare time, and created a report that is in-depth and informative on the environmental issues in which UNC-Chapel Hill excels."

The report was completed in early February, and is available online at [http://www.ie.unc.edu/PDF/Climate\\_Change\\_Report.pdf](http://www.ie.unc.edu/PDF/Climate_Change_Report.pdf).

## HELPING THE LOCAL COMMUNITY RESPOND TO CLIMATE CHANGE BY REDUCING CARBON

**WITH SUPPORT FROM THE WALLACE GENETIC FOUNDATION**, THE INSTITUTE'S ENVIRONMENTAL RESOURCE PROGRAM HAS PROMOTED CARBON REDUCTION IN THE LOCAL COMMUNITY. THIS FALL, ERP PARTNERED WITH THE TOWN OF CHAPEL HILL TO PREPARE LEADERS OF THE CHAPEL HILL YOUTH COUNCIL TO CONDUCT SUSTAINABILITY ACTIVITIES WITH YOUTH.

**DURING A PANEL DISCUSSION** SPONSORED BY THE CHAPEL HILL CHAMBER OF COMMERCE, ERP STAFF DESCRIBED TO REPRESENTATIVES OF 20 LOCAL BUSINESSES CHAPEL HILL'S AND UNC'S CARBON REDUCTION EFFORTS, DISCUSSED THE SCIENTIFIC CONSENSUS THAT COMMUNITIES NEED TO REDUCE CARBON EMISSIONS BY 80 PERCENT BY 2050, AND SUGGESTED WAYS FOR LOCAL BUSINESSES TO DO SO. STAFF ALSO ADVISED MANAGERS OF 16 GROUP HOMES FOR DEVELOPMENTALLY DISABLED CHILDREN AND ADULTS ON HOW TO REDUCE THE "CARBON FOOTPRINTS" OF THEIR FACILITIES.

**THROUGH PROGRAMS WITH THE U.S. EPA AND DURHAM PUBLIC SCHOOLS**, THE ERP HAS INTRODUCED TEACHERS AND ENVIRONMENTAL EDUCATORS TO THE CONCEPTS OF CARBON FOOTPRINTS AND SUSTAINABILITY AND GIVEN THEM HANDS-ON ACTIVITIES TO USE WITH STUDENTS. AND IN OCTOBER, THE ERP LAUNCHED A WEBSITE ([HTTP://WWW.IE.UNC.EDU/CARBON\\_REDUCTION/INDEX.CFM](http://www.ie.unc.edu/carbon_reduction/index.cfm)) THAT ENABLES PEOPLE LIVING IN CHAPEL HILL AND CARRBORO TO CALCULATE AND REDUCE THEIR CARBON FOOTPRINTS. MORE THAN 100 PEOPLE SIGNED ON TO REDUCE THEIR EMISSIONS IN THE FIRST WEEK ALONE.

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## DIRECTOR ANNOUNCES COMMITMENT TO NEW CAROLINA ENVIRONMENTAL SYNTHESIS PROGRAM

As he took the helm of the Institute for the Environment in January, new Director Larry Band announced the launch of a major initiative to unite undergraduate and graduate students with faculty in conducting complex environmental research. The Carolina Environmental Synthesis Program (CESP) will allow UNC-Chapel Hill to tackle, and find solutions to, real and immediate environmental problems in North Carolina.

“The Institute for the Environment will emphasize cross-disciplinary research, education and engagement on critical environmental issues,” Band explained. “We are increasingly recognizing that our environment is a complex, interlinked system which cannot be fully understood or managed by any one discipline. Therefore, we will develop our Carolina Environmental Synthesis Program to draw on and leverage the tremendous talents, insights and interest from diverse programs in the university, including faculty, graduate and undergraduate students, to work collaboratively with external partners.

“In addition to first rate academic research and education, critical policy briefs, guidance and tools will be developed that will make a real difference to our communities and quality of life,” he said.

Each project within the CESP will be proposed by an interdisciplinary group, and will produce tangible outcomes including policy briefs and research publications; unique out-of-classroom student experiences; and public communication, collaboration and outreach focused on the development of understanding and solutions.

The first project, being conducted largely at Lake Jordan and Falls Lake, will focus on storm water protection in developing drinking water supplies, and the challenges of understanding and managing the sources of pollutants in a dynamic and rapidly changing landscape. “This work will require input from faculty and students in the College of Arts and Sciences, Public Health, Law and other schools, including a variety of disciplines, as well as important partners off campus in the public and private sectors,” Band said. “The key component of these programs will be the development of an interdisciplinary, problem-solving culture in which there is recognition, appreciation and mutual education between the disciplines in the development of new, synthetic frameworks for sustaining and improving our environment.”

As the university has been forced to make budget cuts, the IE has endeavored to protect funding for research and education. Funds for the CESP’s first year have come from the IE’s 2007 expansion funding, but to sustain this important program beyond this first year and to add additional projects that respond to the recommendations of Carolina’s UNC Tomorrow commitment, additional funding will be needed. 🌱

## Institute advises state, national leaders on environmental issues

At the request of President Barak Obama’s transition team, IE Deputy Director Philip Berke worked with several UNC-Chapel Hill scholars to provide policy papers to brief the new administration on one of the country’s most challenging environmental issues.

For years, Berke and his colleagues have focused on community resiliency to natural hazards. In two papers on federal disaster mitigation policy reform and on social disparities in the impacts of disasters, Berke, Raymond Burby, David Godschalk and Gavin Smith explained how social disparities – such as the inequalities seen in the aftermath of Hurricane Katrina – arise, and laid out federal policy recommendations for building community capacity to react to natural hazards. They also answered follow-up questions from the President’s transition team.

“We are pleased that they asked for our input on this important issue,” said Berke. “I hope we’ll see some changes in national policy, particularly when it comes to urbanization in high-risk areas, on the coast in the context of sea level rise and coastal hazards, and inland as well. I’d also like to see a national policy that engages disadvantaged communities in the planning process for natural disasters, to create a more environmentally just, shared risk among different populations.”

Before taking office, Governor Bev Perdue’s transition team held a series of open public meetings on a variety of topics critical to North Carolina’s future, including the environment and natural resources, energy, aging, education and transportation. The meetings were facilitated by the Small Business and Technology Development Center, the business and technology extension service of the UNC system. The UNC School of Government assisted with facilitation and was charged with writing reports for each meeting.

At the request of School of Government Dean Mike Smith, Kathleen Gray, the Institute’s associate director for outreach and public service, co-reported for the energy session, along with John Stephens, a faculty member in the School of Government.

Each day-long meeting began with a briefing from a state administrator on the current challenges facing North Carolina. Then, participating stakeholders from industry, the nonprofit sector, academia and government, as well as interested members of the public, spent the rest of the day in facilitated conversations, identifying and prioritizing key challenges facing the state and brainstorming potential solutions. Reports from these meetings will be used by the Governor’s staff to address these issues. Reports are available at [www.bevperdue.com/free\\_details.asp?id=79](http://www.bevperdue.com/free_details.asp?id=79)

In October, a UNC task force that has been helping Camden County with a feasibility study to assess whether building a “green” industrial park there makes sense presented its final report to county leaders and State Senator Marc Basnight. The task force included faculty from the Institute for the Environment, School of Government and the Kenan-Flagler Business School.

David Salvesen, deputy director of the Institute’s Center for Sustainable Community Design and one of the project leaders, shared findings from the study, which was funded by the Golden LEAF Foundation. “We found that there’s a lot of interest in green development in the county, and that while there are many industrial parks in the region, none of them are green. An industrial park in Camden County would have to distinguish itself from the existing parks by going green.”

The other important conclusion is that Camden County cannot pull this off alone. The upfront cost would be much more than the county could afford, so the state and others will have to pitch in to help fund the initial investments in infrastructure that are needed to attract industries to the area, and to hire a consulting firm to prepare a master plan for development of the site.

In December, Salvesen attended a follow-up meeting to answer questions as the group decides how to proceed with planning for this green industrial park, and how to secure funding.

As reported in the fall 2008 issue of this newsletter, the Institute has been helping the University with its response to the environmental portion of the UNC Tomorrow report. According to Kathleen Gray, one of the leaders in coordinating this response, this spring’s focus is on identifying experts and leaders at UNC and other system schools in the areas of water and energy, and pinpointing key issues for the state in these areas. Then, this fall, UNC-Chapel Hill will host a symposium for this group to talk about how universities throughout the UNC system can collaboratively harness

their expertise to most effectively respond to North Carolina’s needs.

The two-day symposium, slated for the 2009–10 academic year, will bring together researchers, decision makers and outreach personnel from public universities around the state. 🌱



OBAMA



PERDUE



BASNIGHT

# As Interim Director, Berke kept momentum going

For the last six months of 2008, Philip Berke piled his full plate even higher: and the UNC Institute for the Environment (IE) is all the better for his willingness to give generously of his time, energy and talent.

Berke, UNC professor of city and regional planning and director of the IE's Center for Sustainable Community Design, spent six months as interim director. He led the IE until January 2009, when Larry Band returned from sabbatical to become the permanent director. The Institute is fortunate that he has agreed to continue as deputy director, focusing in particular on the IE's growing research enterprise.

"Phil stepped into a challenging position and handled a number of important issues with skill and sound judgment," Band stated. "I am very grateful to him for having guided the IE so well while I was in Australia, and am thrilled to have him continue as deputy director."

Berke, who has been involved with environmental issues since he was in graduate school in the late 1970s, has enjoyed taking on these leadership roles "at a time when the environment has really, finally become high on the national agenda for action. It's exciting times for the Institute, and it has been fun to be a part of that, because I see so many things emerg-

ing, both in North Carolina and nationally and internationally."

"I am grateful for the willingness and enthusiasm with which Dr. Berke stepped in to serve as interim director of the Institute for the Environment," said Associate Provost Carol Tresolini. "Phil provided exceptional leadership at a critical time of need for the Institute, and I look forward to continued collaboration with him as deputy director."

With the growing national and global interest in the environment, Berke said the challenge is to keep the momentum going. "We're starting some major initiatives on water and energy, and I think these opportunities will yield some major changes, particularly in urban and rural infrastructure investments and other opportunities to create sustainable development."

As director of the IE's Center for Sustainable Community Design, and with his own research focusing on domestic and international issues in the areas of environmental impacts of urbanization, land use planning, natural hazard mitigation, environmental justice and sustainable development, Berke's plate will remain quite full. (See CSCD article below.)

"These are exciting times, with respect to the environment. It would be ideal if we can view this interim period as a way to reenergize the way we think about our future – in terms of the way we use the resources from our environment, how we build our cities on the landscape, how we protect the ecosystem services that offer critical life support functions to human communities – so we can come up with complementary, integrated strategies to build a more sustainable future," he said. 🌱



PHILIP BERKE

## SUSTAINABLE COMMUNITY DESIGN RESEARCH GOING STRONG

IN OUR LAST NEWSLETTER, WE SHARED SOME OF THE MAJOR PROJECTS UNDERWAY AT THE INSTITUTE'S CENTER FOR SUSTAINABLE COMMUNITY DESIGN (CSCD). ACCORDING TO CSCD DIRECTOR PHIL BERKE AND DEPUTY DIRECTOR DAVID SALVESEN, TWO NEW RESEARCH PROJECTS ARE RAMPING UP AT THE CENTER:

A Cambodian community building in Bayou La Batre, Alabama where UNC and several non-profits are working with town members on disaster preparedness.



1

**AT THE REQUEST OF PRESIDENT PRO TEMPORE** of the Senate Marc Basnight, the CSCD coordinated the preparation of a report on the likely impacts of global climate change on North Carolina. Executive Vice Chancellor and Provost Bernadette Gray-Little convened a meeting of about two dozen leading researchers and scientists on the UNC campus: experts in public health, water supply, land use, ecology, climate change, natural disasters and related topics. The IE, through the CSCD, led the effort to put together the report.

"This was a huge effort, done in a very short timeframe," Salvesen noted.

2

**THE CSCD IS INVOLVED IN** an environmental justice study with the North Carolina Institute for Public Health and MDC Inc. to explore how immigrant Asian populations along the Gulf Coast respond differently to natural disasters such as major hurricanes, as well as the health impacts of natural hazards on these communities.

The study, which spun out of a related project with FEMA and recently received funding from the National Institutes of Health, is examining long-term recovery and sustainable development issues in a minority Asian fishing community in the southern Alabama town of Bayou La Batre after Hurricane Katrina.

Through focus groups and interviews with Bayou La Batre's large Asian population, which includes immigrants from Vietnam, Cambodia, Thailand and Laos, Salvesen and UNC Assistant Professor of City and Regional Planning Mai T. Nguyen have found that this group prepares for, responds to, and recovers from disasters differently than other groups in the community.

For example, Salvesen explained: "Many immigrants, particularly Asian immigrants, don't trust banks or the government, so they might stash their valuables in their house. If there's a big storm coming and they're asked to evacuate, they're less likely to leave because they don't want to leave their valuables behind. Or they may not feel comfortable going to a shelter if people don't speak their language, so they stay in their homes."

Outside aid organizations are often unsure how to tap into this close-knit community to provide assistance, because of cultural and language barriers and lack of familiarity of the right channels to work through.

"Through this study, we're trying to identify those channels and the community leaders, and determine the best way to work with them to help them become better prepared for disasters and to recover more quickly," observed Nguyen.

The study, which is also looking at several disadvantaged communities in the Mid-Atlantic region, could have implications for North Carolina's fast-growing Hispanic immigrant population, as well as for U.S. cities that have large immigrant communities.

"Disadvantaged communities disproportionately bear the risk from natural hazards," Berke noted. "The route to sustainable communities is through justice, and in this context, we're looking at the link between hazards and public health." 🌱

# Perry named director of Manteo field site



Robert Perry and the students of the Fall 2008 Albemarle Ecological Field Site.

Robert Perry of Manteo, N.C., has been appointed permanent director of the UNC Institute for the Environment's Albemarle Ecological Field Site.

The site, one of a network of six such locations in North Carolina and abroad, allows UNC undergraduate students interested in environmental sciences or coastal issues to spend their fall semester in the field studying coastal environmental issues, taking internships with local employers and participating in a semester-long Capstone research project.

Perry has been serving as the Manteo site's interim director since April of 2007. The new appointment became effective January 1, 2009.

Perry will continue to develop the site's curriculum, oversee students' living and educational experiences and teach a course in sustainability. He will also manage every aspect of the field site, from boat and research material maintenance to community relations and fundraising.

"I am delighted to be able to continue serving as director of the Albemarle Ecological Field Site after two years of "on-the-job" preparation," Perry said. "Combining dynamic, interested students with fast-changing coastal systems (speaking meteorologically, biologically and politically) produces a blend of interdisciplinary challenges and undertakings that are profoundly stimulating for the students, the AEFS faculty, and me.

"Because North Carolina's northeast coastal region will likely undergo significant changes over the next several decades, it remains a hotbed of research activity and study," he said. "Roanoke Island remains one of the perfect places for a UNC-Chapel Hill field site."

Before joining the Institute, Perry worked as director of education and environment programs for the Geraldine R. Dodge Foundation for 11 years, and taught environmental science at the high school and college levels for nearly 20 years. He holds degrees from Cornell University and the City University of New York.

Research project topics undertaken at the Manteo site during Perry's two years as interim director include social justice issues surrounding development on a former garbage dump, and public perceptions of climate change in the Outer Banks. ■

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"COMBINING DYNAMIC, INTERESTED STUDENTS WITH FAST-CHANGING COASTAL SYSTEMS (SPEAKING METEOROLOGICALLY, BIOLOGICALLY AND POLITICALLY) PRODUCES A BLEND OF INTERDISCIPLINARY CHALLENGES AND UNDERTAKINGS THAT ARE PROFOUNDLY STIMULATING FOR THE STUDENTS, THE AEFS FACULTY, AND ME."

Robert Perry  
Director of the Albemarle Ecological Field Site in Manteo

*Moreau, continued from page 1*

of the National Academies' National Research Council: he is currently on the Committee on Independent Scientific Assessment of Progress Toward Restoration of the Everglades, and recently completed work on the Committee on Hypoxia and the Mississippi River and Gulf of Mexico. He is also the U.S. representative on an advisory committee for the Royal Bank of Canada (RBC) Blue Water Program.

In addition to his work on the Curriculum, Moreau is working with his Carolina colleagues on an effort to establish a water resources program within UNC.

"David Moreau is an excellent choice to head the new Curriculum in the Environment and Ecology," said IE Director Larry Band. "He brings the per-

fect combination of environmental science, management and administrative experience to the task. David's and my background and work complement each other, particularly in the area of water resources and hydrology, and we work very well together."

"David Moreau is highly regarded for his expertise on water quality and other environmental issues," said Karen Gil, senior associate dean for social sciences and international programs in the College. "He is the perfect person to lead the new Curriculum for the Environment and Ecology and to develop a long-term vision for its future in collaboration with the Institute for the Environment." ■

## UNC Environment student will head to England on Rhodes Scholarship

**A**isha Ihab Saad, a UNC student who will earn a BSPH in Environmental Health Science in May, has received a prestigious Rhodes Scholarship to pursue international study.

Saad, a Morehead-Cain Scholar who is dual majoring in Spanish, will head to Oxford University next year as a Rhodes Scholar. She plans to use her scholarship to pursue a master's degree in nature, society and environmental policy at Oxford. As part of her UNC education, Saad has interned with government ministries in Peru and on the blood diseases ward of Cairo University's Teaching Hospitals. Last summer, she interned with Cherokee Investment Partners, which works to redevelop contaminated land. She went to India to better understand why activist groups there weren't supporting the company's plans.

Saad, who hails from Cary, NC, is particularly interested in studying environmental justice and bringing together opposing groups to create sustainable global development, and would eventually like to pursue a degree in environmental law.

"Aisha was a delight to have in class," said IE Associate Director for Education Greg Gangi. "She always came to class prepared and was always engaged. I quickly developed the impression that she is a student who is very passionate about learning and applying what she learns to make the world a better place." ■



AISHA SAAD

## INSTITUTE RELIES ON, APPRECIATES MAJOR GIFTS

**W**ith the current economy and with state budget cuts rising, the IE is relying more and more on major grants to support the vital research, education and outreach efforts we pursue on campus and beyond. With a cut in our state funding impending next fiscal year, the IE greatly appreciates the awards and donations we've received this year.

Among the most important is a grant from the Park Foundation, whose generous unrestricted funding will allow IE Director Larry Band to further the important water research that already excels at Carolina. "The Park Foundation has provided a very generous gift to support our research, engagement and educational mission," Band said. "Our faculty and students will use these resources to conduct a major study of drinking water sustainability in our developing watersheds in North Carolina and elsewhere. We are very grateful to the Park Foundation for recognizing the critical nature of these problems, and their confidence in us to work with, and provide, key science and social science outcomes in support of solutions."

The Institute's Environmental Resource Program (ERP) recently received funding from the Burroughs Wellcome Fund Student Science Enrichment Program to implement a new program, "Climate Leadership and Energy Awareness Program (Climate LEAP)," over the next three years. The program will engage rising 9th to 12th grade students in Chapel Hill and Carrboro in interdisciplinary, hands-on science and mathematics activities, and will provide opportunities to develop science communication and leadership skills.

"This is a new and exciting opportunity for ERP to reach out to students in our community," said Program Director and ERP Science Educator Dana Haine. "We'll be doing things students wouldn't have time to do in a traditional science curriculum. It will be fun, but it will also be 'brains-on' work."

Climate LEAP students will participate in a one-week, non-residential

Summer Institute on the UNC-Chapel Hill campus, and several half-day Saturday Academies during the academic year. In addition, students will conduct a climate change outreach project and receive community service hours towards their high school graduation requirement.

The mix of lectures, lab tours, activities and field trips will help the students see where science is happening, not just hear about it, Haine said. "We're going to highlight the work of IE faculty, and also the sustainable building measures UNC has taken on campus. We're very grateful for this new opportunity."

Also significant is renewed funding from Progress Energy, which will continue to support the work of the Center for Sustainable Energy, Environment and Economic Development (C-SEED), as well as monthly meetings of the Energy and Environment group. "Progress Energy is allowing UNC to expand our service to the public by providing us with the means to educate the public, K-12 teachers and UNC graduate and undergraduate students," said David McNelis, C-SEED director, research professor and co-director of the Energy and Environment group. "We are grateful for their continuing support."

Finally, a contribution of \$15,000 was given to the Albemarle Ecological Field Site from the Kealy Family Foundation in August 2008. The gift provides funding for general operations, particularly costs involved with student activities such as field trips, equipment and supplies. "I and the AEFS Community Advisory Board, as well as the IE leadership, are extremely grateful to the Kealys for their generosity and warm encouragement in making their grant to the AEFS this past summer," said Robert Perry, director of the AEFS. "It has proven to be wonderfully helpful."

The IE is grateful for the support of these and all constituents, who help us continue to further our mission of providing environmental leadership to the people of UNC, North Carolina and the world. ■

# PEOPLE NEWS AT THE INSTITUTE

## IE welcomes two new board members

**WILLIAM "BILLY" PIZER, PHD**, has joined the UNC Institute for the Environment Board of Visitors. Pizer is the deputy assistant secretary for environment and energy at the U.S. Department of the Treasury, where he leads a new office created by former Secretary Hank Paulson to develop, coordinate and execute the Treasury Department's role in the domestic and international environment and energy agenda of the United States. Prior to coming to Treasury, Pizer was a senior fellow and research director at Resources for the Future, where his research looked at how the design of environmental policy affects costs and environmental effectiveness, often related to global climate change. He holds a BS in physics from the University of North Carolina at Chapel Hill, and a PhD in economics from Harvard University.

**J. ADAM RIGGSBEE, PHD** has also joined the IE's Board of Visitors. Riggsbee is an environmental scientist with Restoration Systems, LLC, an ecological restoration firm based in Raleigh, where he leads the company's dam removal and water quality trading operations. He began working with Restoration Systems in 2006 after earning a doctorate from the Department of Environmental Sciences and Engineering at the University of North Carolina at Chapel Hill. He participates in research efforts focused on the development and improvement of ecological restoration methods and policy, and is actively involved with several scientific organizations. Riggsbee earned his bachelor's degree at Western Carolina University. 🌿

## IE adds New Faculty Advisory Committee Members

Two UNC-Chapel Hill faculty members have been asked to provide their counsel to the Institute as the newest members of our Faculty Advisory Committee.

**DAVID H. MOREAU, PHD**, the newly appointed chair the Curriculum for the Environment and Ecology in the College of Arts and Sciences and research professor of City and Regional Planning, has joined the Faculty Advisory Committee as an ex-officio member. See article on page 1 of this newsletter for more information on Moreau.

**CAROL A. SEAGLE, PHD**, is director of the Center for Sustainable Enterprise and adjunct professor of Strategy and Entrepreneurship at the UNC Kenan-Flagler Business School. She teaches sustainable enterprise, including Environmental Strategy and Sustainable Design, in the MBA Program. Her research concerns the biogeochemistry of organic carbon, the fate of organic carbon in marine sediment, climate change and nutrient cycling.

Seagle joined UNC after working at the U.S. Environmental Protection Agency as an editor and science writer. She earned her PhD from UNC's Department of Marine Sciences, her MBA from UNC Kenan-Flagler and her BS in biology from the University of Scranton, where she minored in biochemistry and philosophy. 🌿

## NEW FACES

**DAWN BUDAY** is the Institute for the Environment's new administrative support associate, stationed in the IE's Bank of America building sixth floor suite. Buday's duties include providing assistance to the faculty and staff working in the BOA suite, providing support for Institute Director Larry Band, assisting with the Center for Environmental Modeling for Policy Development group's CMAS project, and more. Prior to coming to the IE, Buday worked for 10 years assisting physicians seeking to obtain medical licenses. Before that, she worked for many years in accounting.

**SONYA P. WATSON** has joined the Institute for the Environment as grants manager. She comes to the IE from the UNC Department of Biology, where she worked as an accounting specialist for five and a half years. Watson has worked at UNC for 17 years, and has extensive accounting and grants management experience. She will support principal investigators running grants through the IE with pre- and post-award assistance; she will also provide support for the business manager. 🌿

**UPCOMING  
INSTITUTE EVENTS**

Spring 2009 Commencement

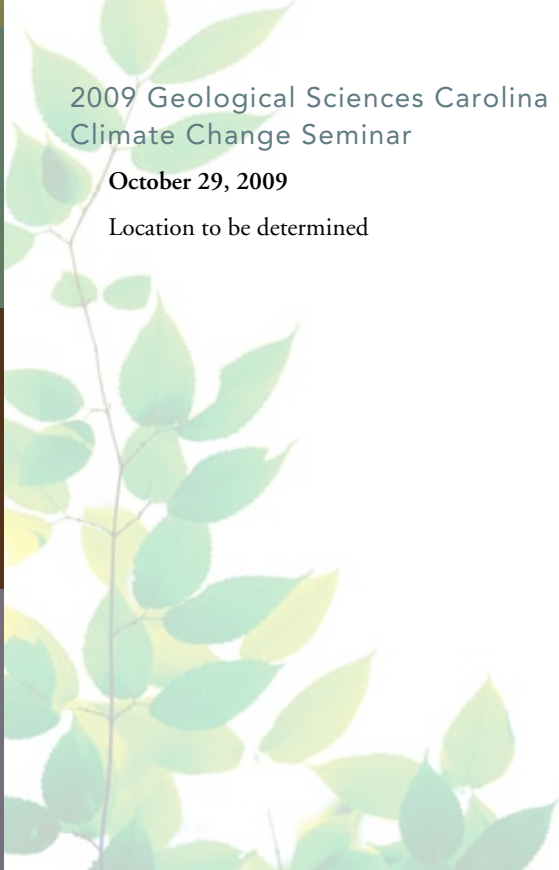
May 10, 2009, 1:00 p.m.  
Fed Ex Global Education Center  
Speaker: The Honorable Lucy T. Allen,  
Representative, North Carolina House (D-49)

Fall Board Meeting

October 2, 2009  
North Carolina Botanical Garden Visitor's Center

2009 Geological Sciences Carolina  
Climate Change Seminar

October 29, 2009  
Location to be determined



**RECENT INSTITUTE EVENTS**



PHILIP SINGER

On November 5 and 6, 2008, the Institute for the Environment hosted "Safe and Sustainable Drinking Water in Developing and Developed Countries: Where Science Meets Policy" at the William and Ida Friday Center. The symposium showcased advances in scientific understanding and technology, as well as innovative policies for managing water resources worldwide. Nearly 100 water researchers from around the world attended.

Presentation topics included controlling chemical contaminants in water, comparing investments in treating water versus vaccinating people against water-borne diseases, and how to implement regulations to provide water to the greatest amount of people. Philip C. Singer, PhD, Daniel A. Okun distinguished professor of Environmental Engineering at the UNC Gillings School of Global Public Health, served as the symposium chair. Additional support was provided by the UNC Gillings School of Global Public Health. 🌿



ROBIN WEST

On Nov. 19, 2008, Mr. J. Robinson West spoke to a packed Murphey Hall audience of faculty, students and community members on "The Energy Crisis: How did we get here and where do we go?" West is founding president of PFC Energy, a global energy consulting firm, and chair of the board of the U.S. Institute of Peace. He is also a former assistant secretary of the Interior, and University of North Carolina-Chapel Hill alum.

West presented information on the current global energy situation, and answered questions from the audience about how future generations will fuel their societies. While on campus, he also spoke with the UNC Energy and Environment group, a consortium of graduate students and their faculty advisors who perform research on energy technology and policy. Additional support for his visit was provided by the Department of Public Policy, the Public Policy Majors Union, and The Roosevelt Institution. 🌿

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