UNO Research Magazine - Spring 2012

Office of Research and Sponsored Programs

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Stewards of the Earth

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Spring 2012
Thank you for reading the Research Magazine of the University of New Orleans. Several exciting changes have occurred in the past year, most notably the selection of a new President of the university. Dr. Peter J. Fos was selected as the sixth leader and first President of UNO in January 2012. Dr. Fos has kindly agreed to answer a few questions regarding his vision for the university.

Our cover picture shows the latest excursion of high school students involved in UNO’s summer geoscience field trip. The program is coordinated by Dinah Maygarden of our Pontchartrain Institute for Environmental Sciences (PIES). Twice each summer, UNO offers juniors and seniors from high schools around the country the chance to study geology in the mountain west or environmental ecology in the coastal wetlands of Louisiana.

This issue contains several items related to the School of Naval Architecture and Marine Engineering (NAME) in our College of Engineering. One ONR-funded project involves collaboration between local shipbuilding companies, our National Center for Advanced Manufacturing (NCAM) and Dr. Pingsha Dong of NAME. Friction Stir Welding is a solid-state metal joining process producing high-strength, defect-free joints in metallic materials. The process employs a pin tool with a low rotational speed and applied pressure that “mechanically stirs” two parent materials together to produce a uniform weld. Dr. Dong’s project demonstrates the feasibility of using the technique to manufacture a ship’s hull from titanium alloy producing a vessel with a lower total cost of ownership. UNO and ONR jointly hosted the Titanium Ship Structure Summit in New Orleans on November 7-8, 2011.

Also in this issue we report on a congressional visit to the Netherlands to study how the Dutch have addressed storm surge concerns for their country. Dr. Denise Reed of our Earth and Environmental Sciences Department and PIES was an active participant in the visit which was aimed at learning how the Dutch have responded to their flood disaster of 1953 and how Louisiana might apply what they have learned in light of the flooding of New Orleans and the region following Hurricane Katrina.

I hope you enjoy this issue of the UNO Research Magazine.

Scott L. Whittenburg
Vice President for Research and Economic Development
vpresearch@uno.edu
Dr. Peter J. Fos—New President of UNO

Q&A:

In December Peter J. Fos became the sixth leader and the first president in UNO history (as a member of the University of Louisiana System, UNO is now led by a president). A UNO graduate and New Orleans native, President Fos has extensive experience as an administrator and faculty member with a proven record of conducting research, fundraising, developing collaborative relationships with other academic institutions, and implementing institutional effectiveness and student success programs. Before arriving at UNO, he held positions at the LSU Health Sciences Center, The University of Texas at Tyler, The University of Southern Mississippi and Tulane University.

What were your emotions when you were selected president of UNO?

My emotions were disbelief and excitement. It felt like a dream. Realizing that I have been selected to lead my alma mater is a very exciting opportunity: I have spent 25-plus years in higher education administration, and now I will be able to end my professional career as the first president of my—and my wife’s—alma mater. Wow!

What sort of reception have you gotten from alumni and business leaders since you were selected?

The reception has been overwhelmingly positive. It has been about 18 months since the University of New Orleans had a permanent president and I sense that alumni and business leaders have been waiting for the selection of the new president. As an alumnus and native New Orleanian, I have been able to connect with and engage alumni and business leaders very quickly. I feel that my, and the University’s, relationship with alumni and business leaders will continue to improve.

How has your past experience prepared you for this challenge?

I have been fortunate to have worked for over 20 years at two major research universities which has prepared me to contribute to UNO—an urban research university. I have been able to connect with and engage alumni and business leaders very quickly. I feel that my, and the University’s, relationship with alumni and business leaders will continue to improve.

Students Team Up With Make It Right On Cutting-Edge Street Project

A group of UNO civil engineering students can see the fruits of their labor, and so can anyone else who visits a newly paved city block in the Lower Ninth Ward. Twenty-three students undertook an ambitious senior design project in coordination with the Make It Right Foundation and the City of New Orleans. It’s a project that could have far-reaching implications for the city’s drainage system.

The UNO students did all of the surveys, design work and material testing on a section of North Priest Street between Jourdan Avenue and DeSibonde Street. Instead of conventional concrete, this special test run used pervious concrete and Gravelite base course. Both materials are porous and allow rain water to be stored in the street, as opposed to all of it entering the drainage system.

Make It Right, Brad Pitt’s nonprofit that focuses on rebuilding homes in the Lower Ninth Ward, has frequently used pervious concrete in driveways and sidewalks, but this represents one of the few times anywhere in the country that the material has been used on a city street.

The street will be tested in the coming months to determine its durability and strength. Officials with the City of New Orleans are watching closely to see how this stretch of street holds up. According to engineer Chuck Fromherz, a UNO civil engineering adjunct faculty member, widespread use of pervious concrete in streets could reduce the city’s drainage load by as much as a third, which could greatly improve New Orleans’ frequent street flooding problems.
UNO Launches WhoData.org

UNO’s Department of Planning and Urban Studies (UNO-PLUS) launched WhoData.org, a powerful community data Internet mapping service that gives citizen groups an unprecedented platform to contribute and track information on the progress of New Orleans’ neighborhoods.

Since Hurricane Katrina, many neighborhood groups have independently collected property condition information. WhoData.org empowers these groups by providing them with a collaborative property mapping application that will allow residents to assess their own neighborhoods, highlight properties that show indicators of blight, create their own maps and property lists and share this information with the public.

UNO Shares $3.5 Million Grant to Study Juvenile Justice

UNO is one of three universities to share a three-year, $3.5 million grant to study the long-term behavioral and financial impacts of juvenile justice decision-making. The grant is funded jointly by the John D. and Catherine T. MacArthur Foundation, the Office of Juvenile Justice and Delinquency Prevention and the John D. and Catherine T. MacArthur Foundation.

The project is entitled “Crossroads: Formal vs. Informal Processing in the Juvenile Justice System.” Some youth who violate the law are informally processed, meaning they are diverted from the juvenile justice system. While others with similar histories who are arrested for identical crimes are formally processed, meaning they are put on supervised probation or sent to institutional placement. In many jurisdictions, processing decisions are made in the absence of empirically developed guidelines.

The research project will evaluate juvenile justice policy by examining the social, developmental and economic consequences of processing decisions in addition to evaluating their effects on re-offending. Researchers will study an ethnically diverse sample of 1,200 male juvenile offenders between the ages of 12 and 16 years old from Louisiana, California and Pennsylvania and interview them semi-annually for three years. The outcomes of interest include educational attainment, mental health, employment preparation, social relationships and recidivism as well as their associated economic costs and benefits.

“We’re trying to quantify all that to see if the kids who stay out of the system do better in a lot of ways than kids who are in the system, or vice versa,” says UNO psychology professor Paul Frick.

UNO Gets More than $600,000 For Oyster Project

UNO has received $632,880 from the Louisiana Department of Wildlife and Fisheries (LDWF) to provide information technology and fisheries modeling for the sustainable management of Louisiana’s public oyster seed grounds. UNO’s computer science and biological sciences departments are working on the three-year project.

The LDWF is responsible for closely monitoring the size and health of oysters on nearly 1.7 million acres of public water bottoms. Every year, the LDWF conducts a survey on public oyster seed grounds to determine the size and number of oysters present. Researchers on the project will input this information, along with the acreage of the oyster reef, into a mathematical model. The model, taking into account oyster growth rate and mortality rate, will predict how many oysters fishermen can sustainably harvest without depleting the reef.

UNO Selected For South Korean Shipbuilding Project

UNO has been awarded a 10-year $3 million contract as one of three American university partners on a South Korean shipbuilding research project. UNO, the University of Michigan and the University of Maryland were selected to work with UNO. The UNO principal investigator is Pingsha Dong, the Northrop Grumman Endowed Chair in Shipbuilding and Engineering and director of the Welded Structures Laboratory. Dong, an internationally renowned engineer, will provide advanced research in the areas of welding, fatigue design and analysis, and structural assembly procedures for marine structures.
UNO Research Reveals Early Humans Lived in Riverfront Property

Early humans lived in a riverfront environment in Ethiopia, according to a study published in *Nature Communications* by UNO researchers M. Royhan Gani and Nahid D. Gani. This finding is in contrast to the previous interpretation of early humans living in a woodland environment far from a river. Knowledge of the habitat of early humans is crucial to answering the questions of early human evolution, including the development of bipedalism—walking on two legs.

Some of the earliest known fossils of humans were excavated from Aramis, Ethiopia.

The researchers studied the habitat of *Ardipithecus ramidus*, a 4.4 million-year-old early human found in Aramis, Ethiopia. They interpreted the data to suggest the presence of major rivers and river-margin vegetation. This would place *Ar. ramidus* in a river-margin habitat part of an otherwise savannah landscape. Understanding the landscape inhabited by *Ar. ramidus* will help assess the different theories for the development of early humans.

Professors Team Up For Avondale Project

A group of UNO professors is teaming up with colleagues from other local universities for a collaborative research project on Avondale Shipyard, which is expected to close in 2013. For more than 70 years, the Avondale Shipyard has been an economic engine for the West Bank, metro New Orleans and the entire Gulf Coast. The research project will help inform the public discussion on the future of the shipyard by studying its significance to the region.

Vern Baxter, professor of sociology; Michael Mizell-Nelson, professor of history; and Steve Striffler, professor of anthropology, will collaborate with colleagues from Tulane University, Loyola University New Orleans and Southern University at New Orleans.

Baxter and Striffler are working on a project that examines how Avondale has been critical to the creation of a middle class in New Orleans during the post-World War II era. Mizell-Nelson is exploring the history of Avondale from its origins in the 1930s through today. He will focus on its central role during World War II; its historical importance to the New Orleans business community and its intimate connections to local educational institutions.
As Good As It Gets

Filmmaker James Chressanthis introduces his documentary “No Subtitles Necessary: Laslo & Vilmos” at a screening in the Robert E. Nims Theatre at the UNO Performing Arts Center in September. The screening marked the debut of the theatre’s new, state-of-the-art digital projector. The Barco 4K DLP projector is the highest resolution projector available (four times the resolution of high definition TV). It gives UNO film students the opportunity to view their work as it would be seen in any of the finest theaters in the world.
UNO Awarded $4.8 Million Grant for Titanium Shipbuilding

According to Dong, with recent advances in welding and math-based design for fabrication techniques, this project represents perhaps the most comprehensive exploration of state-of-the-art technologies to date by actually building a full-scale titanium mid-section ship.

Dong is an internationally renowned researcher in the area of welded structures. Over the years, UNO researchers have developed numerous advanced manufacturing and welding process modeling tools, innovative welding process applications and experimental testing facilities for deploying shipbuilding technologies to U.S. shipyards.

The research will be focused on the manufacturability and structural performance of a titanium mid-section ship. Titanium alloys offer many advantages for ship hull applications compared to traditional structural steels and aluminum alloys. For example, titanium alloys are more resistant to corrosion, have a high strength-to-weight ratio and a high resistance to fatigue. However, the cost of materials and the lack of robust welding and joining techniques have prevented the shipbuilding industry from realizing the enormous potential of titanium for ship hull applications, said Pingsha Dong, a professor in the School of Naval Architecture and Marine Engineering.

UNO has been awarded a three-year, $4.8 million grant from the Office of Naval Research to advance the science and technology of titanium shipbuilding.

ANTHROPOLOGY
David Beriss, chair of anthropology, presented “City of Gastronomy: Global Recognition and Local Resilience in New Orleans” at the 72nd annual meeting of the Society for Applied Anthropology, March 29-April 2 in Seattle, Wash.


Martha C. Ward, research professor of anthropology, was a discussant in the panel “Public Policy and Publics in Post-Katrina New Orleans: How Critical Topics Circulate and Shape Recovery Policy.”

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CREATIVE WRITING
Ken Raves, director of the Greater New Orleans Writing Center, recently received an anonymous $50,000 gift for the organization. The gift will enable GNOWC to become a nonprofit affiliate of the Alliance for Young Artists & Writers, a national nonprofit organization that conducts the Scholastic Art and Writing Awards. As a regional affiliate, the GNOWC will distribute information to schools to solicit submissions, provide support during the submissions process and organize local judging for the competitions. To support this venture, the GNOWC is partnering with the Lusher Charter School creative writing program.

EARTH AND ENVIRONMENTAL SCIENCE
Martin O’Connell, associate professor and chair of earth and environmental sciences, and graduate students presented the annual meeting of the Louisiana Chapter of the American Fisheries Society in Lafayette to present the results of various research projects, particularly those related to improving local fisheries. Projects included estimating redfish and brown pelican populations in Barataria Bay, and Collette Crague, research assistant for O’Connell, Mark Kulpa, associate professor of earth and environmental sciences, and graduate students presented research on oil spill data on the Gulf of Mexico. The data was collected and analyzed at UNO’s Pontchartrain Institute for Coastal Oiling.

To support this research, the Education and Environmental Sciences Charter School creative writing program. In addition, a $20,000 grant from the Louisiana Board of Regents has supported a project for the Educational Leadership Department, which is investigating the use of writing in the classroom to improve students’ literacy skills.

ENGINEERING
Rashed Aziz, distinguished professor of electrical engineering, was a member of the steering committee of the 11th International Conference on High-Capacity Optical Networks and Emerging Technologies, Riyadh, Saudi Arabia, Dec. 20-21, 2011.

Edit Kaminsky Bourgeois, chair of the department of computer science, and graduate student Emily Kofta were appointed to the IEEE Technical Committee on Information Theory and Coding (TCITC) for two years, beginning in January 2012. Bourgeois is also serving on the organizing committee of the 2012 IEEE International Conference on Information Theory, which will be held in Hong Kong in July 2012.

ENGLISH
Kathrin McFarland, professor of English, has been appointed to the University of New Orleans English Language and Culture Committee, which is responsible for overseeing the English Language and Culture Program. McFarland is also serving as the advisor for the UNO Chapter of the American Association of University Professors (AAUP). Her research focuses on the use of technology in the classroom, particularly the integration of digital tools into the teaching of writing.

Mary Ellen Cronin, associate professor of education, and graduate students, presented “Reinventing the Rule for Division of Fractions” at the Annual Meeting of the Louisiana Association for Teachers of Mathematics, October 19-21, 2011 in Monroe, La.


Paul Thomas Bole, associate professor and chair of the Department of Educational Policy, Planning and Administration, served as co-chair of the presentation “National Conference on Educational Policy, Planning and Administration.” Bole and his colleagues presented a paper titled “Is the Transformative Potential of Distance Education Being Realized?” at the 2011 National Conference on Educational Policy, Planning and Administration.

Patricia Williams, associate professor and chair of the Pontchartrain Institute for Environmental Sciences, and Bhakar Kaur, associate professor of environmental science, presented a paper titled “Potential Health Effects of Chinese Dry Wall Components: A Preliminary Analysis” at the Air and Waste Management Association’s annual conference June 21-24 in Orlando, Fla.

EDUCATION AND HUMAN DEVELOPMENT

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which he was also represented on the cover of the October issue of American Theatre.

Hamp Overton, associate professor of film, theatre and communication arts, presented “Composition: From Photography to Montage Images,” at the University Film and Video Association conference, August 34 at Emerson University in Boston, Mas.

FINE ARTS

Richard Johnson, professor of fine arts, closed his solo exhibition at Colin Pratt Gallery in New Orleans, La. The show ran from January 24 through February 12 and included mixed-media paintings which, unlike his earlier abstractions, took the history of art and studies of the classical mode as their subject.

Jim Richard, professor of fine arts, exhibited his work in “Then and Now,” a survey of artists whose contribution had significantly changed the development of the contemporary art scene in New Orleans. The celebration of the 150th anniversary of the Contemporary Arts Center in New Orleans, La., ended June 12. Richard held his first solo exhibition at Jeff Davis in the Chelsea neighbor-

hood of New York, NY from November 17, 2011 – January 1, 2012. This was the 10th solo exhibition of his career. Richard’s collages and gospele paintings joined tarskge oil on linen works.

Jain Rutschin, fine arts instructor, had a pair of exhibitions, and Tony Camp- bell, artist in residence, were curated into “Catharsis,” an exhibit at Space 301 in Mobile, AL, from September 14, 2011, to November 26. The show was held at the Academia Center of the Arts in Latellae, La. May 4-July 9.

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Focus

John L. Renne, early research professor of planning and urban studies and associate director of the UNO Transportation Institute, has been invited by the National Endowment for the Humanities to participate in a virtual roundtable, "A Systems Approach to Disaster Recovery: First Days" in Dayton, Ohio, and Old Dominion University’s Public Service Week in Norfolk, Va.

Salmon Shomade, assistant professor of political science and pre-law advisor, recently had two manuscripts accepted for publication: "Sentencing Patterns of Drug Court Judges in Conventional Criminal Courts," to be published by Judicature and "The Confrontation Obstacle Course: Signaling Opposition through Delay," co-authored with Lisa M. Holmes and Roger E. Hunter to be published by The American Review of Politics.

PONTCIARTAIN INSTITUTE FOR ENVIRONMENTAL SCIENCES
Patricia M. Williams, coordinator for Toxicology Research Laboratories and associate professor, was an invited speaker at the 42nd annual meeting of the Environmental Mutagen Society, October 15-19, 2011 in Montreal, Quebec. Williams is a diplomate of the American Board of Toxicology and co-presented in a symposium on "Environmental Oil Contamination: Effects on Marine Life and Human Life." She presented "Are Seafood Safety Considerations Adequate to Prevent Chronic Health Effects of the Deep Water Horizon Oil Spill on Coastal Louisiana Residents?"

PSYCHOLOGY
Paul J. Fricke, university distinguished professor and chair of psychology, finished his five-year term on December 31, 2011, as editor of the Journal of Clinical Child and Adolescent Psychology, the official journal for the Society of Clinical Child and Adolescent Psychology (Division 53), American Psychological Association. During his term as editor, the journal increased its impact factor from 2.015 in 2005 to 3.342 in 2010.

Elizabeth (Birdie) Shirtliff, early research professor of psychology, received two National Institutes of Health grants in August 2011. One is to examine biobehavioral mechanisms for severe disruptive behavior in adolescent girls. The other is to move the stress field forward with the VeriFy device, a new tool to improve control measurement. Shirtliff co-authored a review entitled "The Adaptive Calibration Model of Stress Responsivity" that appeared in the March 2011 issue of the international journal Neuroscience and Biobehavioral Reviews, the official journal of the International Behavioral Neuroscience Society. Shirtliff, and evolutionary psychologist Marco Del Giudice of the University of Turin and Bruce Ellis of the University of Arizona conclude in the review that, contrary to popular belief, stress is actually beneficial to the human body.

SOCIOLoGY
Francis O. Adeola, professor of sociology and associate professor, was an invited speaker at the Conference on "Disaster Management: A Systems Approach to Disaster Recovery: Four Pillars of Disaster-Resilient Communities." The conference, San Jose, Calif., "An Analysis of the Evacuation of New Orleans: The Greater U.S.A., at the American Society for Public Administration national conference, San Jose, Calif., "Haiti and Emergency Management," at the national conference for the American Society for Public Administration, San Jose, Calif., and "Catastrophes," at the American Society for Public Administration. He has also been appointed to the editorial board of the Journal of Public Affairs Education. In March, he presented a paper and chaired a panel on "Critical Infrastructures Mitigation at the American Society for Public Administration national conference in Baltimore, Md.


Robert Montjoy, research professor of political science, was an invited speaker on university-community engagement at both the Kettering Foundation’s "Dayton Days" in Dayton, Ohio, and Old Dominion University’s Public Service Week in Norfolk, Va.

Anne Boyd Rioux, professor of English and women’s and gender studies, received a National Endowment for the Humanities fellowship for one year to write a biography, under contract with the Johns Hopkins University Press, of the American writer Constance Fenimore Woolson.

Will Torrey, English instructor, was awarded the 2011 Zone 3 prize in fiction for his short story "Tulsa.

M.O. Walsh, visiting assistant professor of English, won the 2011 William Faulkner-William Wisdom Award for his novel in progress entitled Whistleblow. He received a cash award and commemorative gold medal at the Faulkner Society’s annual Words and Music gala in November.
DUTCH LESSONS
By Adam Norris

Known the world over for picturesque windmills and vivid fields of tulips, the Netherlands also draws international acclaim for its water management and flood protection system, which is considered the global gold standard.
The infrastructure alone is extraordinary. The Delta Works, with its massive storm surge barriers, is an extensive national flood defense system, prompted by the catastrophic 1953 floods that killed more than 1,800 people. UNO earth and environmental sciences professor Denise Reed says she is impressed not just by the Dutch engineering, but by the comprehensive approach to water management. Reed was a part of a Louisiana congressional delegation, led by Sen. Mary Landrieu, that visited the Netherlands in November.

“There was a mix of going to see specific projects and understanding those water management concepts in the contexts of a specific example, but there were also broader discussions with [Dutch] ministry folks about how they put environment and infrastructure together,” says Reed.

For the Dutch, water management, flood protection and stemming coastal erosion are national priorities because they have to be. A staggering 70 percent of the country’s gross domestic product is generated below sea level, so the very survival of the Netherlands is dependent upon living harmoniously with water. Reed says the Dutch benefit from having a federal agency that marries the interests of the environment and infrastructure.

“It’s similar to how we’ve done it in Louisiana where we’ve put protection and restoration together at the state level but at the federal level we’re still fragmented, which is still a problem for us,” Reed says.

The delegation included members of federal and state agencies and levee boards as well as university scientists and representatives from nongovernmental organizations. Some of the highlights of the trip included traveling to the Dutch coast to see the Netherlands’ main defense against storms from the North Sea, meeting with Dutch ministry officials and visiting the city of Dordrecht, which is built on and around a levee. The group also spent an entire day at Deltares, the Dutch water institute.

“Deltares is specifically designed to link the thinkers with the doers,” Reed says. “To bring in folks from the universities, private industry and agencies to really identify problems and develop solutions and get them on the ground. That’s one of the things we’ve been exploring in Louisiana. Really thinking about how we can link the good things going on in the universities in Louisiana, like UNO, how can we link those more directly with the kind of skill set that some of our folks in private industry have?”

The delegation also visited Rotterdam, Europe’s largest port, to gain an appreciation for innovative solutions in urban areas and Biesbosch to learn more about a project called “Make Room for the River.”

“They realized a few years ago that the Rhine River levees at some point in the future would not be high enough,” Reed says. “There was subsidence and sea level rise and those kinds of things. Rather than taking the kind of brute force engineering approach and just build the levee higher, they actually took a different approach. They moved the levees out and increased the space that the river had to work with. If the river has more space on each side, the water level doesn’t get as high.”

“That is the kind of creative approach we need in coastal Louisiana to think about how we use the river and how we navigate and how we get the sediment to start building land again.”
By Jessica Ann Llanes

Lava tubes, hoodoos and Upheaval Dome sound more like landscape features of an alien planet than the sandstone deserts of Utah, but to high school students taking part in UNO’s summer geoscience field trip, they are just as exotic.

“The trip out West is such a new experience for most of the students—a life-changing experience,” says Dinah Maygarden, who has been coordinating the program since 2006 and involved since 1997. “We had a sandstorm down at Rainbow Rocks near Moab. That went into the kids’ journals.”

Twice each summer, UNO offers juniors and seniors from high schools nationwide the chance to study either geology in the Wyoming and Utah wilderness or environmental ecology in the coastal wetlands of south Louisiana.

Both field trips are part of a minority education recruitment program established by UNO’s earth and environmental sciences department. The goal of the program is to encourage high school students from backgrounds under-represented in the earth sciences to gain experience “in the field” with experts and industry professionals.

Last year’s Louisiana field trip, which drew students from as far away as Pennsylvania, coincided with the BP oil spill. Students had the opportunity to interact with BP spokespeople and witness cleanup efforts firsthand at UNO’s Shea Penland Coastal Education and Research Facility at Chef Menteur Pass.

“After the oil spill happened, Dinah was getting text messages from former students who were watching it unfold,” says Heather Egger, a fellow program coordinator. “They were interested and asking questions.” She says the spill also has drawn increased interest in the program from potential students outside Louisiana.

Lou Fernandez, former chair of UNO’s geology department, received a National Science Foundation grant to develop the program in 1974, and it begins its 37th year this June. It is designed to be not just a field trip, but hopefully the starting point for lifelong exploration. Recent program expansions include scholarships, tutors and mentoring support.

“I do believe that the program is building character and also stewardship—a stewardship for the home state of Louisiana but also the country, learning about your home and keeping it with you,” explains Egger.

Several students who take part in the program return the following year or join later trips as mentors. Others have siblings who participated in field trips of years past. Many go on to pursue earth and environmental science degrees at UNO.

“When we start out, we ask them what they want to be when they grow up. Most say doctors or lawyers ... because that is what they know,” Maygarden says. “So one of the things we try to get them to understand is that there are jobs in the earth sciences—and some of them are really well paid.”

Sirel White, now a senior geophysicist at ExxonMobil, was recruited into the field trip program as a mentor. Although his undergraduate study was in engineering (’00), his decision to pursue a master’s in geology (’06) was heavily influenced by his field trip experiences.

Students at Avery Island.
Photography by Jessica Ann Llanes

Sirel White hikes in Utah.
Photography by Gregory L. Jones

By Jessica Ann Llanes

Photography by Jessica Ann Llanes
“It opened my eyes to geology,” White explains. “A lot of these kids may not have gone to college at all without the perspective these field trips provide. Even if they don’t pursue geology, it gives them the motivation to prioritize higher education.”

The program is the first and longest continuously running of its kind, not just at UNO, but in the nation. Its success has made it a national model for designing similar science programs elsewhere.

“The summer program help put UNO’s geoscience department on the map,” explains Laura Serpa, who was involved with the program from 1989 until 2006 and spent more than 20 years teaching geology at UNO. She says the University graduates more under-represented, particularly African American, students in the earth sciences than any other U.S. institution.

“When I started [in 1989], only about 3 percent of the students at UNO were black and virtually none in the sciences. By the time I left, 40 percent of the geology department was black—almost all of them had been in the summer program,” Serpa says. “New Orleans is ahead of the curve—working with minorities and getting students into the sciences.”

Now a geology professor at The University of Texas at El Paso, Serpa has once again rejoined the program as part of a collaborative effort by UNO, UTEP, San Francisco State and Purdue. The effort is supported by a four-year, $400,000 NSF grant that begins its second year this summer.

The future of the program, however, remains uncertain. When initial funding disappeared, the program was subsidized with private donor and industry-sponsored support, including help from ExxonMobil, Chevron and Shell Oil. Sponsors donate more than money. Guides like ExxonMobil geologist Gregory L. Jones, who has been involved in the program since 1995, and recent addition Ivan Gill, a science education coordinator at UNO, also donate time recruiting and teaching students on the field trips.

“There is some concern about getting stable funding to continue to do this over the long term,” says Serpa. “It really brings students into the field, into the sciences, and minorities in particular. That is what we say we are trying to accomplish, to bring kids into the sciences.”

If you are interested in becoming involved with the program as a donor, mentor or volunteer or know a high school student who might want to participate, visit http://ees.uno.edu/map/ for more information.

Heather Egger and students near Chef Menteur Pass. Photography by Jessica Ann Llanes

Students hike in southern Utah. Photography by Gregory L. Jones

Martin O’Connell, assistant professor of earth and environmental sciences, and a student in his estuarine environmental science class collect fish during a field trip to the southern end of Lake Pontchartrain.
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