

NDWorks

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News for Notre Dame faculty and staff and their families

Ground broken for environmental research facility



PHOTOS: BARBARA JOHNSTON



Tank



Lodge



Kirkwood

Groundbreaking ceremonies for the ND-LEEF facility at St. Patrick's Park took place June 15. The facility is expected to be completed in late 2012, with initial research experiments taking place in 2013.

St. Pat's Park site bridges gap between lab and field

BY CAROL C. BRADLEY, NDWORKS

Groundbreaking ceremonies were held in June for the Notre Dame Linked Experimental Ecosystem Facility (ND-LEEF), located at St. Patrick's County Park in St. Joseph County, five miles north of campus.

ND-LEEF will allow University scientists, graduate and undergraduate researchers, visiting scholars and others to study experimental watersheds in a controlled setting.

"It's a place where we can do cutting-edge research on environmental change," says Jennifer Tank, biologist and director of ND-LEEF. "We needed something between small-scale experiments in the laboratory and research in the field."

The facility will be home to two constructed experimental watersheds, each about the length and width of a football field and consisting of an interconnected pond, stream and wetland. The ponds, streams and wetlands can be disconnected from

each other, providing maximum flexibility for experimentation.

The site will be restored to the natural prairie ecology, offering the opportunity for terrestrial research as well.

From the beginning, the effort has been a partnership between the University and St. Joseph County Parks, says Tank.

Under the terms of the agreement with the parks administration and parks board, the University will lease 28 acres of undeveloped park land on the east side of Laurel Road, inside the gates of the park. A buffer strip will be maintained between the construction and the road.

ND-LEEF complements the county parks department mission to provide environmental education for school-age students through adults. In addition to an educational kiosk, Notre Dame will provide an on-site program manager who will help local educators develop curricula for schools.

Funding through Notre Dame will cover all building and maintenance costs for the three-season facility. The University expects to invest \$1 million in the initial phase of the project, with the county incurring no costs.

Says Evie Kirkwood, county parks director, "The parks department staff is wholly committed to promoting understanding and stewardship of our unique natural and cultural heritage through innovative programs and services."

ND-LEEF, Kirkwood notes, "gives us an opportunity to expand that work with little or no additional impact on taxpayers or the parks department budget." The partnership with Notre Dame, she adds, positions the parks department to serve as

a model for similar partnerships around the country.

The entire site will be wired with a network of embedded sensors, allowing scientists, students and school groups the opportunity to follow the research online in real time, from anywhere in the world.

In addition to the partnership with the county parks department, ND-LEEF represents a multidisciplinary collaboration between the College of Science, College of Engineering and the School of Architecture.

Construction is expected to be completed by fall 2012, with initial research experiments beginning in 2013. Construction can be followed online via webcam at environmentalchange.nd.edu/programs/nd-leef/.

ND-LEEF is part of the Notre Dame Environmental Change Initiative (ndleef.nd.edu), which conducts policy-oriented research designed to help decision-makers manage environmental challenges.

"St. Patrick's Park offers scientific opportunities that few sites have in our area—the presence of water, wetlands and dry land conditions in proximity, as they occur in nature," says David Lodge, biology professor and director of the ND-ECL. "This facility will provide us with a missing research link—a site where scientists can study the interactions between land, water and wetlands as well as indigenous life forms in a natural setting."



Watercolor rendering of the proposed design by Aimee P.C. Buccellato, assistant professor in the School of Architecture.

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AROUND CAMPUS

BILL BEIRNE NAMED INDUSTRY PARTNER OF THE YEAR

Bill Beirne, director of The Morris Inn and Notre Dame Conference Center, has been recognized by the South Bend/Mishawaka Convention and Visitors Bureau (CVB) for his dedicated commitment to the hospitality industry and the community. CVB Executive Director Rob DeCleene noted that Beirne's service as president of the St. Joseph County Board of Managers for Hotel-Motel Tax, president of the St. Joseph County Hotel-Motel Association and member of the Board of Directors of the St. Joseph County Chamber of Commerce, along with the state-wide recognition he has brought to the community, made him an outstanding choice for the award.



Beirne

This service provides convenient Wi-Fi access using your Notre Dame credentials (netID and password) when visiting other institutions that use *eduroam*. Similarly, visitors from participating institutions can use *eduroam* at Notre Dame with their home institution account information. Additional information about *eduroam* is available at oithelp.nd.edu/networking/wireless/eduroam/.

FOOD SERVICES' PRENTKOWSKI HONORED BY NACUFS

Notre Dame Food Services director **Dave Prentkowski** has been honored with the introduction of the David R. Prentkowski Distinguished Lifetime Member Award created by the National Association of College and University Food Services (NACUFS). This award (formerly the Distinguished Lifetime Member Award), renamed in Prentkowski's honor, was originally created in 1990 to honor retired members who have supported the betterment of college and university food service and the association throughout their careers.

"Dave's leadership, guidance and tireless efforts to advance



Prentkowski

the mission of NACUFS have been instrumental in shaping the association," said Nona Gollodge, NACUFS president and director of dining at the University of Kansas. "He truly embodies the spirit of this great organization, and the board of directors is enthusiastic about recognizing his legacy in this way."

Prentkowski is also the recipient of the 27th annual Irish Clover Award for his many contributions to student life. Prentkowski was also the recipient of the 14th annual Irish Clover Award in 1998. Each year two Irish Clover Awards are given to members of the Notre Dame community, including students, faculty and staff, based on outstanding service to students. Recipients are nominated by the student body, with an approval vote by the Student Senate.

Café de Grasta to undergo renovations

Changes in décor and seating are planned

BY COLLEEN O'CONNOR, FOR NDWORKS

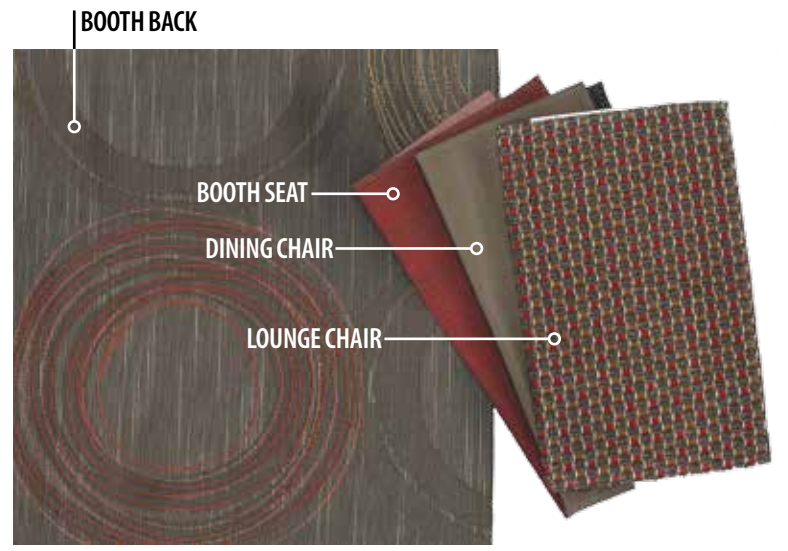
On Monday, Aug. 6, Café de Grasta in Grace Hall will close for approximately 10 days for renovations.

According to **Stephen Whitaker**, general manager of satellite retail operations, improvements to the café will include all-new flooring, new window treatments, fresh paint in the dining room, and new upholstery for the dining room chairs.

Additionally, there will be new seating arrangements more conducive to meetings and conversations, similar to what is found at Starbucks in LaFortune. The hot food area will be opened up to improve traffic flow, the conference room in the back will be opened and incorporated into the main seating area to add capacity, and the trash/recycling bin area will get a new look and increased efficiency.

"The result will be a clean, fresh look," said Whitaker.

The changes are part of a strategic plan put forth by Envision Strategies, an international food service consulting firm retained by Notre Dame Food Services. Notre Dame's Office of Facilities Design and Operations is handling the redesign. No changes to the menu are planned at this time.



NEW WI-FI SERVICE AVAILABLE

In early July, Office of Information Technologies (OIT) engineers activated *eduroam*—a new Wi-Fi option available to faculty, staff and students.

UNIVERSITY OF NOTRE DAME

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Online PDF versions of past NDWorks can be found at nd.edu/~ndworks.

Submit story ideas, questions and comments to ndworks@nd.edu or contact Carol C. Bradley, 631-0445 or bradley.7@nd.edu.

WELLNESS CENTER RIBBON CUTTING



The Grand Opening of the new Wellness Center took place Wednesday, July 11. The facility is open to any faculty or staff member eligible for full-time benefits, as well as their eligible dependents. Services include primary medical care, pediatrics, occupational health, laboratory and pharmacy services. At top, Bob McQuade, vice president of human resources, cutting the ribbon. Below left, speakers included Executive Vice President John Affleck-Graves. Below right, Affleck-Graves and Dr. Lisa Reeder talk with employees.

Research into oaks helps us understand climate change



Jeanne Romero-Severson's research into the evolution of oak trees in North America will help us understand how the trees adapted to changes in climate.

How does natural adaptation arise?

BY GENE STOWE, FOR NDWORKS

Associate professor of biological sciences **Jeanne Romero-Severson** and her collaborators are tracking the evolution of the live oaks of eastern North America, seeking to understand how the trees adapted to climate change during glacial periods.

When the ice advanced, the oaks retreated. When the ice retreated the oaks advanced, spreading from tropical to temperate zones, up from Central America and Mexico into the Piedmont Carolinas. The researchers expect the study of live oak migrations and phylogeny will provide clues to the success of that oaks the range up into northern Ontario in Canada.

Oaks originated in southeast Asia before the continents split and migrated both east and west, but North America has far more species than other regions. Researchers have long suspected that repeated climate challenges might have led to this diversity. Previous studies have shown that the live oaks that live in Mexico cannot survive the Carolina winters. This shows that there are genetic differences between the southern live oaks and their northern descendants.

"In Mexico, live oaks do not experience repeated cycles of freezing and thawing," Romero-Severson says. "Are the live oak species that now live further north different species because of this cold tolerance? What about the live oak species that span the tropical-temperate divide? It is logical to assume there is a genetic basis for the ability to survive in those cold temperatures. With four groups of researchers working together, we can tease out how it was that oaks

were able to adapt to the climate as they moved north. What were the genetic changes they underwent?"

Romero-Severson focuses on genetics and genomics of the oaks. Andrew Hipp of the Morton Arboretum in Lisle, Ill., is studying their morphological differences, Paul Manos of Duke University is studying their systematics (family trees based on DNA markers), and Jeannine Cavender-Bares of the University of Minnesota is studying their ecophysiology, including the survival of seedlings in cold temperatures. A National Science Foundation grant supports the research.

The team hypothesizes that trees in contact with relatives who could just manage to survive in the cold, were able to "capture" from these relatives a few genes favorable for survival in colder climates, without retaining extensive genetic changes that would alter their morphology. Different animal species rarely hybridize in nature and when they do, the offspring are often sterile, like mules. Different forest tree species often make fertile interspecific hybrids, but the parent species remain morphologically distinct.

"It's a mystery to us how oak species can have rampant interspecies hybridization and yet maintain species distinction, but they do," Romero-Severson says. "Favorable gene combinations from one live oak species can be captured by any other live oak species." There might be an "interspecific hybrid screen," a

process that retains a relatively small number of good genes that equip the species for successful northward migration, while maintaining all the other genes that determine species identity.

Identification of the genetic changes in the relatively small number of live oak species in the southeastern United States and Mexico can provide clues for study of the more extensive deciduous red and white oaks, which reach from the Caribbean into California to the west and up into Canada from the east. Eastern North America alone

has more than two dozen red oak species and close to two dozen white oak species.

Some regions in the southeastern United States have the highest concentration of oak species in the world.

"Our hypothesis is that the same set of genes is involved in cold tolerance in all of these species,"

Romero-Severson says.

"We feel that we have defined the problem so carefully that what we learn from these live oaks will help us understand how evolution works, and how natural adaptation arises. Our goal is to understand the role of hybridization in the evolution of forest trees and how forest trees actually respond to rapid climate change."

Romero-Severson, who came to Notre Dame in 2003, is also part of a team of researchers from seven universities with an NSF grant to develop genomics tools for finding the genetic basis for tolerance to the introduced insects and diseases that threaten the nation's hardwood trees.



Romero-Severson

BARBARA JOHNSTON

NEWS BRIEFS

TRYGGVASON HONORED WITH ENGINEERING AWARD

Gretar Tryggvason, the Viola D. Hank professor of aerospace and mechanical engineering and department chair, has been named the recipient of the American Society of Mechanical Engineers Fluids Engineering Award. The award is conferred annually upon an individual for outstanding contributions over a period of years to the engineering profession and, in particular, to the field of fluids engineering through research, practice or teaching.

ENGINEERING FACULTY RECEIVE DURIP GRANTS FOR DEFENSE RESEARCH

Two faculty from the Department of Electrical Engineering, associate professor **Debdeep Jena** and research associate professor **Thomas Pratt**, have each received Defense University Research Instrumentation Program (DURIP) grants from the Department of Defense for 2012, totaling more than \$650,000.

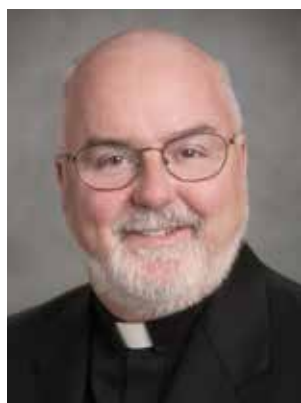
Highly competitive awards, DURIP grants enable the purchase of state-of-the-art equipment, which augments the University's abilities to perform fundamental cutting-edge research and accelerates research

progress for the next generation of engineers and scientists in defense-critical fields.

\$5 MILLION GIFT ESTABLISHES GALLAGHER FAMILY PROFESSORSHIPS IN ADULT STEM CELL RESEARCH

Alumnus **Michael Gallagher** and his wife, **Elizabeth**, have made a \$5 million gift to establish the Elizabeth and Michael Gallagher Family Professorships in Adult Stem Cell Research.

Their gift, which will fund three new endowed professorships in adult and all forms of non-embryonic stem cell research, will strengthen Notre Dame's leadership in the field of stem cell research and enhance the University's effective dialogue between the biomedical research community and the Catholic Church on matters related to the use and application of stem cells and regenerative medicine.



O'Hara

PHOTO PROVIDED

REV. O'HARA ELECTED PROVINCIAL SUPERIOR

Rev. Thomas J. O'Hara, C.S.C., has been elected as the new Provincial Superior of the Congregation of Holy Cross, United States Province of Priests and Brothers by the Provincial Chapter in Portland, Ore.

Father O'Hara is the first elected Provincial of the newly merged United States Province. The Eastern Province merged into the Indiana Province, forming the United States Province of Priests and Brothers, which became effective on July 1, 2011.

"I am both honored and humbled to be chosen to serve my fellow Holy Cross religious as Provincial of the United States Province of Priests and Brothers as we strive to serve the people of God," said Father O'Hara.

HOLY CROSS ORDINATION



MATT CASHORE

On Saturday, April 14, the Congregation of Holy Cross celebrated the Ordination of Rev. Matthew C. Kuczora, C.S.C., pictured here with Bishop Kevin Rhoades after the Ordination Mass.

Looting an international problem, says archaeologist

Posts can be found during digs—or on eBay

BY MARK SHUMAN, FOR THE COLLEGE OF ARTS AND LETTERS

An Indiana Jones-style expedition might be one way to locate 5,000-year-old Early Bronze Age artifacts like those an anthropological archaeologist **Meredith S. Chesson** studies.

Logging onto eBay, however, is the cheaper, easier route. On eBay and similar auction sites, Chesson says, Web surfers can all-too-easily find such artifacts using search terms such as “Early Bronze Age pots” and “holy land.”

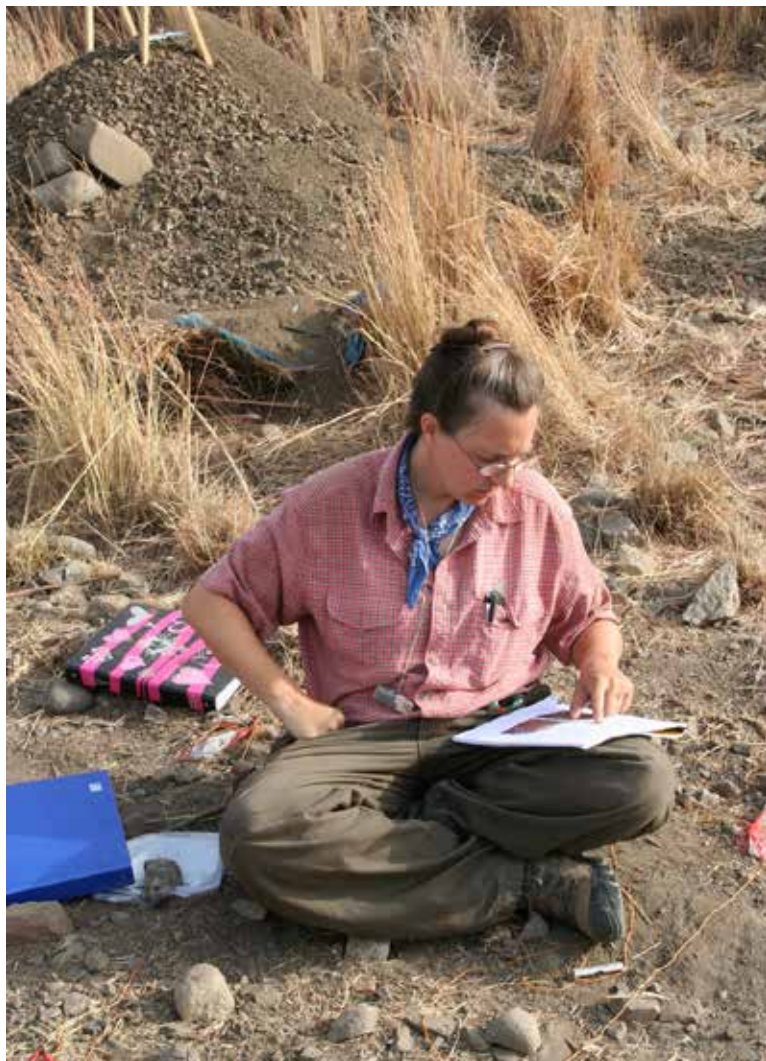
Her ongoing project, “Follow the Pots: The Social Lives of Early Bronze Age Artifacts From the Southeastern Dead Sea Plain, Jordan,” documents the extensive looting—mostly by economically struggling local residents—that for decades has affected the area in and around the Jordanian cemetery at Feifa.

Online collectors, she says, typically pay around \$250 for ancient ceramic pots traditionally linked to Old Testament figures as revered as Abraham and to locations as storied as Sodom and Gomorrah. Scholars are still debating the existence of those two infamous cities, but evidence from their era, and from the first walled urban centers of the Middle East, provides a tantalizingly authentic connection to the past for professional archaeologists, collectors and others, Chesson says.

“Looting is a huge, contentious problem in archaeology today, and it has national and international implications,” she says, adding, “I don’t think we can stop the looting as long as there’s a demand.”

Chesson, associate professor of anthropology, has become an expert on Early Bronze Age civilizations in the Middle East, in part through her ongoing work as publication co-editor on final reports of the 40-year-old Expedition to the Dead Sea Plain.

In 2009, she and her research partner, Morag M. Kersel, an assistant professor of anthropology at



Above, anthropological archaeologist Meredith Chesson in the field. Her current research documents the extent of looting of archaeological sites around the cemetery at Feifa, in Jordan.

DePaul University, received a grant of approximately \$25,000 from the prestigious Wenner-Gren Foundation For Anthropological Research Inc. to fund “Follow the Pots.” The pair has also received logistical support from Notre Dame’s College of Arts and Letters and from DePaul.

Using on-the-ground examinations and aerial photographs, their study documents the extent of the looting in the area; it also includes ethnographic interviews with various groups of stakeholders, including artifact dealers, archaeologists, museum staff, collectors, archaeologists, government officials, local inhabitants and the looters themselves.

The interviews, Chesson says,

are designed to explore how these different stakeholders understand their connection to the past in the form of these pots and archaeological sites, how they think about these materials, and how they believe they can and should be used.

One observation so far, she says, is that looters tend to value only whole pots they take from the tombs and generally ignore artifacts such as shell bangles, beads and stone tools that “don’t really sell.”

Future interviews with looters, museum curators, artifact dealers and middlemen, she says, may ultimately reveal a better understanding of what the cemetery at Feifa and others like it originally contained. “The vast majority of tombs opened in Feifa



Above, archaeologists survey the cemetery at Feifa, where holes show the extent of tomb looting. At left, pots on display in a museum. “Is putting a 5,000-year-old pot in a museum more important than a looter feeding his family?” she asks.

have been opened by looters and not archaeologists,” Chesson says.

Although their findings are not yet published, Chesson allows that she and Kersel have already “raised hackles” by questioning traditional ways of thinking about both archaeologists and looters.

Historically speaking, “part of what (academia has) been trying to do is establish us as the good guys, and the looters as the bad guys. “Both groups,” she cautions, “are stakeholders who value the same materials differently and do different things with them.”

Issues of right and wrong become murky, she says. “Frankly, I’m not willing to tell someone that putting a 5,000-year-old pot in a museum

is more important than feeding someone’s kids,” she says.

Back at Notre Dame, Chesson says “Follow the Pots” has also sparked some interesting discussions in her classes, which include Fundamentals of Anthropology, Gender and Archaeology, and Anthropology of Everyday Life.

The project resonates with her students, she says, because the ethics of archaeological research is such a central concern within the profession.

“The ‘Follow the Pots’ project is the most exciting thing I’ve done in a long time, and it’s pushing me to think about anthropology in new ways,” Chesson says.

New book busts myths about sex, race and violence

Men and women really are different

BY SUSAN GUIBERT, PUBLIC RELATIONS

There are three pervasive myths about human nature centered on sex, aggression and race. They are:

1. Men and women are truly different in behavior, desires and wiring.
2. Humans are divided into biological races (white, black, Asian).
3. Humans, especially males, are aggressive by nature.

A new book by anthropology professor Agustín Fuentes, titled “Race, Monogamy, and Other Lies They Told You: Busting Myths about Human Nature” (University of California Press, 2012), counters these pernicious myths and tackles misconceptions about what race, aggression and sex really mean for humans.

Presenting scientific evidence

from diverse fields, including anthropology, biology and psychology, Fuentes incorporates an accessible understanding of culture, genetics and evolution, requiring us to dispose of notions of “nature or nurture.”

Fuentes devises a myth-busting toolkit to dismantle persistent fallacies about the validity of biological races, the innateness of aggression and violence, and the nature of monogamy and differences between the sexes. He includes a list of the most common misperceptions about human nature on race, sex and violence, and counters those myths with a myth buster. Among them:

Myth: Humans are divided into biological races: Racism is part of our nature.

Myth buster: There is no separate gene for black or white. Our concept

of race is not biological; it is social. While there is only one biological race in humans (*Homo sapiens*), it still matters whether you are black or white in the U.S. Differences between “races” in the U.S. are the outcomes of social, historical, economic and experiential contexts, not biological entities.

Myth: Humans are more or less naturally monogamous, or more specifically: Men want a lot of sex and women want a little. Males want many partners and women search for one mate.

As the saying goes: “Hogamous, higamous, men are polygamous ... Higamous, hogamous, women are monogamous.”

Myth buster: Humans are not biologically monogamous, but we can be socially so. Humans are attracted to many individuals throughout their lifetime, whom they may or may not have sex with, and

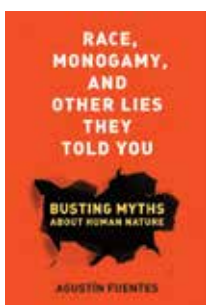
men and women have sex in more or less the same frequency and manners. As a species, humans have lots of sex ... sometimes leading to some very big problems.

Myth: Humans, especially testosterone-laden males, are aggressive by nature.

Myth buster: There is no “beast within.” Humans are neither naturally aggressive nor naturally peaceful, but we are really good at working things out. Humans are the most successful large animal on this planet, but we have few if any “natural” defenses (no horns, claws, fangs, etc.). All we have are big brains and other people. It is our history of working together that got us to where we are (7 billion strong in 2012). But

more people means more conflict — can we continue to work things out?

An expert in biological anthropology, primatology, human evolution, and social organization and behavior, Fuentes also has authored “Evolution of Human Behavior” and “Health, Risk and Adversity.” He is a regular contributor to **National Geographic.com** and National Geographic radio and has appeared as a guest on “Animal Planet.” He also is a regular guest blogger for Psychology Today.



Fuentes

Crawford sees both coasts in 2012 Road to Discovery ride

Event raises awareness, funds for Niemann-Pick Type C disease

BY GENE STOWE, FOR NDWORKS

Greg Crawford, Dean of the College of Science went coast-to-coast this year on his Road to Discovery bike ride. He dipped the back wheel of his bicycle in the Atlantic Ocean at Boston when he left in May and the front wheel in the Pacific Ocean when he arrived at Pebble Beach, Calif., on June 22.

This was Crawford's third ride to raise awareness and money for Niemann-Pick Type C (NPC) research. In 2010, he rode from Tucson, Ariz., to Notre Dame to symbolize Notre Dame's deepened partnership with the Ara Parseghian Medical Research Foundation, and last year he rode from Boston to Dallas, visiting researchers and families affected by NPC along the way.

The end of this year's ride coincided with the Parseghian Golf Classic, at Pebble Beach for the first time, where more than 50 people gathered for the event to raise money for NPC. The route brought him through South Bend, and he stopped for an event at Jordan Hall of Science.

Crawford was in Nebraska when the Michael, Marcia, and Christa Parseghian Scientific Conference for Niemann-Pick Type C opened

PHOTOS: PETER DORAN



in Jordan Hall, and he greeted the participants by video.

From the road, he announced the Elizabeth and Michael Gallagher Family Professorship in Adult Stem Cell Research, a gift from the Gallaghers that will endow three professorships to support adult and non-embryonic stem cell research in the College of Science.

The trip included numerous visits with Notre Dame Clubs from the Hudson Valley to San Francisco, as well as a stop in Chicago to see the Red Stars professional women's soccer team that includes many former Irish players. Hundreds of gold-ink autographs covered the van by the end of the ride, along with the handprints of 8-year-old twin girls who have

NPC whom Crawford met in Carson City, Nev.

Crossing the Catskills and the Rockies, as well as the Great Plains, he faced strong headwinds on the east-west route as well as steep climbs. Crawford said the Bonneville Salt Flats were the most memorable among geographic features that included vast valley vistas and a large singing sand dune.

"Bonneville probably ranks as the most unusual place I have ever been," he said. "The flat land is famous for speed records, including the bicycle speed record of 167 mph by a Dutchman who was pedaling behind a race car for favorable aerodynamics. I didn't set any speed records, but I sure had fun pedaling around. I was

completely covered with salt, and so was my bike."

Crawford's administrative office, including **Katerina Lichtenwalter, Nicole Haley, Marissa Gebhard, Stephanie Healey** and **Sean Kassen**, provided support for the project. The trip was sponsored by Notre Dame Federal Credit Union, which is developing a program to increase support for NPC research. People who sign up for a new credit card through Crawford's blog (roadtodiscovery.nd.edu), for example, get \$25 donated in their name for research. The credit union expects to make arrangements for customers who desire to designate part of their credit card cash-back program to the University for research.



Above, Dean Greg Crawford crossed the Bonneville Salt Flats on his 2012 ride from Boston to Pebble Beach, Calif., over the summer. "I was completely covered with salt, and so was my bike," he says. At left, Day 32, on the leg of the trip between Elk Grove and Livermore, Calif.



Scott Gronck, a Notre Dame law alum, joined Crawford for 60 miles of the leg between Lake Tahoe and Elk Grove, Calif.

English professor develops Shakespeare iPad app

Bringing the humanities into the digital world

BY GENE STOWE, FOR NDWORKS

English professor **Elliott Visconsi** has launched Luminary Digital Media to bring a touch of the humanities to the tech-driven world of mobile learning.

Visconsi and his collaborator, Katherine Rowe of Bryn Mawr College, have built a ground-up iPad application to put sophisticated Shakespeare education at the fingertips of 21st-century readers, whether individually, in coursework or with groups of friends around the globe.

The project also adds a new dimension to Notre Dame's support for advancing campus innovations, says **Pat McMahon**, Notre Dame's program director for technology commercialization under **Bob Bernhard**, vice president of research.

"We have money set aside to use to help commercialize research—some to provide technology support for idea with potential, some to evaluate opportunities," McMahon says. "A lot of that stuff is science and engineering."

"A number of us are working with Elliott to help identify all sorts of applications this can go to. We see a whole bunch of purposes for which can be used in this or other completely unrelated areas," from the Bible to "Huckleberry Finn" and commercial or technical training manuals.

Luminary Digital Media's prototype, "Shakespeare's The

Tempest" for iPad, initiates an approach more suited to arts and letters than the master-and-advance stages of science, technology, engineering and mathematics (STEM) programs on the market.

"That doesn't really apply, in my view, to the humanities," Visconsi says. "We learn and think and work differently. Our discipline has much more to do with deliberation and training the judgment of readers. Our discipline relies on collaboration and conversation across time as well as space—conversation with previous writers, conversation with the colleague in the U.K. or the student in the classroom."

"I felt like it was really important that we design software that would recognize those practices and honor them, while also taking advantage of these new capabilities that we haven't had until now."

Visconsi knew he had found his medium when he met his first iPad in February 2011.

"There's something really great about being able to move from printed text to video to music to Internet and do it fluently. Reaching a broad audience has never been easier. If you know how to play your cards right, you can get a story or a concept or great content to a bigger audience now, working on your own, than you could have working with an

agency 20 years ago at great expense," he says.

Visconsi figures the audience for humanities study is global.

"There's a huge audience, a huge hunger worldwide for Shakespeare, for philosophy, theology, history. Millions of people are eager to wrestle with these great ideas and these great thinkers. This project was motivated by a desire to reach that audience, communicate with that audience in ways that are high quality and accessible but not demeaning or diminished."

Content in the iPad app, including texts, commentaries, audio and video, can be tailored to meet the needs and interests of all readers, from professional researchers to high school freshmen. Groups can set up interactive sites, including private Facebook groups, for sharing and conversation.

"We're helping our students understand how the text works," Visconsi says. "We're trying to transport all of our professional habits and teachers and researchers into the mobile realm where our readers can get access to it right on their iPad, wherever they go."

Visconsi and Rowe, collaborating with the Center for Research Computing and gaining significant support from Bernhard, have launched Luminary Digital Media

to commercialize the fast-developing concept.

"It's a way for us to bring this technology to market," he says.

"It's also an opportunity for us to expand out in exciting and agile ways into this very exciting part of the technology and business world."

The iPad app, with some 90 percent of the content embedded so wireless access is not needed, features key humanities-inspired tools that allow note-sharing, social media conversation with friends, interpretive commentaries, full audio performance with alternate takes and video modules. There are more exciting features coming soon, Visconsi notes.

The iPad feels more like a book, Visconsi says: "In some ways, our app is a multidimensional book. It's as if all of our users have

one copy of a book that they're passing around. The app gives our readers a chance to create and read together, not just read in solitude."

Finger-tapping navigation allows users to copy, paste, highlight, search, jot marginal notes, post questions to discussion groups, collect selected passages, hear how an actor alters the text's effect with various readings, read commentary by a stable of experts, and write their own reflections.

"Shakespeare is the proof of concept," he says. "Our ambition as a company is not to be a Shakespeare company but to be a cutting-edge creator of iOS applications for key texts in the humanities and also for commercial applications of all sorts."



Visconsi

PHOTOS: CAROL C. BRADLEY



Search for "Shakespeare's The Tempest" in the Apple iPad app store.

SERVICE ANNIVERSARIES

The University congratulates those employees who celebrate significant anniversaries in July, including 40-year employee **Michael J. Danch**, athletics.

35 years

Janet L. Million, air science

30 years

Montey G. Holloway, philosophy
Juli A. Tate, economics and econometrics

25 years

Robert E. Bayliss, men's tennis
Paul V. Costello, Food Services
Malgorzata Dobrowolska-Furdyna, physics
Thomas E. Gaughan, residence halls
Deborah J. Gee, College of Engineering
Margaret H. Hartman, Kellogg Institute
Daniel E. Kavanaugh and **Gregory C. Pavnica**, security
Eileen A. Miller, Procurement Services
James M. Moriarity, sports medicine
Milind Saraph, EIS – Application Services
Diane C. Sikorksi, Hesburgh Libraries

20 years

Gina Costa, Snite Museum
Andrew S. Durrenberger, Preventive Maintenance
Chao-Shin Liu and **H. Fred Mittelstaedt**, accountancy
Catherine Robertson, philosophy
Rhonda S. Singleton, psychology
Johanes Suhardjo, engineering and science computing administration

15 years

Patricia P. Base, Institute for Scholarship in the Liberal Arts
Larry G. Bell, athletic grounds
Donald K. Burns, Preventive Maintenance
Judith L. Fox, Legal Aid Clinic
Mandy L. Havert, Hesburgh Libraries
Don A. Howard, philosophy
William D. James, investment office
Dana R. Marsh, Mendoza College of Business
John T. McGreevy, College of Arts and Letters
Denise M. Murphy, Human Resources

10 years

Amy C. Barrett, Law School
Paula M. Brach, Cushwa Center for the Study of American Catholicism
Elizabeth Creary, Health Services
Kelly L. Culver, Satellite Theological Education Program
Vanessa A. Easterday and **Frank Nguyen**, Food Services
Thomas J. Guinan, Office of the Controller
Shari K. Hill, Graduate School
Jennifer S. Ihns, Legal Aid Clinic
Jean C. James, First Year of Studies
Dena M. Leinen, accountancy
Joseph P. Marino, College of Science
Gilbert J. Martinez, admissions
Diana McGinnis, Morris Inn
Mary L. Olen, campus ministry
Beth C. Padgett, Customer Support Services
Ann P. Strasser, Research and Sponsored Programs Accounting
Cleo K. Thanos, Mendoza College of Business
Gayle M. Washburn, Alliance for Catholic Education

NEW EMPLOYEES

The University welcomes the following new employees who began work in May:

Joseph R. Admave, radiation laboratory
Lauren Ajamie, Hesburgh Libraries
Dijavante M. Albert, Human Resources
Ilona Antal, Custodial Services
Blake L. Bird, Huddle
Jinlan Cui, chemistry and biochemistry
Gloria Giraldo-Calderon and **Gena C. Robinson**, biological sciences

Nicole Kovatch, graduate school
Ian Lightcap, Sustainable Energy Initiative
Melissa Ornat, applied and computational mathematics and statistics
Grant W. Osborn, Institute for Advanced Study
Rodolfo Pantoja, Moreau Seminary
Nathan B. Payne, biological sciences

Eugene A. Plonski, Building Services
Stephen A. Riley, Army Science
Sharon Rody, engineering and science computing
Amy F. Roth, accounting and financial services
Sergei Rouvimov, Integrated Imaging Facility
Ann Whitall, student activities

Fourth annual ANDkids World Film Festival at the DeBartolo Performing Arts Center

DeBartolo Performing Arts Center is excited to announce the fourth annual **ANDkids World Film Festival**, Wednesday, July 25, to Saturday, July 28.

The festival is devoted to films for kids of all ages and their families. This year's programming features live action and animated features, shorts, repertory classics and documentaries.

The festival also includes opportunities for children to preview and review the festival's selections, volunteer as greeters and ushers and narrate international films with English subtitles—providing an audience-friendly assist for pre-readers and early readers in attendance.

All films are screened in the Browning Cinema, DeBartolo Performing Arts Center. Tickets are free and available online at performingarts.nd.edu or at the DeBartolo Performing Arts Center ticket office. The ticket office is open Monday through Friday from noon to 6 p.m., or call 631-2800. For more information, visit performingarts.nd.edu/andkids.



Being Elmo: A Puppeteer's Journey (2011)



Le Tableau (2011)

MAKING A DIFFERENCE

UR MOMS gives women a place to connect, share ideas

Group for mothers offers support, information

BY BRITTANY COLLINS, NDWORKS

An idea born in a hallway conversation has blossomed into a new support group for moms, both new and experienced, in University Relations.

UR MOMS (University Relations Mothers Offering Mothers Support) began when **Heather Moriconi**, assistant director of Stewardship Programs, and **Jen Binder**, administrative assistant in Midwest Regional Development, realized they had resources available all around them.

"There are so many valuable resources just in the women who work here," says Binder, "and if you don't see them or have an opportunity to chat with them, they go untapped."

The group, which had its first

meeting in February, is meant to give mothers of all ages a comfortable place to ask questions and offer advice about child-rearing and balancing work and home life. Anyone in University Relations who's a female caregiver—a mom, big sister, aunt, grandmother—responsible for a child is invited to check out the group.

Binder and Moriconi emphasize that the group is about camaraderie and support. Meetings consist of brown-bag lunches, deliberately planned for lunch hours so moms do not have another after-work commitment to worry about. The two have planned monthly meetings throughout the rest of the year, with time taken off during the busiest months for mothers and University employees: April, August and October. Many of the meetings focus on specific issues such as life balance, nutrition and stress management, with facilitators lined up and time for

discussion.

"We've tried to organize some meetings at Eddy Street Commons, some at LaFortune and some at Grace Hall," Moriconi says. "We wanted to make sure we were easily accessible to all UR women on campus."

"It's casual," Binder adds. "We're not here to cram these ideas in or make it too classroom-ish. We're trying to keep it full of humor and fun. We want to make it feel like a break from work—it shouldn't be another 'have-to-do' item on your list."

They have found that the LifeWorks Employee Assistance Program resource on the Human Resources website is a great tool for mothers trying to balance their time between work and family.

It offers articles, tips and help on a variety of these areas. The resource can be found under the Work Life tab at hr.nd.edu.

The first two meetings have received positive feedback, says Binder. "After our last meeting, I had emails saying, 'Thank you so much, that was a great idea.' I think people appreciated the lunch hour, the one hour on how to be a better mom, wife and employee."

"We've met a lot of moms with older children, and they've said, 'I'm not sure this group is for me'—Yes, it is!" says Binder. "Just hearing what you have to say, your experience, is helpful more than you know. We need to hear from women who have 'been there, done that,' and know how they survived!" Although the group

is in its infancy, Moriconi and Binder have "high hopes" for its future. "I think it'll grow as we go forward," Moriconi says. "We're thinking about a blog or an online presence. Down the road, we'd like to send out an email once a month with a quote, a joke or a recipe. We think keeping your sense of humor is important."

UR MOMS was started specifically for mothers in University Relations, but the founders hope the group will inspire similar gatherings in other departments. "If you start to make it too large, you lose the intimacy," Binder says. "That's what I want to get out of it, that camaraderie and support."

Anyone interested in learning more about the group is invited to contact Jen Binder at 631-1435 or jbinder1@nd.edu, and Heather Moriconi at 631-9784 or Moriconi.1@nd.edu.



NDSP conducts workplace violence training exercise at Hesburgh Library



PHOTOS: CAROL C. BRADLEY

Above left, Tracy Skibins prepares library staffers for a training exercise at the Hesburgh Library. The staff participated in a realistic scenario involving gunmen in the building. Top right, Sergeant Greg Pavnica (at left) and Officer Tim Reiter prepare to clear the building.



Above, Deputy Chief Dave Chapman, dressed as a "bad guy," carries a noisemaker used to simulate gunfire. The bad guys, all NDSP officers, were prepared with authentic-looking (but harmless) training weapons, noisemakers and tape-recorded gunfire. Student workers assisted by screaming and asking for help.

Training benefits NDSP officers and dispatchers as well as staffers

BY CAROL C. BRADLEY, NDWORKS

Screams and gunshots echoed through the Hesburgh Library not long ago—and even though it was a training exercise, it was still pretty frightening for participants, says Notre Dame Security Police (NDSP) Officer Tracy Skibins,

"People don't like to think about workplace violence," she says. "It's scary. But that won't stop something like this from happening."

Participants attended a classroom session before the training and were debriefed afterward. The Hesburgh Library was closed for the duration of the exercise. In this scenario, the bad guys played by NDSP officers entered the building, fired guns (using training weapons and tape-recorded gunshots) and made demands.

Student workers added verisimilitude by screaming and asking for help, raising questions for the staff—do they leave their safe place and try to help, or stay where

they are?

Participants were able to hide themselves so effectively that there were only two simulated injuries out of 140 participants (one curled up on a shelf, and pulled a book cart in front to block the view.)

The two "victims" thought their office door was locked and it wasn't. "It surprised the bad guys as much as them," Skibins says. They were handed cards that said, "Gunshot wound to arm."

The training was helpful for library staff, but it also offered a great training opportunity for dispatchers and responding police officers.

NDSP officers are happy to bring information and/or training sessions to campus work groups. For more information, contact Skibins at 631-2621, skibins.5@nd.edu.

There's also a 20-minute training video, "Stay Safe on Campus," available on the NDSP website. Visit ndsp.nd.edu and click on the Crime Prevention link.

"Crime can happen anywhere," says Skibins, "including violent crime. Learn to recognize the red flags, before violence happens. Be alert, be trained, be prepared and think through what to do."

WOMEN'S RAD SELF-DEFENSE CLASSES

Women's R.A.D (Rape Aggression Defense) self-defense classes will be offered by NDSP this fall for women ages 13 and older. The four-session classes (\$5) begin Monday, Sept. 24 or Monday, Nov. 5. Contact Sgt. Keri Kei Shibata, 631-3089 or kshibata@nd.edu.

Profile: David Murphy, associate dean of entrepreneurship

Fostering a culture of innovation across the University

BY GENE STOWE, FOR NDWORKS

When David Murphy '80 stepped down last August, after seven years as president and CEO of Better World Books, he happened to mention the change over breakfast with Peter Kilpatrick, dean of the College of Engineering. Murphy was on campus to help his son, a sophomore, move back into his dorm.

Within a very short period of time, Kilpatrick and Greg Crawford, dean of the College of Science and Engineering, including assuming the directorship for the ESTEEM (Engineering, Science, Technology, Entrepreneurship Excellence Master's) Program.

More than 30 years after he graduated from the College of Arts and Letters with high honors in economics, Murphy has returned to help define and shape the innovation and entrepreneurship track for 21st-century students.

He's been down that road several times himself.

His first job after graduation was with International Paper in New York City, where he participated in an intensive training program that rotated bright hires with primarily liberal arts degrees from the nation's top colleges and universities among the company's financial functions—treasury, cash management, international finance—and required twice-a-week courses (taught on site from NYU and Columbia professors) that introduced Murphy to key business functions—marketing, finance and accounting.

He went on to earn an MBA at the Amos Tuck School of Business Administration at Dartmouth College and worked on Wall Street before he returned to his Michigan roots in a senior leadership position for a major Tier 1 automotive supplier.

When he was 30, Murphy started his first company with two partners, a furniture manufacturer supplying large retailers, but in 1994 he was recruited to work with a couple of very successful entrepreneurs in the health care services space, launching a start-up in Atlanta.

"Most of what I had learned in my early professional years was operations and finance," Murphy recalls. "When I started my first company when I was 30, one of the things you learn is you are selling all of the time. You're the person who has got to make it happen."

He worked with two tech start-ups on either side of the 2000-2001

technology "bubble." One succeeded, and one did not. "You learn a great deal from the pain," he says. "You learn as much or more when things don't work out as you do when things go your way."

In 2002, when he was part of a small private equity firm in Atlanta, Murphy was recruited by Jim Davis of the Gigot Center to become an Irish Angel and get involved in judging business plans as part of the annual McCloskey Business Plan Competition in the Mendoza School of Business. He was reading a plan for book drives to benefit the Robinson Community Learning Center when he saw great promise and potential in the venture that would eventually become Better World Books.

He became a mentor to the three young founders, all 2001 graduates of Notre Dame, and the relationship continued after they won the 2003 Social Venture Competition. The

young start-up took Murphy's advice to find a CEO who could drive the young company to substantial scale—and who could help raise the capital required to fuel the company's rapid growth—and hired him.

Murphy quit his job at the private equity firm but

remained in Atlanta to begin to build out the Better World Books sales team and eventually the company's corporate headquarters staff. The company's operations, logistics and technology infrastructure has remained in the South Bend area from the very beginning, with the primary distribution center located in Mishawaka housing more than 4 million books and approximately 325 of the company's more than 400 employees (others are in Atlanta and Scotland).

Today the company is processing almost 200,000 books per day and has raised \$12 million dollars for nonprofits and libraries while also donating 6.6 million books to many of these same nonprofit groups. It has also won major national recognition from the EPA for its environmental efforts.

Murphy says Notre Dame, with its tradition of Catholic social teaching and commitment to being a force for good in the world, should take the lead in advancing entrepreneurial social ventures such as Better World Books.

"We've got some work to do," he says, adding that the effort will ultimately engage not only science and engineering students but students from all academic disciplines. "I am very enthusiastic about what we can do to foster a real culture of innovation and entrepreneurship across Our Lady's University—and do it in a way that truly reflects our distinctive Catholic character. I think a lot of our best work lies ahead."



BARBARA JOHNSTON

Murphy



Take a few minutes to program your cell phone for emergencies!

In the event of an emergency, the NDSP dispatch center can be reached by dialing 911 from any campus **landline phone**.

But dialing 911 on a **cell phone** on campus, depending on which cell tower the call hits, may send the call to South Bend, Mishawaka or another agency—sometimes even out of state. To save time in the event of an emergency, program your cell phone with NDSP's direct number, 574-631-5555, INCLUDING the area code.

At the same time, check your phone contacts and add "ICE" (which stands for "in case of emergency") to appropriate contact names to let emergency responders know who to get in touch with if you're in an accident or other emergency—i.e., "ICE-Mom," or "ICE-Kevin."

Behind the Scenes



Above: Operating out of the basement of the North Dining Hall, a crew of five staffers handles equipment for an average 8,000 catering events (and 500,000 guests) per year. From left, John Howard, John Negri, Mike Hartman, Leilani Webb and Terry Wheeler.

PHOTOS: CAROL C. BRADLEY



Successful catering events begin here

BY COLLEEN O'CONNOR, FOR NDWORKS

John Negri began his 24-year career at Notre Dame in 1988. Starting as a service associate in Food Services, he washed dishes and mopped floors. Eight months after starting, he was promoted to a catering assistant position, putting together orders, doing set-ups for catered events and loading delivery trucks. Fifteen months later, he became a storekeeper for the South Dining Hall, responsible for, among other things, keeping track of expiration dates for food storage. In 1991, he was promoted to lead storekeeper, a position he still holds today.

What does the lead storekeeper do? A lot.

Negri provides all the equipment as well as canned, bottled and adult beverages for campus catering events. The equipment includes silverware, glassware, dishes, table linens, paper products and supplies, coffee pots, serving platters, drip pans, etc. Originally housed in the South Dining Hall, his operation was moved in 1998 to the lower level of the North Dining Hall.

Assisting Negri is his small, cross-trained staff of four. **Mike Hartman** is the coordinator of adult beverages, which are stocked weekly. **John Howard** and **Terry Wheeler** process the catering orders, which range from deliveries of paper products to served meals and buffets. **Leilani Webb** coordinates the nearly 15,000 pieces of silverware, separating knives, forks and spoons once they come out of the

North Dining Hall dishwasher.

"My 24 years of experience have been great help in making decisions, but this is all about teamwork," says Negri.

The day begins when orders are received from the Catering by Design Office. They are electronically inputted and then posted to a board for processing. Negri personally oversees and tracks every order, checking daily for any revisions. Twenty-five orders are average for a day, but during a busy week, it could be as many as 50 in a day.

Food Services Support Facility drivers deliver the equipment to its designated location. After an event is completed, the equipment is picked up by the Food Services Support Facility drivers and returned to the North Dining Hall, where it is washed and returned to the storeroom. Once back in the storeroom, Negri and his staff sort it out and re-process it for the next function.

Large functions such as Junior Parents Weekend and Commencement require very detailed planning. A typical dinner on Junior Parents' Weekend will require service for an average of 3,800 people. Alumni Reunion Weekend and Graduation are even more challenging, as there are multiple locations involved in the various Commencement and reunion activities. Just last month, in conjunction with the Blue-Gold Game, there were more than 173 catering events in the three days leading up to the game.

The hard part of so many events in a short period of time, he says, is keeping track of everything while managing rapid turnover.

Keeping track of the equipment is an undertaking in and of itself. Once a month, an inventory is taken of everything including more than 6,000 water glasses and china place settings. Of those, 3,500 to 4,000 of each are kept readily available at all times, plus another 1,000 sets of crystal glassware. "We even still have in storage the original pewter plates and pitchers that were used when the University first opened," says Negri.

Asked what he likes best about his job, Negri replied, "The feeling of accomplishment I get at the end of the day, knowing I have met my short-term goals, plus the respect and support I get from management."

In the fall of 2010, Negri severely injured his back in an automobile accident and was out for more than four months. "I had to learn to walk again." But according to Negri, the accident changed his life and made him a better man. "My faith in Jesus is my driving force and gets me through stressful times and frustrating days," said Negri.



Above left, Mike Hartman is adult beverage coordinator. Storekeepers John Howard (above right) and Terry Wheeler fill written orders and pack equipment for outgoing orders. Everyone pitches in to re-stock the shelves when equipment comes back in.