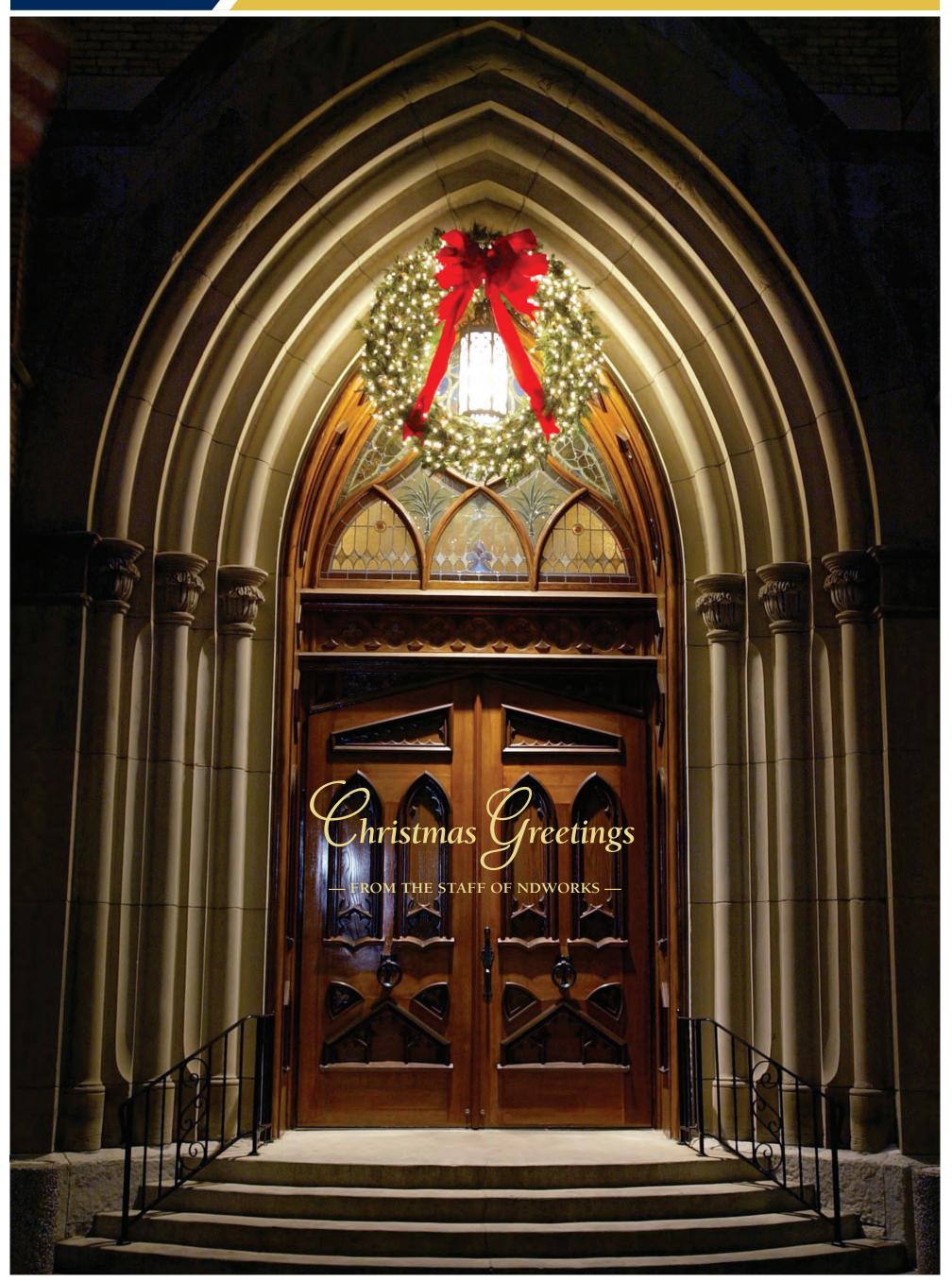


Vol. 12, No. 5 • December 2014

Works for Notre Dame faculty and staff and their families



### **NEWS** BRIEFS

## WHAT'S GOING ON

### **OIT OFFERS FREE SURVEY TOOL**

Interested in creating online surveys? Qualtrics, an industry leader for online survey software, is now available to all ND faculty, staff and students free of charge.

This Web-based tool is a great choice for those who need to create and distribute an online survey and collect results quickly and easily. There are short training tutorials available to help you get started. For additional information, go to ntrda. me/surveyqualtrics.

If you need assistance in designing a quality survey using Qualtrics, contact the Center for Social Research at csr.nd.edu/surveyresearch-services.

### **RENT HOUSING TO ND FACULTY AND STAFF**

Through a partnership with the University, Cressy & Everett Real **Estate** is representing newly hired relocating faculty and staff looking for housing in the greater Michiana area.

If you own an investment property and are interested in renting to ND faculty and staff on a short-term (month-to-month) or long-term lease through the University's Preferred Realtor Program, call 574-485-1908 or visit cressyeverett.com/NDrentals to list your property for free.

### PEOPLE **HILDRETH APPOINTED TO NSF ADVISORY COMMITTEE**

Michael Hildreth, professor of physics, recently accepted a three-year term to

> serve on the <sup>§</sup>National Science Foundation Advisory Committee on Cyber-Infrastruc-

> > ture. The

committee



the Interdisciplinary Center of Network Science and Applications, and the Data, Inference, Analytic and Learning Lab at Notre Dame, has been selected by the Institute of Electrical and Electronics Engineers (IEEE) Computational Intelligence Society (CIS) to receive the society's 2015 Outstanding Early Career Award.

### BOOKS

### **'SPIRIT OF CHRISTMAS AT NOTRE DAME' RELEASED**

A third children's book by Susan Mullen Guibert and Brendan O'Shaughnessy (Public Affairs and **Communications**), "The Spirit of Christmas at Notre Dame," has been released by Corby Books, joining two previous books in the series, "Clashmore Mike Comes Home" and "Clashmore Mike, Dublin to Dome." A very special Santa (inspired by Rev. Theodore M. Hesburgh, C.S.C.) helps a young first-year student rediscover the magic of Christmas. (\$21.95, available at both the Notre Dame and Eddy Street bookstores.)

### **CAMPUS NEWS** SPANISH ARCHITECTS WIN RAFAEL MANZANO **ARCHITECTURE PRIZE**

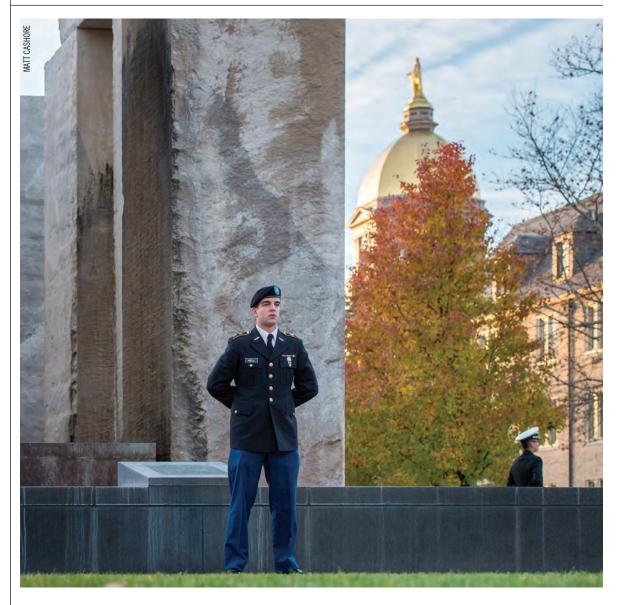
Spanish architects Javier Cenicacelaya and Iñigo Saloña have been awarded the Rafael Manzano Martos Prize for Classical Architecture and Monument Restoration, presented in partnership by the Notre Dame School of Architecture and philanthropist Richard H. Driehaus.

The Manzano Prize recognizes Cenicacelaya and Saloña for their restoration projects, such as the restoration of the Palace of the Regional Government of Bizkaia, and new construction projects, including the School of the Holy Family,



The staff of the askHR help center agree—Notre Dame is a great college to work for!

Farida Suhardjo (13 years); Alicia Ivy (2 years); Marcia King (5 years); Kathy Bossler (4 years); Jessica Orta (2 years); Sheri Egendoerfer (2 years); Amber Petras (4 years); Lindsey Meyer (3 years); Mary Warner (9 years)





advises the National Science Foundation on matters related to vision and strategy regarding solutions to problems of efficiently connecting laboratories, data, computers, and people, with the goal of better enabling computational and data-enabled science and engineering.

### **CHAWLA TO RECEIVE IEEE CIS** EARLY CAREER AWARD

Nitesh V. Chawla, the Frank M. Freimann Collegiate Associate Professor of Computer Science and Engineering and director of both

the rural center of La Rigada and a building on the historic street of Lacken in Brussels.

### **GROUNDBREAKING FOR** TURBOMACHINERY FACILITY

Groundbreaking ceremonies were held Oct. 15 for two multitenant office buildings at South Bend's Ignition Park, which will include space for the University's new Turbomachinery Facility.

The University and five public and private partners announced a \$36 million project in June that will be the nation's foremost research and test facility for advancing the

### **VETERANS DAY**

The University's traditional observance of Veterans Day, Nov. 11, included Navy, Army and Air Force ROTC cadets and midshipmen standing 24-hour vigil at the Clarke Memorial Fountain, honoring the legacy of American veterans of war. The vigil was followed by the Tri-Military ROTC annual Veterans Day Ceremony in the Hesburgh Library's Carey Auditorium, featuring speaker Nick Soley, a former Marine Corps Sergeant who served in the Pacific Theater in WWII and fought in battles for the Solomon Islands, Guadalcanal and Tarawa.

technology used in the massive gas turbine engines used by commercial and military aircraft, power plants

and the oil and gas industries. The Turbomachinery Facility will occupy approximately 43,000 square feet of

space and will be fully operational by July 2016.



Have a comment, question or story idea? Contact NDWorks Managing Editor Carol C. Bradley, 631-0445 or bradley.7@nd.edu. For questions regarding The Week @ ND or the University calendar, contact Electronic Media Coordinator Jennifer Laiber, 631-4753 or laiber.1@nd.edu.



# 2014 TEAM IRISH AWARDS

### Notre Dame Day Team



The inaugural Notre Dame Day brought together current students, alumni, parents and friends from around the world to watch, connect, give and vote for the areas of the Notre Dame experience that meant the most to them.

From its headquarters in LaFortune Student Center, the Notre Dame Day team staged a 29hour online video broadcast on April 27. At the heart of the broadcast was the Notre Dame Day Challenge. Each gift to the University made on Notre Dame Day was accompanied by three votes, which helped allocate over \$250,000 in Challenge Funds to hundreds of campus interests, from athletic teams to research institutes and financial aid.

It took an unprecedented level of integrity, accountability and teamwork for the 30-person Annual Giving and Strategic Marketing team to assemble a coalition of campus partners, video production teams, digital vendors and national media personalities to execute such a complex live broadcast.



Until the fall 2013, the majority of student records were maintained in a paper file that traveled with students as they progressed through various stages of their academic career at Notre Dame. At different stages documents were boxed up and loaded on to a truck and transported across campus. In order to keep track of all of this data, more

First Year Electronic Advising Solution



than 20 databases were used-a very timeconsuming process.

In the spirit of continuous improvement, the Electronic Student File team was formed to streamline the process over the summer of 2014 Student files are now digitally transferred from Admissions to First Year of Studies, eliminating not only paper files but redundant databases. This greatly increases the effectiveness and efficiency of the entire academic document management process and makes us all better stewards of the environment.

## Want to be a happier person? Be generous

### It's a practice, not just an attitude

### **BY CAROL C. BRADLEY, NDWORKS**

In this season of giving, it's appropriate to recall perhaps the most famous miser in literature, Charles Dickens' Ebenezer Scrooge.

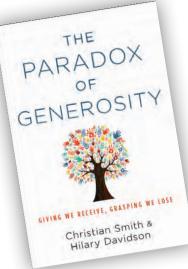
"At this festive season of the year, Mr. Scrooge," said the gentleman, taking up a pen, "it is more than usually desirable that we should make some slight provision for the Poor and destitute, who suffer greatly at the present time. Many thousands are in want of common necessaries; hundreds of thousands are in want of common comforts, sir."

"Are there no prisons?" Scrooge asks. "And the Union workhouses? Are they still in operation? ... I help to support the establishments I have mentioned—they cost enough."

Obamacare for the so-called 'unfortunate' and the illegals.'

"Americans are not stingy. We're just very tired of being asked to give ... and to give...and to give...ENOUGH. I'm keeping my hard-earned cash for my family. Period."

The notion of generosity, and the ways in which we deal generouslyor not-with our friends, family and communities—is the heart of the book, which is based on empirical data collected during five years of research as part of the Science of Generosity Initiative.



enjoy," he says.

Jesus' saying, "It is more blessed to give than to receive," turns out to be true.

But at the same time, many Americans aren't very generous with their money. Only about 3 percent of Americans give more than 10 percent of their income to charity. Nearly half of Americans (44.8 percent) give nothing.

What does it mean to be generous? On a basic level, generosity, Smith notes, is "the virtue and practice of giving good things to other people. It's a practice, not just an attitude."

But generosity can also mean volunteering, donating blood, relational attention and emotional availability to friends and family. It means attending to, and caring about, others.

The kind of generosity that repays



The word "miser," Christian Smith and co-author Hilary Davidson note in "The Paradox of Generosity," (Oxford University Press, 2014) is related to the word "miserable."

And we'd be hard-pressed to find a more wretched character than Scrooge, "a tight-fisted hand at the grind-stone, Scrooge! A squeezing, wrenching, grasping, scraping, clutching, covetous, old sinner! Hard and sharp as flint, from which no steel had ever struck out generous fire."

But if you imagine Scrooge's attitude died out with Dickens' England, you have only to read the comments on a recent (Sept. 3) PBS Newshour story ("Are Americans a stingy lot of people?") on the book. "My taxes already go toward generous (sic) amounts of welfare, Section 8 housing, food stamps and

The research draws on a survey of 2,000 Americans, 60 in-depth interviews with individuals across 12 states, and more than 1,000 photographs and other visual materials.

The conclusion Smith, William R. Kenan Jr. Professor of Sociology, draws is that there's a direct correlation with happiness and generosity. "The more generous Americans are, the more happiness, health and purpose in life they

the generous person is sustained generosity over a lifetime, Smith says, "not a one-off thing. It has to be regularly giving money, tithing-a practice. It is empirically the case that you need to learn to love others."

Smith himself became interested in financial giving when he realized all the good that could be done in the world, if there were resources to do it.

People who aren't generous feel fear, he notes. "They're afraid they'll lose everything. Feeling like you're helping someone else gives us a feeling of gratitude, like we're living in a world of abundance rather than a world of scarcity.

"In holding on to what we possess, we diminish its long-term value to us. Some people make financial decisions that lock them in-they have no discretionary income because they've chosen to spend it all on themselves. Other people want to become more generous-they live with a low-level guilt. A comfortable guilt. But they're

Smith

not so uncomfortable that they'll change anything. They need to get over that hump.'

It's worth doing some soulsearching, Smith says. "People need to confront themselves. What are our best selves? Who would we like to be? See the difference your generosity can make, for the animal shelter or whatever your vocation of care is."

That's the conclusion of the book-that generosity is paradoxical. In giving away, we receive back in return. By clinging to what we have and trying to protect against uncertainties and misfortunes, we become more anxious about those anxieties and misfortunes. By failing to care for others, we do not properly take care of ourselves.

Scrooge, at the end of his story, emerges as a different, now generous soul. It's a transformation any of us can undergo.

"Some people laughed to see the alteration in him, but he let them laugh, and little heeded them; for he was wise enough to know that nothing ever happened on this globe, for good, at which some people did not have their fill of laughter in the outset; and knowing that such as these would be blind anyway, he thought it quite as well that they should wrinkle up their eyes in grins, as have the malady in less attractive forms. His own heart laughed: and that was quite enough for him.'

# Notre Dame's junior faculty achieve record success in nationally competitive awards

### **BY WILLIAM G. GILROY, MEDIA RELATIONS**

The National Science Foundation (NSF) has recognized eight Notre Dame faculty from the Colleges of Arts and Letters, Engineering and Science for their excellence in research with an Early Career Development (CAREER) Award. Additionally, two faculty members have been awarded Young Investigator Program (YIP) Awards from the Army Research Office.

Diogo Bolster, assistant professor of civil and environmental engineering and earth sciences, received a CAREER Award for a project titled, "Connecting the Scales: Local to Global Scales of Mixing in Heterogeneous Porous Media.' The goal of his work is to develop a more complete picture of mixing, a fundamental process that is critical to understanding how to accurately predict the mobility of contaminants in the environment and to design better pollution remediation and prevention strategies. Bolster joined the Notre Dame faculty in 2010.

Ying Cheng, an associate professor in the Department of Psychology and a fellow of the Institute for Educational Initiatives, won a CAREER Award for a project titled, "Cognitive Diagnostic Adaptive Testing for AP Statistics." The research objective of her project is to determine the extent that computerized adaptive testing improves the learning and engagement of students, using statistics from Advanced Placementlevel classes as an example. Cheng joined the faculty in 2008.

Jason Hicks joined Notre Dame in 2010 and is an assistant professor of chemical and biomolecular engineering. His CAREER Award is for a project titled, "Toward Unprecedented Selectivities in C-O Bond Cleavage Reactions Using Fe-Based Bimetallic Catalysts," which involves a thorough study of the stability, reactivity and selectivity of the iron-based bimetallic catalysts that he developed at Notre Dame.

Amanda Hummon, Huisking Foundation Inc. Assistant Professor of Chemistry and Biochemistry, received a CAREER Award for a project titled, "Three Region nLC-MS/MS Analysis: A Novel and Rapid Approach to Evaluate Molecular Penetration." Her project is seeking a better fundamental understanding of how molecular species penetrate cell masses. Hummon joined the faculty in 2009.

Jill Lany, assistant professor of psychology, received her CAREER Award for a project titled, "Discovering the Underpinnings of Statistical Language Learning in Infants." The proposed research will examine how developments in infants' ability to encode and remember auditory and visual information are related to language learning ability and whether these abilities predict when infants will reach language milestones. An important goal is to promote early identification of infants at risk for language delays. Lany joined Notre Dame in 2010.

Gabor Szekelyhidi is an associate professor of mathematics who joined the Notre Dame faculty in 2011. He received his CAREER Award for a project titled, "Canonical Metrics and Stability in Complex Geometry." In his research project, Szekelyhidi proposes to study the Yau-Tian-Donaldson conjecture, which relates the existence of special, preferred shapes of complex manifolds to certain algebraic properties of them.

Ashley P. Thrall, John Cardinal O'Hara, C.S.C, Assistant Professor of Civil and Environmental Engineering and Earth Sciences, was awarded a CAREER Award for a project titled, "Transitional Bridging: From Rapidly Deployable Disaster Relief to Permanent Infrastructure Solutions." Her research project will build a framework for bridges that can be rapidly deployed following natural or manmade hazards and then transformed to support long-term, sustainable development. Thrall, who directs the Kinetic Structures Laboratory, which is a facility devoted to investigating moving structures with applications for the military, the developing world and disaster relief, joined the faculty in 2011.

Franklin Tao, assistant professor of chemistry and biochemistry, received a CAREER Award for a

understanding of the unique catalytic performance of such sites and to integrate research on catalysis and energy science into an educational program. Tao joined the Notre Dame faculty in 2010.

Two junior faculty won YIP (Young Investigator Program) Awards from the Army Research Office. The YIP Awards support researchers who have demonstrated extraordinary research abilities in science and engineering:

Haifeng Gao, assistant professor of chemistry and biochemistry, won a YIP Award for a project titled, "Regulating Inter-Polymer Chain Reaction in Nanospace: An Efficient Method to Produce Hyperbranched Polymer with Uniform Structure." His research project will, for the first time, develop a reliable method to produce nanostructured polymers with high molecular weight and uniform structure. These polymers materials have shown great potential for the applications in catalysis, nanomedicines and microelectronics. Gao joined Notre Dame's faculty in 2011.

William Phillip, assistant professor of chemical and biomolecular engineering, received his YIP Award for a research project titled, "Understanding the Novel Stimuli Responsive Transport Properties of Mutilfunctional, Nanostructured Block Polymer Membranes." The focus of his research project is the development of next-generation membranes with well-defined nanostructures and tailored chemical functionality. Phillip, a graduate of Notre Dame, joined the faculty in 2011.

As Notre Dame's research profile continues to accelerate, the recent successes with the CAREER and



Bolster



Cheng



Hicks



Hummon

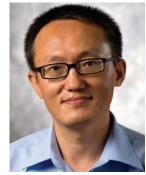




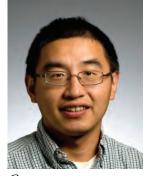
Szekelyhidi



Thrall

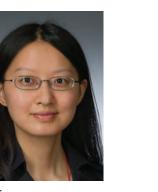


Tao



Gao





project titled, "Catalysis on Singly Dispersed Bimetallic Catalytic Sites." His research focuses on the study of singly dispersed bimetallic sites and aims to gain a fundamental

YIP Awards contribute to a long legacy of excellence in research, scholarship and creative endeavor at the University.

Lany



Phillip

## Whaley named Indiana Professor of the Year

### A first for Notre Dame

### BY MANDY KINNUCAN, **MEDIA RELATIONS**

Michelle A. Whaley, a teaching professor in the Department of Biological Sciences, has been named the 2014 Indiana Professor of the Year by the Carnegie Foundation for the Advancement of Teaching and the Council for the Advancement and Support of Education (CASE). This is the first Indiana Professor of

the Year Award for a Notre Dame faculty member.

Whaley, who joined the Notre Dame faculty in 1993, earned her doctorate in molecular genetics from Notre Dame. Her doctoral work characterized a gene involved in Drosophila (fruit fly) visual system development that, when mutant, causes adult retinal degeneration.

Whaley's research is currently focused on the characterization of Aedes aegypti mosquito visual genes and how gene expression may affect mosquito behavior.

Her teaching has focused on developing critical thinking and research skills in students early in their careers. She teaches three main research-based courses: Junior and Senior Honor Research seminars; Molecular Genetics Laboratory, which is a semester-long research project; and Cell Research, a twocredit independent study research course

She also directs the summer Research Experience for Undergraduates (REU) program in the Department of Biological

Sciences and has received 16 years of continuous National Science Foundation support for her summer REU Program in Molecular and Cellular Biology. The program trains undergraduate students from across the nation at Notre Dame during the summer. A particular emphasis of the program has been on training students from underrepresented groups, with usually half of each summer group consisting of minority students.

Whaley is also the faculty coordinator of the Undergraduate

Research program in the Department of Biological Sciences and the chair of the Undergraduate Research Committee, a group of mostly tenured faculty who develop policy and opportunities for undergraduate research in the department.

### Event management software simplifies scheduling, resource tracking

### Streamlines processes and improves communication

### **BY DAR CUTRONA, NDWORKS**

Reserving general-use spaces on campus for staff meetings or special events has been made easier and more efficient with the implementation of Events Management System (EMS) software.

Introduced to campus through a combined effort of Student Activities and the Office of the Registrar, the technology is now used by the Mendoza College of Business, Law School, Athletics, Catering, the Center for Social Concerns/Geddes Hall and Coleman-Morse Center.

Previously, the online space reservation process took approximately three minutes to complete and offered only a tentative status, with mandatory follow-up action needed for a confirmation.

With EMS, online reservations take less than a minute, without additional steps. EMS simplifies scheduling the 3,000-plus classes and 7,000 events held annually at Notre Dame, and offers tools for managing resources (technology, set-up/teardown, support staff).

"And utilization of space can now be measured in a consistent manner across campus," says Chuck Hurley, University registrar and director of summer session.

Now faculty and staff may reserve a space at scheduling.nd.edu. Same-day reservations are offered, and when possible, all generalpurpose rooms are available at no

cost for academic work, meetings or University events. The highly configurable program allows users flexibility from size or room setting to type of microphone or laptop needed for an event.

Jon Crutchfield, director of information technology at Mendoza College of Business, notes that, "Before EMS, the person making the request had to contact two different Mendoza teams, one to reserve the

room and one to reserve the technology. The software enables Mendoza to use a single, easy-touse web form to combine the room and technology reservation processes." Linda Martellaro,

classroom and reporting specialist in the Office of

the Registrar, says, "The

reservation process is now more efficient and more streamlined for the end user. The software is very intuitive."

Martellaro, who manages 155 general-purpose rooms on campus, added that the software has gone global for the University and is now supporting scheduling needs at Notre Dame's London Global Gateway.

The software is also used by Student Activities to manage spaces in LaFortune Student Center, Washington Hall, Stepan Center, the Creek House (an off-campus retreat facility) and outdoor grounds spaces (with other campus partners). Though used primarily for student clubs and organizations, departments may ask about using a space by contacting the Student Activities office (631-6912) or visiting scheduling.nd.edu.

"The software has helped us manage the scheduling of meeting and event spaces, the resources our department offers to those spaces and improved communication about those reservations to our staff in order to serve student groups and departments across campus," says Brian Fremeau, director of student activities facilities.

"Because so many other facility managers across campus have begun to use EMS, one benefit of the project has been connecting those staff to share best practices about how best to use EMS going forward," Fremeau says.



Linda Martellaro manages 155 general-purpose rooms on campus.

### Construction begins on Campus rossroads

### Pedestrian and vehicular access, parking impacted

### FROM NOTRE DAME SECURITY POLICE

Construction on the Campus Crossroads project-the largest building project in the University's history-began in late November.

Fencing has been erected around the stadium, which will limit pedestrian walkways on both its east and west sides. On the east, a temporary walkway has been built leading to and from Gates 1 and 2 of the Joyce Center. On the west, pedestrians can use the DeBartolo Quad walkways and/or walk through the Mendoza College of Business and DeBartolo Hall.

Construction vehicles and equipment will be in nearly constant use in the parking lot south of the stadium. As a result, most of the available parking space for faculty, staff and students will be south of the Joyce Center.

Construction operations will begin before 8 a.m. and continue into

most evenings, weather permitting. It is likely that construction also will continue on most Saturdays and many Sundays.

A free shuttle for students, faculty and staff will operate weekdays from 7 to 9 a.m., 11:30 a.m. to 1:30 p.m. and 4 to 7 p.m. between the C1 parking lot near the track and field complex and the Main Circle, with a stop at Eddy Street and Holy Cross Drive near Legends.

Because of the construction traffic immediately south of the stadium, faculty, staff and students are urged to use Leahy Drive along the east side of the area to enter and exit the parking lots.

Signs will be posted to provide direction for both vehicular and pedestrian traffic, but faculty, staff and students are encouraged to contact the NDSP parking and traffic office (631-5053 or parking@ nd.edu) with suggestions.

Updates on the Crossroads project and other campus construction are available online at construction. nd.edu.

### Saving for College holiday gifts and end-of-year contributions

If you're thinking about gift or end-of-year contribution to a college fund, the Private College 529 Plan and the IN CollegeChoice 529 Plan offer ways for family and friends to make electronic contributions to an account. Visit your plan's website to learn more. If you participate in the Indiana CollegeChoice 529 Plan, contributions must be received on or before Dec. 31, 2014, to claim the 2014 Indiana state tax credit. Visit savingforcollege.nd.edu for information.

## Make your life easier with these traveIND tools!

Travel Card: Use the card to prepare an expense report as charges flow directly into Concur-minimizes data



CAROL C. BRADLEY

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Visit travel.nd.edu. For more information, contact the travelND help desk, 631-4289.

Concur has a new look beginning in late January. Watch for upcoming announcements.



## Sports as a subject of scholarship

### The Joyce Sports Research Collection

#### **BY CAROL C. BRADLEY, NDWORKS**

"You must have the greatest job in the world!" people often say to **George Rugg.** He's curator of the Joyce Sports Research Collection in Rare Books & Special Collections in the Hesburgh Library.

Rugg has a background in art history and for a time studied and taught courses in Early Modern European painting before joining the library. But since he was a boy he says, "I was always profoundly interested in sports, especially baseball. Playing it, reading about it, watching it. I was obsessed with it. And that interest extended to many other sports, including football and hockey."

The Joyce Collection is an internationally recognized resource in the history, sociology, economics and culture of American sports and their antecedents, Rugg notes, adding that the collection holds no Notre Dame sports-related material—everything University related is held in the University Archives on the 6th floor of the Hesburgh Library.

The collection includes 5,000 book titles alone, plus hundreds of periodicals, photographs (including an important collection of boxing photographs), and tens of thousands of pieces of printed ephemera on athletic sports, physical culture, recreation and leisure, as well as sports literature and journalism. The emphasis is on American sports up to about 1950.

"People think, 'Oh, sports,' Rugg says. "But sports have been a subject of scholarly interest for decades, in sociology, anthropology and history. A researcher might be interested in topics such as the economics of football in the 1930s—what were ticket and concession prices?

"It's a 'destination collection,' a very deep research collection that attracts scholars from around the world. But users might also be journalists and filmmakers in addition to scholarly researchers all kinds of different people use the collection. On the website (rarebooks.library.nd.edu) twogame programs, and typewritten or handwritten manuscripts.

Ephemera (transitory written materials not meant to be preserved) are particularly important, Rugg says, because they may be the only surviving copy.

The collection has been assembled over the past 40 years, with important donations and purchases both large and small.

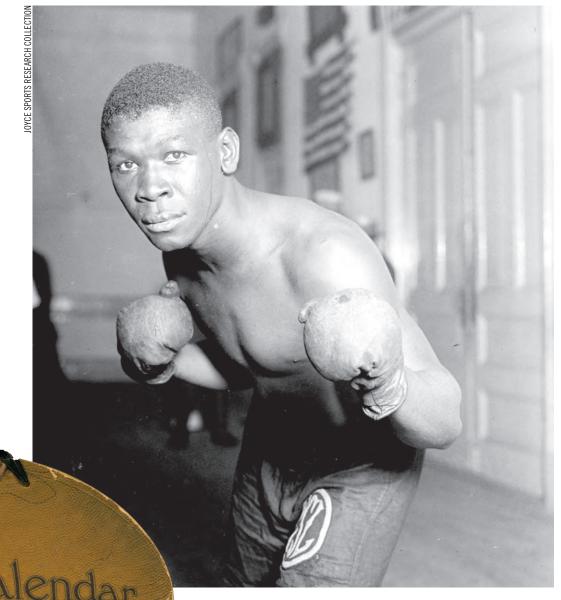
The University began collecting sports materials in the 1960s, prompted by alumni groups. The collection as it exists today evolved from the 1977 purchase of the full inventory of Goodwin Goldfaden, the first sports publication dealer in the country.

"The Goldfaden collection included around 30,000 books and 300,000 additional pieces of printed matter," Rugg says, who was tasked with sorting and cataloging the collection when he joined the University in 1994.

"It proved to be as good an investment as the University's ever made. The

Football

WALTER CAMP 1917



Above, an original, glass negative portrait of Canadian-born, 5-foot 7-inch lightweight boxer Young Sam Langford, c. 1925-26. At left, The Football Calendar 1917, by Walter Camp. Football-shaped printed ephemera "bound" with lacing were popular in the early 20th century. Below left, a program from the first Max Schmeling--Joe Louis heavyweight fight in 1936. The two contests, between an African-American and a German of the Nazi era came to represent to Americans the struggle between democracy and Fascism. Schmeling won the first bout with a knockout in round 12, but in the second, Louis won with a first-round knockout. Below right: A color lithographic poster of professional wrestler Wladek Sbyszko, 1921.

### purchase

came at just the right time before people started collecting baseball cards and other sports memorabilia. Memorabilia, between 1980 and 1990, increased in value exponentially. At the time the Goldfaden collection was purchased, the first issue of Sports Illustrated only had nostalgic value."

The purchase was also prescient, Rugg adds. "It anticipated the subsequent decade's new interest in the application of scholarly methodologies to the study of sports." In 1987, the collection was endowed in honor of Rev. Edmund P. Joyce, C.S.C., the University's longtime executive vice president. The endowment,

and another

funded by

John and

Dessa

and manuscripts, you're at the mercy of the market," he says. "A book we acquired last year was about what are called the Negro Leagues. It dates from about 1905, and is one of only five copies known. If you bid at auction, maybe you get it, maybe you don't. You can't anticipate what's going to be available."

Because the collection is so well

in making a purchase to add to the collection, "We have to have ironclad provenance. We only deal with reputable people, people we've known and worked with a long time.

The sports collectibles market is a viper's nest. Forgeries are rampant. People doctor baseball cards to improve the value. You'd need great expertise related thing Rugg doesn't collect for the library. "No baseball cards," he says.

### Rare Books & Special Collections

Rare Books & Special Collections, 102 Hesburgh Library, is open to any interested user with ID—visitors, faculty, staff or students—from 9 a.m. to 5 p.m. Monday through Friday.

thirds of the hits are for sports."

The collection is also known for its breadth, with several sport-specific sub-collections of national stature, including those dedicated to boxing, wrestling, American football, billiards and golf.

"We have the best boxingrelated collection in the world, and the best baseball collection after Cooperstown," he says.

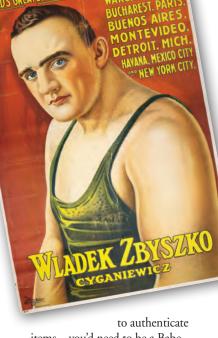
The book collection includes many scarce early titles, ranging from the physician Girolamo Mercuriale's treatise on physical culture in classical antiquity ("De arte gymnastica," 1573) to Walter Camp's 1892 introduction to a game newly popular on college campuses of the Northeast U.S., "American Football."

The collection's hundreds of periodical titles include Sporting Magazine, the earliest known sports journal, published in London from 1792 to 1871, in addition to ephemera such as guides, rulebooks, Campbell, allow for continued growth and development of the collection.

JUNE 18, 1936

The library recently acquired the collection of Nat Fleischer, the most important boxing editor of the 20th century and editor of Ring Magazine. "When you're collecting rare books known, people also offer collections—but these days, he adds, "it's less about finding benefactors than finding things we don't have." When the library is interested

OFFICIAL PROGRAM 254



items—you'd need to be a Babe Ruth signature specialist." Although there's a Babe Ruthautographed baseball in the collection (one of 30 or so the collection received as gifts), there's one sports-

You'll be asked to review and sign the reading room rules before using or viewing materials. Visitors must sign in and out; no food or drink is allowed; hands should be washed before handling materials and cell phones must be silenced. In addition, pens are strictly prohibited in the Reading Room-only pencils may be used. Personal laptops or use of the workstation are permitted. No photography is allowed, but if the condition of the material permits, scanning by librarians is possible. Email or call in advance (rarebook@nd.edu or 631-0290) so materials can be ready when you arrive. Most items can be retrieved while you wait, but some make take up to two business days.

## Reckers: Wood-fired pizza and fresh fruit smoothies

### The University's only 24-hour restaurant

### BY COLLEEN O'CONNOR, FOR NDWORKS

It may be located in the South Dining Hall and surrounded by an undergraduate neighborhood, but Reckers has something to offer everyone.

Besides being the University's only 24-hour restaurant, it also has the only wood-fired oven on campus and prepares more than 50,000 pizzas a year. Everything is made to order and all items on the menu are available 24/7.

Working with Executive Chef Don Miller, the staff at Reckers creates their own unique recipes. All sauces, from lemon pesto to Buffalo, are made in-house. Specialties besides pizza are smoothies—sourced from Freshens and made with real fruit and "piadinas," Mediterranean-style sandwiches made with chargrilled dough.

"In addition to our featured menu, we are continually testing new recipes for burgers, pizzas and milkshakes," says Dawn Dieter-Bell, general manager. "Right now we are featuring Nutter Butter, apple pie and pumpkin milkshakes."

Reckers delivers for planned office events. Staff will make smoothies at your location, whether at noon or midnight. Group meeting space can be reserved at most times of day free of charge.

The casual coffeehouse atmosphere, with comfortable seating and a large outdoor patio, facilitates all manner of gatherings. From



coffee (Starbucks) and conversation, to tutoring to job interviews, Reckers provides a welcoming space to meet.

"Coaches will bring in recruits, and during events such as move-in and move-out days, game days and Commencement, faculty, staff and families come here to enjoy the hospitality of Notre Dame," says Dieter-Bell.

The busiest time is 3 to 4 a.m. when the café becomes a hub of late-night energy. Special events such as poetry night, movie night, game nights and live bands are open to all.

What makes all this work is the great staff here," says Dieter-Bell. "A 24-hour operation is challenging in the sense that you do not have down time to catch up. Our motto is "leave it better than you found it." Hours are 24/7 during the academic year. Summer and break week hours are posted on the website, food.nd.edu. Email reckers@nd.edu or call 631-8638.

Although faculty and staff aren't likely to be there to observe, Reckers busiest hours are from 3 a.m. to 4 a.m. Reckers is the only 24-hour restaurant on campus, and boasts the only woodfired pizza oven as well.

## **Center for Culinary Excellence**





At right, Patrick Dahms, director of food and beverage/executive chef at Morris Inn and Notre Dame Food Services Executive Chef Don Miller at the grand opening of the Center for Culinary Excellence (CCE) on Tuesday, Nov. 11. Formerly known as the Food Services Support Facility, the new Center for Culinary Excellence houses a state-of-the-art catering kitchen, cook and chill operation and bakery, and provides space for food preparation for the dining halls, campus cafés and catered events. Now, instead of delivering to a central storage area first, a single vendor will make direct deliveries to food service units. The relocation of catering operations from the North Dining Hall to the CCE also achieves the goal of physically separating catering and student dining functions, allowing for improvements in operations and customer service.

## New furniture management program announced

### Reducing waste and optimizing resources

### BY MARGOT JONES, CAMPUS SERVICES

Campus Services has announced the launch of **FurnishND**, a new program to assist faculty and staff with the acquisition of workspace furnishings, the removal of office furniture and other items such as computers, lamps and refrigerators, and furniture repair requests. The program will be managed by Warehouse and Delivery Services.

Before purchasing new, faculty and staff now have the option of selecting workspace furniture—desks, bookcases, filing cabinets, side chairs, etc.—that matches their needs from an on-campus inventory of highquality, pre-owned items.

The program will reduce waste, recycle materials and optimize resources, says **Sarah Misener**, associate vice president of Campus Services.

To submit a request for furniture acquisition, removal or repair, fill out and submit the guided form at **furnish.nd.edu.** A member of the Warehouse and Delivery team will follow up within two business days.

The furniture inventory is located in the Mason Support Center Warehouse. Customers can schedule an appointment to view items in person after submitting a request. Acquisition, delivery and assembly of items from the furniture inventory are free to the department, as is removal of existing furnishings.

Warehouse and Delivery will continue to partner with Business Furnishings, the University's primary furniture dealer, to identify furniture solutions and coordinate requests for new furniture, modular furniture (e.g., open work stations, panels) and furniture repairs. These requests should be submitted via **furnish. nd.edu.** 

Charges to departments for new furniture, modular furniture and furniture repairs will vary depending on the type of items selected and the delivery, disassembly or repair required.

Furniture needs related to construction or renovation projects will continue to be led by the Interiors Project team in the Office of Planning, Design & Construction.

Pre-owned furniture in the oncampus inventory is available to all University departments for oncampus use. Items cannot be reserved for units or stored for future retrieval. Visit **furnish.nd.edu** to learn more about the program. Email **furnish@ nd.edu** or call 631-7447 for more information.

"We're excited to provide this program and the services associated with it to the campus community," says Misener. "FurnishND is an excellent use of University resources and is at the same time environmentally responsible."



Above: Donetta McClellan, Wayne Batteast and Silvio Mendez.



Batteast



## Tips for a more sustainable holiday season



Reduce, reuse and recycle

• If traveling to family, buy gifts at



### **ELECTRIC VEHICLE CHARGING STATIONS**

Through a partnership between Facilities Design and Operations, NDSP and the Office of Sustainability, the University has installed four Eaton Tier 2 electric vehicle charging stations for use by the Notre Dame community.

The charging stations, located in the Hesburgh Library parking lot and Joyce parking lot, are available for use in 4-hour increments by drivers registered in the University's EV parking program. The EV parking program is open to any electric vehicle driver with a valid Notre Dame ID and Notre Dame parking permit for an annual fee of \$25.

To learn more about the program or to apply for an EV Parking permit, contact the Office of Sustainability at 631-2748, **green.nd.edu** or **sustainability@nd.edu**.

### BY DANA BAKIRTJY, SUSTAINABILITY

The holiday season doesn't have to be wasteful. Here are some tips from the Office of Sustainability to make your holiday season even more "green."

- Is it time to replace those Christmas lights? Consider buying LED lights—they last longer and will cost less in the long run. In fact, electric costs for lighting a tree 12 hours a day for 40 days is only \$0.56 with LED lights but \$25.13 with traditional bulbs.
- Consider wrapping your gifts in last year's wrapping paper or newspaper (kids love the Sunday comics!) If each American household wrapped just three gifts in reused materials, enough paper would be saved to cover 45,000 football fields.

them with you or shipping them. You'll save money, gas and space in the car.

- If you choose to use a freshly cut tree, make and dispose of it at a Christmas tree recycling center—it will be turned into woodchips for landscaping rather than buried in a landfill. St. Joseph County collects Christmas trees for chipping starting Dec. 28. Check with your local trash and recycling collector for more information.
- Although store-bought Christmas cards are pretty, they also consume substantial natural resources to produce—in fact, the quantity of cards sold in the U.S. during the holiday season would fill a football field 10 stories high. Consider starting a new tradition and make personalized homemade cards. Children's artwork is a great source of Christmas card pictures!



For tickets to events at the DeBartolo Performing Arts Center, visit **performingarts.nd.edu** and create an account or log in to view faculty/staff and student discounted ticket prices, or contact the ticket office, 631-2800. Ticket prices listed are the faculty/staff rate.

### **MET OPERA**

### The Barber of Seville

The Met Opera Live in HD 1 p.m. Saturday, Dec. 6 Browning Cinema; \$23 The Met's effervescent production of Rossini's classic comedy—featuring some of the most instantly recognizable melodies in all of opera—stars Isabel Leonard as the feisty Rosina, Lawrence Brownlee as her conspiring flame, and Christopher Maltman as the endlessly resourceful and charming barber, himself. Michele Mariotti conducts the vivid and tuneful score.

### **CONCERTS**

### Bach's Lunch

12:10 p.m. Friday, Dec. 5 Penote Performer's Hall; free event Join Department of Music students in a noontime concert.

#### Notre Dame Chorale presents Handel's "Messiah"

Department of Music 8 p.m. Friday, Dec. 5 8 p.m. Saturday, Dec. 6 Leighton Concert Hall; \$12-\$3 ND Chorale presents Handel's "Messiah." *Family friendly for ages 7+.* 

#### **University Band Fall Concert** Department of Music

3 p.m. Sunday, Dec. 7 Leighton Concert Hall; free event The Notre Dame Band presents its University Band Concert, featuring students, alumni, faculty and staff of the University. Conducted by Alison Thigpen and Justin McManus.

### **ND Jazz Bands Fall Concert**

7 p.m., Sunday, Dec. 7 Leighton Concert Hall; free event The Notre Dame Jazz Bands present their annual fall concert. Directed by by one of Haydn's final symphonies, Symphony No. 103 in E flat Major, "Drum Roll."

### South Bend Symphony tickets discounted for faculty and staff

The South Bend Symphony offers faculty and staff a **30 percent** discount on tickets for performances at both the DeBartolo Performing Arts Center and the Morris Performing Arts Center in downtown South Bend. The discount is not available on either website-please go in person or call the DeBartolo Performing Arts Center ticket office (631-2800) or the Morris ticket office (235-9190) and mention that you're an employee to receive the discount. Student tickets (\$8) are not discounted, and discounts do not apply to Morris Section D tickets (\$18), but apply to all other ticket prices.

### FILM

Films are screened in the DeBartolo Performing Arts Center's Browning Cinema; tickets are \$6 for faculty and staff unless stated otherwise.

### Joyeux Noël (2006)

6:30 p.m. Friday, Dec. 5 English, French and German with English subtitles Academy Award nominee for Best Foreign Language Film, "Joyeux Noël" tells the true-life story of the spontaneous Christmas Eve truce declared by Scottish, French and German troops in the trenches of World War I.

#### Calvary (2014)

9:30 p.m. Friday, Dec. 5 6:30 and 9: 30 p.m. Saturday, Dec. 6 Father James (Brendan Gleeson) is a good priest who is faced with troubling circumstances brought about by a mysterious member of his parish. Although he continues to comfort his own fragile daughter (Kely Reilly) and reach out to help members of his church with their various scurrilous moral and often comic problems, he feels sinister forces closing in, and begins to wonder if he will have the courage to face his own personal Calvary.

### It's a Wonderful Life (1946)

3 p.m. Sunday, Dec. 7 Facing overwhelming adversity, George Bailey has lost the will to live. It's up to Clarence, a second-class angel aspiring to earn his wings, to show George the meaning of life. A modest success on its initial release, the film became an indelible holiday classic thanks to perennial television screenings. Free for ND students.

### The Life and Death of Colonel Blimp (1946)

8 p.m. Tuesday, Dec. 9 Considered by many to be the finest British film ever made, "The Life and Death of Colonel Blimp," is a stirring masterpiece like no other. Roger Livesey dynamically embodies outmoded English militarism as the indelible General Clive Candy, who barely survives four decades of tumultuous British history, 1902 to 1942, only to see the world change irrevocably before his eyes. Free for ND students.





### National Theatre Live: Cumberbatch and Miller in Frankenstein

National Theatre Live's 2011 broadcast of Frankenstein, directed by Danny Boyle, with Benedict Cumberbatch and Jonny Lee Miller, returns to the Browning Cinema

Frankenstein enjoyed a sell-out run at the National Theatre, and went on to win awards including the 2012 Olivier Award for Best Actor for Cumberbatch and Miller.

*Childlike in his innocence but grotesque in form, Frankenstein's bewildered creature is cast out into a hostile universe by his horror-struck maker. Meeting with cruelty wherever he goes, the* 

Larry Dwyer and Matt Merten.

#### Notre Dame Glee Club Christmas Concert Department of Music

Department of Music 2:30, 6 and 8:30 p.m. Saturday, Dec. 13 Leighton Concert Hall; \$8-\$3 The Glee Club presents its annual Christmas concerts. Proceeds will benefit the South Bend Center for the Homeless and the Food Bank of Northern Indiana. *Family friendly, all ages are welcome. No intermission.* 

June H. Edwards Chamber II South Bend Symphony Orchestra 2:30 p.m. Sunday, Jan. 11 Leighton Concert Hall; \$35-\$8 An afternoon of drama and virtuosity begins with Rossini's irresistible and well-loved opera overture, Overture to "An Italian Girl in Algiers." Guest artist percussionist Kent Barnhart performs Milhaud's "Concerto for Marimba and Vibraphone," followed friendless Creature, increasingly desperate and vengeful, determines to track down his creator and strike a terrifying deal.

Frankenstein-Version 2 7 p.m., Saturday, Dec. 13 Browning Cinema; \$18

**Version 2** features Jonny Lee Miller in the role of Victor Frankenstein with Cumberbatch in the role of the Creature.



### **NEW EMPLOYEES**

The University welcomes the following employees who began work in October:

Matthew J. Adams and Nijinsky Dix, TRiO Programs Christine Amstutz and Jasmin Avila, Notre Dame International Howard W. Buchanon II and Kelly Neemann, Morris Inn Andrea Bullock, Annual Giving Programs Melinda R. Campbell, Food Service Support Facility John P. Chermak Jr., **Athletics Ticketing** Fiona M. Comer, Casandra R. Leslie and Derrick Sarfo, **Custodial Services** Kristian R. Conrad, Land O'Lakes Leigh Cornish, James Heide and Ryan Snodgrass, Customer IT Solutions

Susanna Donovan, Hesburgh Libraries Paul Drake, IT Service Delivery Vanessa Garcia and Greg Phillips, St. Michael's Laundry Charles Harper, Security Margriet Kapluck, Alumni Association Laurie A. Kirkner, Provost's Office Matthew Leiszler, University Health Services Sergey B. Leonov, Aerospace and Mechanical Engineering Kathryn Matteson, Accounts Payable Meagan E. McDermott, Institute for Global Development Roberto Moreno, Radiation Laboratory Trace A. Myers, Women's Rowing Chelsea Noble, OIT Help Desk

Christine O'Brien and Marianne Raybaud, **Biological Sciences** Michael Rupley, College of Engineering Cidni Sanders, Internal Communications Kelly L. Scholl, Robinson Community Learning Center Ronald Thomas, Mendoza College of Business Xiaoning Wang, Chemistry and Biochemistry Lois Zygowiec, Development-International Advancement

### SERVICE ANNIVERSARIES

The University congratulates those employees celebrating significant service anniversaries in December:

### 25 Years

Denis J. Lindquist, Teaching and Learning Technologies Lisa Suhanosky, College of Arts and Letters

### 20 Years

Lee A. Farner, Accounting Operations Nancy E. Horvath, VP-Associate Provost for Internationalization

### **15 Years**

Mary L. Bystry, **Custodial Services** 

### **10 Years**

Jennifer L. Bernal, University Press Lisa M. Caulfield, **Off-Campus Programs** Toni M. Dokes, Food Services, South Dining Hall Richard Forrester, Research and Sponsored Programs Mary B. Nucciarone, Financial Aid Daniel F. Szakaly, **Custodial Services** 

## **Career Development Day**

In recognition of National Career Development Day, Wednesday, Nov. 12, the Office of Human Resources hosted a free professional development event at the Notre Dame Conference Center.

The morning event kicked off with a continental breakfast and keynote address by Lee Svete, associate vice president for career and professional development.

The event was designed to help employees learn ways to develop their Notre Dame career, as well as promoting networking with other members of the University community.

A professional development fair was open all morning, with information tables focusing on educational benefits for Notre Dame faculty and staff, professional development opportunities, and a career consultation center. Representatives of three local colleges were also available-Trine University, Indiana University South Bend and Ivy Tech Community College. Employees were then able to select from three concurrent breakout sessions: establishing your brand and effective networking, facilitated by HR consultant Jenny Borg; interviewing tips and tactics, by recruiting consultant **Susan** Murphy; and a panel discussion, "Managing My Career at Notre Dame," moderated by LaTonia Ferguson. The event, says Ferguson, "Is a shining example of Notre Dame's commitment to the professional development of all employees through training workshops, educational benefits and career counseling services."



Visit hr.nd.edu for information.

## **HEALTH & WELLNESS**



## Thank you.

Participation in the ND Voice 2014 employee engagement survey was the highest ever. More than 80% of you provided feedback to help the Notre Dame workplace be the best it can be.

The Notre Dame community is a special place, made possible by the individual contributions of each member. Thank you for your continued commitment to making Notre Dame a premier workplace dedicated to excellence at every level.

In Notre Dame,

Rev. John I. Jenkins, C.S.C. Thomas G. Burish President

Provost

John Affleck-Graves **Executive Vice President** 

What's next?

Between now and the end of the year, University leaders will review the overall ND Voice 2014 results and each department will review their own. Watch for information coming soon about how you can be involved.

### **Irish Health**

More than 2,100 people visited 58 vendors during the two days of the 2014 Irish Health Fair, Oct. 22 and 23. HR staffers gave away 1,480 bags of popcorn and 38 door prizes (with a total value of \$2,500) from vendors and campus partners. In addition, 665 individuals completed their health screenings.

## Managing chronic medical conditions

### A plan for your daily wellness journey

### **BY CAROL C. BRADLEY, NDWORKS**

If your annual health screening showed elevated blood sugar or cholesterol, what's next after you see the doctor? Maybe you're dealing with a chronic medical condition such as asthma or diabetes, or you want to stop smoking or lose weight.

The Notre Dame Wellness Center, the University's state-of-the-art workplace wellness center for fulltime, benefit-eligible faculty and staff and dependents, offers wellness coaching and assistance with chronic condition management free of charge.

"And if your primary care physician is not at the Wellness Center, we can coordinate with them," says Maureen Jamieson, chronic condition management nurse and dietician.

Her job, Jamieson says, is to assist patients on what she views as a "wellness pathway. You can have mastery over that chronic condition-we need to master the things that can take us off the path."

That means creating a plan-a road map-for your wellness journey. If you have asthma, what are the triggers? Do you have an inhaler with you? What do you need to be aware of daily? Is your nutrition optimal?

The goal, says Jamieson, is to set you up to be successful every day with managing a chronic medical condition.

Conditions for which patients might seek help include high blood pressure, diabetes (both Type I and Type II), elevated blood sugar, obesity, coronary artery disease and dyslipidemia (elevated triglycerides and cholesterol).

Wellness coach Cindy Borders is also available by appointment to teach stress reduction and management, which can help in building resistance—you can learn to respond and not react. Wellness

coaching can also help with achieving weight loss or stop-smoking goals, work-life balance and other areas where positive changes can be made.

In the Wellness Center's pharmacy, Walgreens pharmacist Vincent Workman is also available for private medication consultations. Make an appointment for a medication well-check—a review of current medications, whether they're being taken properly, if they're compatible with each other and whether generics are available.

"There are many people who would benefit from a medication review, especially those with multiple conditions or medications," Workman says. "Patients who are diabetic may not realize that their medications for blood sugar control are free when diabetic supplies and medications are filled or refilled on the same day. And whenever anyone gets a new blood glucose monitor, we can walk them through how to use it."

Says Jamieson, "It's not easy having a chronic condition. But you're the driver. We help make the path clear so you don't get lost—we help you master the things that can take you off the path."

Referrals are not necessary and there are no co-pays or insurance billing. Make an appointment with the chronic condition management nurse, dietician or wellness coach by calling the Wellness Center, 631-9355.

Wellness Center hours are 7 a.m. to 7 p.m. Monday through Friday and 8 a.m. to noon on Saturdays (on home football weekends, closed Saturday and open Sunday 1 to 5 p.m.)

Walgreens Pharmacy hours in the Wellness Center and at the drivethrough window are 7:30 a.m. to 7:30 p.m. Monday through Friday and 8:30 to 12:30 p.m. Saturdays (on home football weekends, closed Saturday and open Sunday 1:30 to 5:30 p.m.) Call 271-5622.

nnseries



### **December & January**

### **Diabetes Education**

12:15 – 12:45 p.m. **RecSports Meeting Room** RSVP to askHR 631-5900

Dec. 4	What is Diabetes?
Dec. 11	Complications of an Elevated Blood Glucose
Jan. 8	Glucose Testing and A1C
Jan. 15	Medications
Jan. 22	Healthy Eating
Jan. 29	Activity and Diabetes

## What's up with that Tower Crane?





### Curious about that tower crane being used in the construction of McCourtney Hall?

The nearly 129-foot-tall crane is rented from Maxim Crane Works, L.P. in Indianapolis, and is constructed in five vertical sections. The boom is 146 feet long, with 60,000 pounds (30 tons) of counterweights.

It's operated by a certified union operator and an apprentice (called an "oiler") in 8-hour shifts.

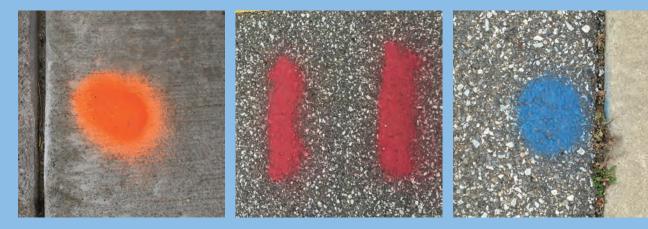
Tony Eisenhut (left), general superintendent for construction managers Shiel-Sexton, explains that the crane is bolted to a concrete foundation 25 feet square and 5 feet deep. The foundation will remain in place after the crane is removed.

This is only the third time a tower crane has been used in campus construction. The first was for the construction of the Hesburgh Library, the second for the expansion of the Law School.

Flying from the crane you'll see an American flag and a Notre Dame flag, as well as an orange-andwhite aviation flag—the crane sits in the flight path to the airport. Follow the construction via webcam at **construction.nd.edu.** 



### What do those spray paint symbols mean?



As you're walking along past campus construction areas, you may notice various symbols spray-painted on the pavement or ground. What you're seeing are marks indicating underground utilities, using the American Public Works Association uniform color code.

The marks are made with inverted or "upside-down" spray paint—the can allows painting on the ground while standing. White indicates proposed areas of excavation; orange indicates communication or cable lines; blue indicates water lines and red represents electric power lines or lighting cables.

WHITEProposed ExcavationPINKTemporary Survey MarkingsREDElectric Power Lines, Cables,<br/>Conduit and Lighting CablesYELLOWGas, Oil, Steam, Petroleum or<br/>Gaseous MaterialsORANGECommunication, Alarm or Signal<br/>Lines, Cables or ConduitBLUEPotable WaterPURPLEReclaimed Water, Irrigation and<br/>Slurry Lines

GREEN

Advance marking ("call before you dig") prevents injuries to work crews, as well as damage to utilities such as gas, water and electric lines. For more information, visit **apwa.net**.

Sewers and Drain Lines