

INSIDE

Page 3

Page 7

Page 12

### **NEWS BRIEFS**

### **PEOPLE**

### **NEW EXECUTIVE** PASTRY CHEF

Theresa Gwizdaloski has been named executive pastry chef for Food Services. Gwizdaloski will oversee operations of the pastry and bake shops located in the Center for Culinary Excellence and serve as a member of the Campus Dining Culinary Council.

#### **HOCKX APPOINTED** DIRECTOR OF LIU INSTITUTE

Michel Hockx has been appointed director of the University's Liu Institute for Asia and Asian Studies within the new Keough School of Global Affairs. Hockx is professor of Chinese and director of the China Institute at SOAS, University of London. He will join the faculty in August 2016.

The Liu Institute, established at Notre Dame with an endowment from the RM Liu Foundation, is dedicated to interdisciplinary research and strengthening of teaching about Asia. The Liu Institute is an integral part of the new Keough School of Global Affairs, which will prepare students for effective and ethical leadership and service around the world.

### **DESCH NAMED DIRECTOR OF** INTERNATIONAL SECURITY CENTER

Political Science Professor Michael Desch has been appointed director of the Notre Dame International Security Center in the Department of Political Science.

The center was established in 2008 to provide a forum where leading scholars in national security studies from Notre Dame and elsewhere could come together to explore some of the most pressing issues in national security policy.

### STURM APPOINTED TO NAICU

John Sturm, associate vice president for federal and Washington relations, was appointed Feb. 3 to a three-year term as the government relations representative for the National Association of Independent Colleges and Universities. The 964-member association represents the nation's private, nonprofit colleges and universities, focusing on policy issues such as student aid, taxation and government regulation.

### **MARTIN WINS URBAN** HISTORY ASSOCIATION **BOOK AWARD**

Alexander Martin, professor of history, has won the Urban History Association's Best Book Award for a work of non-North American urban history published in 2013-14.

His book, "Enlightened Metropolis: Constructing Imperial



Moscow, 1762-1855;" also won

the 2013 Marc Raeff Book Prize,

Russian Studies Association to

the best book in any discipline or

language on the history and culture

Martin's work "addresses a signif-

History Association said, that had not

icant gap in Russian, European and

urban historiography," the Urban

been explored in English-language

of Russia during that time period.

awarded by the Eighteenth-Century

Hockx Gwizdaloski



Desch







Martin



Yin

### STAFF INVITED TO MEET **ONE-ON-ONE WITH JOHN AFFLECK-GRAVES**

Each semester, Notre Dame Executive Vice President John Affleck-Graves invites staff to meet with him and share their ideas for improving the University.

One-on-one meetings will be available in 10-minute time slots from 8:30 to 11:30 a.m. on Monday, March 14, and from 2 to 4:30 p.m. on Wednesday, March

The meetings are open to regular, full-time and part-time staff members. Slots will be reserved on a first-come, first-served basis.

Email execvp@nd.edu to schedule a meeting time and contribute your ideas.

### **CAMPUS NEWS**

### **NOTRE DAME EXPANDS ROME PROGRAM WITH PURCHASE OF A VILLA FOR NEW STUDENT RESIDENCE**

The University has purchased a villa in central Rome to be used as a student residence hall for Rome Global Gateway programs.

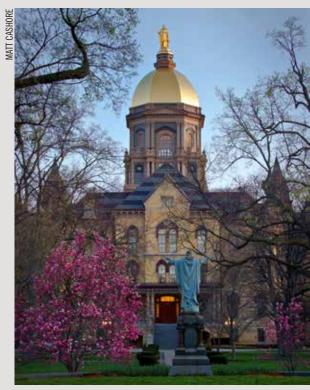
The century-old building is a city block away from the headquarters of the Notre Dame program at 15 Via Ostilia in Rome's Rione Celio neighborhood on the slopes of the Caelian Hill. Scheduled for occupancy in the fall of 2017, the residence will house 100 Notre Dame students, as well as a rector and residence hall staff.

#### **SCIENCE AND ENGINEERING** FAIR FEB. 27

The Northern Indiana Regional Science and Engineering Fair (NIRSEF) takes place Saturday, Feb. 27, at the Stepan Center. The public is welcome to come view the projects after judging from 1:30 to 3:15 p.m., and to attend the awards ceremony from 3:15 to 4:30 p.m.

The fair, which is open to students in public and private schools in Elkhart, Fulton, Marshall and St. Joseph counties, will feature science, social science, engineering and mathematics projects from public and private schools.





### **OWN YOUR FAVORITE NOTRE DAME IMAGES**

Visit photos.nd.edu, the University's official online photo store, to purchase prints of photos such as Barbara Johnston's 'Swan on Saint Mary's Lake,' or Matt Cashore's beautiful image of the Golden Dome in spring. Canvas-wrapped images are available, as well as a selection of historic photos from the University Archives.

### scholarly literature. **INAUGURAL URSULA WILLIAMS** FACULTY FELLOW DEVELOPS HYBRID CHINESE LANGUAGE

**COURSE** 

Notre Dame's Center for the Study of Languages and Cultures has partnered with the Kaneb Center for Teaching and Learning to offer the Ursula Williams Faculty Fellowship.

The fellowship connects foreignlanguage faculty with technology experts at the CSLC and Kaneb Center and supports research to help faculty members determine which technological tools are most helpful in language classrooms.

Chengxu Yin, associate teaching professor of Chinese, was selected as the first Ursula Williams Faculty Fellow in spring 2015. Yin was inspired to apply for the fellowship to develop a hybrid model language class, blending traditional class time with online learning for her Chinese

### WHAT'S GOING ON

### LIGHTS OUT FOR EARTH HOUR

For one hour on Saturday,

March 19 — from 8:30 to 9:30 p.m. - the University will participate in Earth Hour by turning off the lights on the Golden Dome and the Word of Life Mural on Hesburgh Library. This year marks the tenth anniversary of Earth Hour, and the ninth year Notre Dame has participated.

Participants in the single-largest symbolic mass-participation event in the world include the Empire State Building, the Great Pyramids of Giza, the Parthenon and St. Peter's Basilica at the Vatican.

"Notre Dame's participation in this global event for the past nine years exemplifies our strong commitment to sustainability," says Linda Kurtos, director of sustainability. "We encourage all community members to participate by turning off their lights and unplugging for an hour. Strong community involvement is vital to achieving the University's sustainability goals."



Comments or questions regarding NDWorks? Contact NDWorks Managing Editor Carol C. Bradley, 631-0445 (bradley.7@nd.edu) or Cidni Sanders, editor and program director for internal communications, 631-7021 (csander6@nd.edu). For questions regarding The Week @ ND or the University calendar, contact Electronic Media Coordinator Jennifer Laiber, 631-4753 (laiber.1@nd.edu). NDWorks is published 12 times a year. 2015-16 publication dates are June 23, July 23, Aug. 27, Sept. 24, Oct. 29, Dec. 3, Jan. 7, Jan 28, Feb. 25, March 24, April 21 and May 16.

### Partnership with TurboVote provides convenient online tool to ND community



### 2016 DATES\* TO REMEMBER

**April 4:** Voter registration ends May 3: Primary election May 17: Voter registration begins October 11: Voter registration ends November 8: General election

\* Voter registration dates for the state of Indiana.

Source: www.in.gov/sos/elections/ 2403.htm

### Register to vote, request an absentee ballot or find election and polling place information

#### BY CIDNI SANDERS, INTERNAL COMMUNICATIONS

It doesn't matter how someone votes, only that eligible voters from the Notre Dame community take the time to cast informed ballots.

The Center for Social Concerns, Rooney Center for the Study of American Democracy and the Office of Public Affairs are working to increase voter engagement and education leading up to the 2016 U.S. general elections.

They've partnered to make Turbo-Vote, an online voter registration and engagement service, available to faculty, staff and students free of charge. Eligible voters can use the online tool to register to vote online and by mail, request a mail-in (absentee) ballot and sign up for voter information as well as email or text election reminders.

**Tim Sexton,** associate vice president for Public Affairs, says he expects the service to be helpful not only for faculty members and staff who have recently relocated to the South Bend area, but also for longtime residents who want to avoid potential delays at the polls on election day.

"I talk to colleagues who express a genuine interest in participating in the political process but find it challenging to get away from work and family obligations to do things like register, pick up an absentee ballot or stand in a line at the polls," he says. "TurboVote eliminates all of those inconveniences. If you're not a registered voter, you can sign up online or request the paper forms. You can also get helpful information like your polling location or alerts that tell you how many days until your next election."

In addition, the Center for Social

Concerns and Rooney Center have launched NDVotes 2016, a studentled campaign to promote civic and political participation. While the group's "Pizza, Pop and Politics" events are primarily targeted to undergraduates, the topics scheduled faith in politics, income equality, health care, immigration and foreign policy — are relevant to anyone who wants to learn more about the issues facing voters this year.

On Feb. 2, University President Rev. John I. Jenkins, C.S.C., attended an ND Votes event and discussed his role on the Commission on Presidential Debates (CPD) board of directors. The CPD is a nonpartisan, nonprofit organization that has sponsored and produced all U.S. presidential and vice presidential debates since 1988.

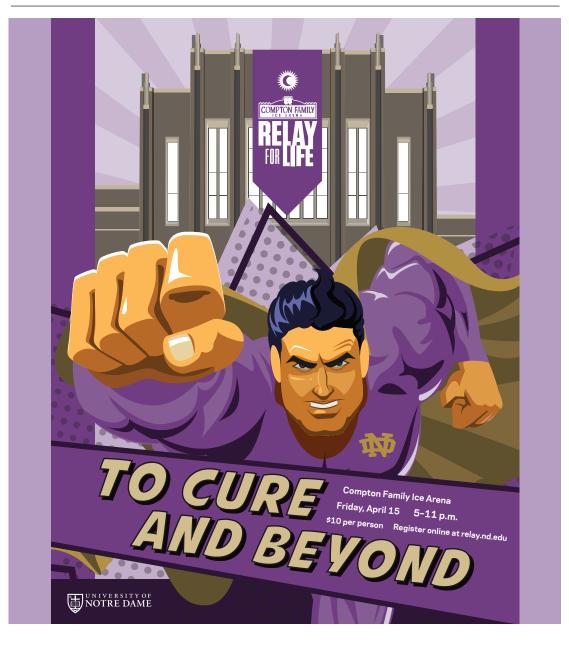
"The reality in our political process is that it has become so high-stakes and with so much money involved that there is always a great danger of cynicism," Father Jenkins says. "The last thing both sides truly want is an open debate. They want to orchestrate their presentations and leave nothing to chance. Each candidate fights to get a sound bite, and our struggle in the CPD is always, 'Let's make this a real debate."

According to the Pew Research Center, voter turnout in the 2012 U.S. general election was 53.6 percent, based on the 129.1 million votes cast for president and an estimated voting-age population of just under 241 million people.

For those who might wonder whether they should take the time to research the issues and participate in this year's elections, Father Jenkins says, "Remember: This country needs you, each of you, to be engaged in the conversation. For all the temptation to cynicism, don't give in to it. Engage."

To sign up with TurboVote and learn more about upcoming ND Votes 2016 events, visit socialconcerns.nd.edu/nd-votes.





### ImproveND results shared at Spring Town Hall Meeting



John Affleck-Graves

#### BY CIDNI SANDERS, INTERNAL COMMUNICATIONS

Attendees at the Spring Town Hall meetings learned of the 2015 ImproveND results as well as other University efforts focused on continued progress.

University President John I. Jenkins, C.S.C., shared his appreciation to campus staff for supporting January's Walk the Walk Week observance, which challenged faculty, staff and students to consider what they could do to promote greater diversity and inclusion.

According to Father Jenkins, approximately 1,000 students, faculty, staff and guests turned out for the midnight prayer service in the Main Building on Martin Luther King Jr. Day that began the week's events. The day continued with a panel discussion and community-building discussions to help participants reflect on the values central to King's legacy and the mission of Notre Dame.

"[King Day] was a great day for us; but, of course, it's not just about that day. It's about our commitment," said Father Jenkins. "It's a reminder to us and, I hope, an inspiration, for us to continue to build a community that's diverse, a community that recognizes the gifts of each individual and where each individual feels that their gifts are recognized and appreciated."

Another area Notre Dame is focused on further strengthening is its benefits package. Father Jenkins announced benefits program changes that will take effect in July to help staff members better balance their work responsibilities with the demands of their personal lives.

"If you recall, last year we had some positive changes to our healthcare plan. This year, I talked to [Executive Vice President] **John** Affleck-Graves and Bob McQuade [of Human Resources], and I said, What more can we do?" Father Jenkins told those attending the Town Hall meeting. "We want to continue to make this a truly great place to work, a place that you're proud to work at and a place where you feel supported."

There are four areas of the benefits program that will be enhanced in July:

- The staff education benefit will increase to \$3,000 annually for courses at accredited institutions and will for the first time include coursework for doctoral courses. In addition, the benefit for jobrelated certifications will increase to \$1,000 annually.
- A new program with Bright Horizons called the Care Advantage Program will be available to assist staff with finding dependable, reputable and affordable backup care for children or seniors as well as access to a comprehensive online listing of nannies, tutors, pet sitters and more.
- The University will launch a new

income-replacement program to ensure that non-exempt staff members who are out for an extended period of time and under the care of a physician for illness, injury or childbirth receive 60 percent of their regular income.

• As part of a new parental leave program, four weeks of paid leave will be provided to mothers and fathers following the birth or adoption of a child.

McQuade, vice president of Human Resources, said the division is finalizing the plans and updating related policies that will be affected by these changes. Additional information will be available in late spring, and information sessions will be held for both supervisors

"I feel particularly fortunate in this day and age to be talking about positive changes to our programs," said McQuade. "Oftentimes being good stewards of the University's resources and adding benefits can be somewhat in conflict with each other, but I believe we've reached a balanced approach that will aid employees in their professional and in their personal lives."

### ImproveND survey results

John Affleck-Graves shared 2015 results from ImproveND, the biennial survey that offers faculty and staff the opportunity to express their views regarding the quality of services at the University.

Overall, there was solid participation in the survey from faculty and staff across the University that provided statistically valid and reliable results.

Regarding overall workplace culture, the University received high marks for being a friendly place. Survey respondents also agreed that high standards of quality exist at Notre Dame and that it's easy to get help. One area of needed improvement regarding culture is being open to suggestions.

Affleck-Graves noted that there has been little to no improvement in this indicator since the 2013 ImproveND survey, despite his own personal focus on increasing feedback channels and acting on suggestions from faculty, staff and students whenever possible. Those

in the audience were asked to email execvp@nd.edu or submit Bright Ideas at evp.nd.edu/bright-ideas to share their suggestions for how this dynamic can be improved across the University.

We have to find ways that we can be more open to suggestions," he cautioned. "Everyone has to take this attitude. We must become an organization that is more open to suggestions and change. I'm going to try to work on this over the next two years. I would love to see this number go up significantly because we owe it to each other to listen to each other."

In the global satisfaction section of the ImproveND survey, the services provided by Hesburgh Libraries, Campus Safety, OIT and the University's fitness/recreational programs received some of the highest scores on campus. This is the second time Hesburgh Libraries has been among the top service providers.

"What is so gratifying and humbling about these surveys is that we do so well because of how hard you work every single day as you come to campus. In most areas, we are doing exceptionally well and, of course, there are some where we have some opportunities for improvement," Affleck-Graves said.

Areas of improvement include the budget process, the performance management process, campus restaurant options and parking. Affleck-Graves said that he has asked Human Resources and the Budget Office to review their systems processes to identify ways to make them easier and more efficient for faculty

Adjustments will be made to the portfolio of dining options on campus. Burger King has been the lowest-rated dining establishment on campus, according to the last two ImproveND surveys. Based on these results, as well as on general student, faculty and staff feedback, Campus Dining will replace it with a new restaurant this summer. Plans are also being made to renovate Decio Commons and open three new restaurants in conjunction with the Campus Crossroads project.

Based on parking feedback provided through the survey, Affleck-Graves has expanded the University's Parking Committee to include more stakeholders from across campus, including faculty, staff and student representation. He is asking the group to review the shuttle system, ground parking, the reserved parking pilot program and the feasibility of a parking structure.

To find out how your department's or division's services were rated, talk to your supervisor.

### Campus facilities update

Also during the meeting, architectural drawings were unveiled for Walsh Family Hall, the new home for the School of Architecture.

Plans for the building, which will be located east of the DeBartolo Performing Arts Center along Holy Cross Drive, are still in the design phase. The building will include classrooms, studios, a library, a workshop area and a plaza. The classical design is intentionally more expressive and distinctive than other buildings on campus, yet Walsh Family Hall will reflect the traditional design of campus buildings as well as the strong and unique character of the architecture program.

In an effort to operate the buildings on campus in a more environmentally friendly manner, the Utilities and Maintenance department is pursuing geothermal and hydroelectric energy sources. Geothermal pipes have been drilled into the ground near the new McCourtney Hall research facility. This system will reduce the amount of energy it takes to heat water in the winter and cool water in the summer.

The University is also working with the city of South Bend and state and federal agencies to permit and construct a hydroelectric facility on the St. Joseph River dam in downtown South Bend. The hope is to begin the project next year.

These alternative energy sources will help reduce the University's carbon emissions and save approximately 15 percent in energy costs. In September, Father Jenkins announced that the University will cease burning coal entirely within five years and cut its carbon footprint by more than half by 2030.

### If you missed it

If you were unable to attend a Spring Town Hall meeting or wish to review a particular section, visit evp. nd.edu/town-hall to watch a video from the sessions. Any questions or comments that were not brought up during the meeting can be sent to execvp@nd.edu or submitted through the Bright Ideas program at evp.nd.edu/bright-ideas.



### The Graduate School:

### Advancing excellence in post-graduate education



### Creating a community of scholars

### BY CAROL C. BRADLEY, NDWORKS

In fall 2015, Notre Dame and the Graduate School welcomed to orientation 487 new graduate students — hailing from 49 countries — entering 45 programs.

Studying in the University's graduate programs in the arts, engineering, humanities, sciences and social sciences, these students add to the diversity of culture and intellectual inquiry that shapes a community of scholars, says **Laura Carlson**, vice president, associate provost, dean and professor of psychology.

Most graduate students are admitted to departmental doctoral programs, while others study in traditional master's programs (including creative writing, art, art history and design, and theology) and in professional master's degree programs (including global health, engineering, applied and computational mathematics and statistics). Advanced degrees in architecture, law and business are administered outside the Graduate School.

The goals of the Graduate School, says Carlson, are to advance excellence in post-graduate education; deepen and enrich the post-graduate experience; expand graduate program offerings and deepen internal and external partnerships to promote those programs.

That's one factor that makes Notre
Dame's Graduate School innovative
— the commitment to service.

"We focus on the well-being of students and community building, and modeling collaborative relationships across departments, programs and divisions — with the aim of creating a positive environment where the contributions of graduate scholars, at the Ph.D., master's and postdoctoral level are recognized, valued and celebrated," Carlson says.

### Preparing graduate students to move into careers

The emphasis on professional development, Carlson notes, "also makes us distinct to prospective graduate student applicants. In other programs, you can study what you want, with the mentor you want. But what kind of professional support will you get? Not many universities have as robust a professional development program as ours."

In addition to providing assistance with learning how to talk about research with non-experts, thinking through the ethical implications of one's research, and developing the leadership and project management skills required for research, the Graduate School also helps students seek out resources to enrich their research experience by assisting with identifying grant and fellowship opportunities and assisting in crafting strong proposals.

The Graduate School also has a dedicated Office of Grants and Fellowships. "Since the office was created in 2011, wins of external grants and fellowships by graduate students have increased from \$1.55 million to \$5.35 million in 2014-2015," Carlson says. "Of those,

our office assisted 91 percent of the major award winners. We have guided more than three dozen Fulbright winners and more than 30 winners of National Science Foundation awards. In addition, many students win awards from multiple opportunities, suggesting that they are really mastering the

art of grantwriting — a critical skill for their success in their careers after Notre Dame.



Carlson

### Helping find employment, inside or outside academia

The Graduate Career Services Office is a partnership between the Graduate School and the Office of Student Affairs, and has recently been expanded to include a director and three full-time consultants, all dedicated to serving graduate students exclusively. Such extensive support is unique and serves as a role model for peer institutions. In addition to a wide array of online resources, students can meet one-onone with a consultant to seek tips for networking and interviewing or look for advice on career exploration and planning, whether that means post-doctoral research, non-academic positions, faculty positions or positions in government.

### Explain your research. In three minutes.

It's important for students to be able to communicate the relevance of their work to a variety of audiences, Carlson says.

To that end, the Graduate School is sponsoring the inaugural Three Minute Thesis (3MT) competition, with a final round taking place at 4 p.m. Wednesday, March 16, in the Jordan Auditoriumof the Mendoza College of Business. The event is open to the public.

The 3MT competition was developed by the University of Queensland, Australia, and launched in 2008. Since then, it has spread to 19 countries, with more than 35 research universities participating.

"It would take about nine hours to present an 80,000-word thesis," Carlson says. "In 3MT, you have three minutes and one static slide."

What's the point? Doctoral students from all departments, she says, need to sharpen their ability to explain their research — including both its breadth and significance — in language appropriate to audiences of both specialists and non-specialists. In three minutes.

The competition, which offers a \$1,000 prize to the winner, also offers a chance for graduate students from different disciplines to interact with each other and discuss their research and its implications.

### #thanksbetograds

While recognizing that obtaining a graduate degree requires intense focus and dedication, the Graduate School also emphasizes a University commitment to wellness and balance across academic, spiritual, physical and emotional dimensions.



To Graduate School Dean Laura Carlson's titles, add one more — marathon runner. Above, Carlson (far right), runs in the Shamrock Series 5K race on Boston Common last fall, in conjunction with the Notre Dame vs. Boston College game. The event raised money to benefit graduate student research and teaching at Notre Dame. She's currently training for her fifth Boston Marathon.

The Office of Graduate Student Life, team-based and comprised of non-academic support areas, represents another important partnership between the Graduate School and the Office of Student Affairs, with a goal "to cultivate a community of learning with an emphasis on 'healthy and holistic development of mind, heart, body and spirit."

The office focuses on the distinct needs of the graduate student population, focusing in particular on wellness and community building — enhancing life outside the classroom, library and lab.

While "we love our grad students all year long," Carlson says, fall's Graduate Student Appreciation Week provides the opportunity to show it, with special events, giveaways and discounts

Services included arranging for a photographer to take professional headshots for use on LinkedIn and other social media (800 students participated.) St. Michael's Laundry offered discounts on cleaning of professional attire. Other events included a dissertation fellowship workshop and Lunch & Learn sessions as well as Mass and various social and community events such as locker room tours and free yoga classes.

Throughout the year, Grad Life

Grants are available to students who want to propose ideas for creative, community-building projects for possible funding.

### Solarium Gallery

The Graduate School's suite of offices on the fifth floor of the Main Building also provides office space for the Office for Postdoctoral Scholars which provides wide ranging support, from appointments to career placements to some 200 postdoctoral scholars.

Recently, the office — which has high ceilings, skylights and towering walls — has been renovated into the Solarium Gallery, featuring work produced by MFA students in the Department of Art, Art History and Design. Visitors are welcome to stop by and pick up a brochure describing the students and their work. In addition, bookcases in the reception area display novels by MFA students in the Creative Writing Program.

"It's a very exciting time to be a graduate student at the University," says Carlson. "And as Notre Dame continues to seek to grow its research reputation, our graduate students are a crucial and valued part of the effort."

## ND Wireless Institute

### **Building a Better Phone**

#### BY BRENDAN O'SHAUGHNESSY, STRATEGIC CONTENT

A yellow mannequin half-head sits on a desk in **Bert Hochwald's** electrical engineering lab with a dissected cell phone rubber banded to its ear. On a nearby computer screen, colored lights reveal the electromagnetic radiation the phone projects into the half-head, which was specially made to mimic the flesh and fluids of a real human being.

Hochwald, the Freimann Chair professor at the Notre Dame Wireless Institute, and his team are leading a three-year, \$1.2 million investigation into how to improve the performance of cell phones while also reducing the potentially harmful radiation the phones expose our bodies to.

#### **Radiation limits**

Every time we use a cell phone, our bodies absorb some electromagnetic radiation. Each phone must comply with the Federal Communications Commission's limits on the specific absorption rate (SAR) of radiation that is considered safe for the body.

"Everybody complains about their phone not performing the way they want," Hochwald said. "The batteries, size, features and processing power of phones all improve daily, but we still have to deal with SAR limits. So we have to be creative in how the phone's technology can work within these limits."

Performance problems with cell phones – indicated by a spinning circle and slow download or transition times – are often caused by the uplink, or how much information a phone can transmit to a base station. A base station can be placed high on a hill and transmit with massive power without serious health concerns. But a phone is held either in hand or next to the head, which means that the requests being transmitted to the base station run into SAR limits.

"There's a constant tension between improving performance and limiting SAR," Hochwald said. "We want to hear better, upload faster and have more power, but these actions produce more SAR, so we have to manage that tension."

### A safer solution

His project, funded by the National Science Foundation, is testing the idea of replacing the single transmitter used in today's cell phones with multiple transmitters at different points within the device.

Cell phone design generally uses a single transmitter, he said, which creates a 'hot spot' of radiation where the antenna and amplifier are located. By using multiple transmitters, the project aims to disperse the radiation and reduce SAR. The multiple transmitters must be used properly to both improve performance as a wireless communication device and to simultaneously reduce SAR. Early results for this new hardware

structure show great promise, Hochwald said.

Besides the half-head, a second testing method involves a full-head mannequin in Notre Dame's anechoic chamber, which seals out exterior signals and completely absorbs reflections of electromagnetic waves. The chamber is used to test the long-range performance of the newly constructed, multi-transmitter phones.

### Crowded spaces

Hochwald already has more than three dozen electrical engineering patents and has applied for several more in relation to the multiple transmitter method. He was one of three Notre Dame professors Thomson Reuters named to its 2014 list of the World's Most Influential Scientific Minds, which included 3,200 scientists around the world whose published articles are the most cited by other researchers. His electrical engineering colleagues on this project are Notre Dame's Patrick Fay, Purdue University's David Love, and University of Illinois' Jianming

The Wireless Institute focuses on crowds. This focus includes crowded venues, such as stadiums where wireless systems get overwhelmed; crowded spectrum, which is the set frequencies at which radio signals travel that must be effectively shared by cellular, WiFi, broadcasting and government use; and crowded devices, which is what Hochwald's team is working on.

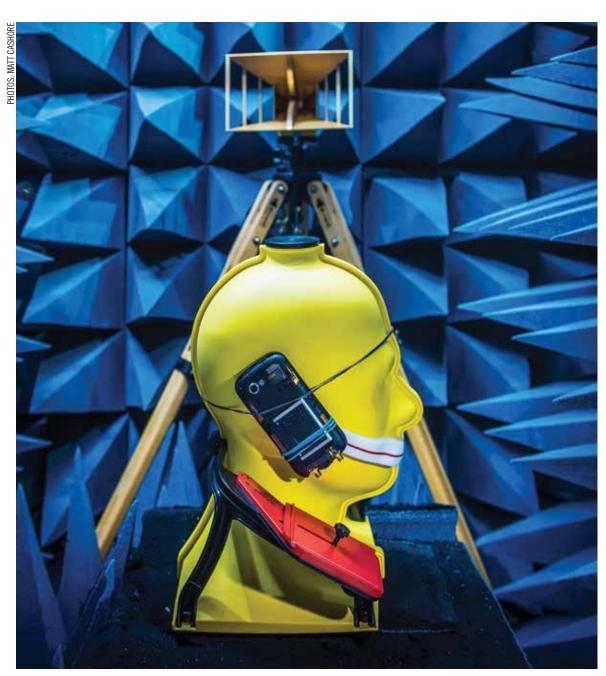
### Looking ahead

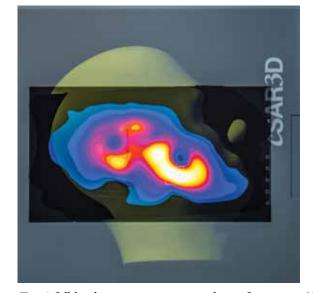
"The trend in wireless is that mobile data is exploding," said **J. Nicholas Laneman**, director of the Wireless Institute. "The devices are getting smaller and you're trying to get more from them. Bert's work is trying to crowd more electronics into a phone."

While the current generation of phones comply with SAR limits, Hochwald said newer phones with more features are constantly pushing toward the edge. Some manufacturers have already had to artificially lower phone performance to meet SAR requirements. And the next generations of phones, including eventually 5G phones at higher frequencies, will absolutely have to find creative ways to limit human exposure to electromagnetic radiation to reach their full potential.

"The hope is that we understand how to incorporate multiple highperformance transmitters and also help reduce human exposure to electromagnetic radiation," he said. "If we can achieve both, it's a win-win."

Originally published on **nd.edu**Produced by OPAC Strategic
Content Team.







Top: A full-head mannequin testing wireless performance in Notre Dame's anechoic chamber. Center photos: Electromagnetic "heat maps" showing radiation emitting from a phone. Researchers seek to improve phone performance, while keeping radiation within safe limits.



Below, electrical engineers: professors Patrick Fay (left) and Bert Hochwald (center), graduate student Arash Ebadi Shahrivar.



### **SERVICE ANNIVERSARIES**

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

### 35 Years

Karen R. Wesolek, Men's Basketball

### 30 Years

Susan A. Feirick, Hesburgh Libraries Pamela D. Foltz, Center for Social Concerns Kimberly S. Hahn, Registrar Patti A. Sikorski, Mail Distribution Jeffrey A. Sparks, Custodial Services

### 25 Years

Noelia Sanders, Food Services, North Dining Hall Constance E. Slack, Office of Research Lisa M. Vervynckt, Notre Dame Conference Center

### 20 Years

David J. Ludwig, Investment Office Alfredo Ramirez, Food Services Support Facility Julie D. Stogsdill, **User Services** Robert M. Winding, IT Service Delivery

### 15 Years

Gloria D. Allen and April L. Miller, Custodial Services

Kimberly M. Brennan, Management Mathew A. Chrystal, Science Computing Jon R. Crutchfield, Mendoza College of Business Kia T. Duong, Food Services, North Dining Hall Wes Evard, College of Engineering Brent M. Gregory, Legends Nita Hashil and Timothy G. Zmudzinski, Hesburgh Libraries Jon P. Jesse, Navy ROTC Patrena K. Kedik, Center for Social Concerns Troy Moreno, Facilities Information Amy Nguyen, Food Services,

### 10 Years

South Dining Hall

and Communications

Melisa K. Wroblewski, **Building Services** Mark A. Zeese,

Accounting Operations

Karen E. Putt, Recruitment

Gerald Cappert, College of Engineering Neil Dodson, Electrical Engineering Sandra J. Ducoffe, Marketing Lisa Heming, Mendoza College of Business Alexander Martin, History Katherine B. Merkle, Payroll Services

### Robinson Center celebrates "moments in time"







President Rev. John I. Jenkins, C.S.C., addresses a standing-room-only crowd at a program marking the 15th anniversary of the Robinson Community Learning Center. Below right, student Andrew McDonald, a member of the Robinson Shakespeare Company, performs a monologue.

### **NEW EMPLOYEES**

The University welcomes the following employees who began work in **January:** 

Sree S. Adusumilli and Brandi Klingerman, Office of Research Jason M. Allison, Ryan T. Kelly and John H. Martin, Turbomachinery Kent M. Berlincourt, Building Services Dana Biasatti, Civil and Environmental Engineering and Earth Sciences Brett M. Blatchford, Compton Family Ice Arena Ebony L. Brown, Kalena Flora and Aaron C. French, Morris Inn Katrina K. Conrad, McDonald Center for Well-Being Anjuli Datta, **Biological Sciences** Suman Datta, Electrical Engineering Anna K. Detlefsen, Student Services Duncan N. French, Athletic Administration Alma D. Gonzalez and Yaneliz Y. Higuera, Custodial Services

Theresa D. Gwizdaloski, Food Services Support Facility Kaci J. Kelly, Career and Professional Development Jamie J. LaCourt, Planning, Design, and Construction Amber K. Monroe, Office of Community Standards Bridget Noonan, Psychology Stephen M. Ponisciak and **Bradley J. Stalcup,** Alliance for Catholic Education Daniel Presler, Procurement Services Alfredo Rangel, Office of VP Kathy L. Reynolds, Research and Sponsored Programs Lincoln T. Robinson, User Services, OIT Alicia M. Sachau, Law School Jessica Secviar, Financial Aid Laura A. Silva, Office of Housing Staci Stickovich, Performing Arts Administrative Kyle B. Sturges, Notre Dame International Junmin Wu, Chemistry and Biochemistry

Elizabeth A. Zapf,

Snite Museum

### 15th anniversary celebration

### BY KATHY BORLIK, FOR NDWORKS

Building on the theme of the passing of time, the Notre Dame community and the Northeast Neighborhood celebrated the many wonderful "moments of time" at the Robinson Community Learning Center (RCLC). The center's 15th anniversary celebration was Feb. 19.

Rev. Edward "Monk" Malloy, C.S.C., president emeritus of the University, offered an opening prayer to the standing room only crowd. Joining him at the podium was President Rev. John I. Jenkins, C.S.C., Louis M. Nanni, vice president for University Relations; Mary Williams, a neighborhood resident; Carmen Williams, advisory board co-chair; Jay Caponigro, director of community engagement, and Jennifer Knapp Beudert, manager of the RCLC.

Fr. Malloy, who was instrumental in the center's beginning, praised the 15 years of collaboration and volunteers who have given their "God-given gifts to the center." He also asked the gathering to remember the late Rev. Tim Rouse of First AME Zion Church. Rouse who was a supporter of the project and advocate for the neighborhood.

The center is fittingly named for Renelda M. Robinson, a neighborhood activist and director of the Northeast Neighborhood Center. Nanni called Renelda the matriarch of the neighborhood and Renelda's daughter, Marguerite **Taylor,** the founding mother of the center. Taylor is a com-

Neighborhood member Mary Williams is the mother of nine; six of whom were tutored at the center. "You know that saying that it takes a village to raise a child? This was our village. It feels comfortable, welcoming. It is an extended family. I don't even want to think about the idea of the center not being here in the community."

Williams added that everyone is welcome — the very young to the very mature. "It is the center of the community, the pillar."

Before the celebration, Beudert spoke about the energy and people at the RCLC.

She said the center serves more than 600 adults and students each week. The outreach programs impact thousands of South Bend and Mishawaka youths ever year by taking programs into the schools.

Using the boundless energy of college students, the center has more than 300 students from Notre Dame, Saint Mary's, IUSB, Holy Cross College and Bethel College who tutor.

The programs serve babies to seniors. There are entrepreneurship classes, anti-violence/anti-bully training, computers training, English as a new language, Shakespeare. "Ideally it is what society should be," Beudert said.

The center developed in collaboration with the University and Northeast Neighborhood. "They wanted a better way to work together, to build a stronger relationship," Beudert said. Residents were questioned about what they wanted. "They met in churches and in living rooms about the needs in the neighborhood" for youth, adults and seniors.

Community member Lu Ella Webster was a self-described "doubting Thomas." She said when she heard plans about the center her first thought was that Notre Dame had a hidden agenda. "They are not doing anything for us."

Now Webster is the adult program coordinator and receptionist at the center. "They made a believer out of me. I could see they cared about the neighborhood and our happiness."

Caponigro, director of community engagement, was director of the center for nine years. "At first we were unsure how it would work." With time and energy things began to fall into place. "It is the creativity of the staff and the support of the community and Notre Dame that has made it a success. We are all very pleased."

**Tim Sexton,** associate vice president for public affairs, said the center is a "shining star in the Northeast Neighborhood. There are babies as young as six weeks with their parents and adults in their 90s learning computer (skills) coming to the center."

Other colleges have educational centers in surrounding neighborhoods but Sexton said he believes the Robinson Center is unique in the range of activities. "It is the energy and passion of the staff that makes it work."

### from the NOTRE DAME WELLNESS CENTER

# Good nutrition begins with shopping, dining

A Q&A with Chronic Condition Manager Maureen Jamieson



#### Q: Good nutrition starts at the grocery store — what tips can you suggest?

A: The key is to resist temptation. Make a grocery list before you shop, and stick to it. Don't shop hungry, and resist those 'sale' items you don't really need.

If you need to satisfy snack cravings, try healthy alternatives like fruits or vegetables, or items with no added sugar. If you are managing a health condition, consult your physician first to discuss your diet. DashDiet. com helps you make grocery lists optimized for certain health conditions.

### Q: Do you have nutrition tips for dining out?

A: First, remember that restaurants usually serve large portions of rich, calorie-dense food that is less nutritious than what we prepare at home.

When ordering, substitute fresh vegetables or fruit for the french fries or onion rings. Bread on the table

usually gets eaten, so tell your waiter to skip the bread basket. Ask for a togo container up front, and pack half of your meal away before you even begin.

Choose between an appetizer or a dessert — but not both. If you choose dessert, sherbet, gelatin and angel food cake are good alternatives. And consider splitting your appetizer or dessert with a friend.

#### Q: What other tricks can you suggest?

A: Start each meal by drinking an 8-ounce glass of water. This will not only aid digestion, the feeling of fullness can help you eat less.

We often eat out of habit, even if we're not hungry. Just be mindful of what you're eating. If you find yourself reaching for a snack as soon as you turn on the TV, keep the snacks out of the living room.

Eat a variety of foods every day from each food group (healthy protein, healthy



### NOTRE DAME WELLNESS CENTER



Maureen Jamieson

fats, whole grain, fruits and vegetables, and dairy.) And last but not least, when you start to feel full, stop eating.

For more information about the Notre Dame Wellness Center's Wellness Coaching and Condition Management programs, visit wellnesscenter.nd.edu or call 574-634-WELL (9355).

The Notre Dame Wellness Center's Wellness Coaching and Condition Management programs can help you reach your wellness goals. Programs are convenient, confidential, and free for full time benefit eligible faculty and staff and their dependents, and dependents of graduate students.

### Interfaith Forum Series



From left, Adam Elbenni, Ina Kahal, Jim Bracke, C.S.C., Ted Bryant and Vaibhav Agarwal.

In the spring of 2016, Notre Dame will offer a fiveweek interfaith series to University faculty and staff interested in learning more about world religions, including discussion of the primary tenets of Buddhism, Islam, Judaism, Hinduism and Christianity. Employees are encouraged to email questions in advance to Staff Chaplain Rev. Jim Bracke, C.S.C., bracke.4@ nd.edu. Questions will be provided anonymously to the presenters of each program. All meetings will be held from 12:15 to 1 p.m. in the McNeill Room of LaFortune Student Center, and attendees are invited to bring their lunch.

March 8 - Buddhism (Jian Zhang)

March 15 - Islam (Jasmine Penic and a local imam)

March 22 - Judaism (Ina Kahal)

March 29 - Hinduism (Vaibhav Agarwal)

**April 5** - Christianity (Ted Bryant and Adam Elbenni)

### **IVY Tech Associate Degree** in Applied Business

for Notre Dame Staff



### Information Meeting

Wednesday, March 30 • 3 -5 p.m. **Grace Hall** Lower Level Training Room

Part of the Notre Dame Learning at Work Program.

Read more about learning and development opportunities for staff at hr.nd.edu/career-development.



### Travelers and the Zika virus

### BY CAROL C. BRADLEY, NDWORKS

Notre Dame students, faculty, and staff who currently are abroad or who are planning travel during the upcoming spring break are advised to take precautions to limit exposure to the Zika virus.

Zika is a disease caused by the Zika virus, which is spread to people primarily through the bite of an infected Aedes species mosquito.

An outbreak of the mosquito-borne virus in Brazil last April has led to its spread to other areas of the world with tropical environments, including Mexico, the Caribbean, Central America and South America.

Zika has been linked to a birth defect called microcephaly. The Centers for Disease Control and Prevention (CDC) has issued a travel advisory urging pregnant women and women attempting to become pregnant to avoid visiting locations where the virus

is or could be circulating.

Symptoms usually are mild and include fever, rash, joint pain and conjunctivitis (red eyes), lasting several days to a week. There is no vaccine to prevent or medicine to treat Zika, but those infected with the virus rarely require hospitalization, says Melanie Smith, travel nurse and occupational health coordinator at the Notre

Dame Wellness Center.

Travelers can limit exposure to Zika and other mosquitoborne diseases such as malaria and dengue fever by taking steps to prevent mosquito bites, including using an EPA-

registered insect repellent containing

"And use unscented everything," Smith adds. "No scented fabric softener, soap, perfume, sunblock, shampoo or lotion. Wear long sleeves, and light colors. Dark colors attract insects. Use bed netting if you're sleeping without air conditioning." Faculty and staff with medical

> questions regarding Zika should consult the Wellness Center, 634-9355. Other information on international travel is available from Notre Dame International, 631-1138 or international. **nd.edu**, or visit the CDC website, cdc.gov/zika.

# Final beam placed in library "topping out" ceremony

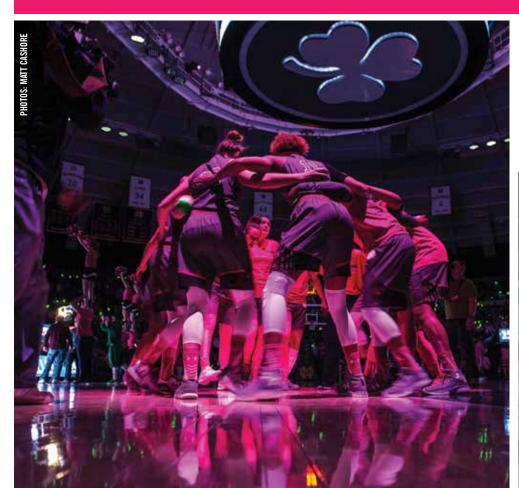








### A Pink Zone game for Valentine's Day



The Notre Dame Women's Basketball annual Pink Zone game, which raises funds for women in the Michiana community who can't afford breast cancer screenings or mammograms, took place Sunday, Feb. 14, with ND beating Miami 90 to 69. Cancer survivors and University researchers were honored at halftime. The Pink Zone initiative has raised more than \$750,000 over the past seven years.







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 discounted ticket prices, or contact the ticket office, 631-2800. Ticket prices listed are the faculty/staff rate.

### **MUSIC**

#### **Bach's Lunch**

Department of Music Friday, March 4; Noon Bring your lunch and enjoy a brief concert performed by Department of Music students. Family friendly, all ages are welcome. Free but ticketed event.

#### June H. Edwards Chamber III South Bend Symphony Orchestra

20th Century Masters
Sunday, March 6; 2:30 p.m.; \$25
From the fanfare of the Hindemith to
the vivid fireworks of Poulenc, this
compelling program showcases the
power and range of musical thought
in the last century. Featuring baritone
Stephen Lancaster and pianist John
Blacklow, both accomplished artists
and Notre Dame faculty.

### **Glee Club Spring Concert**

Department of Music Friday, March 18; 8 p.m.; \$6 Classical music for men's choir (including a new work written for the Glee Club by composer David Conte), folk and multicultural songs and spirituals complete the program.

### **Paul Appleby**

Presenting Series
Saturday, March 19; 7:30 p.m.; \$27
Admired for his interpretive depth,
vocal strength and range of expressivity, rising star tenor Paul Appleby
is one of the sought-after voices of
his generation. This recital is a proud
welcome-home moment for the Notre
Dame alumnus.

### **CINEMA**

### Pickup on South Street (1953)

Tuesday, Night Noir
Tuesday, March 1; 7 p.m.
Directed by Samuel Fuller
With Richard Widmark, Jean Peters,
Thelma Ritter
Not Rated, 80 minutes, DCP
Petty crook Skip McCoy (Richard
Widmark) has his eyes fixed on the
big score. When the cocky threetime convict picks the pocketbook of
unsuspecting Candy (Jean Peters), he
finds a haul bigger than he could have
imagined: a strip of microfilm bearing
confidential U.S. secrets.

Tickets for Browning Cinema movies are \$6 for faculty/staff, \$5 for those 65 and up, free for Notre Dame students, unless otherwise noted on the website. Visit performingarts.nd.edu for more information or to purchase tickets, or call the Ticket Office at 631-2800.

#### The Night of the Hunter (1955)

Tuesday, Night Noir
Tuesday, March 15; 7 p.m.
Directed by Charles Laughton
With Robert Mitchum, Shelley Winters,
Lillian Gish
Not Rated, 92 minutes, DCP
A tall, handsome "preacher," his
knuckles eerily tattooed with the
words Love and Hate, roams the
countryside spreading the gospel ...

knuckles eerily tattooed with the words Love and Hate, roams the countryside spreading the gospel ... and leaving a trail of murdered women in his wake. Now his sights are set on \$10,000 and two little children are the only ones who know where it is. Robert Mitchum stars in the most daring and critically acclaimed performance of his career. Spellbinding, ominous and suspenseful, this extraordinary noir classic remains one of the most frightening movies ever made.

#### Sweet Smell of Success (1957)

Tuesday Night Noir Tuesday, March 22; 7 p.m. Directed by Alexander Mackendrick With Burt Lancaster, Tony Curtis, Not Rated, 97 minutes, DCP A columnist and a press agent tear into the maelstrom of midtown Manhattan's night creatures in a sinister game that involves money, power and ultimately survival. Alexander Mackendrick's Machiavellian and treacherous tale of a New York newspaper tycoon's attempts to play God, with the help of a weak-willed press agent, stars Burt Lancaster and Tony Curtis in the most bleakly brilliant turns of their esteemed careers.

### Riffi (1955)

Tuesday Night Noir Tuesday, March 29; 7 p.m. Directed by Jules Dassin With Jean Servais, Robert Hossein, Carl Möhner, Robert Manuel Not Rated, 118 minutes, DCP French with English subtitles After making such American noir classics as "Brute Force" and "The Naked City," the blacklisted director Jules Dassin went to Paris and embarked on his masterpiece: a twisting, turning tale of four ex-cons who hatch one last glorious robbery in the City of Light. Rififi is the ultimate heist movie, a mélange of suspense, brutality and dark humor that was an international hit, earned Dassin the best director prize at the Cannes Film Festival, and has proven wildly influential on the decades of heist thrillers that have come in its wake.

### **ALSO AT THE BROWNING**

#### The Met Live in HD: Manon Lescaut

213 minutes, Live Broadcast Saturday, March 5; 1 p.m.; \$23 The Met stage ignites when soprano Kristine Opolais and tenor Jonas Kaufmann join forces in Puccini's obsessive love story. Opolais sings the title role of the country girl who transforms herself into a Parisian temptress, while Kaufmann is the dashing student who desperately woos her. Director Richard Eyre places the action in occupied France in a film noir setting. "Desperate passion" is the phrase Puccini himself used to describe the opera that confirmed his position as the pre-eminent Italian opera composer of his day. Met Principal Conductor Fabio Luisi leads the stirring score.

#### National Theatre Live: As You Like It (2015)

Sunday, March 20; 1 p.m.; \$18 Directed by Polly Findlay Not Rated, 240 minutes Shakespeare's glorious comedy of love and change comes to the National Theatre for the first time in over 30 years, with Rosalie Craig as Rosalind. With her father the Duke banished and in exile, Rosalind and her cousin Celia leave their lives in the court behind them and journey into the Forest of Arden. There, released from convention, Rosalind experiences the liberating rush of transformation. Disguising herself as a boy, she embraces a different way of living and falls spectacularly in love.

#### **THEATER**

### **Griffin's Stinky Cheese Man**

Presenting Series
Saturday, March 12; 2 p.m.; \$10
Perfectly paced, this musical adaptation of the fractured fairy tale picture book by Jon Scieszka and Lane Smith, "The Stinky Cheese Man and Other Fairly Stupid Tales," hilariously shares the joy of making familiar stories your own.

### **SPECIAL EVENT**

Acting Right: Drama as a Classroom Management Strategy Wednesday, March 2, 4 p.m.; South Bend Community School Corporation teachers, \$10/all others, \$15

Kassie Misiewicz has taken the foundational elements of acting such as concentration, cooperation and collaboration and created a structured process, which can become the basis for effective classroom management every day. For educators of grades K-4.

The Partners in Education program of the John F. Kennedy Center for the Performing Arts is designed to assist arts organizations throughout the nation to develop or expand educational partnerships with their local school systems.

### SNITE MUSEUM OF ART

### **New to the Collection:**

### Twentieth-Century Photographs

On exhibition through March 13

Photographs acquired by the Snite Museum of Art since 2013, including portraits, photojournalism, fashion and advertising photography as well as fine art photographs, reflect the evolution of artistic styles over the course of the 20th century.

The images also reflect the changing technology of photography, from platinum and silver prints to photogravure. Other color processes are now almost extinct, including carbro printing; dye imbibition (dye transfer) and silver dye bleach printing.

One group of photographs document the civil rights movement, with photographs by Dan Budnik, Danny Lyon, Ernest C. Withers and others. Several are important additions to the Snite Museum collections and will be documented in a forthcoming survey of the collection.

David Edwards' story about the Kazakh eagle hunters of Western Mongolia appeared in the Sept. 1999 issue of National Geographic Magazine; his image of a Kazakh eagle hunter was included in National Geographic's collector's edition, 100 Best Photographs.



David Edwards, Kosan, A Kazakh Eagle Hunter, Tolbo Valley, Bayan-Ölgii, Mongolia, 1998, silver dye bleach print

A museum keeper spits into the eyepiece of an ancient peep-show and sets the musty machine in motion, plunging the viewer into a nightmarish netherworld of bizarre puppet rituals.

### The Quay Brothers in 35mm (1986 - 2015)

Nanovic Institute Film Series Thursday, March 24; 7 p.m. Not Rated, 70 minutes, 35mm

American identical twins working in London, stop motion animators Stephen and Timothy Quay find inspiration in Eastern European literature and classical music and art in work distinguished by its dark humor and uncanny feeling for color and texture. Masters of miniaturization, the Quays turn tiny sets into unforgettable worlds suggestive of long-repressed childhood dreams.

These three Quay masterworks, selected by director Christopher Nolan, feature broken pencils and lead shavings in "In Absentia" (2000); a porcelain doll's explorations of a dreamer's imagination in "The Comb" (1991); and the nightmarish netherworld of "Street of Crocodiles" (1986). All three films are presented in 35mm film along with "Quay" (2015), Nolan's new short film revealing the inner workings of the brothers' studio.

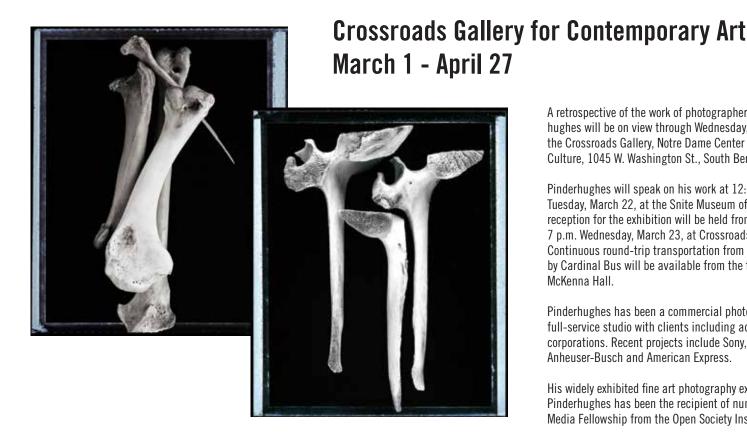


The Quay Brothers in the early 80s, shooting "Street of Crocodiles"



### Reflections & Meditations:

### Retrospective of Photography by John Pinderhughes



A retrospective of the work of photographer John Pinderhughes will be on view through Wednesday, April 27, at the Crossroads Gallery, Notre Dame Center for Arts and Culture, 1045 W. Washington St., South Bend.

Pinderhughes will speak on his work at 12:30 p.m. on Tuesday, March 22, at the Snite Museum of Art. A public reception for the exhibition will be held from 4:45 to 7 p.m. Wednesday, March 23, at Crossroads Gallery. Continuous round-trip transportation from campus by Cardinal Bus will be available from the front of McKenna Hall.



**Pinderhughes** 

Pinderhughes has been a commercial photographer in New York City, and operates his own full-service studio with clients including ad agencies, record companies, magazines and major corporations. Recent projects include Sony, American Family Insurance, BMW, Chase Bank, Canon, Anheuser-Busch and American Express.

His widely exhibited fine art photography explores variations in pattern, texture, light and line. Pinderhughes has been the recipient of numerous grants including most recently The Katrina Media Fellowship from the Open Society Institute where he worked in post-Katrina Louisiana.

# THE PORTAGE PATH

Returning to Our History

Photographs by Kay Westhues



The story of the portage and what it has become is illustrative of a broader history of the forcible displacement and subsequent neglect of the original inhabitants of this continent. I want these photographs to remind us that the history of South Bend did not begin in 1865; people were living in this region for hundreds of years previously and their knowledge and use of the land were directly responsible for the location of this city.

— Kay Westhues







### BY CAROL C. BRADLEY, NDWORKS

Hundreds of years before the city of South Bend was founded, a portage path linked the St. Joseph River to the Kankakee River — the only overland segment of an ancient water route between the Great Lakes and the Gulf of Mexico.

The trail, first used by Native Americans, was later used by French explorers and traders who traveled from Detroit to New Orleans.

Photographer Kay Westhues, in this series of photographs commissioned by the University and the Snite Museum of Art as part of the South Bend 150 celebrations, explores this ancient pathway and the gradual disappearance of the trail from the landscape due to human-made changes.

"While some parts of the St. Joseph River and its branches still reflect the pastoral beauty once acclaimed in descriptions of the area by 18th-century writers," Westhues notes in the catalog accompanying the exhibition, "The 500,000-acre Grand Kankakee Marsh was drained in the 19th century, turning the Kankakee River into a large drainage ditch; the ethanol plant makes use of its headwaters."

Clockwise from top: Kankakee River near Crumstown; View of the U.S. 20 bypass at the Continental Divide; Bowman Creek; Pond behind the ethanol plant (headwaters of the Kankakee River); Road materials at a recycling facility

