

Reciprocity in social networks: iCeNSA cell phone project studies strength of relationships

What your cell phone calls and texts say about you

BY RENEE HOCHSTETLER, OFFICE OF RESEARCH

What does cell phone usage reveal about the strength of relationships and the makeup of social networks?

That's one of the important questions that a project on the dynamics of social networks at the Interdisciplinary Center for **Network Science and Applications** (iCeNSA) investigates.

The project exemplifies the collaborative nature of iCeNSA research by bringing together primary investigators from four departments: Zoltán Toroczkai, physics; Nitesh Chawla, computer science and engineering; David Hachen, sociology; Omar Lizardo, sociology; and Mark Alber, mathematics.

Hachen notes that iCeNSA's strength is its interdisciplinary, intercollege nature. That's evident in the vast array of the people involved and studies conducted.

"The social networks project is divided into three groups," says Hachen, "but we all work together. Toroczkai and his students work on the modeling aspects, Chawla and his group focus on data mining and prediction, and Lizardo and I focus on the sociological issues."

So, what does cell phone usage

reveal about relationships? It turns out, a lot.

Hachen and Lizardo study the number and frequency of calls and text messages to explore reciprocity the way people respond to each other - and how it emerges over time.

"If I called you a lot and you didn't call me a lot, that's an imbalanced relationship," says Hachen. "It turns out that's extremely important. We now believe what's really important in networks is not the formation of ties-and that's important-but the persistence or the dissolution of ties."

According to Hachen, this social network research is distinctive because it focuses on how strong or weak ties are between people—not just whether ties exist, which is what a lot of previous research examined. Researchers use cell phone data from seven million people-numerical data like the number, frequency and timing of calls and texts, but not the actual content of conversations nor any information, such as phone numbers, that could lead to the identification of individuals-to form a picture of a social network.

That gives them an idea of how many friends a caller has, how many people the caller interacts with and how strong those ties are. It also enables them to predict future behaviors.

To study relationship strength, researchers also look at who initiates contact and how often it occurs.

One conclusion: Ties that are more reciprocal

are more likely to remain intact. When there is an imbalance the ties will likely dissolve.

> Hachen says that it's easier for a relationship to become reciprocal if two people have a similar number of ties. "If you have 20 friends, and I have 20 friends, we can achieve a balance. But if I have 20 friends and you have two, you're more likely to try to call me a lot more."

That exemplifies one key distinction between social and physical networks: In social networks a person tends to connect with others who connect as much as they do, whereas physical networks like air transportation systems must connect major hubs with many regional airports because to connect major hubs only to each other breaks the system.

Lizardo says the type of data affects social network research. A decade ago, he says, most data came from interviews that required people to remember friends and provide

subjective information.

Now, the ability to gather information about people's actual behavior rather than memories about their behavior means that researchers can make more accurate observations. Interviews often reveal only strong ties, yet weak ties are very important, too. Behavioral research reveals both.

The next step for the sociology group is to add another layer of data. "In the cell phone project, we have lots of data on the network, but no or very limited information on the people and their behaviors, their tastes, their attitudes," says Hachen. "Sociologists are constantly interested in the attitudes, beliefs, behaviors

from surveys, but they don't have network information. We have network information, but not that. And now we want to get both."

So they have begun the legwork for another cell phone project that will provide 250 first-year Notre Dame students with smart phones, in order to address questions like whether ties influence people's behavior or whether people choose to form ties based on existing similarities. For the project, Hachen and Lizardo will collaborate with engineers who are interested in increasing the quality of wireless networks.

Notre Dame and



SEC

NOV. 9, 1946 Army met at Yankee Stadium in New NOV. 9, 1946 York City on SEC. Saturday, Nov. 9, YANKEE STADIUM, N. Y. ROW 1946. The game GAME 1:30 ended in a scoreless RADE 12:40 P. M. RDAY, NOV. 9, 1946 tie, with Notre ENTER Dame going on to GAT win the national championship. On Nov. 20, 2010, 64 years later, the two teams meet again for the first-ever college game in the new Yankee Stadium.

Holiday book drive, Christmas Open House at Hammes Notre Dame Bookstore

Help the Hammes Notre Dame Bookstore stock literacy rooms at the Boys & Girls Clubs of St. Joseph County by donating new or gently used books for children in grades K-5. Those who donate a book through Saturday, Dec. 18, will receive a 10-percent-off coupon toward a book purchase. The bookstore's Christmas Open House takes place Dec. 18 with events including storytime with Father Jenkins, holiday crafts, cookie decorating and sing-along carols. All proceeds from St. Nicholas picture donations (\$5) benefit the Boys & Girls Clubs libraries.



NEWS BRIEFS

DRUG-FREE SCHOOLS POLICY STATEMENT NOW AVAILABLE

The Drug-Free Schools and Communities Act Amendments of 1989 (Public Law 101-226) require that as a condition of receiving funds or any other form of financial assistance under any federal program, an institution of higher education must certify that it has adopted and implemented a program to prevent the unlawful possession, use or distribution of illicit drugs and alcohol by students and employees.

A copy of the Drug-Free Schools Policy Statement for the University of Notre Dame can be obtained by:

- Visiting the Human Resources website at: http://hr.nd. edu/policy/manual/index. shtml#General
- Contacting the *ask*HR call center at: 631-5900
- Email: askhr@nd.edu
- Visiting the Office of Human Resources, Grace Hall, second floor

ALUMNI ASSOCIATION CALLS FOR STUDENT AWARD NOMINATIONS

Is there an outstanding sophomore, senior or graduate student you'd like to see recognized? The **Alumni Association** is accepting nominations for three annual student recognition awards, all based on service to Notre Dame, service to the community and good academic standing. Past recipients include student athletes, student leaders, students with outstanding academic achievements and those involved in community service.

Nominations are made online



MANAGING EDITOR Carol C. Bradley

CONTRIBUTING WRITER Colleen O'Connor

GRAPHIC DESIGNER Kristina R. Craig, Kreative Koncepts

COPY EDITORS Brittany Collins Jennifer Laiber through Monday, Dec. 6, at the following URLs: **The Mike Russo Character**

Award acknowledges a sophomore who demonstrates outstanding character and involvement in extracurricular activities and service, particularly service that directly assists children. Nominate at mynotredame.nd.edu/MikeRusso.

The Distinguished Student Award acknowledges a top senior. Nominate at mynotredame.nd.edu/ DSA.

Nominate a graduate student for the **Distinguished Graduate Student Award** at **mynotredame. nd.edu/DGSA.**

The awards will be given out in the spring.

UNIVERSITY RECEIVES CIVIC SERVICE, COMMUNITY EDUCATION AWARDS

The University has received the Larry A. Conrad Civic Service Award from the Indiana Association of Cities and Towns. The Conrad Award recognizes a private citizen, company or civic organization for private sector service to municipal government.

Notre Dame was nominated for the award by South Bend Mayor Steve Luecke, who cited the University's recent 10-year commitment of more than \$3 million in unrestricted funds to the city government to help the city meet its budget, fully staff police and fire departments and keep park facilities open. He also cited the benefits of the Eddy Street Commons development project and the Notre Dame community's contribution of more than 420,000 hours of community service in 2009.

The **South Bend Alumni** Association's (SBAA) Community Hall of Fame Committee has awarded the University the **2010 Corporate Education Award.** The University, notes Ron Bella, executive director of the SBAA, is an institution with a worldwide impact. "But the SBAA recognizes Notre Dame for the great impact the University has on local children through education outreach and student involvement."

FOOTBALL USHERS

Hats off to Notre Dame's 800-member usher corps— 60 percent of them

University of Monterrey RAs sample life on campus

Visit combined business and pleasure

BY GENE STOWE, FOR NDWORKS

Three student resident assistants from the **University of Monterrey, Mexico** (UDEM) visited campus for five days in October, seeking to learn how the University manages its residence life.

Representatives of UDEM, a Catholic university, had visited Notre Dame

and several other U.S. universities before the school launched its own campus housing, unusual in Mexican higher education, five years ago. The visit informed how UDEM built both its buildings and its programs.

"They visited ND because they believed that our system was unique in Catholic higher education," says Jeff Shoup, director of the Office of Residence Life and Housing.

"Over the years, we have maintained a relationship with the student affairs staff from UDEM, and our office has continued to keep in close contact with their housing staff."

Kathleen O'Leary, assistant director of the Office of Residence Life and Housing, says the most recent visit combined business and pleasure.

The UDEM workers shadowed Notre Dame RAs who hosted them and took them to meals; met staff in other departments such as campus ministry and student affairs; and attended a pep rally and



From left to right, UDEM student RAs Armida López and Héctor Campbell; center, Robert Casarez, assistant director in Residence Life and Housing; UDEM student RA Gabino Gerardo and Erika Garza, a UDEM staff member.

football game.

They attended classes, ate in the dining halls, spent the night in residence halls observing traffic in and out of the RAs' rooms, and attended Mass.

"What we hope is that it's going to be very eye-opening for them," O'Leary said. The role of the rector—the pastoral position within the residence halls—is unique at Notre Dame, she adds.

The visitors commented that one of the highlights of the trip was shadowing RAs on a duty night, O'Leary says. "They saw how the RAs interact with students, enforcing University policy yet remaining welcoming and supportive."

They were also moved by both the spirit of campus on a football weekend and the spiritual presence in hall Masses and at the Grotto. "They were surprised that students went to Mass without their parents telling them to," she says.

Their institution is very new compared to Notre Dame, O'Leary adds. "But they left here feeling like they can be stewards and creators of the history of the University of Monterrey."

RecSports to close for remodeling

Rolfs Sports Recreation Center will be closed from Monday, Dec. 20, through Monday, Jan. 10, for remodeling. The Rockne Memorial will have adjusted hours to accommodate. Look for updated facility hours at **recsports.nd.edu**.



STUDENT INTERN Kelly Hunt

EXECUTIVE EDITOR Gail Hinchion Mancini

NDWorks, Notre Dame's faculty and staff newspaper, is published by the Office of Public Affairs and Communications. The deadline for copy is 10 business days before the following publication dates: July 22, Aug. 19, Sept. 23, Oct. 14, Nov. 18, Jan. 13, Feb. 17, March 24, April 21 and May 26.

The views expressed in articles do not necessarily reflect the views of NDWorks or the administration. Online PDF versions of past NDWorks can be found at **nd.edu/-ndworks**.

Submit story ideas, questions and comments to internalcomm@nd.edu or contact Carol C. Bradley, 631-0445 or bradley.7@nd.edu. unpaid volunteers who travel from 24 different states to work every home game. The longestserving among them, **Richard Scheibelhut**, has ushered for 57 years.

Ushers include (from left to right): (1) 15-year veteran Fred Pearson, who commutes from Chicago with wife Joan, a three-year usher. Pearson, who also ushers at Cubs games, was Wrigley Field Usher of the Year last year. (2) 12-year veteran Tom Ortwein, a retired school principal from Venice, Fla. (3) Yale graduate Jorge Marrero, a third-year usher who works for the Social Security Administration
(4) Assistant supervisor Shirley Cox,
a 14-year veteran and Ancilla College professor of education who joined when her daughter was a student.
(5) Tony Tezik, a second-year usher and retired educator who commutes from Pennsylvania
(6) Jim de Arrieta, an eight-year

usher and the only former Notre

Dame football player who has ever worked as an usher (7) Sam Henley, a 31-year veteran and retired finance company executive who commutes from Fredericksburg, Va. (8) 13-year veteran and field captain Wayne Oosterhoff, an insurance company claims executive who commutes from Forestville, Mich. (9) 11-year veteran Jean Oliviera, who commutes with her husband, Manny, from New

Bedford, Mass. (10) Section 23 usher Richard Scheibelhut, the current seniority leader with 57 years of service. (11) Manny Olivera, 11-year veteran, and (12) Ticket entrance usher and 11-year veteran Paula Ann Horne, senior administrative assistant in the College of Engineering Dean's Office.

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ntribution to be directed

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on the United Way, please visit v

is United Way campaign,

Have you filled out your United Way pledge card?

Win round-trip airline tickets to anywhere in the continental U.S.

Invest in your community by pledging online or filling out a United Way pledge card by Monday, Dec. 13, and you'll automatically be entered into a drawing for a number of different prizes, including a pair of round-trip airline tickets to anywhere in the continental U.S., one of two reserved parking spaces for 2011, a tour of the stadium, a \$50 gift card to the Riverfront Café in Niles and a \$50 Food Services gift card.

Last year, your tax-deductible contributions helped raise more than \$3 million in St. Joseph County, which leveraged to \$6 million in community impact through sponsorships, in-kind gifts, grants and matching funds.

Local United Way initiatives include People Gotta Eat, which has raised \$150,000 for local food pantries.

Your United Way dollars support local health and human service programs including Scouting For At-Risk Youth through LaSalle Council Boy Scouts of America; the United Health Services Early Identification and Treatment program, which provides language and hearing screenings at local preschools; American Red Cross services to members of the active duty military and deployed members of the National Guard and reserves, including emergency communications, emergency financial assistance and veterans services; and the Catholic Charities emergency food pantry.

A new E-Pledge system allows employees to fill out pledge forms online. To access the system, visit giveUW.nd.edu. Paper forms may be downloaded at hr.nd.edu/nd-faculty-staff/united-way-campaign/, or you may request a form through the *ask*HR helpline, 631-5900.

You may also choose to check the box to designate 5 percent of your total pledge to go to the Employee Compassion Fund, which assists Notre Dame employees with catastrophic needs.

For more information, contact the *ask*HR helpline, 631-5900.

Home for the holidays

Cathy Pieronek builds new memories after devastating blast

Wa Introductory computer skills training program available to staff

Yes, I would like to help make a difference in my community!

O Please designate 5% of my total United Way donation to the Notre Dame Employee Compassion Fund

Payroll Deduction: Lauthorize Notre Dame to deduct this nt during the months I receive pay in 2011. N used donations will be matched by a grant from

I am making a donation today by cash or check. Please make checks payable to the United Way of St. Joseph

turn pledge cards to 511 Main Building by Monday, Dec. 13.

United

Indiana Association of United Ways

OR

BY NATALIE DAVIS MILLER, FOR NDWORKS



stop

and photos.

Imagine losing something you really

need-your laptop or cell phone. Life

Now imagine losing everything-

This past February, Cathy Pieronek,

your home and all of its contents.

Your pets. Clothing, jewelry, books

assistant dean for academic affairs

in the College of Engineering, and

her husband, Chuck Shedlak, lost

crew digging nearby hit a gas main.

Pieronek's condo was one of four in

blow up and burn to the ground.

the building, and was the only one to

The explosion occurred around 1

their home when a construction

as you know it would momentarily

debris with it and creating additional worries about things like identity theft.

While Pieronek lost many possessions, including a vehicle and

rabbits, Hoppy and

Copper, bits and pieces of her life were salvaged from the debris, including her grandparents' wedding rings and part of a treasured Waterford crystal nativity set from her late uncle.

changes, has been rebuilt on the same property. The missing pieces of her nativity set have been replaced, and it will be home for the holidays. Even with this progress, Pieronek knows that life going forward will still be a tallying of losses as yet undiscovered.

"I think we're going to have a whole year of thinking our way through stuff-and having to go buy stuff. It snows, and you have to go get a snow shovel. We used to have a snow shovel. It's Christmastime—we have no decorations. That sort of thing." During the whole ordeal, Pieronek and her husband, both alumni of the University, received help from strangers, friends, family members, and most notably, from the Notre Dame community. "You always hear about someone who suffers a tragedy in this family and how Notre Dame pulls it together. You never want to experience that kind of tragedy, but I tell you, when you do, this place really does pull it together." Pieronek says that when it was all said and done, she wrote more than 140 thank-you notes with 120 going to members of the Notre Dame family. "It's really hard to get through something like this by yourself, and we're just grateful we didn't have to. We are truly grateful to our friends here at Notre Dame for helping us recover our lives. Their love has been the biggest blessing of all."

Computer skills are life skills

BY COLLEEN O'CONNOR, FOR NDWORKS

Business Operations, the largest nonacademic unit on campus, is partnering with human resources and Graham Allen Partners to offer classes in introductory computer skills to all University employees.

"With campus departments and outside agencies transitioning to paperless systems, computer skills have become life skills. In today's society, it is critical that our staff feel comfortable using a computer, whether to read the news, order a prescription refill, or review their vacation balances. This program provides people with the skills they need to feel confident navigating the online world," explains Amy Coughlin, director of administrative services for business operations and program sponsor.

The program was piloted this summer with an enthusiastic group of staff from a variety of campus departments. The first course series was designed and taught by Margot Jones, senior intern for business operations majoring in American studies and computer applications. The group worked together to learn the fundamentals and spent extra

time with Jones to craft a program that was fun and educational.

Classes meet during regular business hours on paid time. They are held three times a week for three weeks for a total of nine classes, two hours each. There is a maximum of 10 students per class, and multi-departmental participation is encouraged so that no one department is left unmanned. Every effort is made to accommodate all three shifts.

The course focuses on logging onto the University computer system, searching the Internet, using University email, and accessing inside.nd.edu to locate payroll information, benefits and parking registration, as well as human resource functions such as Open Enrollment and employment applications.

An introduction to Microsoft Word and word processing skills are included in the course, including opening, printing and saving a document. Participants receive their own personal training manuals and a quick-reference guidebook as part of the training materials. At completion, a certificate is awarded at

is teaching the first training class, which began Nov. 2. A typical class day begins with a review of the prior lesson, followed by the modeling of a new skill. Participants are assigned hands-on activities in order to reinforce learning. Refreshments and prizes are included in the sessions in order to create a relaxed environment conducive to learning. "Although informative, we want participants to have fun with this," said Ogren.

In addition to conducting classroom instruction, the department will be opening a computer lab in the near future. Located in the Maintenance Center, the lab will house six computers and one printer.

All Business Operations employees are welcome to use the lab before or after their shifts, and during lunch and break time. Based on need, the lab will be staffed during certain hours by Graham Allen Partners. According to Jones, "We are creating this employee training lab, and more to come, in order to encourage and facilitate computer training outside the classroom."

Employees may sign up for the classes by contacting their managers

two beloved pet

Today the home, with slight

p.m. on a Tuesday afternoon, and just a few minutes later Pieronek received a phone call from a friend who knew she lived in the area of the blast. Pieronek called her husband, and they both headed toward their home. "I was half a block away when the fire department called to tell me that it was my house."

The explosion left Pieronek and her husband with virtually nothing.

"You're just sort of functioning to get things done for a couple of days," Pieronek says. "You need underwear. You need a toothbrush. So you're at Meijer at midnight on a Tuesday night with two shopping carts full of stuff, just so you can take a shower the next morning and put on clothes that don't smell like smoke."

One of the very first things she found after the explosion was her W-2 form sitting out on the lawn. "You think to yourself, 'Oh yeah, I had a whole room full of financial information." The wall of that room essentially blew out, taking unburned

a recognition luncheon held in their honor.

Mary Jo Ogren, consultant with Graham Allen Partners,

or filling out registration cards available in break rooms. For further information, contact Margot Jones at mjones10@nd.edu.



New Notre Dame Credit Card launched

The University has introduced a new Notre Dame® Visa® credit card as part a new affinity banking partnership with Bank of America. Bank of America is now also an official sponsor of Notre Dame Athletics.

The new banking program will help support the various programs and services of the Alumni Association, including service projects, career development, academic programming and spiritual programs.

The Notre Dame credit card from Chase Bank is being discontinued. If you want to continue to have a card that helps support Notre Dame, you will need to complete an application through Bank of America to obtain the **NEW** Notre Dame® credit card.

When cardholders use the Notre Dame® credit card for purchases, they will earn WorldPoints® rewards points that can be redeemed for cash, gift cards, brand-name merchandise, and in the very near future, exclusive ND Rewards™ with true Notre Dame experiences.

You can apply online at alumni.nd.edu/creditcard or by calling 1-800-932-2775 and mentioning Priority Code UABGOP. For more information about the Notre Dame® credit card, visit alumni.nd.edu/creditcard.

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Kroc research examines interaction of Catholic, Muslim and secular worlds

Looking for points of commonality and divergence

BY RENEE HOCHSTETLER, **OFFICE OF RESEARCH**



Mason

A new research project at the Kroc Institute will examine what it means to be Catholic or Muslim in the modern world. More specifically, the Contending Modernities projectglobal in scope—will look at the interaction of Catholicism and Islam with each other and with the secular world.

Patrick Mason is the project's associate research director and notes that there are no universal experiences. "There's not just one modern world. Depending on where you are or who you are, there are different ways that people in the contemporary world express themselves," he says. "That's the scholarly heart of the project: What are the multiple ways that people in the world express and understand and experience modernity?"

Catholics and Muslims both wrestle with what it means to be people of faith in a changing world. "We want to get a more nuanced understanding of the religious and the secular and how people understand themselves in the modern world," says Mason.

Directed by the Kroc Institute's director, Scott Appleby, the project will officially launch Nov. 18 in New York with a series of events that will preview the kind of work Contending Modernities will do and the issues it will address. For example, a panel discussion open to the public will deal with issues of women and gender in Catholicism, Islam and secularism. The panel will include prominent experts in subjects like Islam, law, theology and women's studies.

Tackling the issue of women and

gender is key because it's so relevant and timely, says Mason. Case in point: in September, France passed a law that bans women from wearing any veil that covers the face-including burqas-in public places.

That's a clear example of contention between some expressions of Islam and the broader secular world. "In many ways gender is the rub between religious and secular modernity, and we want to understand it," says Mason. "We anticipate that one of our first research teams will deal with gender issues, and that's why we're highlighting it in New York."

People don't operate in a vacuum, says Mason, so it's critical that a study on Catholicism and Islam addresses what it means to be part of secular contexts, too.

The project will include six to seven research groups, each with eight to 10 scholars worldwide, that will each address a specific topic for three vears: Human Development and the Globalizing Economy; Science, the Environment, and the Human Person; Gender and Family in State and Society; Authority, Community, and Identity; Law, Governance, and Citizenship; Migration, Mobility, and Displacement; and Violence, Peace, and Human Rights.

The Kroc Institute isn't the only group studying Islam and Christianity, but its focus on sustained scholarly study is an important distinction. While the findings will eventually have practical application-information that religious and business leaders around the world will use to further their understanding-the project's first phase emphasizes the research itself.

"In the initial stages it's not about religious leaders sitting around a table and coming up with common beliefs,' says Mason. "We really want to dig into the traditions and see points of commonality, points of divergence, and include secularism in the debate, too."

Mason acknowledges that Contending Modernities is an academically and logistically ambitious project: Catholics and Muslims make up 40 percent of the world's population. The goal is to incorporate other religions in later phases.

We think Contending Modernities will really be a leader in the field," says Mason, "and in some ways transform

' IN MEMORIAM' Art professor Beckman dies at 93



Beckman with an unidenified student, c. 1970s.

Frederick S. Beckman, 93, professor emeritus of art, art history and design, died Sunday, Oct. 31, at his home in South Bend.

He joined Notre Dame's art faculty in 1946, serving for many years as chairman of the department and developing and directing its industrial and graphic design programs.

Memorial contributions may be made to the Frederick Beckman Memorial Fund, c/o Carol Hennion, Office of Development, 1100 Grace Hall, Notre Dame, IN 46556.



the field of how we think about religion and study it."

Library partnership promotes diversity

Hesburgh Libraries, Kresge Law Library mark a decade of cooperation

BY CAROL C. BRADLEY, NDWORKS

In early November, the Hesburgh Libraries and the Law School's Kresge Law Library came together to mark 10 years of cooperation in encouraging diverse students to enter the field of library science.

Hesburgh Libraries and the Kresge Law Library first partnered in 2000 to develop the two-year Librarian-in-Residence Program. The program, which to date has supported six librarians-in-residence, is intended to recruit a recent library school graduate who can contribute to diversity of the profession and the University while developing career interests in various aspects of academic librarianship.

Leslie Morgan, who held the librarian-in-residence position

from 2005 to 2007, notes that the program "gave me a wonderful opportunity to take what I learned in the library science classroom and put it into practice as a new professional librarian. My various rotations in the program exposed me to a wealth of practical knowledge about academic librarianship." In 2007 Morgan was hired into a newly created position as the Hesburgh Libraries' First Year Experience Librarian.

Another program initiative, the Project to Recruit the Next Generation of Librarians, funded by a three-year Institute for Museum and Library Services grant, offers 14 college-bound seniors the opportunity to work for eight weeks at five participating libraries,

including the University's Hesburgh Libraries and the Kresge Law Library, McKenna Library at Holy Cross College, the Franklin D. Schurz Library at Indiana University South Bend and the Christopher Center for Library and Information Resources at Valparaiso University.

The summer program for high school students offers graduating seniors headed for college an early chance to gain an understanding of the different functions and departments of an academic library while working as student assistants in both the Hesburgh Libraries and the Kresge Law Library. More than 60 percent go on to work in their undergraduate institutions' libraries.

ND sustainability grade rises to B+ Improves for third straight year

Submit your "Bright Idea" today at brightideas.nd.edu!

BY RACHEL NOVICK, OFFICE OF SUSTAINABILITY

Notre Dame received a "B+" on this year's College Sustainability Report Card, improving over last year's "B." The higher grade came in response to a continued reduction in the University's carbon emissions and resource-saving programs spearheaded by a number of campus departments.

"This is a welcome recognition of the progress we have made and the direction in which we are headed," said John Affleck-Graves, Notre Dame's executive vice president. "This accomplishment would not be possible without the active participation of our students, faculty and staff. The everyday choices they make to conserve, recycle and purchase responsibly really do add up.'

Notre Dame's carbon emissions

declined 8 percent from 2008-09 to 2009-10, and a total of 16 percent since 2006-07. This improvement is due in large part to the Energy Conservation Measures program, the Temperature Set-Point Policy, and increased participation in sustainability education and outreach programs.

The Report Card cited several advances made this past year, including the LEED Gold certification of Geddes Hall and Ryan Hall and the introduction of the Zipcar car-sharing program. The University also received an "A" on Food and Recycling for the first time, owing to ongoing efforts by Food Services to expand local and organic food sourcing and recycling efforts. Notre Dame received an "A" in student involvement for the

third year in a row, a testament to the dedication of student leaders in GreeND and Students for Environmental Action. "Student involvement is critical to the progress any university makes toward sustainability. Notre Dame students truly understand the global impact of their actions and are passionate about making a difference," said Heather Tonk, Notre Dame's director of sustainability.

The Report Card is an independent sustainability evaluation of campus operations and endowment investments. Published by the Sustainable Endowments Institute, a special project of Rockefeller Philanthropy Advisors, it assesses 300 public and private colleges and universities with the largest endowments each year.

' TEAM IRISH AWARD '

Staff Advisory Council

The Staff Advisory Council (SAC) is a 19-member, freely elected council of nonexempt staff who volunteer their time to provide a channel of communication between staff and administration.

Although comprising nonexempt staff, the council's work often benefits the entire campus community.

As a result of recommendations made by SAC. speed bumps were placed in several locations to increase pedestrian safety. SAC met with Food Services representatives to develop a discounted staff meal plan at the dining halls.

The council also supports charitable activities on campus, fielding a Relay for Life team and organizing a campus-wide initiative to collect denim jeans for Operation Quiet Comfort, an organization that makes quilts for wounded American soldiers.

Epitomizing the University's core values of teamwork, integrity, accountability, leadership in mission and leadership in excellence is the Staff Advisory Council, winners of the University's Presidential Team Irish award.



SAC members include: Patricia Smith, Jody Klontz, Shari Herman, Bill Peck, Marie Revak, Penny McIntire, Roxy Litteral, Sandra Sarber, Kathy Seymour, Fred Sonneborn, Diana Singleton, Peggy Lant, Joe Negri, Char Koblick, Adele Almaguer, Joe Wheeler, Kathy Troth, Tamara Springer and Barb Wadley.

SNITE MUSEUM



Soprano and professor of music Georgine Resick, accompanied by pianist Päivi Ekroth,

' TEAM IRISH AWARD '

The University's Today's Administrative Professional (TAP) advisory team took to heart the results of the first ND Voice survey, in which employees expressed a strong desire for increased training and development opportunities.

The team, consisting of members from academics, Business Operations, Athletics, Student Affairs, OIT and Human Resources, brainstormed, researched best practices and used their firsthand knowledge as administrative professionals to develop a certificate program that will serve both current and future staffers.

The TAP program offers technical, managerial and interpersonal skill training for full-time, nonexempt administrative University staff.

Ninety-six staffers have already completed the program, which has more than 50 current enrollees.

The TAP advisory team has demonstrated what individuals from across divisions can accomplish when focused on a common goal. As Margaret Mead said, "never doubt that a small group of thoughtful, committed citizens can change the world.'

Epitomizing the University's core values of teamwork, integrity, accountability, leadership in mission and leadership in excellence is the Today's Administrative Professional Advisorv Team, winners of the University's Team Irish award.



Members are Leanne Knapp, Diane Pribbernow, Lynn McCormack, Catherine Robertson, Lisa Yates, Kara McClure, Cyndi Sykes and Lisa Butt.

' TEAM IRISH AWARD

Facilities

The Facilities Maintenance Team, comprising nine facility coordinators, 10 maintenance technicians and five locksmith services staffers, consistently provides campus with an unparalleled level of maintenance and customer support, with industry rankings that proclaim the University one of the best-maintained campuses in America.

The department has a philosophy of meeting or exceeding customer expectations the first time, every time.

During 2009, facilities team members handled more than 575 projects, ranging from wall repairs and carpet replacements to complete renovations of research laboratories. At the same time, the department handled 26,000 facility service requests for minor heating and cooling

repairs, carpentry, paint, electrical and plumbing jobs, with the work completed on time, within budget and with a high customer-satisfaction rating.

Locksmith services processes more than 3,400 work orders a year, handling calls for repair and maintenance for locks, access systems, door closers and panic bars as well as maintaining records of all key and master key systems on campus.

For their consistent, quality work in repairing and maintaining our beautiful campus, Facilities Maintenance is awarded the 2010 Presidential Team Irish Award, presented to work groups epitomizing the University's core values of teamwork, integrity, accountability, leadership in mission and leadership in excellence.

performed "Paradise to Opium Den" in the Snite Museum of Art's Baroque Galleries in late October. The recital included Gabriel Fauré's vision of paradise in "La Chanson d'Ève," and Jean Cras' settings of several poems of Omar Khayyam's "Rubaiyat."



At right above, Ambassador Manuel Rodriguez Arriaga, Consul General of Mexico in Chicago, with Douglas E. Bradley, Snite Museum curator, Arts of the Americas, Africa and Oceania. Ambassador Arriaga co-sponsored the reinstallation of the Snite's Mesoamerican Gallery and exhibition "Body and Soul: Life, Death and Wellness in Ancient Mexico."





Facilities Maintenance: Luis Borrero, Carol Rhoades, Deb Murray, Fath-Allah Oudghiri, William Brovold, Mark Egierski, John Kuczmanski, Jim Sanders, Philip Shaffer, Ralph Dowd, Mike Standiford, Keith Bruce, Rick Clifford, Kurt Dering, Bruce Fidler, JoRae Lukowski, Mike Manijak, Scott Mears, Joe Negri, Mike Sobieralski and Rob Wilk.

Locksmith Services: Andrew Tripp, David Bierwagen, Marvin Pruett, Ricky Milliken

Cedar Grove Cemetery plans expansion



Two additional mausolea approved by the University

BY COLLEEN O'CONNOR, FOR NDWORKS

Our Lady of Sorrows at Cedar Grove Cemetery mausolea complex opened in July 2007 in response to the high demand from Notre Dame alumni to "return home." Named for and dedicated to the patroness of the Congregation of the Holy Cross, the complex currently houses two open-air garden mausolea, Mary, Queen of Angels, and Mary, Queen of All Saints, as well as a small courtyard. With space in the existing complex 50 percent reserved, the University has approved pre-selling of space in two additional structures. Expected to meet the same funding requirements as all other new buildings on campus, construction of the new mausolea is projected for the spring of 2012.

The new mausolea will be named Mary, Holy Mother of God, and Mary, Holy Mother of the Church, in keeping with the Litany of Mary. They will exhibit the same palette of materials as the first two, utilizing Notre Dame brick, slate roofing, matching granite and limestone accents. However, the interior design will differ to accommodate burial preferences learned in the process of filling the original two mausolea. Mary, Queen of Angels and Mary, Queen of All Saints were designed so that 80 percent of the space is for cremated remains, offering single or companion niches. The remaining 20 percent is designed for full body burial in either single or companion crypts. At this time, all full body companion crypts are taken.

To respond to the demonstrated interest in full body interment in the mausolea, Mary, Holy Mother of God, and Mary, Holy Mother of the Church will have more crypt space, with a division of approximately 50/50 with niches for cremated remains. Additionally, two new types of crypts will be offered that will make more efficient use of space, thereby broadening the price range to make them more affordable.

In addition to adjustments in space configuration, the two new mausolea will be surrounded by a much larger courtyard, triple the size of the existing one. According to Leon Glon, manager of Cedar Grove, committal services at the mauselea are attracting a growing number of family and friends. Some services are small and solemn, while others are very ceremonial.

"We have everything from immediate family only, to large groups including international family members and friends," says Glon. Some families bring recorded music or make arrangements for live accompaniment, including bagpipers and Notre Dame band members. "Upon request, I will put them in touch with singers arranged through the Basilica of Sacred Heart. The additional courtyard space will accommodate large groups and allow families to have the kind of service

they desire."

Also in the plans is the construction of a vine-covered pergola, which will offer shade and relief from the heat as well as provide a buffer between Cedar Grove Cemetery and the Burke Golf Course.

Even with the addition of two new mausolea and a large courtyard, Notre Dame's 22-acre cemetery has room to grow. Future plans call for up to 11 mausolea in the Our Lady of Sorrows complex.

Along with Notre Dame alumni and surviving spouse, parent or child and members of Sacred Heart Parish, aboveground burial in the mausolea is open to full-time Notre Dame faculty and staff as well as retirees with the requisite years of service. In-ground burial at Cedar Grove is reserved exclusively for full-time Notre Dame faculty, staff and retirees with the requisite years of service.

For more information, contact Karmin Meade, Services Coordinator, at 631-5660 or **kmeade1@nd.edu.**

CONTACT US

SUBMIT STORY IDEAS, QUESTIONS AND COMMENTS TO NDWORKS@ND.EDU OR CONTACT CAROL C. BRADLEY, 631-0445 OR BRADLEY.7@ND.EDU.

ND paper phone directory discontinued

From the Office of Information Technologies

In an effort to support sustainability efforts and provide the most accurate contact information for faculty, staff and students, the University will no longer produce paper copies of the campus phone directory.

There are several options available to access up-to-date directory information, including the online campus directory, nd.edu/directories. There is also a directory search feature located on insideND. Other options include the Exchange Global Address List in Outlook/Entourage and the LDAP directory search in other email programs. A directory for mobile devices can be found at **m.nd.edu**. Visit oit.nd.edu/telecommunications/directory.shtml to download PDF files of information formerly contained in the front of the directory, including departmental listings, emergency information, the campus map and a Facility Services reference. Also available are links to the interactive campus map and Saint Mary's College and Holy Cross College faculty and staff listings. A directory of Congregation of Holy Cross priests and brothers is available as a PDF.

Summary Annual Report for certain retirement plans of the University of Notre Dame du Lac

This is a summary of the annual reports of certain employee benefit retirement plans maintained for employees of the University of Notre Dame du Lac for the plan year beginning January 1, 2009 and ending December 31, 2009. The plans described in this summary include: the University of Notre Dame Defined Contribution Retirement Plan for Faculty and Administrators, (Plan No. 002) and the University of Notre Dame Supplemental Retirement Account Plan, (Plan No. 004). The employer ID number for the sponsor of the above plans, the University of Notre Dame du Lac, is 35-0868188. The annual reports have been filed with the Employee Benefits Security Administration, U.S. Department of Labor as required under the Employee Retirement Income Security Act of 1974 (ERISA).

For administrative convenience, this summary covers two of the retirement plans maintained by the University of Notre Dame du Lac, including plans that may not apply to you. The fact that you are being provided this summary does not necessarily mean that you are eligible for benefits under the plans mentioned in this summary.

Basic Financial Statement for the University of Notre Dame Defined Contribution Retirement Plan for Faculty and Administrators

Benefits under the plan are provided by custodial accounts and insurance. Plan expenses were \$26,602,324. These expenses included \$5,975 in administrative expenses, \$23,841,007 in benefits paid to participants and beneficiaries, \$2,755,261 paid to insurance carriers for the provision of benefits and \$81 in other expenses. A total of 4,869 persons were participants in or beneficiaries of the plan at the end of the plan year, although not all of these persons had yet earned the right to receive benefits.

The value of plan assets, after subtracting liabilities of the plan, was \$707,771,062 as of December 31, 2009 compared to \$607,698,657 as of January 1, 2009. During the plan year the plan experienced an increase in its net assets of \$100,072,405. This increase includes unrealized appreciation or depreciation in the value of plan assets; that is, the difference between the value of the plan's assets at the end of the year and the value of the assets at the beginning of the year, or the cost of assets acquired during the year. The plan had total income of \$123,220,739 including employer contributions of \$21,802,983, employee contributions of \$11,125,811, other contributions of \$1,068,754, earnings from investments of \$89,217,929 and other income of \$5,262. There were also net transfers to the plan of \$3,453,990.

increase includes unrealized appreciation or depreciation in the value of plan assets; that is, the difference between the value of the plan's assets at the end of the year and the value of the assets at the beginning of the year, or the cost of assets acquired during the year. The plan had total income of \$33,564,672 including employee contributions of \$10,783,124, other contributions of 1,374,064, earnings from investments of \$21,400,732 and other income of \$6,752. There were also net transfers from the plan of \$3,531,736.

The plan has insurance contracts with Metropolitan Life Insurance Company and TIAA-CREF.

Your Rights to Additional Information

You have the right to receive a copy of the full annual reports, or any part thereof, on request. The items listed below are included in that report:

- 1. An accountant's report;
- 2. Financial information and information on payments to service providers;
- 3. Assets held for investment;
- 4. Insurance information including sales commissions paid by insurance carriers; and
- 5. Information regarding any common or collective trusts, pooled separate
 - accounts, master trusts or 103-12 investment entities in which a plan participates.

To obtain a copy of the full annual reports, or any part thereof, write or call the office of the plan

administrator: Vice President Human Resources, University of Notre Dame du Lac, Office of Human Resources, 100 Grace Hall, Notre Dame, Indiana 46556; (574) 631-5900. The charge to cover copying costs will be \$.05 per page.

The plan has insurance contracts with Metropolitan Life Insurance Company and TIAA-CREF.

Basic Financial Statement for the University of Notre Dame Supplemental Retirement Account Plan

Benefits under the plan are provided by custodial accounts and insurance. Plan expenses were \$3,775,355. These expenses included \$1,183 in administrative expenses, \$3,670,378 in benefits paid to participants and beneficiaries, and \$103,794 paid to insurance carriers for the provision of benefits. A total of 8,363 persons were participants in or beneficiaries of the plan at the end of the plan year, although not all of these persons had yet earned the right to receive benefits.

The value of plan assets, after subtracting liabilities of the plan, was \$116,550,223 as of December 31, 2009 compared to \$90,292,642 as of January 1, 2009. During the plan year the plan experienced an increase in its net assets of \$26,257,581. This

You also have the right to receive from the plan administrator, on request and at no charge, a statement of the assets and liabilities of the plan and accompanying notes, or a statement of income and expenses of the plan and accompanying notes, or both. If you request a copy of the full annual report from the plan administrator, these two statements and accompanying notes will be included as part of that report. The charge to cover copying costs given above does not include a charge for the copying of these portions of the report because these portions are furnished without charge.

You also have the legally protected right to examine the annual reports at the main office of the plan administrator: Vice President Human Resources, University of Notre Dame du Lac, Office of Human Resources, 100 Grace Hall, Notre Dame, Indiana 46556; and at the U.S. Department of Labor in Washington D.C., or to obtain a copy from the U.S. Department of Labor upon payment of copying costs. Requests to the Department of Labor should be addressed to: Public Disclosure Room N1513, Employee Benefits Security Administration, U.S. Department of Labor, 200 Constitution Ave., N.W., Washington, D.C. 20210.

Additional Explanation

The participant counts for 2009 are significantly greater than for 2008. This is due to changes in how participants are counted for purposes of complying with certain government reporting requirements.

SERVICE ANNIVERSARIES









The University congratulates those employees who celebrate significant service anniversaries in November, including 25-year employees Deborah M. Coch, Mendoza College of Business; Gloria M. Coplin, Elaine K. Griffen and Richard B. Wojtasik, Hesburgh Libraries; and

Elizabeth Schneider, Provost's Office.



Griffen

20 years

Michael I. Brewington, utilities Patrick F. Farrell, aviation Tina M. Jankowski, Law School Patricia A. Moorehead, Investment Office Marty Nemeth, chemical and biomolecular engineering Janet E. Rose, law library

Scott W. Siler, Alumni Association Gwendolyn D. Troupe, financial aid

15 years

Myrtle L. Doaks, history William J. Doyle, University Relations Joseph C. Freeland, computer science and engineering Lisa R. Harris, South Dining Hall Patricia A. Kirvan, Hesburgh Libraries

10 years

Brandon Bauer, information security Michael Cora, South Dining Hall LoriAnn B. Edinborough, Career Center Neil F. Lobo, biological sciences Jody K. Sadler, athletics Zoe C. Samora, Metropolitan Chicago Initiative

NEW EMPLOYEES

The University congratulates the following new employees, who began work in September and October.

Barbara L. Babbs and Dora A. Calvillo, Morris Inn Joel B. Barrett, Shakespeare at Notre Dame Ward S. Byers, security Gary A. Chew, Landscape Services Edward G. Cohen, Mendoza College of Business Devin Collins, operations and engineering Kari A. Conjalka, Freimann Animal Care Facility Stephanie M. Doering, applied computational math and statistics Adam W. ElBenni, finance Shawn T. Finlen, international studies Barry Gregory, Office of Research Jon C. Howard, Catering by Design

Anna Korpal, admissions Jaimi J. Lentine-Wood, Legal Aid Clinic Elizabeth McCoy, Kellogg Institute Susan Nugent, College of Arts and Letters Samuel D. Pecoraro, biological sciences Robert A. Quakenbush, development Jenna Rager, Office of Institutional Equity Michael B. Roe, AgencyND Craig J. Sharpe, Office of General Counsel Susan Sharpe, College of Science Kaitlin Sweeney, varsity strength and conditioning Nathan J. Walker, recreational sports Erica A. Williams, **Custodial Services** Catherine M. Wilson, Provost's Office

Summary Annual Report for certain Health and Welfare Benefit Plans of the University of Notre Dame du Lac

This is a summary of the annual reports of certain employee health and welfare benefit plans maintained for employees of the University of Notre Dame du Lac for the plan year beginning January 1, 2009 and ending December 31, 2009. The plans described in this summary include: the University of Notre Dame Flex Plan (Plan No. 504), the University of Notre Dame du Lac Group Life Insurance Plan (Plan No. 502), the University of Notre Dame du Lac Travel Accident Insurance Plan (Plan No. 505), the University of Notre Dame du Lac Long Term Disability Plan (Plan No. 503), and the University of Notre Dame du Lac Long Term Care Plan (Plan No. 511). The employer ID number for the sponsor of all of the above plans, the University of Notre Dame du Lac, is 35-0868188. The annual reports have been filed with the Employee Benefits Security Administration, U.S. Department of Labor, as required under the Employee Retirement Income Security Act of 1974 (ERISA).

For administrative convenience, this summary covers a number of employee benefit plans maintained by the University of Notre Dame du Lac, including plans that may not apply to you. The fact that you are being provided this summary does not necessarily mean that you are eligible for benefits under all the plans mentioned in this summary.

Insurance Information

The Flex Plan has a contract with:

Anthem Insurance Companies, Inc. to pay all retiree medical insurance claims incurred under the terms of the plan. The total premiums paid for retiree medical for the plan year ending December 31, 2009 were \$1,383,792. Because it is an "experience rated" contract, the premium costs are affected by, among other things, the number and size of claims. The total of all benefit claims paid under the experience-rated contract during the plan year was \$1,213,272.

- Because it is an "experience rated" contract, the premium costs are affected by, among other things, the number and size of claims and the subsidy applied that is approved by the Center for Medicare and Medicaid Services.
- Meritain Health to manage the self-funded HMO and PPO plans. A self-funded prescription benefit plan which is managed by Medco Health Solutions, Inc. is also included. The University of Notre Dame du Lac has committed itself to pay all claims incurred under the terms of these plans.
- Great Lakes Delta Insurance Company ("Great Lakes") to pay dental claims incurred under the terms of the plan. The total premiums paid to Great Lakes for the plan year ending December 31, 2009 were \$2,295,472. Because it is an "experience rated" contract, the premium costs are affected by, among other things, the number and size of claims. The total of all benefit claims paid under the experience-rated contract during the plan year was \$2,055,177.
- ٠ EyeMed Vision Care ("EyeMed") to pay all vision claims incurred under the terms of the plan. The total premiums paid to EyeMed for the plan year ending December 31, 2009 were \$543,060.

Not all of these contracts will apply to every employee covered under the Flex Plan.

The Group Life Insurance Plan has a contract with:

Minnesota Life Insurance Company to pay all claims incurred under the terms of the plan. The total premiums paid for the plan year ending December 31, 2009 were \$1,729,148.

The Long Term Disability Plan has a contract with:

The Life Insurance Company of North America (CIGNA) to pay all claims incurred under the terms of the plan. The total premiums paid for the plan year ending December 31, 2009 were \$471,569.

The Long Term Care Plan has a contract with:

- Aetna Life Insurance Company to pay all claims incurred under the terms of the plan. The total premiums paid for the plan year ending June 30, 2009 were \$118,247.
- Prudential Insurance Company of America to pay all claims incurred under the terms of the plan. The total premiums paid for the plan year ending December 31, 2009 were \$138,094.

Your Rights to Additional Information

You have the right to receive a copy of the full annual reports or any part thereof, on request. The item listed below is included in that report: 1. Insurance information including sales commissions paid by insurance

carriers.

To obtain a copy of the full annual reports, or any part thereof, write or call the office of the plan administrator: Vice President Human Resources, University of Notre Dame du Lac, Office of Human Resources, 100 Grace Hall, Notre Dame, Indiana 46556; (574) 631-5900. The charge to cover copying costs will be \$.05 per page for any part thereof.

You also have the legally protected right to examine the annual reports at the main office of the plan administrator: Vice President Human Resources, University of Notre Dame du Lac, Office of Human Resources, 100 Grace Hall, Notre Dame, Indiana 46556; and at the U.S. Department of Labor in Washington, D.C., or to obtain a copy from the U.S. Department of Labor upon payment of copying costs. Requests to the U.S. Department of Labor should be addressed to: Public Disclosure Room N1513, Employee Benefits Security Administration, U.S. Department of Labor, 200 Constitution Avenue, N.W., Washington, D.C. 20210.

Community Insurance Company, dba Anthem Blue Cross and Blue Shield to pay all retiree Medicare prescription claims incurred under the terms of the plan. The total premiums paid for retiree prescriptions for the plan year ending December 31, 2009 were \$1,614,478.

The Travel Accident Insurance Plan has a contract with:

National Union to pay all claims incurred under the terms of the plan. The total premiums paid for the plan year ending December 31, 2009 were \$9,225.

orts Lec

Join RecSports and WALK ND and walk a million steps

WALK ND

Join RecSports and Human Resources in the **WALK ND** program and walk 1 million steps over the next 100 days! Million Steps ends Thursday, Feb. 10, but WALK ND continues with fun, new goals and giveaways! To get started, register via RecRegister (recsports.nd.edu/programs/ recregister/) or stop by the Rolfs

Sports Rec Center. You'll also need to pick up free pedometer and log book at the RSRC, and T-shirts are available while supplies last! Contact Kara, 631-5849, for more information.

PERSONAL TRAINING

Give the gift of health this holiday season! All personal training packages are 20 percent off Dec. 1 through 24. To purchase a package, log in to RecRegister (recsports.nd.edu/programs/ recregister/) and use promotional code 20%Xmas2010 at checkout to receive the discount.

GROUP FITNESS

Work off the holiday season in a RecSports fitness class. Free dropin classes will be held Dec. 10 to 15. Class space is limited and on a first come, first served basis. The group fitness schedule can be found at: recsports.nd.edu/programs/ fitness-and-instructional/ schedules/.

Coming up in January

SPRING GROUP FITNESS CLASSES

Look for a full schedule of **spring** fitness classes, including Aquacise, Body Sculpt, Cardio Box, Pilates,

Yoga and Zumba. View the schedule at (recsports.nd.edu/programs/ fitness-and-instructional/ **schedules/).** These classes are open to the entire campus community.

FAST CLASSES

FAST (Faculty And Staff Training) classes are reserved for faculty, staff, retirees and spouses. View the schedule at recsports.nd.edu/ programs/fitness-and-instructional/ schedules/#fast.

RETIREE GROUP FITNESS

We have a new fitness class designed just for retirees: Gentle, Healthy Toning meets from 11 to 11:45 a.m. Mondays, Jan. 24 through March

7. Contact Shellie, 631-3432, for more information. **Registration** for spring fitness classes begins at 7:30 a.m. Thursday, Jan. 20. Instructional classes such as SCUBA, tennis, dance and martial arts begin registration at 7:30 a.m. Thursday, Jan. 27.

Register online and pay with a credit card at RecRegister, http:// recsports.nd.edu/programs/ **recregister/**, or pay with cash or check at Rolfs Sports Recreation Center, 631-6100.



Librarian's digital archive goes viral

What started as a family project gains worldwide audience

BY CAROL C. BRADLEY, NDWORKS



Tom Lehman's parents were missionaries in Ethiopia and Puerto Rico in the late 1940s and 1950s—and his father took a lot of pictures.

"We had metal boxes of slides, and every Christmas he'd pull out 30 or 40 and we'd review that family history," recalls Lehman, Hesburgh Libraries digital access librarian. "I got the idea of scanning the photos to make a set for each grandchild, and decided to upload a few to the photo-sharing site **flickr.com.** And all of a sudden I started getting emails."

What started in 2005 as a family project has grown into an archive of more than 24,000 images by 60 different photographers, with a dedicated online community. Lehman manages the project on his own time—early mornings, evenings and weekends.

Lehman's primary goal, he says, "is to develop the most

The photos have also been used in a PBS documentary about Puerto Rican professional baseball player Roberto Clemente. "I've heard they've been used in classrooms in Puerto Rico," Lehman says. "Some were used in a land use hearing. A social worker used them working with people with Alzheimer's."

Members of the online community contribute reminiscences, and help develop the collection as a resource by identifying various commercial buildings, homes and streets.

Most of the photos were taken with Kodachrome slide film, a product introduced in 1939. "The quality of the product has amazed me. The earliest photos were taken in 1942—it's like they were taken yesterday. By scanning them, I preserve them. As far as I know, it's the largest collection of color photos of Puerto Rico from that period that is publicly available online."







comprehensive collection I can of photos taken in Puerto Rico in the '40s and '50s."

The archive focuses mainly on Puerto Rico, but includes images contributed by missionaries who served Honduras, Mexico, Cuba, Ethiopia and the Congo.

It's an interesting period in the history of the country, he notes. "Everything is changing. It starts out being agricultural and rural, and then development explodes. The Puerto Rico you see in the pictures is gone."

A book featuring photos from the collection, "Puerto Rico in Pictures," was published in 2008, and in 2011 a London publisher is releasing a volume featuring 225 of the images, tentatively titled "Puerto Rico Remembered." The Library of Congress, he adds, has hundreds of thousands of early photos online, but fewer than 200 color photos of Puerto Rico available.

To view a selection of photos from the archive, visit: **flickr.com/photos/tlehman.** The photos are organized by country, and grouped by photographer. A list of frequently asked questions and terms of use for the photos are included under Lehman's profile. The full collection of images is viewable by invitation. Contact Lehman at **tlehman@nd.edu** for more information.

1. Blue house in Utuado, Puerto Rico, May 23, 1955. A visitor to the site identified it as the Julie Maestre house. Photographed by Lee Smith. 2. Woman with two children in front of house, taken sometime between 1946 and 1948 by Clayton Gingerich. 3. Young man with mortar and pestle (pilón) grinding coffee. Taken between 1956 and 1958 by Dr. Lavern Gerig. 4. Plowing with oxen in the 1950s, taken by John Lehman. A visitor to the site identified the location as La Plata and the plowman as his Uncle Millo, "who still lives in La Plata." 5. Threestory building with balcony, photographed by Lee Smith, May 23, 1955. A site visitor identified the location as the back of St. Michael Catholic Church elementary school in Utuado, Puerto Rico, and added that the third floor housed the Sisters of Divine Providence convent; the brick building to the right housed the print shop of the Franciscan priests. 6. Hoeing tobacco on a steep hillside, 1950s, taken by John Lehman. 7. Loading a cane truck near Luquillo, June 1949, taken by Robert Ebey.