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ND Works

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News for Notre Dame faculty and staff and their families

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\$o far, \$o good

BY GAIL HINCHION MANCINI

Despite a turbulent world economy, University finances are sufficiently strong that the Board of Trustees recently approved a Fiscal 2009-10 budget that continues to invest in the University's core mission. The approved budget preserves jobs, allows for modest salary increases, and calls for the smallest percentage increase in tuition in decades.

Because it appears increasingly likely that this economic downturn could be both deeper and longer than downturns of the last half century, prudence calls for planning for a future in which resources may be constrained. Executive Vice President John Affleck-Graves, in presentations across the campus, underscored this somber possibility and discussed ways in which University financial experts have planned contingencies should the economy continue to significantly weaken.

Delivered during a two-week period of tough economic news—neighboring Elkhart leads

the Midwest's bleak unemployment picture and investment markets fell in response to a new national stimulus plan—the news was received with appreciation. Calls for questions brought inquiries about the potential of recycling, opportunities for taking second jobs on campus, and the University's debt practices. (A recap of town hall questions will appear in an upcoming ND Works.)

In building the Fiscal 2009-10 budget, the administration has already taken into account reductions in the size of the endowment, donors with less ability to give and students with greater financial aid need. Much of Notre Dame's financial stability is based in "don't-put-your-eggs-in-one-basket wisdom," or revenue diversity.

Even with those declining revenue sources, the University still is able to earmark about \$30 million in additional funding for the budget. But as is happening with our own household budgets, those additional dollars are quickly being absorbed by the rising costs of fuel.

"We have seen huge increases in the cost of our utilities," said Affleck-

Graves. "These costs are driven by both increased usage as new facilities have come online and increased fuel cost. Coal is up 60 percent. Our fuel costs increases are \$8 million to \$10 million. Our food costs have increased 12 percent. In addition, our financial aid costs are likely to be up by \$10 to \$20 million."

"So far, we have been able to set aside some dollars for salary increases," he added. "But they will be very, very modest." Unlike some universities that have instituted layoffs but will give raises to remaining employees, Notre Dame has made preserving jobs a priority.

The University's financial stability is rooted in longstanding, fiscally conservative practices.

- Notre Dame's endowment spending practices lead it to be more conservative than peer institutions in spending during periods of significant market growth but enable the University to be more aggressive in spending during down markets. In essence, Notre Dame's spending practices have anticipated the so-called rainy day that has now arrived.

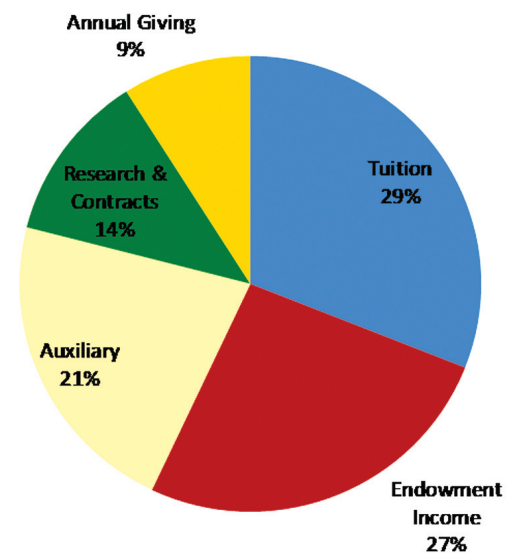
- Another conservative practice has been related to funding construction. Several years ago, the University implemented a new policy that required that 100 percent of the

funding for a project be identified prior to putting a shovel in the ground and more importantly at least 75 percent of the funding has to be in hand. The construction taking place on campus is fully funded and future projects will not begin unless they meet the same criteria.

To further prepare for economic challenges, fiscal planners have moved all debt from variable-rate loans in only a few organizations. Planners also have negotiated several lines of credit to assure cash flow.

To further prepare for the financial challenges imposed by the current economic environment, the University has fixed all of its long-term debt to lock in attractive rates in the 3.8 percent range. In addition, the University has negotiated bank lines of credit and other short-term borrowing instruments to support operations for the next few years.

If the economy were to stabilize in the next few months, "we're in good shape," says Affleck-Graves. But things could get worse." Therefore,



Diversified sources of revenue help the University weather the economic storm.

contingency plans have also been developed and include a clear sense of when, if ever, a hiring freeze might be instituted and, under even more dire circumstances, the point at which layoffs would be necessary.

In the meantime, "There are things you can do to help," he said. Potential savings rest in minimizing travel expenses, stretching the useful lives of technology and other equipment, filling open positions with caution, taking advantage of the procurement department's savings opportunities, and conserving energy.

'University of Notre Dame, may I help you?'

BY CAROL C. BRADLEY

You reach them by calling 631-5000, or just by pushing "0."

They're the campus switchboard operators—although "switchboard" is something of a misnomer these days, says Janice Love, supervisor of switchboard operations.

"We don't have a switchboard per se," says Love. "These days we run off computers."

Love remembers the days when the switchboard was a manual cord board on the lower level of the Main Building. She was hired as a long-distance operator in 1971—in October she'll mark 38 years as an employee.

Forty-year staffer Janice VanMele, who handles the telecommunications help desk, tops even Love's lengthy tenure—VanMele's connection to the department extends even further back. Her mother, Madeline Cooper, worked for the University for 30 years in several different jobs, including part-time switchboard operator.

VanMele recalls a time when she—at age eight—answered a phone call at the Main Building switchboard while her mother was in the ladies' room. The caller asked for the Provincial House, she says. "I had no idea what that was. I said, 'We don't have one!'"

These days, the switchboard—staffed by two full-time, four part-time and two on-call operators—handles about 12,000 calls a month from an office on the second floor of the Old Security Building. The switchboard is open from 8 a.m. to 11 p.m. weekdays—at times when the switchboard is closed, callers hear a message directing them to call 631-5555, the non-emergency number for the Notre Dame Security Police.

There, operators with computer terminals play Twenty Questions with confused callers—say a caller asks for "Diana"—no last name. "There are 27 Dianas, sir. Which one would that be? Is she faculty, staff or student?" With patient questioning, they can usually figure it out.

But switchboard operators handle

far more than requests for telephone numbers.

They field requests for directions to campus, information on special events, Mass schedules and game times. Over the years, Love has counseled forlorn students, and explained to others how to bake a cake or cook a pot roast. One story legendary in the department is of a fellow who called from Alaska, trying to win a bet about the words to the Notre Dame fight song.

A surprising number of people want to know if operators can get them football tickets, Love says. "And you'd be amazed at what people are willing to pay for them. A guy offered me a case of Chivas Regal." Others will call in the middle of a football game, wanting to speak to the coach—they want to argue about the plays he's calling.

Many switchboard requests are for phone numbers, of course, although the number of requests has declined with the spread of cell phones and the removal of landline phones from student rooms. The switchboard does

still get calls from disgruntled parents, when their son or daughter hasn't returned a call and the voicemail is full—those get referred to the hall rector.

Other duties are more serious. In the event of a call about a family emergency—an accident, or a death in the family—the switchboard will contact staff chaplain Rev. Gregory

A. Green, C.S.C. or another priest on campus. Families often prefer that a priest contact a student, rather than breaking bad news over the phone, Love explains.

Over her years on the switchboard, she notes, things have changed. "But people are all the same. People have the same problems. If we had time, we'd write a book," she says. "Some people will make your whole day—another will ruin it. But we just wait till the next call. It'll be something different."



Janice H. Love, standing, oversees a crew of operators including Barbara J. Finch, who handle some 12,000 calls to 631-5000 each year.

ND Voice results show much improvement

BY GAIL HINCHION MANCINI

Two years after the first employee satisfaction survey, staff and administrators are measurably more satisfied and confident about how the University treats them, and more say they are engaged and committed to their work at Notre Dame.

2008 ND Voice survey results show improvement in every area of focus that supports the University's core mission, values and goals. Executive Vice President John Affleck-Graves attributes much of this growth to the grassroots action plans departments and divisions devised after the 2006 ND Voice.

In more than a dozen town hall meetings over the past two weeks, top administrators expressed their enthusiasm about the results, then asked for help realizing further improvements.

The University will focus attention and resources on improving accountability, respect and fairness, and teamwork, said Affleck-Graves and Robert McQuade, associate vice president for human resources, who led the town hall meetings.

While survey respondents actually feel measurably better about accountability and respect and fairness, when 2008 results are compared to those of 2006, there is still room for improvement.

The key issue regarding respect is that employees say they do not feel safe speaking up, a state of affairs Affleck-Graves says will not be tolerated. "Over the past two years, I've been trying to find out whose job has been affected because they spoke up. I haven't found one, but if you know of anyone, please send me that information," he said. "We cannot get better unless you speak up. I encourage you to speak up, challenge tradition and propose innovations to improve the way we do things."

Accountability refers to such perceptions as whether the University is dealing with poor performance, whether work loads are fairly distributed and whether those who do not pull their weight are dealt with appropriately.

The latest survey results show that, increasingly, the staff and administration believe Notre Dame salaries are comparable to those in markets outside the University, and there is almost universal appreciation of our benefits program.



Robert McQuade, associate vice president for Human Resources, chats with members of the building operations night shift before sharing ND Voice results.

But employees continue to believe that poor performance is not dealt with. Said McQuade, "This was your most frequently expressed comment." Characteristically, employees said that they believe that raises are the same for those who did not perform as for those who believe they go the extra mile.

"As a Catholic university, it is our responsibility to treat all employees fairly. No one at a Catholic university should feel that work is not fairly

distributed," said McQuade. A performance management and merit pay system will be in place for all employees by this summer, giving supervisors an opportunity to better reward those whose service is exemplary. That, and a new supervisory training program, may help address this area.

The category of teamwork explores perceptions on whether people cooperate to get a job done and can cooperate among

departments and divisions, and whether managers foster an environment of teamwork and open dialogue.

Seventy-five percent of those surveyed have a favorable impression of teamwork. But it's an area where Notre Dame should excel, said Affleck-Graves. "That's a very strong number. But we talk about being the Notre Dame 'family,' and we should be doing better."

Although there is improvement in all areas, "I'm not really concerned about the national norms, or the numbers," said Affleck-Graves. "Our goal is that Notre Dame be the very best employer."

As for respect and fairness, he concluded, "I'm challenging all of my leaders to make sure we listen well. We're a great organization, but I'm not sure we always listen well."

The next steps begins as divisions share ND Voice information specific to them and begin working on divisional and departmental action plans. Affleck-Graves expects action plans by May 30.

A full report on the University's ND Voice results can be found on Affleck-Graves' Web site, evp.nd.edu.

A summary of town hall meeting questions and answers will appear in an upcoming ND Works.

When patristic scholarship packs a punch

BY MICHAEL O. GARVEY

Rev. Brian E. Daley, S.J., Catherine F. Huisling Professor of Theology, specializes in "patristics," the study of the writings, sayings and lives of the earliest Christians.

Whatever dusty, antiquarian associations may burden that scholarly label, they seem misapplied in Father Daley's case. Certified both as a rowing and a boxing coach, he serves as a cut and bucket man during Notre Dame's celebrated Bengal Bouts and confesses that he loves his sidelong involvements in men's and women's boxing programs "as a kind of alternative form of teaching and ministry." Besides, amateur boxing, his hobby for some four decades now, is an agreeable way to keep in shape.

Anomalous enthusiasms drive Father Daley's scholarship no less than his recreation. "Brian is everywhere acknowledged as one of the leading patristics scholars in the world," says John Cavadini, theology department chair. "He is equally at home in North American and European settings, and, as a Jesuit, enjoys a familiarity that extends to theologates in Africa and Asia as well. His prominence in the field is exceeded by no one in the world, and equaled by few."

Father Daley's 1991 book, "The Hope of the Early Church," has a noticeable resonance with public themes newly fashionable; the ancient past for him is not so ancient, and barely past.

"As a historical

theologian," he writes, "a student of the Christian tradition who is convinced of its living value for faith today, I truly believe that the hope of people in our own age can be nourished and inflamed by an informed acquaintance with the hope of earlier generations."

Undergraduate and graduate students who attend his popular lectures, like those area churchgoers who have heard him preach, will generally attest to his success in applying it. Now they have been joined by several of his colleagues in patristic studies, who celebrate his work in a book recently published by the University of Notre Dame Press.

"In the Shadow of the Incarnation: Essays on Jesus Christ in the Early Church in Honor of Brian E. Daley, S.J.," is edited by Peter W. Martens, visiting professor of theology at Yale's divinity school. Examining the works and witness of early Christian writers and theologians from the second through the seventh century, the essays reverberate Father Daley's insistence that the ancient writers' assertions

about Jesus must, in the publisher's words, "be interpreted in the largest possible context of concerns about Christian practice and discipleship, scriptural interpretation, martyrdom, salvation, the love between Christ and believers, and the ultimate mystery of the incarnation."

According to Daniel H. Williams, professor of religion at Baylor University, the essays offer an "admirable reflection on the wide-ranging scholarship and depth of scholarship that have long been associated with Father Daley's work. Considering the scope of participants in this collection, from accomplished peers to recent Ph.D. graduates, the book bears witness to the degree Father Daley has influenced and shaped generations of scholars. As such, this collection succeeds in honoring a man of faith who is certainly worthy of such an honor."

A commendably humble man, Father Daley has doubtless taken this most recent honor in stride. It isn't exactly the Golden Gloves, after all, but it will have to do.



Rev. Brian E. Daley, S.J., is pictured in one of his favorite settings, a Bengal Bouts competition, in 2005.



Think of yourself as an ND customer ...

ND WORKS STAFF WRITER

As we bustle about doing our jobs, whether we're faculty, staff or administrators, we may not think of ourselves as Notre Dame customers and clients.

Yet during any single work day, we might ride a shuttle, grab a coffee, stock up on supplies, copy course packets and order books for courses, schedule a classroom, tackle a research grant application, take an exercise class, upload or download a new computer program or negotiate a health care question.

Do these various and varied services work as well as they might? That's the question behind a new faculty and staff survey on customer service excellence called **ImproveND—Striving for Service Excellence**.

The ImproveND survey will be administered during the first three weeks of March with the assistance of Towers Perrin, our partners in ND Voice. A link to this confidential online survey will arrive in our e-mail boxes March 2, directly from Towers Perrin. Survey results are due by March 23.

Paper versions of the survey will be available in some break rooms. You also can get a copy through your supervisor or by calling *askHR*, 631-5900.

Four group sessions are planned for those who would like to take a paper version but may want someone nearby to help with questions. These proctored sessions will be at 10 a.m. Tuesday, March 3 in the Gold Room of North Dining Hall; 2 p.m. Friday, March 6 in the Oak Room of South Dining Hall; 10 a.m. Wednesday, March 11 in the Oak Room, and 2 p.m. Thursday, March 12, also in the Oak Room.

"One of our key University goals is to foster a culture of continuous improvement. To do this in the area of service, we need to understand how effectively our departments meet our needs," says John Affleck-Graves, executive vice president.

As has been the case with ND Voice, once survey results are known, the administration will identify areas in need of attention. The advantage of a survey that focuses on service across University departments is it may help us identify problems that can be addressed with a common solution, says Affleck-Graves.

Also like ND Voice, the University will administer the survey every two years to identify improvements and new areas of focus. ImproveND results will be available in late spring, and disseminated broadly.

For further information, contact *AskHR* at 631-5900.

Technology broadens impact of new language center

BY SHANNON CHAPLA

One are the days of students learning foreign languages by donning clunky headsets and repeating phrases in booths at the campus language lab.

The University's new high-tech home for language and culture study, the Center for the Study of Languages and Cultures (CSLC) in 329 DeBartolo Hall, is promoting communication and interaction through a variety of innovative methods designed to appeal to students.

"The most exciting thing we're working on that no other language center in the country is doing is creating an Internet window," says CSLC director Lance Askildson. "It's a live, high-definition video connection that will run 24 hours a day, allowing students here in the center to have conversations any time they choose with students at universities in Asia, Europe and South America."

Having worked closely with the Office of Information Technologies to develop the technology, Askildson now is coordinating with Notre Dame's study-abroad affiliates and plans to launch a pilot this semester in Angers, France. Eventually, he wants Internet windows in every country

where the University supports a language program.

"This technology has never been used in language learning and never in the way that we're proposing," Askildson says. "High definition really makes a difference when you're trying to learn a language and trying to have a cross-cultural, cross-linguistic interaction. You need to be able to see articulation movements of the mouth and facial expressions, and sound quality is very important."

Formerly the assistant director of the Center for English as a Second Language at the University of Arizona, Askildson specializes in second language acquisition and was attracted to Notre Dame because of the innovative nature of the new center and its wide-ranging support on campus due to a broader push for internationalism.

"We hope the center accelerates our goal to become one of the very best places in the country for language acquisition and cross-cultural engagement," says John McGreevy, I.A. O'Shaughnessy Dean of the College of Arts and Letters. "At a moment when other universities are cutting back on language instruction, Notre Dame is expanding, and we've seen recent enrollment increases in almost every language, with Arabic

and Chinese enrollments exploding."

Currently, the center supports a variety of programs that match students with peer tutors, learning partners, groups and international students, and offers language-culture debates. Resources include foreign language software; collections for literature, periodicals, film and audio; and a 60-inch flat-screen television dedicated to foreign language programming and films.

All of the existing resources and film collections from the language departments and the library are being transferred to the CSLC, which now offers at least one foreign language television channel in each language taught on campus. More options will be available soon via satellite.

One of the most intriguing aspects of the new center, however, is something students can access without actually walking through its doors. The new Web site, cslc.nd.edu, is all about community and interaction and serves as a gateway to 14 "language communities" that house reference materials, resources and information on upcoming events, and soon will offer a series of interactive



Students in the new Center for the Study of Languages and Cultures can practice language acquisition with face-to-face chats, but videoconferencing, blogging and other technological features will play a big role in this innovative new initiative.

Shannon Chapla

features.

Synchronous chat and video conferencing features will allow quick access to peer tutors or the CSLC desk. Blogs moderated by leaders of student language groups will promote discussion on campus, cultural and societal issues. There will be a forum for study-abroad returnees to share their experiences, and wikis will serve as "how-to" guides for each language group.

"The student-edited wikis, I think, are the most interesting feature," Askildson says. "These will offer tips on how to survive, study and succeed in each language level. No faculty will be named, as it won't be class-specific,

but it will provide a forum to help students master language study from a student perspective."

Askildson, a member of the Computer Assisted Language Learning Consortium, the largest language-learning consortium in the world, is most excited about the center's potential.

"We're still in development, but there are very few post-secondary institutions that provide the level of support for language and cultural studies that Notre Dame does," he said. "I believe we're one of the best language centers in the country, especially if you consider where we're going."

Teaching the language of belonging

BY JUDY BRADFORD

In the Ukraine, Elena Brazhnikova is a vitreo-retinal surgeon who has worked with some of the world's top eye doctors.

But when she came to the United States about a year ago, she had trouble communicating at the bank and grocery store and getting other errands done.

"I was very depressed. You don't know what to do or where to go."

Now, she has renewed confidence and abilities, thanks to English as a Second Language (ESL) classes for the spouses of international students arranged by the University's International Student Services and Activities.

"I can do almost everything myself now," says Brazhnikova, whose husband is enrolled in the doctoral program for law. "I am independent; I can pronounce words the right way; and I understand the culture here more. I feel much better compared to when I first came to America."

Two retired high school teachers, Beverly Willis and Ann Germano, teach the classes. But they do so much more than teach conversational English. They teach their students how to survive in South Bend.

Most of these women, like Brazhnikova, are highly educated. In their home countries, they worked as teachers, nurses, chemists, journalists, venture capitalists and lawyers.

But when they come here—often for three to five years—they are fish out of water. If they could get jobs here, they might get the day-to-day support they need. But to practice their professions, many of them would have to apply for licenses, a time-consuming and costly venture for someone who may not stay in this country long-term.

Willis and Germano make sure the sessions are relaxed and filled with meaningful discussions.

For example: "How did you feel when your husband said 'We're going to South Bend?'," was a recent question asked of the beginning class.

The students answered: happy, sad, nervous, curious, excited and "two thoughts at the same time," meaning they had conflicting feelings.

Germano and Willis also make sure the students share food and recipes from their home countries, advice about raising children and tips on filling out paperwork. They have helped their ESL students find dentists and doctors and read menus at restaurants. They encourage them to explore the community and take their children to see the sites off campus.

The students also write for "Authentic Voices," a quarterly magazine. The latest issue, published in November, included recollections from childhood and "life lessons" dealing with loss, love, friendship, anger—and even luggage.

"The publication gives them an opportunity to write, and it brings them some recognition," says Germano. "It also builds community."

The value of the ESL program is most felt at home. If the mother of the international's family isn't happy

in this country, then the international student won't be happy—and neither will the children.

But Germano and Willis say the class is equally valuable to them as teachers.

"They inspire me so much, and I learn from them," says Willis, of her students. "They are so grateful and so appreciative. This is my died-and-gone-to-heaven job."

Nominations sought for teaching, advising awards

ND WORKS STAFF WRITER

Nominations are being sought for winners of the 2009 Edmund P. Joyce, C.S.C., Award for Excellence in Undergraduate Teaching and for the 2009 Dockweiler Award for Excellence in Undergraduate Advising.

Nominations for both awards are to be submitted through an online application tool at provostawards.nd.edu by Tuesday, March 3.

Faculty and students are invited to submit nominations for the Joyce award. Faculty, students and exempt staff are invited to submit nominations for the Dockweiler award.

Three recipients will be selected for the Dockweiler award, 19 for the Joyce award. Recipients of both awards will receive a \$1,500 cash prize and acknowledgements in various University publications and events.

The selection criteria for the Joyce award are closely aligned with the characteristics of effective teaching and deep student learning that Notre Dame seeks to cultivate. The award will honor faculty members who have had a profound influence on the undergraduate learning experience, elevated students' intellectual engagement and fostered students' ability to express themselves effectively within a disciplinary context.

Recipients of the Joyce award will be selected from the following disciplines: business (2); engineering (2); fine arts and architecture (2); humanities (4); language and literature (3); science (3) and social science (3). Faculty committees from these various disciplines will review the nominations and help pick the award winners.

Dockweiler award winners will be drawn from the broad pool of full-time teaching faculty, professional specialists, research faculty, academic advisors and career counselors who influence students' choices about their academic and professional goals.

Detailed information about the awards, the selection process and eligibility criteria can be found at provost.nd.edu. Eligibility is generally limited to faculty and exempt staff with at least five years of service. The online nomination tool at provostawards.nd.edu lists which candidates are eligible based on years of service and other qualifying factors.



ESL teacher Beverly Willis leads students through a discussion on the question: "What were your feelings when your husband first told you that you'd be coming to South Bend?" Her students, generally women and highly accomplished, have accompanied their spouses, most who are graduate students.

Judy Bradford

Charles Darwin's career is being recognized in grand style on campus. But other significant birthdays turn our attention to the cosmos, music, a great U.S. President and a champion of the blind.

Darwin still shapes biology's questions

BY GAIL HINCHION MANCINI

Biologist Hope Hollocher never hopped a brig sloop like the HMS *Beagle* to sharpen her scientific perspective. As a future scientist growing up in Philadelphia, her investigations took place in the Philadelphia Academy of Natural Sciences or the Franklin Institute Science Museum.

"I did everything from going bird watching to making my own prism," says the biologist. By high school, she was learning by mentoring elementary school science students. She studied organisms and simple genetics, but had yet to really discover the works of Charles Darwin.

These days, Hollocher is spicing up her students' experiences as one of the lead planners of the University's interdisciplinary observance of the 200th anniversary of Darwin's birth and the 150th anniversary of his seminal work "On the Origin of Species."

This puts Hollocher and her students at performance events such as the play "The Great Tennessee Monkey Trial" with Ed Asner and John Heard, or has her talking up the Darwin Poetry Slam the Department of Biology sponsored Feb. 12 in Jordan Hall.

Living in the world of both art and science comes naturally to Hollocher, who considered taking a master's degree in fine arts before committing to doctoral studies in biology. Her own students have convinced her of the relevance of a yearlong observance of Darwin's impact, and the lasting theological and philosophical controversies it ignited.



"I have students who are wondering, what's science, what's religion, and how to reconcile the two."

But to speak with Hollocher, an evolutionary biologist, is to understand how and why, for scientists, the theological and philosophical discussions can be off their radar. There simply is no end to the purely scientific inquiries that Darwin's theories of evolution and speciation helped crystallize.

"There's a famous quote that the biology department picked as an inset in the floor of Jordan Hall," says Hollocher. "It's by Theodosius Dobzhansky (considered one of the fathers of evolutionary biology), and it says, 'Nothing in biology makes sense except in the light of evolution.'"

"Evolution is a central pillar for biology more generally," she says. Understanding that all organisms in the world are related through the evolutionary process is the starting point of all biological research ranging from investigations into infectious disease to the impact of global warming on the diversity of life.

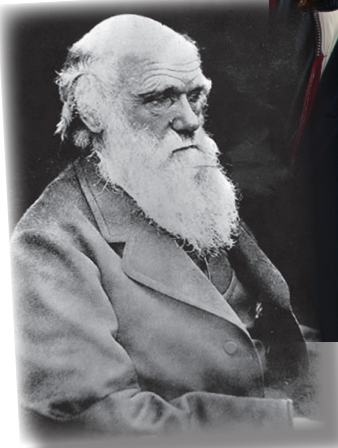
Hollocher applies the principles of evolutionary biology at the genetic level. In one area of interest, she uses the fruit fly *Drosophila* as a model to

study how, why and in what instances infertility emerges among evolving species—a fundamental process underlying the origin of new species. But Hollocher's research goes beyond evolution in than tiny insects. Shortly after arriving at Notre Dame, Hollocher started an evolutionary discussion group and attended a conference here on theology, science and the environment. While at the conference, she met Notre Dame biological anthropologist Agustin Fuentes, who has studied the behavior, ecology and social structuring of macaques in Bali for decades.

Realizing their common interest, Hollocher, Fuentes and students now incorporate population genetics and evolutionary theory into the macaque research to understand the implications for disease transmissions



Hope Hollocher and Ron Hellenthal attire for the opening celebration of the University's yearlong observance of the contributions of Charles Darwin.



among populations across the island. (Like Darwin, the lucky students combine learning and travel to Bali while helping us understand more about the basic mechanisms of disease spread among primates, which has implications for combating newly emerging infectious diseases more generally.)

Many of the questions evolutionists pursue today were on scientists' minds 150 years ago. Today, though, new technology and the development of analytical tools promise to synthesize data from many diverse projects and collaborations into a more coherent view, Hollocher says.

Little wonder Notre Dame's biologists are demonstrating a giddy sense of fun during some Darwin events. It's not just T-shirts like one Hollocher wears, which bears a portrait of Darwin, famously with beard and black hat. For the kickoff reception for the Darwin series, Ron Hellenthal, a fellow colleague in the department, came as Darwin himself, with (fake) beard and black hat.

All joking and poetry aside, "evolution research is a serious matter, and Darwin's legacy has fundamentally shaped the way we ask biological questions today, and, perhaps from the look of things, will do so 150 years from now," she says

Seeing as Darwin saw

BY CAROL C. BRADLEY

When Charles Darwin set off on the HMS *Beagle*, he was 22 years old, notes Diana Matthias, curator of education at the Snite Museum of Art.

The *Beagle*, with a crew of 73 men, set sail from Plymouth, England on Dec. 27, 1831, charged with charting the waters of the coast of South America. The young Darwin traveled as the ship's naturalist and companion to Capt. Robert FitzRoy.

Matthias has assembled late 19th-century photographs from the museum's collection of Latin American photography, along with lithographs from the Hesburgh Library's Department of Special Collections, in a small exhibition, "In the Wake of the *Beagle*: Darwin in Latin America 1831-1836."



Patagonian aboriginals, circa 1865 Snite Museum

The images from that era let us see for ourselves some of the places Darwin visited as he observed the natural world, collected specimens, and gathered the material that would result—nearly 30 years later—in the publication of "On the Origin of Species."

"I think students will be able to understand and empathize with a young man setting off on a voyage around the world," she says. "They can see he's someone like them."

The *Beagle* voyage, Darwin would later write in his autobiography, "has been by far the most important event in my life, and has determined my whole career."

One of the things it's important to remember when considering the impact of the *Beagle* voyage on Darwin's later



Snite Museum curator of education Diana Matthias holds a reproduction of a portrait of Charles Darwin painted in 1840.

life and work is that he came out of the world of Jane Austen, says Phillip Sloan, professor in the Program of Liberal Studies and an expert in the history of evolutionary theory. As a young man of 22, he says, "Darwin could have stepped out of 'Sense and Sensibility.'"

During his travels, Darwin was out of touch with England and home for five years, Sloan notes. "People don't appreciate today that it might take three years to send a letter to the ship and get an answer."

Sloan served in the Navy, and once worked as an oceanographer. "I can relate very well to Darwin, although

his was a much more intense, isolated experience," he says. "Out at sea for long periods, exposure to different people, different places. The ocean itself, over long periods of time ... I'm still affected by that," Sloan says.

During Darwin's travels in South America, the young British gentleman had first-hand encounters with the aboriginal populations of Tierra del Fuego—these people, living primitive lives, under extreme conditions, were unlike anything he had ever known. "The question was, how did these people get there?" Sloan says. "It got him thinking about the question of human origins."

The Snite exhibition, Sloan says, gives us a look at "how these places looked when they were still Spanish and Portuguese colonies—places like Rio de Janeiro, or Valparaiso, Chile. It was still pretty wild and rugged when he (Darwin) made his journey across the pampas with the head of the gauchos."

It's hard to imagine any other ship's naturalist that had such a wide range of experience, Sloan says. "The *Beagle* went around the world, to South America, Australia, New Zealand, Madagascar, South Africa. It had a profound effect on Darwin's thinking—the relationships of life on the whole planet."



Historian Phillip Sloan sees Charles Darwin as someone who stepped out of a Jane Austen novel and into a National Geographic-type expedition.

The telescope at 400: Seeing things that don't twinkle

BY GAIL HINCHION MANCINI

If the 16th-century Italian scientist Galileo Galilei were to drop by the office of David Bennett, he'd find a few surprises had developed in 400 years since the introduction of the telescope.

As the first scientist to apply the telescope to astronomy, Galileo would be a much welcome guest at any of this year's events sponsored by astronomers and astrophysicists, who are observing the 400th birthday of the telescope.

"He'd probably be surprised by how long it took to clear his name," says Bennett, a noted astrophysicist and associate research professor in physics. Bennett was referring to Vatican charges of heresy and imprisonment that Galileo faced for promoting the notion that the sun, not the earth, is the center of our solar system. Not until 1992 did Pope Paul II express regret for Galileo's fate and officially concede the point of science.

What might not surprise Galileo, often called the Father of Science, is that Bennett and his colleagues ultimately are driven by a quest relevant to the 16th century: "We don't have a very good idea of how life develops," says Bennett. "We don't know what processes were important for the development of life." Determining the makeup of the galaxies, as with the development of life, is among the great questions.

One thing that's occurred to astronomers since Galileo's time is that many answers may be found by exploring what cannot be seen by the eye. The presence and composition of dark matter, a subject Bennett has explored, is just one indecipherable. There are planets and other objects in space that cannot be seen because they omit little or no light. In this darkness, there likely are other solar systems, says Bennett, whose pursuit in this field has led to the discovery of

a dozen new planets.

What might make Galileo want to track down Bennett and the international group of astronomers with which he collaborates is the evolved method of star and planet discovery and identification that informs this work.

Rather incredibly, objects in space themselves serve as lenses, in an astronomical phenomenon called gravitational microlensing. When two objects—stars, or a star and planet—are perfectly aligned as seen from Earth, the gravitational field of one object is magnified by the presence of another. Astronomers don't see the planet or the star that it is orbiting, but the effect of their gravity reveals the existence of the unseen object.

Stargazing, in this context, isn't a matter of trying to discern the twinkle amidst the darkness, but to capture these moments of perfect alignment. The image that microlensing defines is then captured by a traditional telescope. Once the alignment identifies the previously undetected objects, astronomers collect data such as its mass, its temperature and its orbit around its stars.

In this sense, Bennett is a census taker of the galaxy's occupants. Like astronomers and astrophysicists before him, Bennett dreams of more powerful and available instrumentation. Alignments are "rare events. We don't want to miss them," he says.

Working with Nobel Laureate John Mather, a senior NASA astrophysicist, Bennett dreams of a day when telescope instrumentation is launched into space that is dedicated exclusively to identifying the alignment necessary to identify new objects. Mather has, himself, been involved in such a launch as the NASA scientist who oversaw the Cosmic Background Explorer, a satellite whose instruments



Astrophysicist David Bennett and colleagues have identified a dozen new planets through a process, gravitational microlensing, that identifies objects of substantial mass even though they are in the dark.



Galileo

helped verify the Big Bang theory and gave insight into how galaxies grew from primordial seeds. "Mather plans to visit the campus on Apr. 23."

With the proposal already evaluated by NASA, Bennett would hope for this latest advancement in the telescope to be funded and prepared, possibly by the early 2010s and in time to assure that the next 100 years of the telescope will be as active as the past 400.

Mendelssohn bicentennial noted with concert series

BY CAROL C. BRADLEY

Professor of music Craig Cramer and Gail Walton, director of music at the Basilica of the Sacred Heart, are marking the bicentennial of the birth of Felix Mendelssohn by exploring the German composer's complete works for organ.

Mendelssohn, born in Hamburg, Germany, on Feb. 3, 1809, was a prodigy, "not quite on the order of Mozart, but very nearly," Cramer says. Mendelssohn became one of the most successful musicians of the 19th century, composing and performing widely until his untimely death at age 38.

Although Mendelssohn wrote a number of works for the organ, he published only two sets of those works: Three Preludes and Fugues, Opus 37, and the Six Sonatas, Opus 65—the latter commissioned by an English publisher.

Cramer has previously performed the complete organ works of Johann Sebastian Bach and German Baroque composer Dieterich Buxtehude.

Researching and performing the complete works of a composer, Cramer says, is an exercise both musical and intellectual. "It forces you to come to grips with a wide variety of pieces you otherwise would not have known."

It's a self-imposed discipline, to expand one's horizons as a performer and a teacher—no different from doing research in any field, Cramer adds. "At the root of it is the notion of seeking the truth, broadening yourself. Teaching informs research, and research informs teaching."



Mendelssohn



Cramer

Carol C. Bradley

Musicians all know the famous masterpieces for their instrument, he says, "But we're always delighted to find lesser-known pieces that deserve to be played as part of the standard repertoire."

The concert series will likely continue—2010 marks the 200th anniversary of the birth of German composer Robert Schumann; 2011, the birth of Hungarian composer Franz Liszt.

Celebrating Louis Braille's 200th birthday

BY MICHAEL O. GARVEY

The bicentenary of another member of 1809's pantheon of genius, the French inventor Louis Braille, will be celebrated with a daylong symposium Friday, March 6 that explores the cultural and technological aspects of blindness and partial site.

The symposium will take place in McKenna Hall and is to be hosted by the University's Disability Studies Forum. In addition to presentations and discussions among representatives of higher education, business and technology, a technology fair will feature products and services of special interest to blind and partially sighted people.

Braille, whose eponymous orthographical system of embossed dots has been adapted to nearly every known language and is used for reading and writing by blind and visually impaired people worldwide, was born Jan. 6, 1809, in Coupvray, France. Blinded in an accident when he was 3 years old, he had all but perfected the revolutionary system by the time he turned 15.

"The symposium is about blind people and is inclusive of blind people," said Essaka Joshua, professional specialist in the College of Arts and Letters. "It's intended to be a forum through which our blind and sighted students can meet and develop a wider awareness of blindness issues. Blind and sighted Notre Dame students will be taking part in a discussion on the major

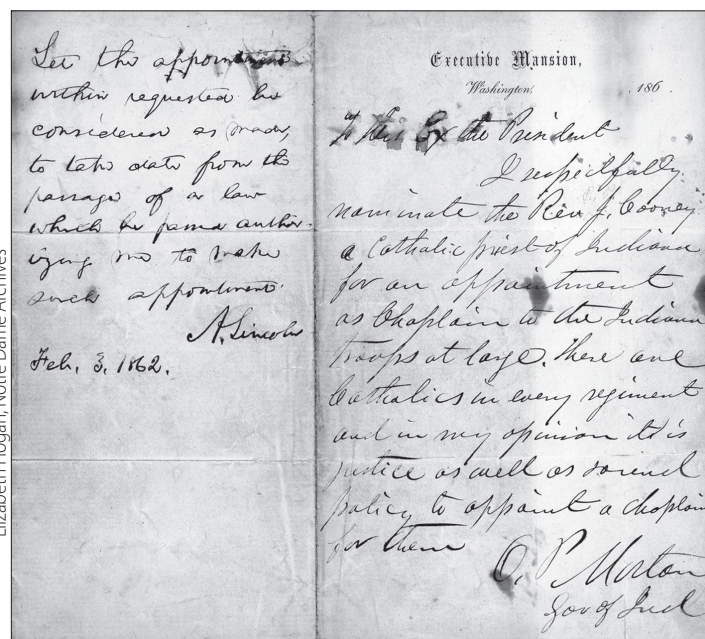
issues that affect blind people today."

The keynote speech for the symposium will be given by 1974 Notre Dame alumnus Marc Mauer, president of the National Federation of the Blind, at 10:45 a.m. in the McKenna Hall auditorium.

Representing the Indiana Family and Social Services Administration at the symposium will be Peter A. Bisbecos, director of the Division of Disability and Rehabilitative Services (DDRS); P. Michael Hedden, director of the Bureau of Rehabilitation Services; and Greg Jinks, director of DDRS Business Operations. Dr. Frederic Schroeder, first vice president of the National Federation of the Blind, also will be in attendance.

Other participants in the symposium will include Edward Wheatley, Surtz Professor of Medieval Literature at Loyola University, speaking on "Stumbling Blocks Before the Blind: Constructions of a Disability in Medieval England and France"; Georg Bodammer, venture manager for Siemens in Munich, Germany, speaking on "A Prototype Cognitive Ais System for the Blind and Partially Sighted"; Joshua, speaking on "Blind Vacancy: Sighted Culture and Voyeuristic Historiography in Mary Shelley's 'Frankenstein'"; and Paul Down, associate professor of art, art history and design at Notre Dame, speaking on "Finding Independence Through Low-Tech Design."

In this Civil War-era letter held in the Notre Dame Archives, Oliver P. Morton, 14th governor of Indiana, writes to President Abraham Lincoln asking that Rev. Peter P. Cooney, C.S.C., be appointed chaplain "to the Indiana troops at large." The letter was returned with Lincoln's endorsement, "Let the appointment within requested be considered as made ..." and signed A. Lincoln, Feb. 3, 1862.



Elizabeth Hogan, Notre Dame Archives



Rev. Peter Paul Cooney, C.S.C., appointed by Abraham Lincoln, served with the 35th Indiana ("1st Irish") Volunteer Infantry.

Elizabeth Hogan, Notre Dame Archives

Barbara Hielenthal

Matt Cashore

Everybody Bill

BY CAROL C. BRADLEY

He's known on campus as "Bill, the shuttle driver." For more than eight years, Bill Trethewey has driven Notre Dame's campus shuttle bus, ferrying employees from parking lots to their buildings in the mornings, then back to their cars at lunch hour and in the evening.

"He's always such a gentleman," says Susan Stratigos-Scanlon, an on-call staffer in the Office of Research. "I've very much appreciated his promptness, courtesy and driving skills, particularly on all our frigid and icy days this winter."

"Bill? We love him," says Redgina Hill, records processor in the Admissions Office. "You can count on him to be on time at every stop. If we pull up a little late, he recognizes your car and waits."

Trethewey always warns his passengers to watch for cars as they get off the bus, staffers note. They also recall a memorable occasion last winter, when the bus arrived

at the Main Building Circle—in sub-zero temperatures—with the doors frozen shut. He borrowed a ladder from Mail Services, and helped riders climb out the emergency window-exit.

"I wish we had a picture of that," reminisces Marjorie E. Wosick, senior staff assistant in the Admissions Office. Of Trethewey, she says, "No one can fill his shoes. When he's gone, he's really missed."

Trethewey looks out for everyone who rides the bus, says Jan Verwilt, admissions senior staff assistant. "He takes care of us, and we're very

appreciative. We depend on him to get us to our jobs every day."

In fact, pity the poor substitute drivers, who fill in during Trethewey's occasional absences—they're peppered with questions about when Bill will be back.

The past few years, Wosick has coordinated a staff Christmas gift for Trethewey—last year his gift was presented along with a large collage of a fireplace, surrounded by Christmas stockings signed by staff members. This year, his gift was accompanied

by a Christmas tree, decorated with handmade ornaments—each the picture of a staff member with their car.

"One office made an ornament of a bus, with their faces in the window," Wosick adds.

Trethewey, a Bethel College graduate, was a bus driver for 16 years before starting his current position; for 14 years before that, he was a missionary pastor at churches in Indiana and Michigan.

What does he like most about his job as shuttle driver?

"The people," Trethewey says. "They're awesome. They spoil me, and I spoil them."

Dan Skendzel, director of administrative services in the Office of the Vice President for Business Operations, adds that Trethewey has helped determine the best times and routes for the shuttle. "He's very service-oriented, and he really cares about the University and the people he transports. I just can't say enough good about Bill—we're lucky he works for us."



Carol C. Bradley



Shuttle driver Bill Trethewey collects the late afternoon crowd in front of the Main Building. His riders annually express their gratitude with inventive Christmas presents, like the one presented, above, by Marjorie E. Wosick.



Daffodil Days

Flower orders for the American Cancer Society's annual "Daffodil Days" fundraiser are due by Friday, March 6. Flowers are \$10 a bunch, or \$15 with a vase. Vases can be purchased separately for \$5. Place your order by visiting hr.nd.edu and clicking on the "Daffodil Days" link, or call askHR at 631-5900. Mail payments to Daffodil Committee, Office of Human Resources, 200 Grace Hall. Payment must be received before March 19.

Flowers will be available for pickup at one of three campus locations on Thursday, March 19. When you order, specify pickup at 200 Grace Hall, the Library Lobby or at the Hammes Notre Dame Bookstore. Volunteers are needed to assist with flower pickup. Contact askHR at 631-5900 if you're interested in helping.

DISTINCTIONS

The University welcomes the following employees, who joined the faculty and staff during January.

Anthony J. Alford, Andrew B. Sherwood and Frank J. Verducci, athletics
Derek S. Alter, Jessica N. Couch and Shebra S. Guidry, custodial services
Amy M. Bladow, AgencyND

Luis A. Borrero, architect's office

Rory D. Carmichael, computer science and engineering

Adele G. De Rosa Cio, Holy Cross House

Brian S. Fordyce and Heather N. Turnbull, ticket office

William M. Gamble and Joseph Herman, power plant and utilities

Lacey N. Haussamen, Alliance for Catholic Education

Scott Hershberger and Stephanie Martin, enterprise systems

Mose Horton, Myra J. McEwen, Stephen A. Olesen, Richard S. Regulinski and Harold A. Weber, food services

Daniel J. Hubert, sociology

Michelle Hudson and Barbara A. Pietraszewski, library

Kathleen O'Leary, residence life and housing

Theresa Ricke-Kiely and Salil Verma, Mendoza College of Business

Sarah T. Ryckman, Rockne Memorial

Kathryn L. Seymour, Morris Inn

Carolyn L. Sherman, Institute for Advanced Study

Patricia A. Sprang, anthropology

Kathryn E. Wales, Center for Ethics and Culture

New faculty positions

The University and the Provost's Office welcome five faculty who assumed new instructional faculty positions in January.

Thomas E. Albrecht-Schmitt



Professor, civil engineering and geological sciences; concurrent professor, chemistry and biochemistry
Research: Solid-state chemistry, especially of actinides; nuclear

waste disposal; structure-property relationships in novel crystalline solids; environmental chemistry; crystal structure analysis

Teaching: Mineralogy, environmental chemistry, actinide chemistry, crystal structure analysis, general chemistry, inorganic chemistry

Most recent position: Professor, Auburn University

Education: B.S., Southwest Minnesota State University; M.S., Ph.D., Northwestern University, Post-doc University of Illinois

Reflection: Notre Dame is a place

where I will be intellectually engaged on a continuous basis by superb colleagues and students. I am very interested in collaborative research, and Notre Dame has several existing experts in my field to work with. I want to be a part of building the greatest center for actinide science and engineering in the world. This can be done at Notre Dame.

Robert L. Alworth



Director, Integrated Engineering and Business Practices

Curriculum Teaching: Provide a working knowledge of the fundamentals of business

practice and the role of engineering in business.

Most recent position: senior vice president, international operations and global sourcing, for S&C Electric Company

Education: B.S., Notre Dame; M.S., Cornell University

Reflection: My three daughters and I are graduates of Notre Dame. Coming home to the center of Catholic

educational excellence to assist in the critical mission of forming and educating future Catholic innovators and business leaders is a wonderful opportunity to return in some small measure the blessings we have received.

Mark Berends



Professor, sociology; director, Center for Research on Educational Opportunity (CREO)

Research interest: Sociology of education, research methods, school effects on

student achievement and educational equity; how school organization and classroom instruction are related to student achievement, with special attention to disadvantaged students

Teaching: Survey research methods

Most recent position: director (current), National Center on School Choice (NCSC); associate professor of education and public policy, leadership, policy and organization department, Peabody College, Vanderbilt University

Education: B.A., Calvin College M.A., Ph.D., University of Wisconsin

Reflection: I'm excited about integrating the work of CREO and the NCSC, which I will continue to direct. In fact, CREO provides a broader umbrella for the NCSC. CREO's emphasis on research of educational opportunity is essential to the future of education, and will help us make significant contributions to the field of sociology and educational policy.

Elizabeth A. Kerr



Assistant professional specialist, civil engineering and geological sciences

Research interest: Civil engineering materials, effects of fire on concrete,

rehabilitation of concrete structures

Teaching: Civil Engineering Materials

Most recent position: Senior engineer, Gwin, Dobson, & Foreman Inc., Altoona, Penn.

Education: B.S., Civil Engineering,

University of Evansville; M.S., Ph.D., Notre Dame

Reflection: I am excited to implement my passion for teaching at a university with Notre Dame's reputation for high quality students and faculty. Additionally, the atmosphere, community, and tradition of Notre Dame make it a truly special place.

David J. Veselik



Associate professional specialist, biological sciences

Education: B.A., Notre Dame; M.S., Ph.D., Georgetown University

Teaching: Cell

biology

Research interest: Breast cancer, steroid receptors

Reflection: I am excited and honored to be back at Notre Dame where I have so many great memories. It is a privilege to advance the mission of the world's premier Catholic university.

Support group offers new hope

BY CAROL C. BRADLEY

In October of 1989, Michael Crowe kissed his wife goodbye at the airport and headed off to a conference on the history of science, where he delivered a major research paper.

He returned home, exhausted, to find about a third of the furniture in the house missing, and a note on the kitchen table saying his wife had left him, moved to Arizona, and was filing for a divorce.

"I had to teach the next morning," he remembers—an astronomy class.

At the time, Crowe—today an emeritus faculty member in the Program of Liberal Studies—was 53, a father of four, and had taught at Notre Dame for 28 years. He had been married for 31 years.

What got him through the experience, and into a new life, was a support group that met at Christ the King Lutheran Church.

Crowe later founded a similar group at Little Flower Catholic Church, a support group for the divorced,

separated and widowed called "New Hope."

He's still leading the group—952 meetings later.

The first meeting of every month is devoted to sharing, while others center on specific topics. The group maintains a lending library of books and DVDs, and offers regular social events and a monthly birthday party. After meetings, members typically gather at Nick's Patio to have coffee and continue the conversation.

A member of the Notre Dame community who benefited from the group is Georgine Resick, professor of music and a soprano who has performed worldwide.

Resick came to Notre Dame in 1990 as a newly separated, single mother, with babies age two and eight months.

"That was tough," she says. "I'm not a joiner, but it was a time in my life when it was important."

The group offered many advantages, Resick says. "It was an opportunity to speak whatever was on your mind. It gave the families and

friends of people going through a rough time a rest from having to listen. And for someone like myself, who moved here without knowing anyone, it was a chance to form a social group."

One of the nicest things, she says, is that the group always has gatherings on holidays, "so someone who didn't have anyone to spend Christmas or Thanksgiving with had a place to go."

For those who are experiencing marital difficulties, Crowe recommends that couples first try to save their marriage, through counseling or a program such as Retrouvaille (retrouvaille.org). Retrouvaille is a weekend experience with six to 12 follow-up sessions over the next three months. A session will be offered March 6 through 8 in Fort Wayne.

Those separated, divorced or widowed are welcome to attend Crowe's New Hope support group meetings, held at 7 p.m. every Tuesday at Little Flower Catholic Church, 54191 Ironwood Rd., South Bend. The group is Christian-based, but nondenominational. Contact Michael

Crowe, 631-6212 or crowe.1@nd.edu for more information, or visit newhopelittleflower.com.

In addition to the weekly support group, Crowe recommends "Beginning Experience" weekends (beginningexperience.org), a nationwide program for adults grieving the loss of a relationship through death, divorce or separation. The program, sponsored by the Catholic Church, will be offered in South Bend on March 13, July 17 and Oct. 23, 2009.

Resick has since remarried. Crowe obtained an annulment and remarried as well. He and his wife,

Marian—a retired, part-time Notre Dame faculty member and support group alumna—were married at Little Flower in a ceremony attended by family, friends and many divorced Christians served by the New Hope and Beginning Experience ministries. On Jan. 2, the couple celebrated their 15th wedding anniversary.

Their wedding ceremony concluded with a song, sung by Georgine Resick, "which seems no less relevant today," Crowe says.

Joyful, joyful, we adore Thee, God of glory, Lord of love;

Hearts unfold like flowers before Thee, opening to the sun above.



Carol C. Bradley

For more than 18 years, Michael Crowe, second from left, has led a local support group for the divorced, widowed and separated. From left, Christine Mast, Ron Crook and Craig Forsythe.

FYI

ART

In the Wake of the Beagle: Darwin in Latin America 1831-1836

March 1 through 29, Snite Museum of Art. Public reception and gallery talks, 4:30 to 6 p.m. Thursday, March 5. 19th-century photographs and lithographs of some of the places Charles Darwin visited as he traveled on HMS Beagle.

Writing Against War

Through March 1, second floor (Mezzanine Level) Hesburgh Library. A multimedia traveling exhibition featuring the theme of war in the works of Austrian writer Ingeborg Bachmann.

PERFORMANCE

Unless otherwise noted, all events take place in the Marie P. DeBartolo Center for the Performing Arts. For more information or to purchase tickets, visit performingarts.nd.edu or call 631-2800. Ticket prices are for faculty and staff, senior citizens and students.

Guernica

Ongoing, 7:30 p.m. through Saturday, Feb. 28; 2:30 p.m. Sunday, March 1, Philbin Studio Theatre

Inspired by the true story of the suspicious sinking of an Albanian refugee ship off the coast of Italy. Presented by the Department of Film, Television, and Theatre. \$12/\$12/\$10

Spectrum Dance Theater

7 p.m. Thursday and Friday, Feb. 26 and 27; 2 p.m. and 7:30 p.m. Saturday, Feb. 28, Decio Mainstage

Midwest premiere of "The Theater of Needless Talents," co-commissioned by the DeBartolo Performing Arts Center and inspired by Jewish artists who affirmed life and generated optimism even while imprisoned in Nazi death camps. Visiting Artist Series. \$32/\$30/\$15

51st Annual Collegiate Jazz Festival Swing Night

Thursday, Feb. 26, LaFortune Ballroom; 8 to 9 p.m., free swing lessons with the Notre Dame Swing Club; 9 to 11 p.m., open swing dancing with live music from

Notre Dame Swing Band II

Sponsored by the Student Union Board. Free; no tickets required.

North Carolina Central University Vocal Jazz Ensemble Concert

4 p.m. Friday, Feb. 27, Notre Dame Downtown, 217 South Michigan St. Special guest concert presented in conjunction with the 51st annual Collegiate Jazz Festival. Free.

51st Annual Collegiate Jazz Festival Performances, 7 to 11 p.m. Friday and Saturday, Feb. 27 and 28, Washington Hall

Top college jazz bands perform before world-class judges. General admission, \$5 for one session, \$8 for both at LaFortune Box Office, 631-8128, or the door, if available.

Notre Dame Symphony Orchestra Winter Concert

8 p.m. Friday, Feb. 27, Leighton Concert Hall. Featuring the winner of the orchestra's 2008-09 Concerto Competition. Presented by the Department of Music. \$5/\$4/\$3.

The Undertones Reunion Concert

8 p.m. Saturday, Feb. 28, Leighton Concert Hall. An a cappella offshoot of the Notre Dame Glee Club celebrates 12 years together. \$8/\$8/\$5.

Notre Dame Chamber Players Benefit Concert

7:30 p.m. Wednesday, March 4, Leighton Concert Hall. Proceeds to purchase musical instruments for young musicians of South Bend schools; featuring Mendelssohn's "Piano Trio in D minor, op. 49" in honor of the 200th anniversary of the composer's birth. Presented by the Department of Music. \$8/\$5/\$3.

Schola Musicorum presents Abend-Musique XXXII

9 p.m. Wednesday, March 4, Reyes Organ and Choral Hall. A concert of Gregorian chant sung from medieval manuscripts. Presented by the Department of Music; all tickets \$3.

South Bend Symphony Orchestra: Feel the Spirit!

2:30 p.m. Sunday, March 8, Leighton

Concert Hall

Celebrating the spiritual, featuring Minnita Daniel-Cox and the South Bend Chamber Singers. \$25/\$23/\$5.

FILM

Unless otherwise noted, films are screened in the Browning Cinema, DeBartolo Center for the Performing Arts; tickets are \$5 for faculty and staff, \$4 for seniors and \$3 for students. Visit performingarts.nd.edu or call the box office, 631-2800. Contact the box office to reserve tickets for "free but ticketed" events.

The Animated Films of Abi Feijó

6:30 and 9:30 p.m. Thursday, Feb. 26. Handcrafted auteur animation by the Portuguese director. Director Abi Feijó is scheduled to be present. Nanovic Institute Film Series.

2009 Asian and Asian American Film Festival

- **First Person Plural (2000)**, 6:30 p.m. Friday, Feb. 27. A Korean girl adopted by an American family learns the truth: that her mother is alive.
- **Last Life in the Universe (2003)**, 9 p.m. Friday, Feb. 27. A mysterious, obsessive-compulsive Japanese man is thrown together with a Thai woman through a tragic chain of events.
- **West 32nd (2007)**, 6:30 p.m. Saturday, Feb. 28. An ambitious young lawyer defends a 14-year-old boy charged with murder and discovers Manhattan's Korean underworld of organized crime. Director Michael Kang and screenwriter Edmund Lee are scheduled to be present. Korean and English with English subtitles.
- **Hula Girls (2006)**, 9:30 p.m. Saturday, Feb. 28. A Japanese mining company plans to build the Hawaiian Center to promote tourism—young women in the community see the call for dancers as the key to a more promising future.

America the Beautiful (2007)

3 p.m. Sunday, March 1. Illuminates the problem of female body image. Director Darryl Roberts is scheduled to

2009 ASIAN FILM FESTIVAL & CONFERENCE

Friday February 27th

- 6:30pm—**First Person Plural** with Student Panel on Korean Adaptation
- 9:00pm—**Last Life in the Universe**

Saturday February 28th

- 4:00pm—**Academic Conference** Kathleen Leifer, Ja Soek Beegam, University of Nevada, Las Vegas; Stephanie DeBoer, Indiana University, Bloomington
- 6:30pm—**West 32nd** CMA with director Michael Kang & screenwriter Edmund Lee
- Opening Hula Dance performance by the Hawaii Club of Notre Dame
- 9:30pm—**Hula Girls**

Event Details: nd.edu/events Ticket Info: performingarts.nd.edu

be present. Cosponsored by the University Counseling Center. Free but ticketed.

Slumdog Millionaire (2008)

8 p.m. Tuesday, March 3; 6:30 and 9:30 p.m. Thursday, Friday and Saturday, March 5 through 7. A penniless Indian orphan wins 20 million rupees, but is arrested on suspicion of cheating—how could a street kid know so much?

CELEBRATIONS AND GATHERINGS

79th Annual Bengal Bouts

Finals, 7 p.m. Saturday, Feb. 28, Joyce Center Arena. Benefits the Holy Cross Missions in Bangladesh. Ticket information at bengalbouts.nd.edu

Lily Hoang reading

7:30 to 8:30 p.m. Wednesday, March 4, Hammes Notre Dame Bookstore. Hoang, a graduate of the Creative Writing Program and visiting professor at Saint Mary's College, reads from her book "Changing." Presented by the Creative Writing Program. Free.

Early Childhood Development Center Open Houses

1:30 to 3 p.m. Sunday, March 1; 9:30 to 11 a.m. Friday, March 13. For information, call 631-3344 or visit nd.edu/~eccdncd

ARCHIVES



Students pose in front of a "George Washington" snowman near the Basilica of the Sacred Heart, circa 1931 to 1933. Washington was born in Westmoreland County, Va. on Feb. 22, 1732—277 years ago.

Elizabeth Hogan, Notre Dame Archives

The secret life of frogs

BY CAROL C. BRADLEY

Biologist Sunny Boyd's research is a little like "Match.com" for amphibians. Say you're a female tree frog looking for a mate—how do you choose among a number of potential suitors?

Boyd, two postdoctoral researchers, two graduate students and three undergraduates, go out into the real world—the real world being UNDERC, the University's environmental research center in Land O'Lakes, Wis.—and observe what frogs are doing in nature. "Then we create computer models where we explore what might be causing the behavior," says Boyd, an associate professor in the Department of Biological Sciences.

Female frogs prefer males with longer calls—a trait linked to better offspring. But how does she choose? The lab's research is investigating two possible strategies. Does she pick the first male that meets the basic criteria, or—in what Boyd calls the "best of" strategy—make comparisons among several males?

Frogs are useful organisms for conducting basic research, says Boyd, because they bear a considerable resemblance to humans—they have the same basic brain areas, and the same basic behaviors.

"Frogs use vocal communications—as do humans.

Obviously they have fewer words than we do, and their behaviors are simpler. Because their behaviors are simpler, we're looking at three behaviors instead of a hundred."

Another area of research looks at the vocal behavior of bullfrogs, something that's often a critical component of social interaction. Many behaviors—including vocalization, aggression and reproduction—are influenced by neuropeptides and steroid hormones similar to those found in humans. "The frog peptide is vasotocin. Humans have a variety called oxytocin. The very same peptide is involved in pair bonding mammals," says Boyd. "The same chemical is linked to autism."

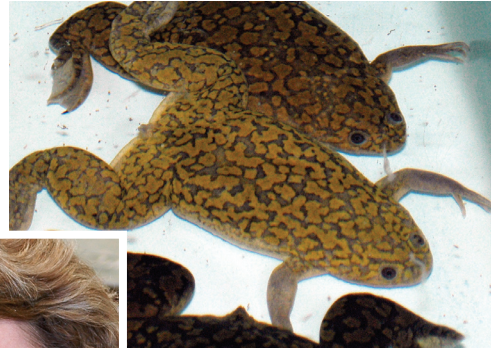
An exciting new line of research involves African clawed frogs and a new technique called microarray. The lab is investigating a steroid hormone that's produced directly in the brain, and trying to understand how it works.

Boyd likens the technique to a glass slide, with probes for each of the 32,000 genes of the frog. A color development system allows researchers to see whether the treatment under investigation makes the genes more or less active—do they produce more or less of their chemical product?

They've discovered—for the first time in any organism—that the steroid in question influences two

other chemical messengers from the pituitary gland. It's a potentially important discovery, Boyd says, since the neurochemicals in the brain of a frog are either identical or almost identical to those in the human brain.

"The steroid we're investigating has been shown to be involved in post-partum depression," she says. "It has protective effects in Alzheimer's disease and strokes. I uncover the basic mechanisms that apply across all vertebrates."



Sunny Boyd's research on frogs may someday lead to medical applications for strokes and diseases such as Alzheimer's.



Carol C. Bradley

Boyd

Survey verifies Take Ten results

BY CAROL C. BRADLEY

Take Ten, the Robinson Community Learning Center's (RCLC) violence prevention program for children and teens, is showing positive results in St. Joseph County schools, says RCLC director Jay Caponigro.

As a result of a recently completed survey of the program's results, "We can tell that the Take Ten curriculum is being learned, and we can judge that there is a statistically significant difference in behavior," Caponigro says.

The Take Ten curriculum teaches youth to "Take Ten" before they act—take 10 deep breaths instead of saying something that hurts; take 10 steps back to cool off instead of using something as a weapon.

While anecdotal evidence has long suggested that the program is working, the recent analysis of surveys completed by 393 primary, intermediate and high school students who participated in the program in 2007–08 provides more concrete evidence of the program's impact.

The survey analysis revealed that children in primary grades had significantly improved their understanding that they should not become violent with others—including calling each other names.

In the high schools—where Take Ten volunteers teach peer mentors who work directly with first-year students—those surveyed described themselves as more likely to use Take Ten skills to solve problems.

The survey analysis, says RCLC associate director Ellen Kyes, shows that Take Ten is doing what it was intended to do—help kids change their behavior when confronted with conflict.

Other information gleaned from the analysis has already led to changes in the way the curriculum is delivered, Kyes adds.

Previously, Notre Dame student volunteers delivered the program in the schools. But survey results revealed that children develop a greater understanding of Take Ten when the curriculum is presented during the school day.

Because it's difficult for Notre Dame students to be available during the day—coupled with the fact that demand for the program has outstripped the number of available volunteers—RCLC staffers

critically. "They learn those things here, so they can work on other important problems" when they begin their own scientific careers.

Ultimately, the mission of the lab is to advance human, animal and environmental health. "That's where our basic research findings have an important role to play. You can't skip this step. We lay the foundation for more applied medical research."



At the second annual Green Summit earlier this month, a table of students and staff, above, joined by Sharon Hawkins, second from left, discussed "the need to increase awareness," she says. Mark Hummel, right, reports that his table focused on energy conservation measurements being taken in several buildings, and the savings that can be realized through individual efforts.

Seeking frontline eco soldiers, office by office

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The Office of Sustainability is offering a training program for office personnel that will walk them through steps to save energy, reduce waste, offer environmentally friendly hospitality and purchase environmentally friendly products. Ultimately, all techniques would also help the University realize cost savings.

The first session will be from noon to 1 p.m. Friday, March 27. Sign up is being accepted at endeavor.nd.edu. Lunch—an environmentally friendly lunch presented by Catering by Design—will be included. Based on the number who want to take the class, subsequent sessions may be offered, says Rachel Novick, sustainability education and outreach coordinator.

Besides trying to attract frontline office support staff, Novick and student workers took the concept to the University's business managers, who are likely to appreciate the cost-

saving aspect. Their support, she notes, is important in empowering a small number of staff to educate and involve their colleagues.

"Office policies that support sustainability have not been developed in many departments," says Novick. "Tens of thousands of dollars a year are wasted as a result."

Workshop topics will address

- How to set computer and printing defaults to maximize efficiency
- How to cater an environmentally friendly lunch and save money
- How to create online forms that save time and reduce paper use
- How to use teleconferencing software to reduce travel costs

What kind of savings are possible?

"The paper you buy makes a difference," says Novick. The University's copy paper purchases totaled \$293,000 last year. "Of this, \$45,000 could have been saved," she said. Among tricks: buy generic with

some recycled content, and buy in bulk. Ultrabright paper, she adds, is whitened with extra chlorine, a source of pollution.

Savings when one switches from water bottles to water coolers are even more impressive. The University purchased \$95,000 worth of water bottles last year; it could have saved \$70,000 by using coolers and washable glasses and mugs.

Before each training session, program participants will be asked to inventory their hospitality practices, the way they order supplies and office colleagues' conservation practices. Following the workshop, sustainability representatives will follow up with each program participant to evaluate the implementation of practices and help estimate the dollar savings they have realized.



Gail Hinchon Mancini



Carol C. Bradley

Kyes

have developed a Take Ten teacher's manual. It is being piloted in two local elementary schools.

While Notre Dame student volunteers will still participate in the program, the addition of the teacher's manual will enable school personnel to deliver the curriculum directly and will allow the program to grow, Kyes says.

Another interesting revelation from the survey, notes Caponigro, is that students who have participated in Take Ten are less likely to feel safe in their schools—perhaps because they're more aware of the many different forms violence can take.

When kids feel less safe in their schools because of violence, it's a clarion call to teachers and administrators to help children learn to communicate, Caponigro says.

"Kids can learn to make different choices," he says. "They can learn to walk away" from a potentially violent confrontation.

One of the ways participating youths are communicating with their peers is through a student-written comic book, "The Take Ten Crew and the High School Dance Faceoff," which illustrates the importance of resolving conflict peacefully.

The new comic follows the successful release in 2007 of "The Take Ten Crew and the Three O'clock Fight." The new book sells for \$3 and is available at the Hammes Notre Dame Bookstore. A percentage of the proceeds are donated to the Take Ten program.

There are also many ways concerned parents can be involved in the program, Caponigro emphasizes. "They can volunteer, contribute or bring Take Ten to their children's school." Those interested can contact Caponigro at caponigro.2@nd.edu, Ellen Kyes at paul.21@nd.edu, or by calling the Robinson Center, 631-8759.