



### IN THE WORKS



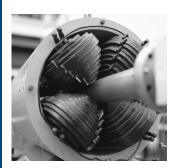
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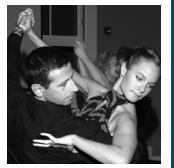
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# The dark side of migration is her territory

#### By Melanie McDonald

"When I went to law school, I never intended to practice law," says Bridgette Carr, associate clinical professor of law for the Legal Aid Clinic at the Law School. "For better or worse, people listen to you more if you have a J.D. after your name. I went to law school so that I could get a seat at the table and be heard."

Funny how the best laid plans often change.

Carr does indeed practice law, lending her voice and expertise to the cause of seeking justice for noncitizens, particularly those who are victims of forced migration. "Many people are aware of the issues surrounding economic immigration—this is what our border debate is about right now, where people are crossing into the U.S. by choice to find work and earn a better living for their families." She says that most people, however, do not think about forced migration, which involves individuals who are fleeing persecution, or who are in the United States as a result of force, fraud or coercion."

Carr's scholarly and practical work in the area of human trafficking and forced migration began while she was a law student at the University of Michigan. There, Carr immersed herself in advocacy for the poor and began to focus on assisting refugees, further honing her skills through an internship at Amnesty International's London office and then at Detroit's Freedom House, which represents homeless or indigent refugees seeking asylum in the United States or Canada.

Following law school graduation, Carr began work as an assistant professor of law and director of the Asylum and Immigrant Rights Law Clinic at Ave Maria School of Law in Ann Arbor. Carr and her students assisted immigrants and refugees with a wide variety of legal needs. Her particular focus, however, became advocacy for women and children refugees and victims of human trafficking in the United States.

Carr earned her undergraduate degree in psychology from Notre Dame in 1998. From there, her road to law school and beyond was a winding one.

Following college graduation, Carr began a year of service with AmeriCorps in a Fort Wayne middle school, where she taught English, science, and math to children from 23 countries who spoke 14 different languages. Carr's next step was Indiana University's School of Medicine, to which she was awarded a full scholarship. Shortly after starting her medical education, she realized that



Bridgette Carr, a 1998 graduate, is an advocate for women and children refugees and victims of human trafficking in the U.S. *Photo by Matt Cashore.* 

medicine was not her passion. She opted for another year of AmeriCorps service before deciding that "advocating for those without a voice in society is my true calling."

Carr aims to help her students and others distinguish between "economic migrants"—broadly defined as people who choose to enter the U.S., particularly out of economic necessity—and "involuntary migrants"—victims of human trafficking and asylum seekers. Asylum seekers are those who flee their countries because of persecution or the fear of persecution, "because of race, nationality, political opinions, religion, or identification with a certain social group."

Carr says that women and children are often treated brutally in America and are victims of human trafficking. "Society's most vulnerable are frequently forced into slavery in neighborhoods throughout the United States," she saysThis human trafficking takes such forms as forced labor, sexual slavery or forced marriage. An upcoming report on NBC News will feature Carr's work with one of her clients.Carr says she came to Notre Dame Law School because she knows it's a place "where we can talk about all people as human beings, and where affronts to humanity matter."

# Indiana trout, Alaska salmon face a similar foe

#### By Carol C. Bradley

Once a year, stream biologist Gary Lamberti and his students head to Warren Golf Course with their waders to assess fish life in the creek that passes through the course.

When Warren was built, a portion of the creek was fashioned as a pristine habitat where trout and other development can be reclaimed for wildlife.

At first, Lamberti says, "We saw full biological colonization of the two stream reaches. Everything from algae to fish, insects and snails. It happened quickly." Trout flourished, spawning amid the gravel floor of the creek.

But 10 years later, Lamberti's findings: "This year in our sampling, it's sad to report, we found zero trout." blanketed in fine sediment. Where it's coming from is the entire watershed," he says.

Some of the more tolerant fish species—those that like mud, such as suckers and various minnows—have profited, he says. "Trout have declined because they're a sensitive species, and need clean gravel to spawn in—silt and sand smother the eggs."

Lamberti's curiosity about the

What threatens wild Alaskan salmon is the same influence that has led to the decline of trout in Juday Creek: the degradation of watersheds by human activity. In the Pacific Northwest, logging, dams that impede the migration of fish to spawn, removal of water for agriculture and other purposes, chemical pollution, and all degrade salmon habitat. "And add climate change on top of that," Lamberti says. "Salmon are coldwater fish."

As for the decline of trout in Juday Creek? The result was not unexpected, but it was important to document.

"That's the kind of knowledge

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stream life could spawn, and where Lamberti and his students could learn whether streams affected by man-made "The decline is a direct result of upstream impacts. What's happened is that the gravel in the stream is being



From left, doctoral candidate Angela Bobeldyk, stream ecology lab manager Mike Brueseke and biology professor Gary Lamberti net fish in Juday Creek, just off the 18th hole of the Warren Golf Course. After the fish are counted, they are released unharmed back into the creek. *Photo by Carol C. Bradley.* 

far-flung places, Alaska included. Whether he's working with local trout or, in the Pacific Northwest, wild

salmon, his eye is always on larger ecological issues.

Funded by a \$420,000 grant from the U.S. Department of Agriculture's National Research Initiative, Lamberti's Alaskan research considers the importance of forests in producing salmon, and how the salmon population affects forest health. His research takes place in southeast Alaska, in an area almost entirely encompassed by the 17.85 million acre Tongass National Forest.

His team has established that salmon indeed impact the health of the entire forest. Salmon provide nutrients for other forest organisms, from bears to the trees that grow near streams. The salmon and the forest, he says, are a cohesive, integrated unit. you want. We know that a wellintentioned restoration is only as good as its context. Fish declines are an indicator of a much broader problem," he says.

A truly effective reclamation strategy would have run the length of the stream. "The human effects on the stream from its headwaters all the way to Lake Michigan must be considered," Lamberti says.

"Localized strategies, however well-intentioned, are doomed. In the case of salmon, you have to consider not only the entire watersheds but the ocean environment as well."

Still, he's hopeful, both for the prospects for river management and conservation, and for the long-term survival of species like the Pacific salmon. "We can revive all those," he says. "But people have to care. They have to recognize there's a problem, and care enough to do something about it. It's hard to imagine a world without Pacific salmon. Seeing the salmon run in Alaska, watching the bears grab them out of the water that's something that can't go away."

### **PRAISING STUDENTS**

# Junior fast-tracks whim to learn music, join ND Band

#### **By Shannon Chapla**

A friendlier young woman you'll never meet, just don't tell her she can't do something.

Caitlin Lambert, a junior chemical engineering major from Rochester, N.Y., was born with a portion of her left hip missing. She spent the first two years of her life undergoing surgeries and wearing various types of casts and braces. She doesn't remember any of it, but figures the challenges she unknowingly overcame then might have played into her determination less than a year ago to join the Notre Dame Band—an ambitious goal for any young musician, much less someone who had never even played a kazoo, let alone (of all things) a sousaphone, or marching tuba.

Now one of 18 tuba players in one of the best and most historic collegiate bands in the country, Lambert laughs about how it all came to be.

"My boyfriend, Matthew Lucia, is in the band, and last year we road-tripped together to the Notre Dame-Georgia Tech game," she explains. "He brought his trombone into the stadium and played all of the songs, since our band wasn't there, but when he attempted the alma mater ('Notre Dame, Our Mother'), he couldn't remember parts of it. I pointed out when notes were too high or too low, and eventually we got it.

"He said, 'You're a natural. You should probably learn to play something.' So, I took his advice."

It wasn't until Lucia tried to steer her away from the tuba because "it would probably be too heavy" for her to carry, that Lambert decided "That's it! I'm playing the tuba." She began lessons for course credit last spring with assistant band director Emmett O'Leary,



The instrument Caitlin Lambert plays for the Notre Dame Marching Band stands only a few inches shorter than the diminutive junior herself. *Photo by Shannon Chapla.* 

and in very short time grew to love the tuba, as she earned the respect of her teacher.

"Caitlin's determination and work ethic have been amazing," O'Leary says. "She has put in more time practicing than any beginning student I've ever had before. Above all, she has shown a real passion for music and tuba playing, which is not common. I think her participation in the band this year is a true testament to her hard work and the quality of student that she is. For her to take on the difficult task of learning a new instrument to the level necessary for participation in the Notre Dame Band and at the same time maintain her studies in chemical engineering is truly amazing.

When she's not marching around the field lugging a 50

pound brass instrument nearly as tall as she is, Lambert likes to discuss the "pretty cool thermodynamic properties" of ionic liquids. She serves as a teaching assistant in Introduction to Engineering Systems and has worked on the research team of Joan Brennecke, Keating-Crawford Professor of Chemical and Biomolecular Engineering and director of the Notre Dame Energy Center, for whom Lambert currently conducts laboratory work.

Brennecke is happy to toot Lambert's horn.

"What a hoot!" she says. "Caitlin was planning on doing a senior thesis with me this year, but those plans got modified when she made the band. I really admire Caitlin's big dreams and determination to achieve them."

For the moment, Lambert says she feels adequately challenged juggling band and academics; in the spring, she plans to resume some extracurricular activities such as volunteering in the College Mentors for Kids program and tutoring youths at the South Bend Juvenile Correctional Facility. Her goals also extend past graduation.

"I want to go to graduate school, earn my doctorate and pursue a career in industrial research and development, but first I want to do a year of service work," she said. "I'm considering working with abused children for Sisters of Mercy of the Americas."

Her parents must really be proud, unless, maybe they don't know.

Lambert had planned to "surprise" her mom and dad with the crazy news that she'd learned to play the tuba and had made the band by greeting them at a football game this fall dressed in full uniform. She didn't pull it off. Her dad received a bill for her music lessons, and her mom saw her on television as a camera panned over the band at (what else?) this year's Georgia Tech game.

#### New Web site to premiere during Nov. 2 emergency testing

#### By Gail Hinchion Mancini

On Friday, Nov. 2, the University will test ND Alert, the campus comprehensive emergency notification system. ND Alert includes a new component, the Web site **emergency.nd.edu**, that will provide ongoing information during a time of crisis.

In the event of an emergency, emergency.nd.edu will serve as the primary source of information about the nature of the crisis, how to remain safe and the point at which safety has been restored. The new site will allow off-campus partners such as alumni, parents and the media to monitor a crisis.

On an ongoing basis, the site will host information about the campus emergency preparedness and response plan; general emergency contact information and a summary of the tools and resources that support response efforts.

"Safety during a campus emergency is our top priority, and rapid, effective communication during an event is of paramount importance," said Rev. John I. Jenkins, C.S.C., president. "The University's emergency response committee has studied the lessons for emergency circumstances at other universities in devising this multi-layered communications protocol."

During the afternoon of Nov. 2, the Offices of News and Information and Information Technologies will activate two ND Alert notification systems that will complement information at **emergency.nd.edu**:

• A mass notification system will distribute messages to student, faculty and employee landlines and registered cell phones, University e-mail accounts and any additional personal e-mail accounts previously provided.

• The University's Comcast cable system will broadcast a test message to any live television in residence hall rooms, common areas such as LaFortune Student Center and office televisions. All messages will clearly indicate that a test is underway.

ND Alert notification system will be used only in the event of an extreme emergency. **Emergency. nd.edu** is expected to provide communications on a broader range of emergencies such as responses to snow and blizzards or isolated utility issues that affect few but create a visible emergency response.

Members of the campus community who have not registered personal cell phone numbers and additional e-mail information are encouraged to do so. At the beginning of each semester, students have the opportunity to update emergency contact information during enrollment. In addition, throughout the semester students may contact the Registrar's Office to provide updates. Faculty and staff may provide emergency contact information through the Resources tab of Inside.ND.



Image provided by *Tim O'Connor, ND Media* Group

## Out of the Navy, he musters into the Class of 2012

#### **By Julie Flory**

You won't hear first-year student Aaron Gutierrez complain that his room in Keough Hall is too small.

couldn't afford to attend. He joined the military as an avenue to pay for college.

As he applied to Notre Dame, Gutierrez received support from his division officer—who, as it happens, is an alum—and others he met along the way, including Lt. Mike Lipke, now on the faculty as an assistant professor of naval science. Lipke was Gutierrez' watch officer at the nuclear plant.



"That's probably one of the first conversations we had, talking about him wanting to go to Notre Dame," recalls Lipke, with whom Gutierrez remains friends and joins for an occasional tailgate party. "My advice to him was 'absolutely, if you can do this, it's a great University,' and I encouraged him."

Gutierrez filed his application while completing his tour of duty out on the ship, which turned out to be no small task.

"Somehow I had to get all the stuff I needed out there in the Persian Gulf," he explains. "I sent part of my application from Cypress, part from Dubai." With delivery taking two to three weeks, making deadlines was a challenge.

> When he was told to expect an answer sometime in December, he couldn't wait for the envelope to arrive. He e-mailed the Admissions Office on Christmas Day and received the news—he was in. "That was a pretty nice

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"My dorm room is huge compared to what I'm used to," says the freshman from San Antonio, Texas, who takes the phrase "nontraditional student" to a completely new level.

First, there's the age difference: He graduated from high school in 2001 and turned 25 in September. And while his fellow freshmen generally are straight out of high school, he has come here directly from the U.S. Navy, where he served for six years as a nuclear engineer. He spent much of the past year on the U.S.S. Dwight D. Eisenhower in the Persian Gulf.

"It's been six years since I've had to spell the word 'calculus,' much less do it," Gutierrez says of his transition from sailor to student. "Most of these people were taking AP chemistry and calculus a few months ago, and I'm trying to think back six years. It's a whole different ball game."

Like all freshmen, Gutierrez must live in a residence hall. Suddenly, he is surrounded by young men up to seven years his junior. His roommate is 18. At mixers with female dorms, the women are equally young. "There are definitely a lot of awkward moments," he admits.

Financing a Notre Dame education also is proving to be a bit tricky. Gutierrez is paying his own way and, although he has received what he calls a "nice scholarship" from the University, beyond that, he is relying on a \$36,000 G.I. Bill, his savings from his time in the military, and the hope of future financial aid to pay for the remainder.

All that pressure might be enough to scare some away from pursuing a Notre Dame education. But not Gutierrez, who says it's all worth it to follow a dream.

"I knew in middle school that I wanted to come here," recalls Gutierrez, who applied and was accepted to the University as a high school graduate, but First-year student Aaron Gutierrez meets with Lt. Mike Lipke, an assistant professor of naval science. The two served together in the Navy before Gutierrez came to Notre Dame. *Photo by Julie Flory.*  Christmas gift that I got there," he remembers.

From there, it was a whirlwind of returning to port in Norfolk, Va., packing up, and going home to Texas just long enough to load up for college.

Now that he's here, Gutierrez, who likely will put his training to use with a major in aerospace engineering, does have one big thing in common with his fellow students—a newfound sense of freedom.

"Every minute of my day was accounted for," he reminisces of his military days. "I was told what to eat, what to wear, how long I could have my hair. Everything was so structured."

Gutierrez says he had grown accustomed to the sense of camaraderie in the military, and he has been pleased to find that, as he wrote in his Notre Dame application essay, he truly has gone "from one blue and gold family to another."



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## PROFILES

# She's an art historian, not an Elvis historian

#### By Carol C. Bradley

#### Don't call her the Elvis expert.

"I'm more than that," says Erika Doss, art historian and new chair of the Department of American Studies. She arrived at Notre Dame in August, after 21 years at the University of Colorado.

Doss is the author of "Elvis Culture: Fans, Faith and Image," published by the University Press of Kansas in 1999. But she's not an Elvis historian, she emphasizes—she's interested in his image and the role his image plays in the life of fans.

Doss has written five books on American material and visual culture, including "Benton, Pollock and the Politics of Modernism: From Regionalism to Abstract Expressionism" a book that considers how we got from the realism of Thomas Hart Benton to the abstractions of his most famous student, Jackson Pollock. She is also the author of "Twentieth-Century American Art," published by Oxford University Press.

"I'm eclectic," she says. The thread that ties her research together is public culture, and public response to that culture. "Why do people respond to certain works of art?" she asks.

The original idea for the Elvis book sprang from a conference paper given by a friend on a popular work of art, the 1924 Warner Sallman painting "Head of Christ"—familiar to generations of Sunday school children—depicting Christ with flowing light brown hair and blue eyes. What in popular culture had replaced the ubiquitous image? Doss wondered.

"I flashed on Elvis," she says. "It was 1992. He died in the '70s. He has this amazing afterlife—in paintings, posters, and postage stamps. I became interested in fan culture."

When Elvis died in 1977, Doss notes, there were fewer than 25 fan clubs. "Now there are more than 500. Every year, 600,000 people visit Graceland. Until last year, he was the top-grossing dead celebrity—he's slipped behind Kurt Cobain."

Of course, Elvis has been dead for 30 years—it's the image, not the man, that lives on. In "Elvis Culture," Doss notes that for many fans, Elvis—or more specifically, his image—is deeply, personally significant. But the image is multifaceted—"Rockabilly, rebel, teen angel, Army private, B-movie idol, family man, Las Vegas superstar, Nixon admirer, drug addict, dead superstar." Elvis holds on to iconic status because his image can be continually negotiated and remade by fans.

What does Elvis mean? It's a question that Doss has been asked often. It's a mystery, an enigma, she says. In the conclusion of "Elvis Culture," she points out that there are no simple "sound-bite" answers or easy assumptions to be made regarding Elvis, his postmortem popularity, or popular culture in general. Her hope, she writes, is to offer ways to think about how popular images are made meaningful in contemporary America.

Doss is currently working on two book projects that expand on her interest in image and meaning. "Memorial Mania" investigates the

creation of spontaneous shrines that commemorate tragedies, and what these commemorations tell us about the visual and material culture of death. By whom, and for whom, are they made?

Her other project, "Picturing Faith," deals with the intersections between Catholic visual and material cultures. Her research will focus on Catholic artists and the particularities of faith and belief. "This is a healthy place to be working on the topic," she adds.

The prospect of researching the topic is part of what drew Doss to Notre Dame, in addition to the opportunity to chair an American studies program. "I have a background in art history, but I'm most comfortable being in an American Studies department. It's a broad-based field, and expansive enough to include the kinds of interdisciplinary work I do."



Erika Doss, chair of American Studies, wrote a book on Elvis fan culture, but describes herself as "an art historian, not an Elvis historian." *Photo by Carol C. Bradley.* 

# Reviving Byzantium's crucial role

#### By Michael O. Garvey

One of the ambitions of the University's *Spirit of Notre Dame* fundraising campaign is the establishment of an endowment for Byzantine studies within the Medieval Institute. That ambition was accelerated earlier this year when Thomas F.X. Noble, the Robert M. Conway Director of the Medieval Institute, successfully applied to the National Endowment for the Humanities (NEH) for a grant he says "puts the University in a position to develop *the* premier Byzantine studies program in the United States and one of the top programs in the world."

and still later, Istanbul. While the western half of the empire dominated by Rome disintegrated as a result of the barbarian invasions of the 5th century, the part dominated by Constantinople survived and often flourished for the next thousand

years. This Byzantine part of the empire uniquely absorbed, enriched, and exported aspects of Greek, Roman, early Christian, Asian, and Slavic cultures, and supported a civilization in which the faiths of Christianity, Judaism, and Islam all exerted profound and lasting influence.

Until recently, Western academics have generally shown little enthusiasm for Byzantine studies, evidently agreeing with the disdainful judgment of the 18th-century historian Edward Gibbon, who jeered that the history of this civilization of Greek-speaking Romans was no more than "a tedious tale of weakness and misery." Such contempt has so debased the word "Byzantine" itself that its popular and pejorative meaning is now "complicated to the point of incomprehensibility." Today, medieval scholars, including Notre Dame's, argue that Byzantium is intrinsically fascinating and also indispensable to an understanding of the development of Western civilization, the Slavic world, and Islam. Since its establishment in 1946, Notre Dame's Medieval Institute has gained an enviable international reputation for the strength of its scholarship in the history, language, literature, philosophy, theology, and art of the Western medieval world and its four great religious traditions: Latin Christianity, Orthodox Christianity, Islam, and Judaism. Aside from its art and certain aspects of its language and theology, the Byzantine world of the same period has not been as well-represented in the institute's

### Gao is gone; memories remain

#### By Gail Hinchion Mancini

Nobel Laureate Gao Xingjian was here for five days in September. But his visit lingered in more than the exhibit of his paintings, which remained on display in the Snite Museum of Art through the end of last month.

One of the most haunting pictures of the more than 30-piece Chinese ink on paper exhibit is now a part of the Snite permanent collection. Called "Suspens," it is a gift of Robert and Beverly O'Grady, whose support underwrote Gao's visit.

A cloaked and lonely figure stands on what could be a bridge in an otherwise abstract setting. The imagery speaks of indecision and the perils of choice. "I tell everyone who looks at it, 'You know you've been at a point just like that,'" says Chuck Loving, Snite director.

Gao, originally from China, is a novelist, playwright and screenwriter, poet and librettist. The three-day event surrounding his visit, titled "From Homeland to Heartland," featured a screening of one of his films, student performances of scenes from his plays, a panel discussion on his drama and a literary conversation with Dominican Republic-born novelist Julia Alvarez.

The focus on homeland cultures not withstanding, the lessons of Gao's visits seemed more about the creative space between territories that are not spacial: abstract and the figurative in art; first person and third in literature.

Host Lionel Jensen, professor of East Asian Languages and Cultures, and Loving noted that Gao shrugs off the mantle of artistic genius. "I will always recall his undistinguished humanity," says Jensen. "We distinguish him. We lay wreaths before him. But he seeks to be among these dimensions. He seeks to be invisible."

Robert O'Grady commissioned associate design professor Robert Sedlack to create a catalogue commemorating the Gao exhibit. "The book was about balancing everything: two cultures, two languages. The paintings. Photographs. Essays. Pull quotes," says Sedlack.

Sedlack, Loving and Jensen all attest that Robert O'Grady set a high bar in honoring Gao; each enjoyed rising to the challenge. "What Bob told me was that he wanted a catalogue that was 'elegant and most unusual.' That helped make the book great," says Sedlack. The cover of the basic edition is bound in red, raw silk. Ten copies of a special edition were laid in silk boxes, each including an original artwork by Gao.

The final lasting memory is of Gao's joy. "He had unbelievably kind things to say about the book," says Sedlack. "He said it's the best he's seen of his work."

Howard Goldblatt, a research professor and a renown translator of Chinese literature to English, worked with Jensen to bring Gao to Notre Dame. "I got the sense no one had ever given him that kind of royal treatment. In the gallery with his art, he was just beaming. "

Sedlack recalls a point in Gao's comments when the hosts realized the artist had discovered another unexpected space between. They got the distinct impression that Gao had thought appreciation of art was the province of Europe and New York.

After his visit here, "He realized there is culture and respect for the arts happening in places throughout the U.S.," Sedlack says.



Gao Xingjian has made few appearances in the United States since winning the Nobel Prize in literature in 2000. But hosts of his September visit, who saw him beaming with pleasure at the display of his paintings, believe the campus left a lasting impression. *Photo by Rebecca Varga.* 

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Emphasizing Byzantium's crucial role from the 4th to the 15th centuries as "a great civilization at the crossroads of interchange among Christianity, Judaism,

and Islam," Noble's proposal argued that "to understand the history and thought of Byzantium is to better understand the cultures and religious dynamics of those regions and religions today."

In June, the University was awarded a 4-to-1 NEH challenge grant of \$800,000, a dramatic and promising incentive to raise another \$3.2 million, which will make possible the addition of two faculty positions in the Medieval Institute, one in Byzantine history and another in the history of Byzantine theology; two graduate fellowships in Byzantine studies; a variety of conferences and visiting lectures in Byzantine studies; an new library acquisitions in the field.

A field often overlooked and misunderstood by contemporary academics in the West, Byzantine studies concerns the history, culture, politics, faith, and thought of the eastern half of the Roman Empire that surrounded Byzantium, the ancient Greek city later called Constantinople,



Thomas F.X. Noble is set on developing the premier Byzantine studies program in the U.S. *Photo by Matt Cashore.* 

grant expresses the NEH's confidence that Notre Dame could soon become an international center of Byzantine studies to rival any other in the world.

The considerable resources on which the Byzantine studies program will be able to build include the 40,000-volume library of the late Milton V. Anastos, one of the nation's foremost Byzantine scholars, which Notre Dame acquired 10 years ago. Since then, Notre Dame holds the nation's second largest (after Harvard's) library collection dedicated to Byzantine thought, history, and culture.

Several of the nearly 50 faculty members in Notre Dame's College of Arts and Letters now affiliated with the Medieval Institute are teaching, researching, and writing on Byzantine subjects in history, art history, theology, and classical languages. Charles Barber, associate professor of art history, for instance, lectures and writes on all aspects of early Christian, Byzantine, and medieval art; Rev. Brian E. Daley, S.J., the Catherine F. Huisking Professor of Theology, recently edited a critical century Greek theologian Leontius of Byzantium; Robert Darling Young, associate professor of theology, lectures and writes on Greek, Syriac, and Armenian Eastern Christianity and early Christian monasticism; Joseph Amar, professor of classics, specializes in classical and Christian Arabic, Syriac literary culture, and early interactions among Judaism, Christianity, and Islam; and Noble, himself, recently finished a monograph exploring the discourse of late antique and Byzantine art and its effects on Western quarrels over religious art.

"Father Hesburgh has always praised medieval studies as one of Notre Dame's 'jewels," Noble said. "He has also often said that Notre Dame is where the Church does its thinking. Pope John Paul II said dozens of times that the Church must breathe through both its lungs, the Eastern one and the Western one. The NEH challenge grant gives today's Notre Dame a chance to keep faith both with Father Ted and with the late John Paul, and that is pretty good company."

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# **DECADES OF**

For 70 years, Notre Dame faculty have been at the forefront of physic They and their counterparts in engineering advance new ideas every

## Looking back at 70 years of physics research, looking forward to 100

#### By Dave Rumbach

Seventy years ago, Notre Dame scientists began exploring the atomic nucleus using what was then one of the country's first and most powerful particle accelerators, or, as people called them back then, "atom smashers."

They had entered a wide-open frontier of unanswered questions about the realm at the heart of atoms. With a home-built electrostatic generator funded with a University grant of \$900, Notre Dame physicists found themselves at the forefront of nuclear physics. They immediately began making important contributions.

The University has never stopped "smashing" atoms. Today, it's one of only a handful of universities still operating a laboratory with its own low-energy (by today's standards) accelerators, according to Michael Wiescher, director of the Nuclear Science Laboratory.

The questions have changed since the fall of 1937, when ND started running experiments on its first accelerator-a monstrous contraption built of wood, covered with copper and propped on stilts made of plastic sewer pipes. Within months, the machine was used to disintegrate the beryllium nucleus and to provide the first experimental confirmation of the weird phenomenon of Cerenkov radiation, which had been discovered in the Soviet Union just three years earlier.

Today, physicists and graduate students use a trio of accelerators in the rear of Nieuwland Hall to probe questions in astrophysics, a field that strives to understand the nuclear reactions that occur deep inside stars and in brilliant explosions of stars called supernovae. Over the eons, all the heavier elements in the universe are believed to have been synthesized in these stellar reactions, some of which are recreated in the lab.

In its seven decades, the lab has produced a steady stream of discoveries and new physicists have become leaders in the field, a distinction Wiescher attributes to the lab's small size and hands-on atmosphere. Graduate students typically design, build, set up and run their own experiments, a rounded experience that's impossible to have at national laboratories employing technicians to handle the mechanical work.

"At national labs, you may not get your hands on anything at all," he says. "A lab like ours is really a unique experience, and it pays off."

The continuing vitality of nuclear research at Notre Dame is shown by its lead role in the Joint Institute for Nuclear Astrophysics, a collaboration with the University of Chicago and Michigan State University. The institute, which Wiescher directs, is one of only 10 Physics Frontier Centers being funded by the National Science Foundation.

Not that there haven't been some close calls along the way. Twice in its history, government committees have decided to cut off funding and pull the plug on accelerator research.

#### The beginning

It started with a void-a large, empty room 40 feet long, wide and high that had been set aside for research in newly opened Cushing Hall.

A visiting professor was impressed by the cavernous space and suggested it was perfect for a big Van de Graaff accelerator, a new research tool for a new science. Physics instructors George Collins and Edward Coomes took up the





made theirs much bigger.

With a grant from the University, some spare maintenance supplies and the help of three master's degree candidates, the two built their woodframed, copper-covered ball. When they raised it up on its stilts, it looked like an evil, alien robot in a B-grade sci-fi movie.

It was one of the first six particle accelerators in the world. Testing began in late summer of 1935, according to retired physicist Paul Chagnon, who gave a presentation on ND's first accelerator at a workshop marking the University's 50th anniversary in nuclear physics. During the first tests, 19-foot sparks jumped off the copper ball, which gathered its charge from a moving belt of varnished paper. The first beams of electrons exceeded 1 million volts. traveling down a long vacuum tube through an opening in the wall into what the machine's creators called the "disintegration room."

When the machine was in use, the ball was surrounded by an eerie light called a "corona." Students walking by Cushing Hall could look through large windows and see a "monstrous machine bathed in a purple glow," according to Chagnon's presentation.

Within just a few years, after splitting beryllium, producing Cerenkov radiation and making other advances, researchers did something characteristic of particle physicists ever since: They decided they needed a more powerful machine. It would prove to be a fortuitous decision.

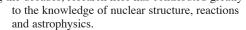
Notre Dame's second accelerator was a long metal tank that could be pressurized. It was completed in the basement of what is now LaFortune in 1942, just in time to be taken over for exclusive use by the Manhattan Project and the race to build the two bombs that would end World War II.

For a time, faculty member Bernard Waldman worked at Los Alamos on a team whose job it was to design an aerodynamically stable shell for what would be the first atomic bomb used against Japan. Waldman was later picked to be one of four scientists to fly behind the Enola Gay in a second plane to record the explosion of that bomb over Hiroshima.

#### Peacetime research

After the war, faculty resumed peacetime experiments and fundamental nuclear research, research that now underlies many modern devices we take for granted, from smoke detectors to medical scanners and cancer treatments.

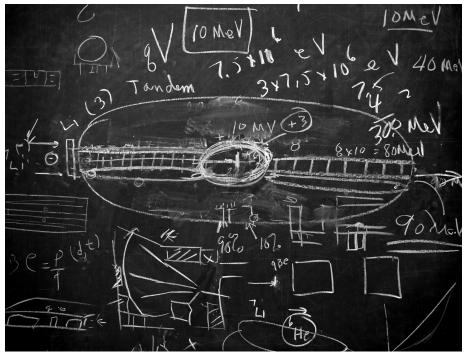
Wiescher, who came to ND in 1986 to strengthen the emphasis on astrophysics research, figures that the University's nuclear lab has seen five generations of accelerators, four generations of faculty members and 10 generations of students. During the decades, research here has contributed greatly

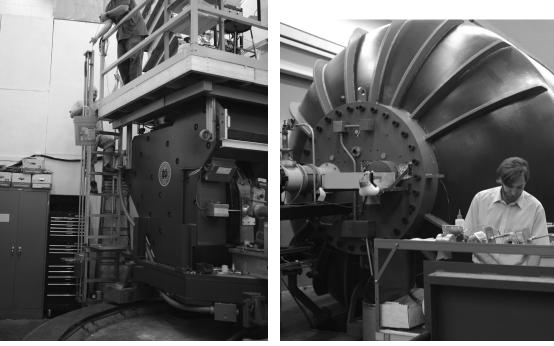


Government support reached a peak in 1965 when a grant of \$2.5 million, said to be the largest ever for the University, was used to

Michael Wiescher, left, and James H enduring research traditions. The fu in the hands of teaching and resear A. Collon and Ani Aprahamian. Ume Joachim Gorres, Larry O. Lamm, Ed photos.

challenge, patterning their design after an electrostatic generator Collins had seen at the Carnegie Institute in Washington, D.C.-only Collins and Coomes





A good old-fashioned chalk board complements such physics research equipment as the spectrograph, and the tube-si spectrograph. Ed Stech, who works with Michael Wiescher, director of the Nuclear Science Laboratory, works at the acc Cashore.

Page 4

#### ND W

# DISCOVERY

### s research. day.



Kolata carry on one of the University's most ture success of the Nuclear Science Lab also is ch faculty including Wiescher, Kolata, Philippe esh Garg and Xiadong Tang and researchers Stech and Wanpeng Tan. ND Works staff



photograph taken around 1935, was then one of the country's first and most powerful particle accelerators. Photo supplied by Elizabeth Hogan, Notre Dame Archives.

install a large Van de Graaff accelerator in the basement of Nieuwland Science Hall. Completed in 1968 under the leadership of then-director Cornelius P. Browne, it remains the workhorse of the laboratory.

Accelerators proliferated at universities throughout the country in the postwar period, but by the 1970s, government funding began to shift away from small university laboratories in favor of the large, high-energy and extremely expensive accelerators at national laboratories, says physics professor Jim Kolata, who joined the faculty in 1977.

The University managed to survive and stay in the forefront of nuclear physics, Wiescher says, by coming up with new ideas and interesting avenues of research for accelerators that operate at relatively low energies.

Another key to survival is a spirit of can-do, Yankee engineering, a value that seems to have been ingrained in the character of the lab since that first accelerator was cobbled together from wood and copper sheets.

A case in point is a device Kolata designed, called the TwinSol, built in collaboration with University of Michigan physicists. It allows physicists to do something tricky: use an accelerator to create a beam of radioactive particles and then form those particles, which live for less than a second, into a second beam that hits a target.

Kolata and his collaborators on the project couldn't afford to hire established instrument makers to build their machine. So they hired a recycling company that makes magnets to separate metal from trash streams to do it for a third of the going rate. The company, which aspired to break into the instrument field, managed to meet the physicists' specifications, including one that required extremely good insulation.

The device is cooled by liquid helium to just a few degrees above absolute zero, the coldest possible temperature, Kolata says. To keep down operating costs, the lab wanted a machine that required refills of liquid helium no more than four times a year.

'That's like asking someone to make a cup that keeps your coffee warm for 10 years," he says.

Wiescher and his colleagues are proposing a new generation of accelerators

to keep ND's lab in the forefront and allow it to survive future funding challenges. Wiescher would like the University to add another large accelerator. To keep it within the existing laboratory infrastructure at Nieuwland, it would have to be set vertically on its end in a four-story tower. "Since it's ND, it will probably be a Gothic tower, with a clock,' Wiescher kids.

He also would like to see an applied physics program that will make nuclear physics technology available to students and researchers in departments throughout the campus, including the liberal arts. Nuclear devices can be used, for example, by archeologists to date and otherwise analyze artifacts and by art historians to determine if paintings are real or fakes, he says. They're also useful to scientists studying everything from dinosaur bones to moon rocks.

"This would get physics and nonphysics people together," Wiescher said.

Kolata, who is marking his own 30th anniversary here, said he's optimistic the lab will see further milestones. "It's kind of hard to say we'll make 100," he said. "Physics changes tremendously, even over 10 years. If you're doing the same thing for 10 years, you're vulnerable.

## Air flow research takes flight

#### **By Gail Hinchion** Mancini

After more than a hundred years of work on the ground, aerospace engineering research has taken flight.

In mid-September, two Cessna Citations engaged by faculty from the Center for Flow Physics and Control's Aero-Optics project began the initial flight experimentation in a five-year project supported by a \$5.6 million Air Force grant.

During the course of the project, the high-speed jets will be outfitted as a sophisticated airborne aero-optics laboratory that initiates laser movement between aircraft and records and analyzes those contacts.

The project represents the University's first foray into flighttest engineering, which is common in industry but rare at the university level, according to Stephen Batill, chair of Aerospace and Mechanical Engineering (ÂME).

It is an essential step to further the pioneering aero-optics research of a group assembled by Eric Jumper, AME professor and lead researcher on the project.

The Aero-Optic group's mission is to understand how the turbulence around an aircraft affects light and laser transmissions, and how turbulence-imposed distortions can be corrected. The work is expected to pave the way for speed-of-light, free-space communications that might occur between aircraft, between an aircraft and the ground, or between an aircraft and a satellite. Among practical applications, imagine high-speed Internet service during a commercial airline flight.

FlowPAC, directed by Thomas Corke, was itself established to promote multi- and interdisciplinary research in the areas of flow



safety protocols of flight tests to analysis of the underlying principals of physics and Computational Fluid Dynamics (CFD). Associate Professor Meng Wang and his group of computational experts are working with the aero-optics group on the CFD calculations.

Creating a flight-test program is difficult and involves a good bit of internal and external partnership, says Batill.

The new, larger wind tunnel facility being constructed on White Field includes elements that are particularly beneficial to aero-optics research, says Corke. The wind tunnel produces the conditions expected in the flight simulations.

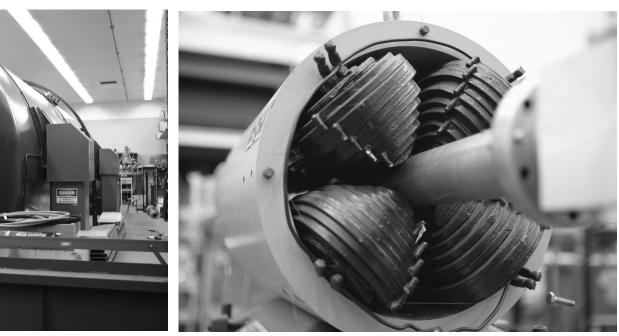
Besides Notre Dame faculty and equipment, and Air Force funding, Jumper has assembled external partners from industry. Boeing, for example, will build pieces of the aircraft testing device. A southwestern Michigan flight service has been signed on to provide the aircraft and flight time.

Project members face a weighty to-do list over the next five years: Conceive and predict flow-control schemes and test them both in the wind tunnel and in flight. Design a turret-like laser trapping device for the air experiments that captures and analyzes data. Design two-aircraft send-and-receive experiments at flight speeds close to the speed of sound.

But the very point of the inair investigation, says Jumper, is to reverse a shortfall: "No flight tests have been flown to see if the predictions based on theory and wind-tunnel testing can be validated."

What is known: Light beams seem to survive fairly well if they are directed straight forward. It's when they are sent and received from "the full hemispheres above and below the aircraft" that they become distorted, Jumper says.





naped tandem accelerator. Graduate student Daniel Robertson, who works with Phillipe A. Collon, stands on the balcony of the celerator. At right, the quadrupole focusing magnet is an essential part of the "atom smashing" mechanism. Photos by Matt

Eric Jumper, above, has pioneered Aero-Optics research with such team members as, from left in front of the plane, David Cavalieri, Mike Zenk and Stanislav Gordeyev. Photos provided.

#### ORKS

## **OUR GOOD WORKS**

## **New Isis Gallery opens in O'Shaughnessy Hall**

#### By Carol C. Bradley

The Department of Art, Art History, and Design has resumed a 37-year tradition of displaying student and faculty art with the reopening in O'Shaughnessy Hall of the Isis Gallery. The new gallery's inaugural exhibit features the work of Douglas Kinsey, an emeritus faculty artist who was with the program for much of that period.

The gallery has existed in various locations on campus since the 1970s, most recently on the third floor of Riley Hall of Art. That space was lost six years ago in a remodeling of the department's offices and classrooms. The new gallery is open daily, from 8 a.m. to 4:30 p.m., is in a renovated space on the first floor of O'Shaughnessy Hall, across from the eatery Waddick's.

Mark Roche, dean of the College of Arts and Letters, notes that two college

priorities in the past decade have been student-centered work and the arts. "The two come together in this wonderful gallery, situated in the midst of one of the University's most vibrant buildings and the hub of the College's rich intellectual and social life," he says.

"It's a crossroads," adds department chair Dennis Doordan, "And an optimal location for sharing art with the Notre Dame community.'

Kinsey joined the faculty about the same time the first Isis Gallery was established in the old athletic fieldhouse. His work is a fitting choice to be the first in the new space, says Doordan. "It's a new beginning. A new show-by one of our own-in a new space...we're celebrating continuity while we're celebrating a fresh start.

His evocative paintings begin with photographs published in the New York Times and other new sources. He utilizes painted collage elements so that the figures

emerge from linear patterns that resemble a driving rain or are hidden behind floating, stenciled images. The subjects often are caught up in disaster or brutality.

"Like a lot of journalism now like a lot of Greek drama—I'm not showing violence but the aftermath of violence," says Kinsey, who received the 1999 Sheedy Award for teaching excellence. Although the images are taken from published sources, he prefers not to know details about the actual events being photographed. "I'm not illustrating the story," he says. "I'm responding to the image. I'd

Douglas Kinsey greets visitors to the new Isis Callery in O'Shaughnessy Hall, where his work will hang through Nov. 29. At right is "Street Scene II." Photo by Carol C. Bradley.

as soon know as little as possible."

The opening of the gallery comes at a time when interest in the arts is booming. The total number of undergraduate majors in the arts has increased for the seventh consecutive year, says Roche, topping 500 students for the first time in history.

The gallery offers exhibition space for a variety of media, including three-dimensional work such as

ceramics and sculpture. The work of visiting faculty also will be hung. Exhibition space for two-dimensional work-painting, drawing, design, and photography-is also available in new wall-mounted display cases in the hall between the dean's office and the Great Hall. Major solo exhibitions by department faculty, as well as the spring B.F.A./M.F.A. thesis exhibition, will continue to be held at the Snite Museum of Art.



## DISTINCTIONS

The University congratulates employees who are celebrating significant anniversaries in November, including Charles F. Kulpa, professor and chair of biological sciences, who joined the science faculty 35 years ago.

Others celebrating anniversaries are:

#### **30** years

Robert M. Zerr, risk management

#### 25 years

Phyllis R. Campbell, building services

John W. Hans, food services support facility

Janet M. Mickelson, radiation laboratory

#### 20 years

Charlene K. Bollman, graduate studies



Charles F. Kulpa has been with the University for 35 years.

Carol J. Kissinger, Huddle **Christopher A. Landon** 

and John P. Murton, power

plant Cecilia Lucero, research

Thomas W. Marentette,

\* \* \*

**Rev. Virgilio P.** Elizondo, professor of pastoral and Hispanic theology and fellow of the Institute for Latino Studies, has received the 2007 Community of Christ International Peace Award for his work in advocating full inclusion and justice for immigrants. The award ceremony, on Oct. 26, was part of the Community of Christ Peace Colloquy titled "Real World, Real Peace: Sharing the Peace of Jesus Christ."

#### The Fischoff National **Chamber Music Association** housed here at Notre Dame was named one of six recipients of 2007 Governor's Arts Awards. Gov. Mitch Daniels presented the awards in a ceremony in Bloomington Oct. 25. The Fischoff is the largest chamber music competition in the nation, hosting 200 high school and college-age musicians from around the country during its annual spring competition.



## WHAT THEY DO

By day, they are professors and administrators. On Oct. 17. though, they were the featured faculty of "Dancing with the Profs," a fund-raiser for the Ballroom Dance Team that featured tango and cha-cha demonstrations. Dancing faculty, from left, are Ramzi Bualuan of computer science an engineering; Malgorzata Dobrowolska-Furdyna, physics, and Anna M. Thompson, director of the performing arts center. Photos by Anya Hershberaer.



information technologies Katherine G. Rosswurm, development Shafa Saddawi, physics Martin S. Stone, athletics

Pamela G. Jobin, St. Michael's Laundry

Rosie M. Mitchell, custodial services

Denise L. Moser, operations and engineering

Gary E. Tuohy and Michael **G. Vignati,** building services

15 years

Hope A. Kaser, stadium concessions

Carol A. McIntyre, arts and letters dean's office

Robert G. Wilk, general services

10 years

Arthur L. Jackson, North Dining Hall



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## FOR YOUR HEALTH

## Relax, meditate, get a massage

#### By Carol C. Bradley

It's the middle of a stressful workday, but imagine you're in a quiet room with dim lighting and a thick, soft rug on the floor. There's a trickle of water from a fountain in the background, and soothing music playing. You're relaxing and reclining in a robotic massage chair, which is kneading the kinks out of your back.

It may sound like wishful thinking, but it's something faculty, staff and students can experience in the new "Inner Resources Room" located on the third floor of St. Liam Hall in the University Counseling Center.

Funds for the new facility came from a gift from the Class of 2004 and the St. Liam Hall renovation project, says staff psychologist Wendy Settle.

The room-christened the Inner Resources Room by counseling center director Susan Steibe-Pasalich-is designed to provide a tranquil space for users to learn to relax, manage stress or enhance performance, Settle says. "The room also includes equipment that would allow them to enhance their mood, and biofeedback equipment that helps people learn to concentrate and focus, improving academic and other activities."

What resources are available in the room?

• A robotic massage chair/ recliner-The chair allows you to select from three automated programs that alternate to target different areas of the back. You may also customize your massage using a variety of massage modes. Massage rollers can be targeted to hit specific sore spots. The chair can also be used without massage to recline and meditate, listen to music or an instructional CD, or to watch a DVD.

• A light box for daily, scheduled bright-light therapy to help regulate seasonal mood swings, improve sleeping patterns and enhance feelings of well-being.

• RESPeRATE, a portable biofeedback machine designed for lowering blood pressure and stress management. As you sit in the recliner with the device in your lap, listen to instructions and music through the attached headphones-the program guides you through 15 minutes of therapeutic breathing exercises. The machine has been clinically proven to lower high blood pressure within four to six weeks.

 A temperature sensor biofeedback device. When you're under stress, your hands become cold because of constriction of blood flow in the extremities, Settle says. Using a temperature sensor attached to your finger, you can learn to reverse your body's response to stress by warming your hand temperature.

• A negative ion generator-Highdensity negative ions in the air have been shown to significantly improve mood and reduce mood disturbances. They're used in space capsules and on submarines, Settle notes.

 A Zen timepiece—a brass bowl on a stand-can be set to gong a gentle bell tone to signal the end of your session. The timepiece can also be used to time yoga or be used for mindfulness meditation.

• A selection of soothing music and video in CD and DVD formatview a Rocky Mountain waterfall, or waves on a Caribbean beach. Staffers are also developing a collection of instructional CDs and DVDS for guided relaxation and mindfulness meditation.

"Or you can just come by and relax in the massage chair and listen to music," Settle adds.

The Inner Resources Room is open to faculty, staff and students and can be reserved for half an hour or an hour. Sign-in through the counseling center's Web page is not yet available—the sign-in sheet is on the bulletin board near the third-floor reception desk.

When you arrive, leave your Notre Dame ID card with the receptionist and pick up a key.

#### New session of swim lessons

A new session of parent/tot, child and adult swim lessons will be held on five Sundays-Nov. 4, 11, and 18 and Dec. 2 and 9-at the Rockne Memorial pool. Register for classes at Rolf's Sports Recreation Center. For more information on class times and fees, visit hr.nd.edu/openenroll.

#### **Open enrollment ends** Nov. 9

Open enrollment for 2008 benefits extends through Friday, Nov. 9. This is your opportunity to select 2008 benefits choices among medical, dental, eye, and life insurance, and establish the amount you want to put in your pre-tax Flex spending account. If you don't enroll for 2008 benefits, you will retain your 2007 insurance options, but will lose the option of holding pre-tax dollars out in a Flex spending account. Online enrollment, not paper, is mandatory for all employees who receive electronic paychecks. Visit hr.nd.edu to enroll.

For Your Health explores programs that promote health and well-being and the people whose lives have been enriched by them.



Staff psychologist Wendy Settle relaxes in the massage chair while demonstrating "RESPeRATE," a biofeedback system the reduces stress and blood pressure through therapeutic breathing exercises-just a few of the options available in the University Counseling Center's new "Inner Resources Room." *Photo by Carol C. Bradley.* 

#### FYI Music and movies at the performing arts

center Coming to the Leighton Concert Hall, violist Nokuthula Ngwenyama and pianist John Blacklow will perform works by Vitali and Schubert for violin, viola and piano, 7:30 p.m. Monday, Nov. 5. Tickets are \$8 for faculty and staff, \$6 for seniors and \$3

Student talent will be on display in all forms as

for students.

• The Notre Dame Symphony Orchestra presents "Music for the Ballet," by Weber, Copeland and Tchaikovsky at 8 p.m. Thursday, Nov. 8. Tickets are \$5 for faculty and staff, \$4 for seniors, and \$3 for students.

• The Notre Dame Glee Club performs a program of works by Distler, Gabrieli and Poulenc, as well as folk songs and spirituals, at 8 p.m. Friday, Nov. 9. Tickets are \$6 for faculty and staff, \$5 for seniors and



#### for students.

#### • The Notre Dame Concert

Bands perform at 3 p.m. Sunday, Nov. 18. The event is free but ticketed-call the box office at 631-2800 to reserve

• Student thespians take to the Decio Mainstage in Tony Kushner's tragicomic play "A Bright Room Called Day," 7:30 p.m. Tuesday, Nov. 13 through Friday, Nov. 16, and 2:30 and 7 p.m. Sunday, Nov. 18. The play follows a close-knit group of artists and activists in 1930s Berlin. Kushner's lyrical piece of political theatre probes the nature of evil in the world, and is ominously reflective of contemporary American politics. Tickets are \$10 for faculty, staff and seniors, \$8 for students.

accompaniment by 10 p.m. Friday, Nov.

16. Films tickets are \$5 for faculty and staff, \$4 for seniors and \$3 for students.

Bring your lunch and enjoy



through the season.

Blacklow

Tickets are \$22 for adults, \$15 for students of any age. The ticket price for performing arts center and MET season subscribers is \$19-\$15 for students. Tickets are already on sale for season subscribers; individual tickets go on sale Nov. 9. Those who buy tickets for all eight performances at one time become season subscribers, and receive the \$19 price. Purchases can be made at the performing arts center box office.

• "Peter Grimes," 1:30 p.m. Saturday, March 15

• "Tristan und Isolde," 12:30 p.m. Saturday, March 22

• "La Bohème," 1:30 p.m. Saturday, April 5

• "La Fille du Régiment," 1:30 p.m. Saturday, April 26

#### **Prayer and song from Campus Ministry**

Muslim prayer will be explored at 8 p.m. Wednesday, Nov. 7 in Campus Ministry's ongoing series "Prayer from Around the World," Room 330 Coleman-Morse Center. The Folk Choir's annual Concert for the Holy Cross Missions takes place at 9 p.m. Saturday, Nov. 10 in the Basilica of the Sacred Heart. Donations will be accepted to support work in Africa.

#### **Saturday Scholars** series considers John Milton

Philip Carli from the George Eastman House, New York. Nobuhiro Yamashita's 2005 film "Linda Linda Linda," will be screened at 7 and

for students.

• The Notre Dame Chorale and Chamber Orchestra, directed by Alexander Blachly, will perform at 8 p.m. Friday, Nov. 16. Tickets are \$8 for faculty and staff, \$6 for seniors and \$3

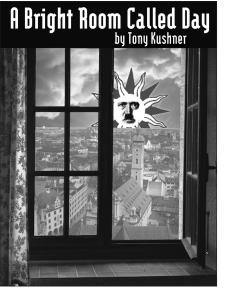


Image by Paul Wieber, ND Media Group

In the Browning Cinema, Katie O'Connell, '99, American Studies alumnae and head of drama development at NBC will be the featured speaker in an upcoming FTTtalks presentation, "Developing the Prime-Time TV Drama," 7 p.m., Tuesday, Nov. 13.

Upcoming films include PAC Classic 100 films "Rescue Dawn," 7 and 10 p.m. Friday, Nov. 9, "Chinatown," 4 p.m. Sunday, Nov. 11 and "Network," 4 p.m. Sunday, Nov. 18. Faust at Notre Dame continues with F. W. Murnau's 1926 film "Faust," at 7 p.m. Thursday, Nov. 15. The film is silent with English title cards, and will have live piano

Bach's Lunch, a free concert featuring advanced music students at 12:10 p.m. Friday, Nov. 9 in the Penote Performers' Assembly. The event is free but ticketed.

Ticket information for these events is available by calling the box office, 631-2800 or by visiting performingarts.nd.edu.

#### **Opera returns to the Browning**

It's a new season of The MET Goes to the Movies, world-class opera performances broadcast live in HD from the Metropolitan Opera in New York to the big screen at the Browning Cinema in the performing arts center.

Upcoming performances include "Romeo et Juliette," at 1:30 p.m. Saturday, Dec. 15 and "Hansel and Gretel," at 1 p.m. Tuesday, Jan. 1. Eight productions are planned

Other scheduled performances include:

- "MacBeth," 1:30 p.m. Saturday, Jan. 12
- "Manon Lescaut," 1:30 p.m. Saturday, Feb. 16



For more events information, see agenda.nd.edu

The Saturday Scholars series continues with a lecture by Stephen Fallon, chair and professor in the Program of Liberal Studies, on "Theology vs. Religion: The Case of John Milton." The lecture takes place at 11 a.m. Saturday, Nov. 10 in the Annenberg Auditorium, Snite Museum of Art.

#### **Final education benefit** session

Representatives from the Office of Human Resources, undergraduate admissions and financial aid will present information on the University's education benefit at 7 p.m. Monday, Nov. 5 in the Carey Auditorium of the Hesburgh Library. Parents and students are welcome to this discussion on benefits for children attending Notre Dame and Saint Mary's or who qualify for the portable education benefit.

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### **BACK STORY**

## Campus Ministry receives Team Irish Award



A mix of priests, nuns and lay ministers comprises the Office of Campus Ministry. Front row, from left, Rev. Ralph Haag, C.S.C.; Sister Sue Bruno, O.S.F; Mary Olen, Sylvia Dillon, Danielle Thomson, Rev. Joseph Carey, C.S.C., Kristi Flaherty, Priscilla Wong, Erica Meyer, Amy Huber, Steve Warner, Joseph Nava and Brenda Alvarez. Middle Row, from left, Rev. Richard V. Warner, C.S.C., Rev Peter rocca, C.S.C.; Gail Walton, Brett Perkins, Melissa DeClercq, Brother John Platte, C.S.C.; Father John Conley, C.S.C., John Dillon, Rev. Greg Green, C.S.C., Nancy Beitler, Rev. Pete McCormick, C.S.C.; Daniel Allen and Rev. Paul Doyle, C.S.C. Back row, at left, John Zack, Katharine Barrett and Andrew McShane. *Photo by Matt Cashore.* 

#### By Carol C. Bradley

The Office of Campus Ministry carries on a ministry rooted in the Catholic tradition and inspired by the Congregation of the Holy Cross, says Rev. Peter D. Rocca, C.S.C., rector of the Basilica of the Sacred Heart.

The office's staff of 30, directed by Rev. Richard Warner, C.S.C., was recognized with the presentation of a Presidential Team Irish award during the USC game Saturday, Oct. 20. The award was developed to recognize staff teams that exemplify the University's core values: integrity, accountability, teamwork, leadership in mission, and leadership in excellence.

"Our mission is to help the Notre Dame community grow in its love for Christ—through Masses, retreats, reflection sessions, Bible study, catechesis, and music," Father Rocca says. The office, he notes, fulfills the vision of Blessed Basil Moreau, C.S.C., founder of the University, whose vision was to educate the mind, "but not at the expense of the heart," Father Rocca notes.

Campus ministry coordinates more

than 100 Masses per week—including more than 40 every Sunday—offers retreats reaching 3,000 students per year, and handles marriage preparation and weddings for 130 couples per year. Student leaders include 60 Basilica servers, 70 lectors, and more than 500 extraordinary ministers of Holy Communion.

The office also offers programming for those of other faith traditions, or of no faith, says Brett Perkins, director of Protestant student resources and peer ministry. "We also have, every night of the week, activities going on that seek to create community and build up students in their faith."

"In many ways, we are central to maintaining the Catholic identity of the University," says associate director for administration Priscilla Wong. "One thing we hear students say is that at Notre Dame, they feel comfortable and welcome to talk about their faith. They don't have to feel defensive or explain."

"I always feel like this is the giant parish to the students," says Mary Garvey Olen, retreats administrative coordinator. "The whole staff is at their disposal for spiritual guidance. Our size and strength is a testimony to the faith life of the students."

## Investment group values the team concept

#### ND Work staff writer

About half the 28 members of the Investment Office crisscross the globe, "scouring the world," as Mark Krcmaric explains, "for the best investment managers" to fill the various niches of the University's \$6.5 billion endowment pool.

About half work primarily from campus, adds Kremaric, who is managing director and chief operating officer. Besides support staff, they include certified public accountants, lawyers, business majors and other professionals.

The home team sets up and manages all the accounts. Wiring money to and from the University's 166 money management partners involves transactions that number in the thousands each year. Investment software helps these specialists comb account reports to evaluate performance. But a lot of good-old-fashioned checking and rechecking is involved, says Kremaric.

On Saturday, Nov. 3, members of the Investment

Office will be honored as recipients of the Presidential Team Irish award. Among measures of the excellence of their work, the endowment is among the highest performing funds in the nation over the past 15 years. It is the 15th largest higher education endowment in the country and the largest among Catholic colleges.

For them, the pride of the award is being acknowledged as a team.

Scott Malpass, vice president and chief investment officer, is the recognizable face of the office. But he often says, as does Krcmaric, that the Investment Office succeeds because of the staff's cohesion. "It's a wonderful place to come to work," says Krcmaric, whose 10 years with the department is one of many stories of longevity. "There is great camaraderie among the group."

To the world at large Malpass is a highly regarded financial rainmaker. But on the ninth floor of Grace Hall, where the offices are located, his gift is vision. "He's always connecting our work to the mission of the University and how the endowment is making Notre Dame a better place," says Krcmaric. "That's why we're here."





Jim Lyphout, vice president for business operations, visited the fire station recently to present commendations to five Notre Dame Fire Department officers for exemplary service the day of the Michigan State game. From left, Bob Zerr, firefighter Mike Holdeman, Dan Skendzel, Assistant Chief Bill Farhat, Fire Chief John Antonucci, and Lyphout. Not pictured: Captain Tom Quarandillo and firefighter Ryan Schafer. *Photo by Carol C. Bradley.* 

# Fire officers receive commendation

#### By Carol C. Bradley

Five Notre Dame Fire Department officers—R.D. Brown, Mike Holdeman, Ryan Schafer, Assistant Chief Bill Farhat and Captain-in-Charge Tom Quarandillo—recently received commendations from Jim Lyphout, vice president for business operations, for their a game day is 12 to 15 calls," says firefighter R.D. Brown. "We had a very high activity level on campus that day. Every call was legitimate—no false alarms," he adds. The crew handled falls, cardiac problems, heat exhaustion, breathing difficulties and alcohol-related illnesses—in addition to a fire in the coal pile.

Lyphout noted that the commendation offered "an opportunity to thank the guys for outstanding performance on a game day. It

They value the team atmosphere of their division. Members of the Investment Office, in the front row from left, are Shelley Huff, Sureeni Ekanayake, Brenda Tucker, Amy Goodwine, Pat Moorehead, Laura Leblang, Nancy Filley, Cheri Hayward, Stephanie Miranda Pries, Patty Brady and Sushma Lakkaraju. Middle row, from left, Brian Wrona, Pete Murphy, Mark Krcmaric, James Quinn, Tom Gotsch, Scott Malpass, Tim Dolezal, Roman Smith and Rick Buhrman. Top row, from left, Mike Melby, Chris Gehring, Mike Cook, Dave Ludwig, Bill James, Mike Ridenour, Sean Mulvehill and Mike Donovan. *Photo by Joe Raymond.* 

contributions on Saturday, Sept. 22, the day of the Michigan State game. During a 13-hour period that day, officers handled 29 emergency calls—nearly twice as many as usual.

"The average number of calls on

demonstrates how vital this service is on campus."

The officers also received the personal thanks of Fire Chief John Antonucci. "I am blessed to work with this group of men," he says. "These guys, without question, give their heart, mind and soul to the University."

## 2008 Notre Dame Forum to focus on the future of sustainable energy

#### ND Works staff writer

President Rev. John I. Jenkins, C.S.C., has identified the topic for the 2008 Notre Dame Forum as "Charting a Sustainable Energy Future."

"It's a subject that implicates a host of timely and difficult issues," says Father Jenkins, citing climate change and the condition of the environment, the costs and benefits of economic development, the fairness of wealth and income distribution, and the appropriate roles of nations and individuals in creating such a future.

Frank Incropera, professor of aerospace and mechanical engineering and former dean of the College of Engineering, will chair the Forum organizing committee. The announcement of the Forum date and other members of the organizing committee will be forthcoming.