

SPRING 2011 \$6.

Also inside: Global economies and the common good · Better business · Letter to a dying friend
Making furniture · Beating the blahs · Driving Khmer-style · Toasting Chuck

NOTRE DAME

MAGAZINE

Hunting Down the Universe



L I F E G O E S O N

A funny thing happened on my way to writing this editor's column. I knew the theme would be life moving on. But where to start?

I couldn't decide if I should open with Chuck Lennon's retirement this summer after 30 years as head of the Alumni Association. I could point readers to Dick Conklin's affectionate farewell and express my own admiration for someone who has meant so much to the Notre Dame family.

I could then introduce the association's new director, Dolly Duffy '84, who has been associate director since 2008. A South Dakota native, Duffy and her husband, Dan Fangman '84MBA, had owned their own business for 17 years before coming to South Bend.

That a woman will head the alumni organization seemed perfectly natural, hardly noteworthy — until I remembered the University was male-only for the school's first 130 years, and that women long felt like interlopers when Domers gathered to cheer revered traditions.

My other option for opening this "life goes on" theme was the magazine's forays into 21st century communication. The magazine, first published in 1972, launched its website in 1996, providing online what was available in print. The menu expanded over time, but not much.

For the past year or more, however, the website has significantly expanded its offerings. Thanks to Carol Schaal '91M.A. and John Monczunski, the magazine's website gives online readers lively content not found in our print quarterly, with new postings almost daily.

Alumni, faculty and staff write regular columns for us about a variety of topics. Many others contribute reflections and opinion pieces. Michael Molinelli's Molarity crew can be seen in historic black-and-white cartoons *and* in all-new full-color episodes. If you'd prefer to *hear* magazine stories or audio clips relating to stories or campus happenings, check out the magazine on iTunes. Connect to us on Facebook, or scan our "Networthy ND" feature that gathers Notre Dame-related stories from various sources.

Or join the conversation by sending, sharing, friending, responding and writing.

While we're as devoted as ever to our print edition, we also understand the new appetites for information exchange. So we're now going mobile and making that familiar *Notre Dame Magazine* conversation available in a digital magazine and e-reader format, and planning to expand the menu as time goes by.

Life does go on.

But here's the funny thing that happened the day I set to write about the march of time.

As I thumbed through our winter 2000-01 issue looking for something else, I found an essay on page 96 by Beth Apone Salamon '90, entitled "I Have Become the Center of the Universe," in which she writes about motherhood and the "two creatures [who] look to me to meet their every waking need."

An hour later, reading proofs for this issue, was another essay, again on page 96, about motherhood by Beth Apone Salamon. It's called "The Death of Me," and it's about her children having reached the age when they have outgrown her. She laments being cast aside while her kids charge into adolescence.

Time does move on. But some things never change.

— Kerry Temple '74

SPRING 2011, VOLUME 40, NUMBER 1

NOTRE DAME MAGAZINE

DEPARTMENTS

Notre Dame Avenue

- 6. Beating the winter blahs; jammin' jazz
- 13. Seen and heard

Expeditions

- 18. Wind power; ovarian cancer

The Spirit Campaign

- 20. Church life

Café Arts

- 52. A TV critic's homework
- 54. Screenwriting novelists

Alumni

- 56. The inimitable Chuck Lennon
- 58. The greatest game never played
- 60. Domers in the news
- 61. Class columns

CrossCurrents

- 89. The mountain in my backyard
- 92. Look who's watching
- 94. A sacrament of food
- 95. For the time being
- 96. The death of me



FOLLOW
NOTRE DAME
MAGAZINE
ON FACEBOOK



JOHN MONCZUNSKI

FEATURES

22. Wonder of Wonders,

BY JAY WALLJASPER

Notre Dame physicists gaze into the heavens, searching the stars and infinite darkness, reading the clues to make sense of the awe.

30. Into the Deep,

BY PATRICK DUNNE '60

At the end of this life on Earth we all face a journey into the mysterious unknown.

34. The Global Good,

BY CAROLYN WOO

'Whether globalization contributes to the common good is a question that has been answered: Yes, some of the time. The more pertinent question is how globalization, through business, can serve society.'

39. The Investor,

BY LORI BARRETT

Paul Tierney '64, once known as a corporate raider and a savvy, successful fund manager, is now making bold impacts by bringing venture capital into what he calls frontier markets. And doing some real good.

43. Driver's Ed, Khmer Style,

BY ADAM KRONK '02, '09MNA

Wherever they're headed, whatever they're wearing, most of Cambodia is up with the dawn and moving with purpose, dodging one another with a stoic ease that still escapes this author.

46. The Natural,

BY KERRY TEMPLE '74

After a decade as a doctoral student, Geoff Keating '00M.A. finds his true calling as a furniture maker.

In his "Believing" blog for the magazine, Michael Garvey '74 wrote about the latest art project of Father Martin Lam Nguyen, CSC, pictured left. See magazine.nd.edu/news/18591-believing-an-artist-at-work/ for the column, one of several new blogs posted weekly at magazine.nd.edu.

EDITOR
Kerry Temple '74

MANAGING EDITOR
Carol Schaal '91M.A.

ASSOCIATE EDITORS
John Monczunski
John Nagy '00M.A.

ALUMNI EDITOR
Angela Sienko

DESIGN & ART DIRECTOR
Kerry Prugh

BUSINESS MANAGER
Julia Bertini Ettl

COVER PHOTO
Vatican Observatory

BACK COVER PHOTOS
Matt Cashore '94
Brian Bloom

Notre Dame Magazine
(ISSN 0161-987X) is published
four times yearly in Spring,
Summer, Autumn and Winter
by the University of Notre
Dame for its alumni and friends.

The magazine's address is
538 Grace Hall,
Notre Dame, IN 46556-5612
ndmag@nd.edu
magazine.nd.edu

Copyright 2011 by the University
of Notre Dame. Reproduction in
whole or part without written
permission is prohibited.

Periodicals postage paid at Notre
Dame, IN 46556 and at additional
mailing offices.

Postmaster: Send change of
address to Notre Dame Magazine,
538 Grace Hall,
Notre Dame, IN 46556-5612.

Subscriptions: \$25 one year; \$40 two years
Telephone: 574-631-5335, Fax: 6767

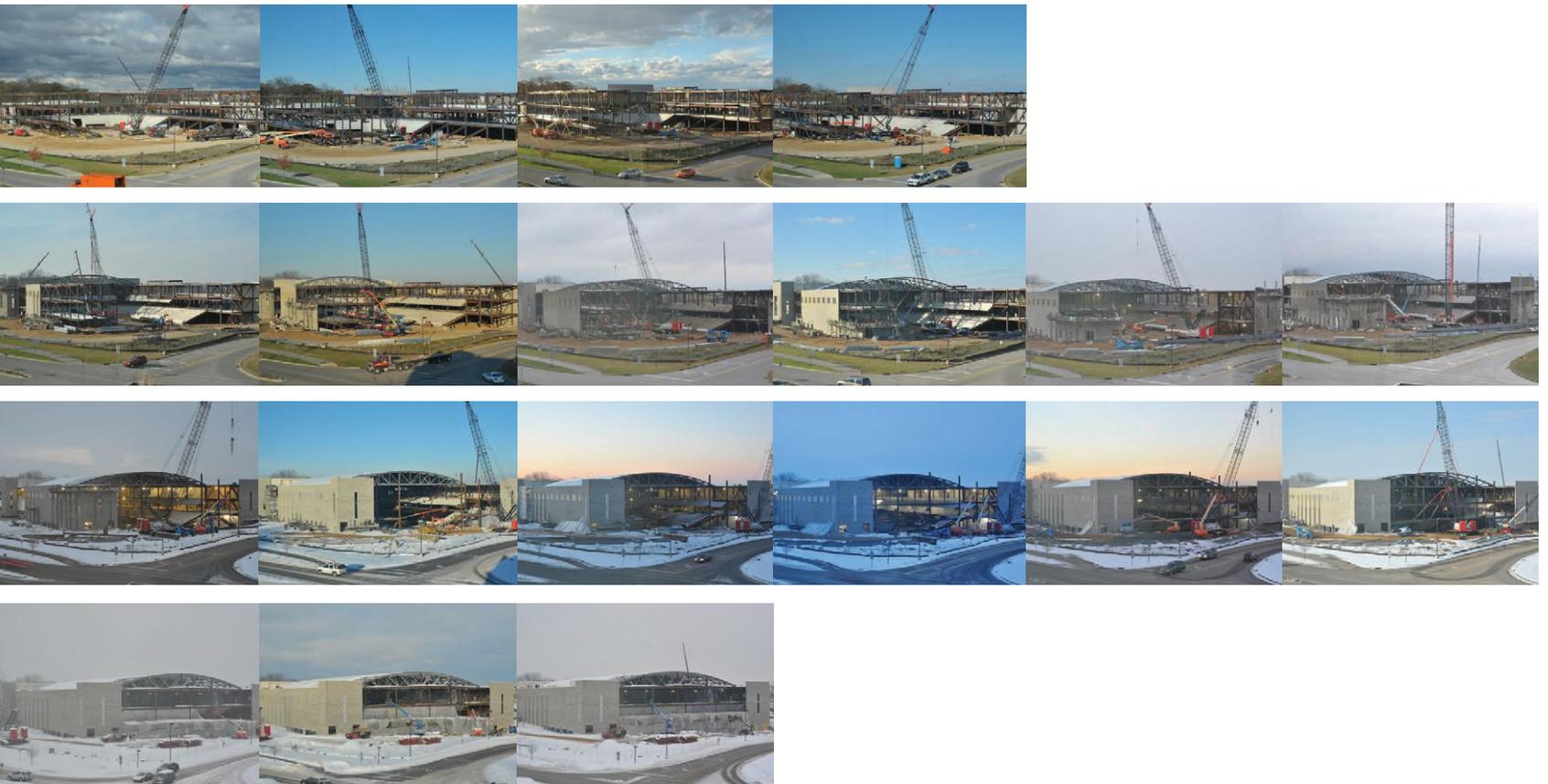
Other University phone numbers:
Directory Assistance: 574-631-5000
Undergraduate Admissions:
574-631-7505
Alumni Association Office:
574-631-6000
Office of the Registrar: 574-631-7043
Athletic Department: 574-631-6107
Ticket Office: 574-631-7356



STILLPOINT



If you build it, they will come and skate and cheer and play. The Compton Family Center ice facilities, providing two ice sheets and room for 5,000 fans, has been growing on the southern edge of campus since last summer. Expected to be finished for the 2011-2012 hockey season, the 203,000-square-foot arena will house Notre Dame's hockey team, which reached the NCAA national championship game in 2008, as well as programming for youth hockey, figure skating, broomball and other activities. For a 90-second time-lapse video of the construction, go to magazine.nd.edu/multimedia. Photography by Matt Cashore '94.



The letters we publish here are edited for space and are representative of those we receive. We print only those letters referring to an article in the most recent edition of the magazine, not those responding to letters or commenting on issues not addressed in the recent issue. For a fuller presentation of letters visit our website at magazine.nd.edu.

LETTER FROM CAMPUS

Calling Patricia

FROM CAROL SCHAAL '91M.A.

In February, Patricia McAdams '67M.S., Notre Dame's doyenne of computer assistance, began working part-time.

"Technically it's 20 hours a week," she tells me.

I give her a skeptical look, and we both crack up.

When the magazine offices were in the Main Building, two words were the lifesaving mantra we used when one of our computers misbehaved: "Call Patricia!"

You could tell she once had been a nun and a teacher. Tall and stern, with non-nonsense short gray hair, Patricia would quiz you about buttons pushed, updates installed and reboots attempted. Then she'd laugh and cheerily fix whatever was wrong before rushing off to answer the next cry for help. A whole lot of people called Patricia, who was no stranger to 60- and 70-hour workweeks.

Patricia makes no claims of blazing trails. But when she entered a doctoral program in computer science at the University of Missouri - Rolla in the mid-1970s, she was one of only three women in the program. When she started work in Notre Dame's Office of Information Technology in 1992, however, women were no longer such a rarity in the field.

But those women weren't Patricia, whose independent streak and penchant for working long hours eventually made the sisterhood an unlikely fit — "I was not living religious life the way it



was intended," she says — and whose knowledge of computers made her a geek before being a geek was fashionable.

To the one-time math major, there is nothing magical about computers, nothing she can't stare down and take care of. They are simply tools, tools that, for instance, took the grunt work out of

Carol Schaal is managing editor of this magazine.

Dark and light, evil and good

As with a lighthouse guiding the University and its supporters through the stormy seas of life, you provide a beacon to help guide the way. I do not need to tell you how difficult it is to be a quiet witness to your divergent constituents. But your winter edition did just that. During this time when many question the Catholic presence at Notre Dame, you quietly illuminated what that presence is and what it should be.

DOUGLAS MARVIN '69
PITTSBURGH, PENNSYLVANIA

The winter issue arrived as I muddled through the meaning of the Tucson shootings. Reading the editor's column, I focused on: "You don't have to save the world or even fix it; just do good in your little corner." To "do good" is, of course, ambiguous. But the phrasing here certainly admits that because evil will always be with us, it is enough to live a good life (and avoid evil). But is it really enough to feed the hungry, for example, without seeking to address the socio-geopolitical causes of endemic hunger in the world? Should we content ourselves with comforting the sorrowful in Tucson, without giving thought to the eliminationist vitriol which has overtaken us?

I have read Kerry Temple's writing for years so I believe his definition of "do good" is more expansive than simply to avoid evil, but it was disconcerting. So imagine my surprise when I turned to the letters and found five letters decrying the University's proposed study of the problems of evil — not only as an expensive waste of time but an actual threat to substitute knowledge for belief. But we already know what happens when we choose belief over knowledge: Urban II, after all, relied on the Biblical report of Joshua commanding the earth to stay firm in the cosmos to reject the knowledge of Galileo. If belief is true, it welcomes inquiry; it is error that fears it. Why not study evil? Maybe we will learn something.

THOMAS P. CARNEY JR. '67
LAKE FOREST, ILLINOIS

Musical cares

Mixed in the middle of what was otherwise one of your finest issues was a very disappointing article on Notre Dame's sacred music program — disappointing in that ND's faculty could be so wrong. To dismiss the music of the St. Louis Jesuits, Gregory Norbert and many others as "pop" music is more than wrong, it is disrespectful of the creativity of fine liturgical musicians. To suggest that people in pews are not singing because

"sacred music" is not heard frequently enough is not just wrong, it shows they did not attend Mass in pre-Vatican II days when that is all congregations heard. And "heard" is the operative word, because back then choirs gave performances rather than leading people in singing.

I have been active in music liturgy for more than 40 years, and I can assure them that the music they call "pop" is the music of truly talented musicians and helps people participate in Mass. There may be a place for chants and many other forms of "sacred music" to be performed by a choir, but they most assuredly won't foster participation nor will it help bring young people back to church.

RICHARD FREMGEN '60
KENT, CONNECTICUT

I was stunned to read the statement of music Professor Margot Fassler that "the music of the Roman Catholic Church is essentially in a crisis." I would like to give you an external assessment. I was raised as an evangelical Protestant and am currently a member of a Unitarian Universalist church choir. Since I began singing, I have envied the sacred music tradition of the Roman Catholic Church. If I go a day without listening to such music, I literally feel as if I'm starving. I think most music historians would agree with me that in the field of sacred music, the Catholic Church has no equal.

If there is a music crisis, it is because current leaders want to be contemporary and program music that sounds like light rock music. The "crisis" can be easily resolved: return to roots and rediscover the music that has moved people for centuries.

RAYMOND YEE
HOFFMAN ESTATES, ILLINOIS

The power of prayer

On reading Chris Kaczor's fine sketch of Ralph McInerney, a reader might ask: "How could one man accomplish so much, of such high quality?" A possible answer: He took seriously Saint Paul's admonition to "put on Christ." The result is that he developed a deep contemplative spirit. He actually did "pray always" — not just in church, but in class, with people, in his office, writing at home, while thinking, speaking, arguing, serving, paying close attention to whomever or whatever was present to him. He was always living in the presence of God. His deepest regret was the abundant evidence that not many others at his beloved university were doing likewise.

JOHN A. GUEGUEN JR. '56, '58M.A.
KIRKWOOD, MISSOURI

The brother, Father Dunne

I commend Patrick Dunne for writing such an insightful article about his brother, Father John Dunne, CSC, who was my favorite professor. I still carry with me some of the themes from his courses, such as the struggle between the desire to live all possible lives as opposed to the desire to integrate all possible lives into one life. Such thoughts and reflections have a timeless quality; they speak to the ongoing spiritual quest he stimulated and encouraged in so many of his students.

BOB ENGLER '64, '68 M.A.
NEWTONVILLE, MASSACHUSETTS

When I lived in Breen-Phillips, Father Dunne's visits to Sunday night Mass were a highlight. He would pace back and forth and let us in on all that his amazing brain was contemplating. When I talk about how hard it is to replicate my Notre Dame Catholic experience, so much has to do with how wonderful it was to experience people like Father Dunne letting us undergrads in on the wonders of their thoughts.

KRIS SANDERS-GENDREAU '87
SAINT PAUL, MINNESOTA

America and us

Robert Schmuhl's "End of the Ride" was an excellent map of where we are as a nation and unfortunately leaves us with what I believe to be the correct conclusion — that the future is "all up to us." I say "unfortunately" because we have migrated to a largely "me-centric" society in which everyone stresses their rights and avoids their responsibilities.

Currently, spin has replaced truth, greed is crushing ethics and the definition of "common good" has changed from programs and services that assist most of our society to the funding of special interest projects that benefit a chosen few. While direct responsibility for this migration lies with the talk show hosts who have their lies go unchallenged, the bankers who invest TARP money in stocks rather than lending to small businesses or the politicians of both parties who are concerned with re-election rather than the common good, we all have a responsibility to make our voices heard beyond changing the politician of one party for the other occasionally.

EDWARD J. DADURA JR. '67
NAPLES, FLORIDA

Bob Schmuhl reports the Tea Party is "worthy of criticism on certain grounds," but he does not back up his statement. What specifically are the grounds that are worthy of criticism? More glaringly inaccurate is the statement that the Tea Party is "largely antigovernment in orientation." The Tea Party Patriots Mission Statement actually calls for government to protect individual liberties. With the exception of Fox News, the liberal media continue to mischaracterize the Tea Party. To reveal the real Tea Party would result in too many common-sense Americans joining them.

TERRI JENNINGS ROHR '84
AUDUBON, PENNSYLVANIA



PHOTOS BY MATT CASHORE '94

Volunteer Patricia McAdams sells a poster-program before a Notre Dame women's basketball game.

the hours and hours of simple computations once required for numerical analysis.

Now the 69-year-old also has another set of tools, tools that make it possible for her to live her current life. That would include an electric wheelchair, a specially equipped van, a hoist at the Rockne pool to get her into the water and her ever-present Blackberry.

In her let's-get-this-fixed-and-move-on voice she practically dismisses her life-changing accident, a January 2008 event she doesn't even remember. "It never struck me as something like 'woe is me — this is the end of my life,'" she says.

It almost was. Heading back to campus after attending a ND women's basketball game in West Virginia, Patricia pulled to the shoulder of an icy I-69 near Fort Wayne, where an accident had just occurred. As she stood between her car and a guardrail, another car trying to avoid the previous accident struck her car. Police reported that Patricia's car then hit her, throwing her over the guardrail.

If you ask, she'll list the fallout: broken pelvis, broken clavicle, six broken ribs, a crushed left arm.

And one last thing. "It was more than two weeks after the accident when I finally realized that I had no legs."

Her response to the trauma her body underwent is one of gratitude for the outpouring of support from the Notre Dame community — and for what a team of doctors did *not* do. "They almost amputated my left arm," she says. Instead, they put the crushed limb together with "metal plates, wires and screws," which means she can use the hand controls to drive her van and can lift herself from the driver's seat to her wheelchair.

Still, "It takes me so much longer to do what other people might consider simple things," she says.

So while Patricia no longer stands tall, don't think for a minute that she can't stare down a problem, computer or otherwise.

One she loves to tackle is her service as volunteer coordinator for the Notre Dame women's basketball team, often putting in seven hours on game days alone.

"My interest in basketball came out of teaching at Immaculata," where she also earned her bachelor's degree, she says. That school's women's team won the national championship in 1972, '73 and '74.

Patricia would like for the Notre Dame women to do as well. And if not the national championship, she'd at least like for the team to beat UConn on a regular basis. □

ND's deep freeze

How students beat the cold — or embrace it

BY JORDAN GAMBLE '11

My Californian roommate — the same one who skipped around in sleet her freshman year, so excited finally to see winter precipitation — now starts most winter mornings by checking the temperatures on her laptop, peeking out the window with a resigned sigh, then pulling on boots, gloves and a hat.

But even she caught the snow-day crazies this February, when Notre Dame canceled classes for the first time since 2000.

The rumbles started on a Tuesday night. Students from winter-weather states experienced in this sort of thing led the way with their snow-day voodoo: flushing ice cubes down the toilet, sticking spoons under their pillows, wearing pajamas inside-out, and the capstone: waking up before dawn just to find out if you can sleep in.

At 6:33 a.m. on February 2, cell phones buzzed and email inboxes dinged with the news: “This is an ND Alert,” the message said. “Because of dangerous weather conditions, classes have been cancelled and the campus will be closed today.”

After a few more hours of free sleep, the snow day truly began. Tackle football had roughed up the quads by midday. A brave few ventured out on the maybe-frozen surface of Saint Mary’s Lake before Notre Dame Security Police shooed them to safety. Students sledged down the steps of Bond Hall on trays filched after breakfast — both dining halls were open for regular hours, thanks to a valiant “snow emergency” staff. By late afternoon, piles of wet sweatpants and dripping boots lined dorm hallways and students warmed up by watching TV-show marathons on DVD.

It takes the novelty of a snow day to elicit this kind of schoolkid behavior. The typical student reaction to the South Bend winter includes groans and lots of layers.

When the cold first settles in the waning weeks of the fall semester, it’s a Christmas



Jumping into St. Joseph's Lake on campus is a dubious idea even in summer, but about 250 students stripped down and dived in for the second annual Polar Bear Plunge this February. The temperature was a balmy 34 degrees.

GRANT TOBIN/THE OBSERVER

decoration: comfortable, cheerful, another part of Notre Dame’s postcard aesthetic. In January, the permacloud seems to stretch as far as the expanse of time before spring break.

At least the football schedule chops autumn into palatable chunks, with each week punctuated by either a day of campus pagentry or an afternoon on the futon, catching the game on TV. But this comfortable

rhythm doesn’t carry into the spring semester, when events are smaller and sporadic. A Legends concert here, a dorm dance there. Basketball and hockey games in the JACC can be raucous, but they’re over and done in a couple hours.

Football season parades our community spirit on broadcast television, but winter leaves us to our own devices. So we get creative.

Jordan Gamble is the spring 2011 intern at this magazine.



Sophomores Jesus Perez and Davis Hayes, clad in summer attire for the annual Siegfried Hall Day of Man, made snow angels in exchange for a \$10 donation to the South Bend Center for the Homeless.



A perfectly timed snowfall added to the spirit of competition for the first I-Domer-Rod race. Most trips across South Quad aren't this exciting.

The Keenan Revue still kicks off “spring” as it has for the last 36 years: mercilessly mocking life under the Dome. Junior Chase Riddle, the 2011 show’s producer, says the original Revue was just a talent show in the dorm’s basement, started because there was nothing else to do in January and February.

The talent angle was eventually dropped. “Turns out Keenan wasn’t as talented as they thought they were,” says director Grayson Duren, a junior. In its place grew a comedy sketch show satirizing the campus dating scene, arbitrary dorm stereotypes and all the usual fodder from the football media circus.

People take their Domer-specific comedy seriously, and tickets are a hot commodity. This year I showed up two hours early at the JACC box office, where the 4,300 free tickets “sold out” in about 10 minutes. Considering about half the student body sees the show, it’s no surprise the Revue’s jokes often enter the campus vernacular by the end of the three-performance run and stick around for the rest of the semester, if not longer.

After nearly 170 rounds of the frozen season at Notre Dame, you’d excuse students for running out of ideas to avoid the cold and just embrace it. Winter’s chill is an asset for campus fundraisers, such as the I-Domer-Rod, inaugurated in 2011 by Sorin, Pangborn, Lyons and Fisher halls, with entry fees going to the Declan Drumm Sullivan Memorial Fund.

Teams of two to six students playing sled dogs pulled student mushers who were trying to stay seated on plastic toboggans. Afternoon flurries made the already-deep snow all the fluffier for the 12 teams competing in the race down South Quad. Pangborn’s Team Cool Runnings won the women’s bracket and The Knott Men of Knott Hall prevailed over opponents who made the mistake of putting their

heaviest teammate on the sled.

Of course, at Notre Dame, things quickly go to extremes. On the annual Day of Man, about 150 men from Siegfried Hall go about their business in flip flops, shorts and a T-shirt. They carry plastic cups to ask for donations to the South Bend Center for the Homeless. A rotation of Ramblers stands 20-minute shifts outside campus crossroads like LaFortune and DeBartolo Hall. For \$10, some will even make you a snow angel.

“It’s Siegfried Hall’s way of standing in solidarity with the homeless who are cold every day,” says sophomore Andrew Ritter, Siegfried’s president.

In 2011, the Day of Man happened to be the coldest day of the school year. Ritter says the wind chill was 17 degrees below zero at 5 a.m., when some men were already outside the dorm talking to news crews. But the severe cold probably worked to their advantage. Ritter says the stunt raised about \$5,000 just from the cup donations on campus, with even more coming from parents, alumni and people who saw the television reports.

The following Saturday, temperatures had climbed into the high 30s when some 250 beachgoers gathered on the shore of Saint Joseph Lake for the Polar Bear Plunge, sponsored by Badin and Dillon halls. Groups of about 20 took turns stripping down to bikinis and swim trunks, psyching themselves up for a quick dip. Each of the philanthropic masochists paid \$5 for the privilege, with the proceeds benefitting the HOPE Initiative, an organization supporting education in Nepal.

So maybe there is something about South Bend’s numbing freeze that makes us want to experience pain — or at least watch others inflict it on each other. The Bengal Bouts boxing tournament, raising money for the

Holy Cross Missions in Bangladesh for the 81st time, is easily the most widely attended charity event of the semester. Sure, most of us know someone fighting in the preliminary rounds, but there’s also the factor of seeing that guy from calculus class wearing gold boxing shorts and whaling on the kid who works at the Starbucks in LaFortune.

“To be honest, a lot of them don’t know the best technique . . . so people just like seeing guys beating the crap out of each other,” admits co-president Dominic Golab, a senior. “In the prelims you see a lot of brawls.” By the finals, when the fights are more evenly matched, attendance reaches 3,000 as people turn out to cheer on their friends and support the cause — but also to appreciate the sport.

Even so, few Domers are content to be spectators. Jennie Phillips, the assistant director of campus fitness facilities for RecSports, says cold weather and New Year’s resolutions push many to the gyms. In the fall, Notre Dame’s 8,300 undergrads and 3,300 graduate students are either wrapped up in start-of-school activities or stay outside to exercise,



The Keenan Revue satirizes hot-button campus issues even in the freeze of winter.



MATT CASHORE '94

BATTLING WINTER OLD DRUMS

Gray moods match gray skies for a reason. Wendy Settle, the staff psychologist at Notre Dame's University Counseling Center (UCC), says maybe 1 to 2 percent of campus suffers from Seasonal Affective Disorder, a type of depression often found in the cloudy parts of middle latitudes where sunlight hours decrease in the winter. Symptoms include irritability, fatigue and an increased craving for fattening simple carbohydrates like sugary sodas, juices, candies and cakes.

"When the days are shorter, especially in the morning, you're not getting the light you need," Settle says. Early morning sunlight sends signals to the pineal gland that shuts off melatonin, a chemical that induces sleepiness.

While actual Seasonal Affective Disorder is a real problem, many more suffer from what can best be called the "winter blues," a milder reaction to the lack of sunlight.

When Notre Dame renovated its student health center in 2006, the UCC set up an Inner Resource Room to give students self-help tools to counter stress. The room on the third floor of

Saint Liam's Hall features a massage chair; bio-feedback technology to monitor heart rate; and a light box, a lamp that simulates sunlight.

The light box gets the most attention. It's a tabletop lamp with 10,000 lux light power; so bright it's like sitting on a beach in the middle of the morning. (For comparison, an incandescent bulb generally has only 150 lux.)

It's popular, Settle says, because students can sit in front of it for 30 minutes while doing homework, listening to music or eating, and they can feel real results. Initials fill in nearly every time slot on the sign-up sheet, with about 50 more visitors in February than September, records show.

However, the light box is not a panacea. About 75 to 80 percent of users respond well to light therapy, Settle says. But she adds that it's also important to pursue all-around good health: regular exercise and a diet that emphasizes complex carbs, omega-3, magnesium, vitamin C and — instead of a trip to the vending machine — maybe even some dark chocolate.

— Jordan Gamble

but RecSports recorded almost 53,000 different entries into their facilities in February 2010 — about 18,000 more than the previous September.

Rush hour hits about 3:30 or 4 p.m., Phillips says, although the gym buzz starts in the wee hours and goes late into the evening.

RecSports' indoor intramural competitions are a bit more eclectic in winter, too. Ping-Pong and innertube water polo are popular, but broomball is a senior-class favorite. It's basically hockey, but with tennis shoes instead of skates, a ball instead of a puck, and "broomsticks" with a triangular

rubber mallet on the end. There are no referees for the midnight games, and the required helmets do little to protect the rest of the body from bruise-inducing wipeouts.

RecSports also offers more than 50 fitness classes from indoor cycling and ballet to Zumba. Phillips notes that attendance drops sharply after spring break, when course work heats up and motivation for a beach bod cools. But it's certainly not because the break actually coincides with any return of the warm weather conducive to outdoor exercise. "Spring semester" really is a misnomer. In South Bend, winter clings late into March, as do the displays of winter rebellion.

Every March 27th, North Quad becomes a battlefield for one final bracing event, Zahm Independence Day, a water-balloon fight commemorating the Student Senate's passage in 2007 of a resolution officially recognizing the dorm as "Zahm House."

Residents divide into two teams — Americans (upperclassmen) and Redcoats (freshmen). Tricorn hats are donned, speeches are given and the lunchtime crowd leaving North Dining Hall stares as the mayhem commences and the Americans force the Redcoats back to the steps of Haggar Hall.

"I guess maybe people just love any excuse to chuck water balloons at freshmen," says junior Chris Kratschmer, Zahm's president.

When warm weather does finally come, we students tend to overreact. Anything above 32 degrees and we break out the cargo shorts, flip flops, lacrosse sticks and Frisbees. If the snow melts and sunshine bakes the muddy quads enough, some even lay out a blanket and start their homework.

Indiana being Indiana, these warm snaps are just punking us. More than once I've stowed away my parka, only to pull it out again days later when a new snowstorm rolls in. I've lived in this state my entire life and have seen my share of horrendous winter weather, but South Bend is a whole other monster. Lake-effect snow piles hip-deep. The air can get so snot-freezing cold it hurts to breathe. The land is so flat the wind has no place to go but faster.

Still, surprises sneak through the gloom. Winter nights are the brightest, with the lamplight shimmering off the snow blanket along the quads, bouncing back into the crisp air. Pinkish hues from South Bend and Mishawaka outline the rooftops in all directions.

I first saw that perpetual dawn over South Quad four years ago when my mother had dropped me off for an overnight visit set up through the admissions office. I'd seen cam-

WHEN WINTER HANDS YOU LEMONS

South Bend had already received more than 90 inches of snow by early February, according to the *South Bend Tribune*. At Notre Dame, all that free construction material didn't go to waste.

Forts and igloos popped up outside dorms with varying degrees of architectural soundness. Most were built on the Wednesday, February 2, snow day and had collapsed by the weekend. But a dozen men from Fisher Hall spent a week erecting an 8-foot-tall structure with snow blocks molded from Rubbermaid storage tubs. A plastic tarp, anchored by a second-floor window frame, sheltered the inside. This Fisher Fort was invitation-only. Guests had to enter through freshman Anthony McIver's basement-level window. The fort stood proudly for about two weeks before the 50-degree-highs of a heat wave erased it.

Meanwhile, McGlenn Fields, the flat, open area west of the bookstore, ironically became a magnet for snowboarding enthusiasts. Students built a ramp under the uprights used for club rugby and interhall football games. With no slopes to generate speed, they tied a bungee cord to the goalpost. The first boarder hopped on a snowboard and grabbed the cord while friends pushed him back and let him go, shooting him along a packed-down path under the crossbar, up the ramp and into the air, where he let go of the bungee before landing stylishly in the powder several feet away. Others migrated out to the scene, waiting their turn on a pair of office chairs that had somehow wound up about 100 yards from the nearest building.

— Jordan Gamble

pus the previous August, but that sweltering summer day had nothing on February.

My host, Amy Holt '10, then a freshman in Badin Hall, showed me around: a theology class in O'Shaughnessy, Latin dance aerobics at Rolfs, dinner in South Dining Hall with her friends. She gave me a lot of valuable advice I'm still using today. For instance:

Hockey games are worth the wait in line for free tickets.

Cut through the engineering building on super-cold days.

Invest in a pair of insulating leggings to wear under jeans.

Take all your visitors to the southwest corner window on the 13th floor of the Hesburgh library and watch their jaws drop at the view of the stadium, the Dome and the whole of campus — especially when it's sparkling under a fresh layer of snow.

After a late-night movie — Martin Scorsese's *The Departed*, which has at least two Notre Dame references and therefore garnered a lot of cheering from the packed lecture hall — we did the requisite prospective-student thing and went down to the Grotto.

It wasn't postcard perfect. One of the park



MATT CASHORE '94

benches appeared to have been uprooted by an enthusiastic snowplow. But the Grotto was still and quiet, and though I was freezing, I could pretend I felt warm with all the yellow light emanating from the racks of candles.

It was after midnight on the morning of February 2, 2007, and still a handful of people lined the iron rail in front of the candles, their knees dry on red cushions swept clean of snow, their toes in the slush.

I knelt down and, quite honestly, my first

thought was not to pray but to wonder if people ever caught their scarves on fire when they bent over the candles to set their own in the rack. It was then that I realized I'd decided to come back for four full winters in this place. I was already thinking about the practicalities of a South Bend winter wardrobe.

The snow stood about 2 feet deep, the temperature hovered in the 20s, and I was in love. □

Live from South Bend . . . er, Cairo

INTERVIEW BY JOHN NAGY '00M.A.

The day before former Egyptian President Hosni Mubarak relinquished power and fled Cairo in February, Notre Dame's expert on North African politics and Islam was nowhere to be found.

CNN was on the phone at noon and again at 3 p.m., anticipating Mubarak's resignation via a prepared statement scheduled that night on Egyptian state television. They wanted to line up their newest reliable source, Professor Emad Shahin, for comment on their morning broadcast.

No Shahin. Strange. Since the toppling

of Mubarak, Shahin, the Henry R. Luce assistant professor of religion, conflict and peacebuilding at the Kroc Institute for International Peace Studies, was this winter.

Shahin's star was born when his prescient commentary on the Tunisian revolution for *GlobalPost* indicated that Egypt might well be next. The day he wrote it, thousands of Egyptians were flooding into Tahrir Square and were to occupy it for the next 18 days. And the morning after Mubarak seemed to defy expectations of his ouster by suggesting limited changes to his nation's constitution,

Shahin's mysterious disappearance from campus was explained. He was in Tahrir, still doing interviews, having flown to join in the revolution with his countrymen.

Notre Dame Magazine took its turn with Shahin when he returned to South Bend shortly after Mubarak's departure, as similar anti-regime protests were heating up in

Iran, Bahrain, Libya and Yemen.

leave the country and seek a better life somewhere else. Over the past two decades, Egypt started to experience the phenomenon of "boat people," young people rescuing their life in unsafe boats heading towards Europe. The tragedy is that many lost it on the way, and they kept doing it knowing well that their chances of survival were minimal.

Now the opposite is happening. The youth are determined to stay and rebuild a new Egypt. Expatriates are being called to return and apply their expertise to improving the country. Egypt is becoming like a huge workshop that seeks to keep the spirit and inspiration of this revolution and to build on it to achieve a new political, economic and social revival. This should be the ultimate goal of the pro-democracy revolution.

All of this creates rich and exciting new research material for me as a scholar and for stimulating conversations with my students at Notre Dame.

NDM: Why was it important to you to comment to the media during the revolution?

ES: I wanted to convey several messages. As a scholar who has studied the political dynamics of the region for decades, I wanted to provide English-speaking audiences with an in-depth and objective analysis of what has been going on in Egypt and its implications for the rest of the Arab region.

I also wanted Egyptians who have taken part in this revolution to know that there is a deep appreciation and respect for what they have been doing and wanted to support them in their heroic quest for freedom, dignity and democracy. Finally, I wanted policymakers in the West to know that siding with the region's despots does not provide stability or any protection for their strategic interests. What is more stable in the long run is to support the emergence of free and democratic governments in the region.

NDM: Why did you return to Cairo?

ES: My decision was not pre-planned. I simply could not stay away any longer and



Hours after Mubarak stepped down, Shahin (right) and protester Aly Alah were on PBS host Charlie Rose's broadcast from Cairo.

PHOTOS COURTESY OF CHARLIE ROSE

of Tunisia's dictator weeks before had fixed all Western eyes on the unrest in the Arab world and its simmering focal point, Cairo's Tahrir Square, Shahin had become a media sensation. At the height of the anti-Mubarak protests he was appearing several times a day everywhere from *The New York Times*, Al Jazeera and Canadian TV to NPR's *The Diane Rehm Show*.

Shahin had spoken with journalists before, but never like this. No ND expert with in memory has become the overnight go-to for the international media quite the way

John Nagy is an associate editor of this magazine.

Iran, Bahrain, Libya and Yemen.

NDM: You have become a trusted media resource as a political scholar, an Egyptian and a commentator with clear insights. How is this changing your life and your work?

ES: What happened in Egypt is changing the lives of Egyptians, myself included. For the past few decades, many Egyptians suffered from a feeling of despair and helplessness. An entire generation grew knowing only one president, who has been clinging to power for 30 years. The future was bleak, particularly given the fact that that ousted president had wanted to transfer power to his son. The biggest dream for the youth was to

miss the unfolding of these historic and momentous events. It is one thing to talk and teach about revolutions and another to live and share them firsthand.

My time in Cairo was extremely productive. I went to Tahrir Square every day, talked to the protesters and shared their mo-

claims that Arabs and Muslims are not concerned about democracy and freedom or are not ready for it, and that the Arab and Islamic cultures are incompatible with democracy. The recent events show that the Arabs do want freedom and democracy and are willing to pay with their lives to attain them.

The other misperception readily connects Arabs and Muslims with violence. As you can see in Tunisia and Egypt, the demonstrators were always keen on maintaining a nonviolent nature to the protests, despite the repressive measures of the anti-riot security police. While they were being brutally attacked they kept chanting, "Peaceful, peaceful."

This gave them a high

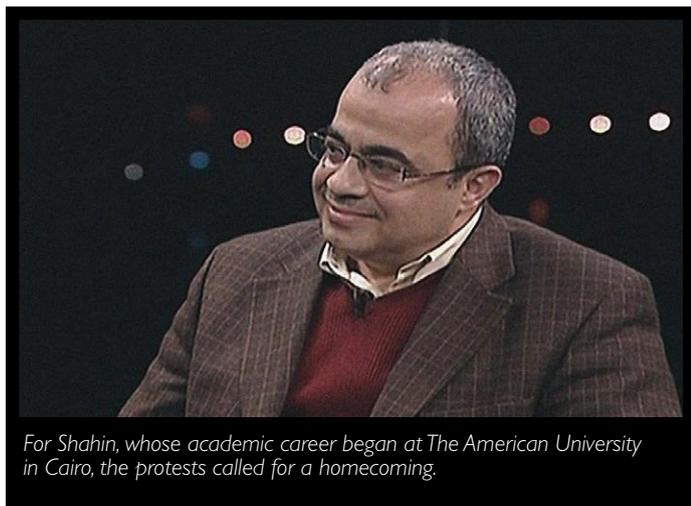
transfer of power. These nonviolent revolutions are great accomplishments and an opportunity to unleash great potential for political, economic, social and cultural growth.

The main losers are the autocrats of the region and their external allies, corrupt elements, and all those who did not want to see the Arab region assume a normal and healthy place in the international community.

NDM: *Should we in the West have seen this coming, and what should we watch for next?*

ES: Unfortunately, the West has backed these authoritarian and repressive regimes for decades; provided them with financial, military and security aid; trained their abhorrent state security forces; and approved, explicitly or implicitly, of their oppressive and corrupt polices. So far, when it comes to democracy and human rights issues, the West has been on the wrong side of history in siding with these autocrats. It was concerned mainly with maintaining stability and preventing change that would affect its strategic interests in the region. It should have been expected that one day the people would rise up and repel this repression. Anyone who appreciates values, and not only interests, should have seen this coming.

As a scholar of the Middle East, I would urge all Americans to pay close attention and urge changes to steer U.S. foreign policy toward the fundamental values of the American people. America should always stand for freedom, democracy and the people's right to self-determination. □



For Shahin, whose academic career began at The American University in Cairo, the protests called for a homecoming.

ments of frustration and joy. I participated in workshops focusing on how to build a new, democratic Egypt. While there, I gave several interviews and wrote some op-ed pieces analyzing the events in Egypt and the Arab world.

NDM: *What misperceptions about Egypt have you encountered in your media work?*

ES: Many pertain to the Arabs and Muslims in general. A common one is what is known as Middle East exceptionalism. It

moral ground over the autocratic regimes and gained them the respect and support of the entire world.

NDM: *Who do you see as winners and losers in this new moment?*

ES: The winners are the people themselves and the youth in particular. People in the Arab world have the right to live in free and democratic systems where there is rule of law, transparency and accountability, respect for private and public freedoms, justice and

A death in the family

A leading philosopher of science, recruited out of his doctoral studies at Belgium's University of Louvain in 1954 by a young Father Ted Hesburgh, CSC, and remembered by colleagues as "one of the giants of Notre Dame," has died. **Father Ernan McMullin**, a native of County Donegal in northwestern Ireland, was a Galileo expert whose hundreds of articles and 14 books on such subjects as the relationship between theology and the cosmos made him, in the words of his friend, colleague and occasional sparring partner, Michael Ruse of Florida State University, "one of the best-known philosophers and historians of science in the past half century."

An intrepid scholar, McMullin demanded the same tireless work ethic of his colleagues in philosophy, the department he chaired from 1965 to 1972. With Hesburgh's blessing, McMullin pursued a major shift in the department's intellectual center. Thomists, once dominant, became a minority on the faculty. "If there is a basic pluralism of respect," McMullin

reflected in the pages of this magazine shortly after stepping down as chair, "a department will neither end up with strict orthodoxy, whether it be that of Thomism or language philosophy, nor will it suffer from constant warring between intradepartmental empires."

McMullin led by example, winning respect and friendship with a charm and erudition that marked his direction of the History and Philosophy of Science program and the Reilly Center for Science, Technology and Values, and saw him elected president of four different professional organizations.

He was equally dedicated and cordial in the classroom. McMullin taught Notre Dame undergraduates for the better part of 40 years and continued to offer graduate seminars until his full retirement in 2003. He twice won the University's Burns Award for graduate instruction, making him one of only two professors so honored to this day.

Father McMullin passed his retirement in St. Paul, Minnesota, and Donegal, where he died on February 8 at age 86.

Psyching kids for physics

BY DON LINCOLN

Subatomic particles moving so fast, they could go around the Earth more than seven times in a single second. Particle accelerators so large that 13 copies of the Notre Dame campus could comfortably fit inside them. Temperatures about five billion times hotter than the center of the sun. These mind-blowers are just some of the things that Notre Dame physics Professor Randy Ruchti describes as he paces in front of a classroom full of wide eyes and rapt attention. You'd expect a professor at a leading

voice occasionally cracks as he asks his questions. Ruchti believes that the best way to turn kids on to science and research is to introduce them to it early in a big and impressive way. And, like many people with a mission, he didn't just believe. He's done something about it.

In 1999, the National Science Foundation decided to fund a proposal to match high school teachers with university-based physics researchers across the United States. The goal was to improve the public visibility of the Large Hadron Collider, which would power up near Geneva, Switzerland, in 2008 as the world's largest particle accelerator. The educational partnership between researchers and teachers included Ruchti's vision of heavy student involvement and became known as QuarkNet.

QuarkNet is essentially a pyramid scheme, albeit one designed to funnel knowledge to teenagers, rather than money to Bernie Madoff.

summer research appointment to work with a physicist at a local university. They learn some particle physics and survey what curriculum is already available to bring to their classroom. When they return to their classrooms in the autumn, they recruit another 10 teachers to join them the following summer. During the year they start to sprinkle particle physics into their classes.

In year two, the new teachers participate in a three-week, investigation-based summer training institute. By year three, they have many options available, from bringing cosmic ray detectors into their school for students to explore, to giving the students access to data taken at the Large Hadron Collider. Students may pursue paid summer internships to do research with the professors. By this time, the teachers have sufficiently mastered particle physics to be able to turn their considerable education skills toward generating additional curriculum, which is then disseminated to

Learn more about QuarkNet at quarknet.fnal.gov.



STEVE TOEPF

In 2008, Ruchti and QuarkNet students tested plastic scintillator, a technology used to detect ionizing radiation.

Today about 50 QuarkNet centers are located at universities spread across the country. Each one is led by at least one senior researcher who works with a group of roughly a dozen local high school physics teachers. Since each teacher has more than 100 students, QuarkNet winds up reaching as many as 100,000 students each year. Over the project's history, an estimated one million kids have learned from world-class scientists about protons, neutrinos, the enigmatic Higgs boson and how particle accelerators might actually create the dark matter that governs the motion of the galaxies as they twirl throughout the cosmos.

"As a scientific researcher, you never know when you are going to hit something big in an experiment. QuarkNet itself has been an experiment, partnering traditional university researchers with nontraditional

other QuarkNet centers.

Ruchti is by no means the only person involved in running QuarkNet. The project now has five principal investigators and half a dozen project staff. The U.S. Department of Energy joined the National Science Foundation in funding the project, which has an annual budget of \$1.6 million. Notre Dame hosts the administrative center for the NSF funding and four of the principal investigators are or have been ND faculty.

While the raw numbers of QuarkNet's successes are impressive, the experience is a more personal one for most of the university mentors — including me. Each of us is passionate about science and about giving kids exposure to the kinds of frontier research that drives us. For many years, I was the QuarkNet mentor in Fermilab, America's foremost national laboratory dedicated to particle physics. I would meet with my group of teachers from the Chicago area and share all the insider scuttlebutt on what was going on in particle physics research. We developed educational materials they could take back to their classrooms. Occasionally, I would go to a high school and talk directly with students.

The most satisfying experiences occurred when I invited the students to work in my laboratory in the summer. These kids were amazingly bright and incredibly enthusiastic. Depending on their skills and interests, I would have them testing electronics, programming or even analyzing data.

particle physics research institution to talk about these ideas with his graduate students, but his audience today is much younger. Some are too young to drive and one lad's

researchers, who are high school teachers and students," Ruchti reflects. "Would it work? Beyond my wildest dreams — and I have these often. Most particle physics research groups in the country have been significantly impacted by QuarkNet, and we can't keep interested teachers and students away. The partnership is here to stay."

Getting a QuarkNet center up and running takes three years. In year one, two high school physics teachers receive an eight-week

Don Lincoln is a senior researcher at Fermi National Accelerator Laboratory and an adjunct professor at Notre Dame. He is a former QuarkNet mentor and author of two books about particle physics for the public, including his recent *The Quantum Frontier: The Large Hadron Collider, which has now been translated into three languages.*

'To infinity and beyond!'

Those in the field of particle physics study some of the deepest and oldest mysteries, which have perplexed humankind for millennia. When they couple it with its cousin discipline of cosmology, scientists are able to make real progress on eternal questions. What are the ultimate building blocks of which everything is made? How did the universe come into existence, and what will be its fate?

Over the last century, scientists have discovered atoms, only to find out that they were made of smaller objects still. The smallest objects known are the quarks that form the compact nucleus of atoms, and the leptons, the most familiar of which is the electron that swirls around the nucleus much in the way that planets orbit the sun. Of course, it is possible that smaller building blocks exist. It could be that a current QuarkNet student will be the one to discover the next layer in the subatomic onion.

— Don Lincoln

One Chicago area student, Paul Bierdz, worked with me on a study of particle collisions that were producing a pair of bottom quarks. I had a hunch that this might be a promising class of collisions in which to find new physics. Bierdz, then between his junior and senior year of high school, showed me some plots he was making and said, "This doesn't look right to me." Sure enough, he had found a bug in our analysis code that would have invalidated the result. It took two weeks for us to recover, and we senior researchers were grateful for the observation.

Bierdz and I have kept in touch, and he is now a graduate student in physics at the University of Michigan. He speaks highly of that summer. "The QuarkNet program was meant to give young, aspiring scientists a chance to explore the limits of human knowledge and know which frontier they'll explore. I am thankful for having taken part in the unique experience."

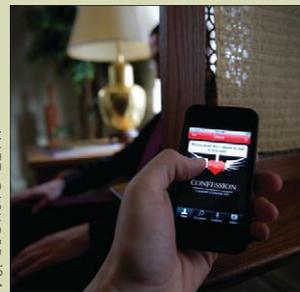
Other protégés of mine have gone on to graduate school in astrophysics at other noteworthy universities. My experience is quite common. Many QuarkNet students have pursued graduate study, with one of the first just about to complete her Ph.D. in mathematics. The opportunity to interact with inquisitive young minds is a driving motivation for the researcher mentors and certainly is one of our chief rewards.

The future of particle physics is bright. The Large Hadron Collider is expected to run for the next two decades. The QuarkNet generation will be able to explore an entirely new frontier. Program spokesperson Marjorie Bardeen, Fermilab's education office manager, has high hopes. "Being part of QuarkNet means being part of the particle physics research community. This is heady stuff for high school teachers and students alike. As the field moves into an exciting era of new discoveries, it is particularly satisfying to bring a new generation of physicists along." □

Preparing to make a good confession? **SEEN & HEARD**

Yeah, there's an app for that now, too, and it's got a strong thread of Notre

Dame DNA inside it. Ryan Kreager, a doctoral candidate in psychology, is one of the three self-described "Catholic geeks" who developed "Confession: A Roman Catholic App" for Apple's iPad, iPhone and iPod Touch. For a cool buck ninety-nine at iTunes' App Store, penitents can download and personalize the sacramental



MATT CASHORE '94

resource, which features an examination of conscience written by Father Dan Scheidt '91, the pastor of Queen of Peace Catholic Church in Mishawaka. It's one of iTunes' best sellers so far this year. Kreager and his partners garnered some extra buzz after receiving an imprimatur — an official clean bill of doctrinal health — from Fort Wayne-South Bend Bishop Kevin Rhoades, a distinction thought to be unprecedented for the text of a piece of mobile-device application software. Late-night comedians roasted the concept and some commentators mistakenly suggested that the Church had approved virtual confessions, prompting a Vatican clarification that the app is only a preparation aid and not a substitute for the sacrament. Kreager and company wholeheartedly agree and Father Scheidt says parishioners have already used the app inside his confessional. . . .

Notre Dame is one of the most selective schools in the country, but Admissions has nothing on the Office of the President when it comes to granting filmmakers permission to shoot a major motion picture on campus. Only *Knute Rockne, All-American* (1940) and *Rudy* (1993) had made the cut — until this year. Producers are raising money, and they hope to begin filming the story of Haley Scott DeMaria '95, the Irish swimmer who overcame the life-threatening injuries she sustained when the team bus slid off the icy Indiana Toll Road on January 24, 1992, en route home from a meet near Chicago. Two teammates, fellow freshmen Meghan Beeler and Colleen Hipp, died that night. But the young sprinter survived the accident and the grueling rehabilitation of her body, inspiring everyone from her doctors and classmates to former football coach Lou Holtz. The tentatively titled *Two Miles from Home* will tell the story of DeMaria's determined return to her studies and her sport. . . .

It was back to school last fall for Terrence "The Relentless" Rogers '79, who enrolled in the Law School's graduate LL.M. program for international human rights, but that's not why Rogers was all over the news. Beyond his studies, the 55-year-old from Lancaster, Pennsylvania, had two other goals in mind — winning the Bengal Bouts title that had thrice eluded him as a transfer student in the late 1970s and



DAN JACOBS '11

breaking the famed boxing tournament's \$100,000 record take on behalf of the Congregation of Holy Cross' work in Bangladesh. Rogers lost his preliminary-round fight in the 167 lb. weight class by unanimous decision to senior David "Mountain Man" Gray, ending that dream, but at press time the tournament still had a fighting chance at a six-figure gift for the missions. "Apparently I moved a lot of people, which is not something I expected to do," Rogers says of the supportive crowd and the congratulations he received from all corners of campus after the fight. "I had expected that some people would be interested in the outcome of the competition, especially because of my age, but everyone seems genuinely happy for me for simply getting into the ring and putting up a competitive battle." . . .

Gold looks pretty good on day-glo pink. So say the members of the Notre Dame Synchronized Skating Team, who



BOB GOLDMAN

Transfer-mation: What it's like to transfer to Notre Dame

BY AMANDA GRAY '12

Jack Heinrich has a legacy story at Notre Dame — a legacy of transfer students.

“My aunt transferred in, and so did my grandfather,” the junior says. “All the members of my family who went here transferred.”

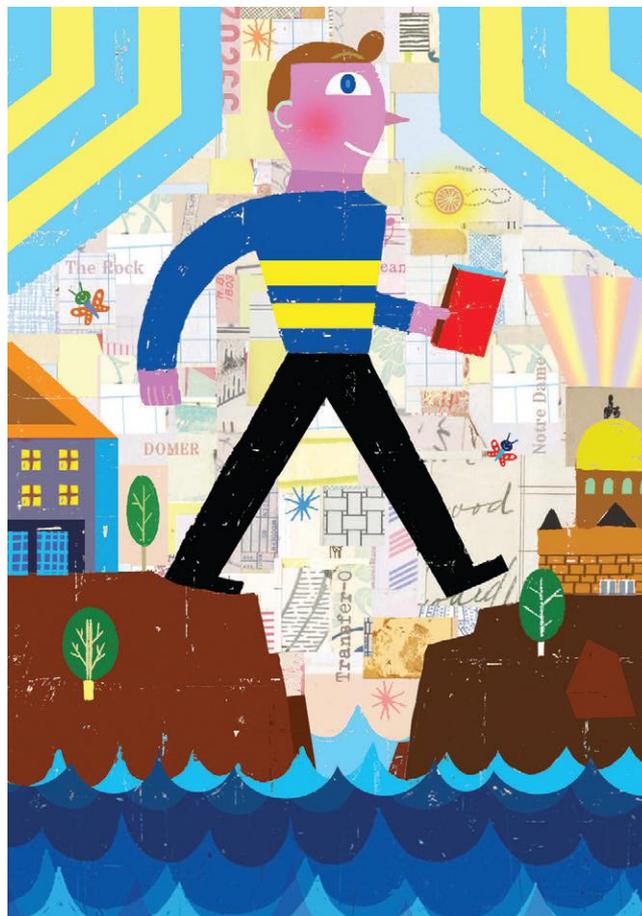
Heinrich was at Philmont, a Boy Scout High Adventure camp in northern New Mexico, in the summer of 2009, when he received a note in the mail from his parents. It was brief: “Big envelope from Notre Dame.” That served as confirmation of his acceptance into the University. So he left behind a partial scholarship at the College of the Holy Cross in Worcester, Massachusetts, and now he studies economics, works at Café de Grasta in Grace Hall and boxes in the Bengal Bouts.

Heinrich, who says he “got the small letter” the first time he applied to Notre Dame, is one of many students on campus who don’t spend four years under the Dome. Some 400 transfer students walk among the University’s 8,500 undergraduates, according to Erin Camilleri '97, '01M.Div. and the Office of Strategic Planning and Institutional Research.

Camilleri, the transfer coordinator in the Office of Undergraduate Admissions, says she is proud of how passionate and hard-working the transfer students are.

“It’s a great day when I get to pick up the phone and tell someone they’ve been admitted to the University of Notre Dame,” she says. “I can only imagine how excited these kids are.”

On average, admissions receives 400 to 600 transfer applications for the fall semester and around 60 for the spring. Camilleri says the number of applicants has declined over the last 10 years, but the quality keeps improving. Today the average GPA of incoming students is 3.7.



Students apply from schools all over the country, but Camilleri sees applicants from about 10 institutions on a regular basis: from Indiana University, Purdue, Boston College, Marquette, Loyola University Chicago and Villanova to Holy Cross and Saint Mary’s colleges across the road. The reasons students transfer vary as much as the schools they come from, she says.

While most arrive as first semester sophomores, senior Audrey Sui came as a junior. “I loved Saint Louis University, and I had a great time,” she says. “But I wanted to go to a school with a better economics program.” She didn’t know much about Notre Dame but says it took only one campus visit for her to fall in love.

“The most stressful part of transferring was picking classes,” Sui says. A day before her registration deadline, someone tipped her to get professor and course reviews from NDToday.com, a community-based website created by students in 1999. “I got really lucky.”

Transfer students get their first taste of campus life at Transfer Orientation, often called Transfer-O. The fall semester’s session runs for four days starting the Thursday before classes begin and goes a little more in-depth than the spring session. Eight to 10 transfer veterans return early to campus to lead the newbies through their first few days, forming “families” made up of an older “mom” and “dad” and their new-transfer “children.” While these groups are only official during orientation, the friendships often last through graduation.

Senior Jackie Merola transferred from the University of North Carolina at Chapel Hill in 2008 and served as Transfer-O commissioner last autumn. She says the transfers refer to themselves

as Transfer Nation. “The whole transfer culture made me want to give back to students who were going through a similar experience,” she says. “Transfers, in a way, have a greater appreciation of what’s so great about Notre Dame” because they have something to compare it to.

They also never really lose the “transfer” modifier — it’s a part of their Notre Dame identity.

You always have a transfer group of friends, Heinrich says.

Sui agrees. “It’s kind of like being a freshman twice.”

Unlike freshmen, however, transfers face a housing concern because they aren’t guaranteed on-campus placements. Some

turn to off-campus houses and apartments. Inevitably, one becomes a gathering point they'll call Transfer House.

Merola considers herself lucky to have received a high lottery number and have been placed in Walsh Hall. "I was put into a quint [a five-person room]. I was forced to make friends."

She participates on hall sports teams, attends Walsh's Mass and works in the Rock as a weight-room and front-desk attendant.

"The dorms foster a sense of community. At my old school, my dorm had 900 people in it. You didn't even know your neighbors," Merola says. Walsh holds about 190 students, and, she says, "Everyone knows each other here."

At least one transfer alumnus can relate to these experiences. "I do not recall any problems in acclimating to campus, but unfortunately I never lived in a residence hall," says Thomas G. Burish '72. When he moved to South Bend in 1969, Burish shared a basement in a house on Angela Boulevard with three law students. "We became good friends, and I decided to remain with them."

Few current Domers know this about their provost, but ask any transfer student and they'll explain with pride that two of Notre Dame's three top administrators — Burish and University President Rev. John I. Jenkins, CSC, '76 — transferred in to Notre Dame. They know because both men make a habit of speaking at Transfer-O.

Burish didn't apply to any other colleges when he decided to transfer from a small school near Green Bay, Wisconsin, that no longer exists. "I thought if you were doing adequately in high school or as a college freshman, it was easy to transfer. I was, in spite of my ignorance about how the admissions process worked, fortunate enough to get into Notre Dame."

At Notre Dame, he majored in psychology after a professor piqued his interest in the subject.

"One of my fondest memories — and life-changing experiences — was doing research with Professor Thomas Whitman, who continues today to be a superb professor in the psychology department," he says.

Outside of the classroom, he made many friendships. Now, as provost, Burish sees today's transfer students as a strong group of individuals.

"The transfer student community is comprised of a talented, diverse group of students who know what another college is like firsthand, who are especially eager to come to Notre Dame for a variety of reasons, and who immediately appreciate how Notre Dame differs from other colleges," he says. "It is sometimes said that people who convert from one religion to another are among their chosen religion's strongest supporters. I have often seen the same characteristic in transfer students regarding Notre Dame." □

SEEN & HEARD

performed their program in eye-catching outfits to songs from the rock musical *Hair* and took the gold medal in Minneapolis on February 5 at one of their sport's most prestigious events, the Midwestern Synchronized Skating Championships. The accomplishment was a first for the club team, founded in 1997 and coached by Tracey Mulherin '02. . . . **House Speaker John Boehner** showcased his support for school choice legislation and Catholic schools in particular through his first-ever list of invited guests to President Barack Obama's 2011 State of the Union Address. Sitting near Washington D.C.'s Cardinal Donald Wuerl and D.C. Parents for School Choice executive director Virginia Walden Ford in the House chamber that night were John P. Kelly, a first-year teacher in ND's Alliance for Catholic Education master's program, and Mike Thomasian '09M.Ed., a graduate of ACE's Mary Ann Remick Leadership Program. . . . **Scissor lifts are gone for good** at the football team's LaBar Practice Complex. While Notre Dame and the state of Indiana continue their separate investigations into the lift collapse that killed junior Declan Sullivan, a student videographer, during afternoon practice on October 27, the University announced it was installing a remote-controlled video system in time for spring practices, which began March 23. Four pole-mounted cameras will capture footage for review at the Guglielmino Athletics Complex. Videographers will also work from LaBar's permanent towers. . . . **The oldest band in the land** has now officially entered the ranks of its best. During the home football game against Air Force on October 8, the Marching Band will receive the 2011 Sudler Trophy, a now-biennial honor presented by the John Philip Sousa Foundation to recognize "collegiate marching bands of particular excellence that have made outstanding contributions to the American way of life." No band may win the honor twice; Notre Dame's is the 28th marching band to receive the 22.5-inch-tall trophy — a bronze drum major elevated above a football stadium atop a marble base. It will be displayed for two years at Ricci Band Rehearsal Hall. . . . **Carolina Panthers starting quarterback** Jimmy



MATT CASHORE '94

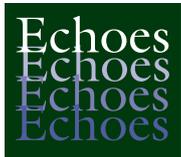
Clausen rejoined the senior class in January with the goal of walking with them in May. Clausen, a sociology major who entered the NFL draft in 2010 after three years leading the Fighting Irish under former head coach Charlie Weis '78, has said he promised himself and his parents he would finish his Notre Dame degree and that the anticipated pro

football lockout made this spring an attractive time to do it. . . . **Soccer magician Melissa Henderson**, whose 17 goals and 11 assists helped propel the women's team to the national title in December, has received the Honda Sports Award as the nation's top collegiate women's soccer player. The award puts the All-America junior forward in the voting later this spring for the Honda-Broderick Cup, honoring the Collegiate Woman Athlete of the Year from among candidates representing 12 NCAA-sanctioned sports. . . . **The forbidden underground tunnels** that deliver precious, life-giving steam heat most everywhere on campus also contain Al Capone's riches, Amelia Earhart's Lockheed Electra 10E and Jimmy Hoffa's tomb and lead all the way to Dublin and the Lost City of Atlantis — or so one might think, given their siren allure to generations of Domers. But sophomore commentator Suzanna Pratt of *The Observer* has demystified the tunnels for all time



MATT CASHORE '94

in a tart, 400-word essay and photo gallery that appears on the student newspaper's online multimedia page at ndsmcobserver.com/multimedia/underground-the-tunnels-of-notre-dame-1.1964424. "The passageways are narrow and the ceilings are low. There is only enough room to walk single file," Pratt warned freshmen who complain about walking in the South Bend winter. "Unless you enjoy arriving to class covered in sweat and grime, the tunnels are not your friend. It is hot and gross down there." □



... a look back at campus past ...

The Collegiate Jazz Festival: Kind of Blue (and Gold)

BY ANTHONY MONTA

I'm standing in the LaFortune Student Center in that reverberant hall underneath the windows of the old ballroom in late January, when everyone and everything on campus is buttoned up against the cold.

In walks Sy Doan '10, student programmer of the Collegiate Jazz Festival (CJF), who has all the professional poise of a well-suited jazzier in New York City. Doan is a young guy, but it's as if the whole 52-year history of the festival just walked up to me and put out its hand.

The CJF is the oldest festival of its kind in the country and started on a similar gray day. In the late 1950s, a student named Tom Cahill '59, feeling the blues falling around his fellow Irish, hit on the idea that maybe what the campus needed at that time of year was some new energetic music, some green burst of spontaneity. Maybe some jazz, new jazz by students, maybe a competition.

This was a radical idea. There was no jazz program at Notre Dame at the time. There weren't full-fledged college jazz festivals anywhere. Jazz on college campuses was a rare bird. In staging a festival like this, Notre Dame would be far out in front of the rest of the nation, an innovator, a risk-taker in the Midwest.

This was also at a time when America's

Anthony Monta serves as the assistant director for academics at Notre Dame's Nanovic Institute for European Studies. Before coming to ND in 2007, he worked in higher education administration in Louisiana and has played jazz in New Orleans.



MATT CASHORE '94

The 2011 festival kicked off with the Notre Dame Jazz Band I and an appearance by the Voices of Faith Gospel Choir.

cultural balance was felt to be especially precarious. It was 1959, the Civil Rights Movement was in full swing, the Cold War was getting hot. The elegant sophistication of swing was about to be displaced by the urgent new rhythm of rock 'n' roll. Serious young musicians like Ornette Coleman, John Coltrane, Miles Davis and Dave Brubeck were charting radically new directions in melody and rhythm, and they weren't just playing around. They were issuing clarion calls and starting maiden voyages that would sail in new, unfamiliar directions.

Notre Dame opened its ears at precisely this moment. The idea of an integrated collegiate jazz festival spread like wildfire. Cahill and Bill Graham '59, the student body vice president, took the South Shore train to Chicago, pitched the idea to the influential editor of *DownBeat* magazine, and suddenly found enthusiastic external connections, attracting to their Board of Advisers the likes of Leonard Bernstein, Benny Goodman, Stan Kenton and Duke Ellington. Such manufacturers as Selmer, LeBlanc and Zildjian gave top-of-the-line instruments as prizes. Winners were offered high-class gigs at top jazz clubs like The Blue Note in Chicago and had their performances pressed into vinyl. Winners even went on U.S. State Department tours of Europe.

Seizing the opportunity, jazz ensembles formed in colleges nationwide and applied en masse. In a few short years, the CJF at Notre Dame was a national phenomenon.

Judges lined up to participate and represented a Who's Who of the jazz world: Bill Evans, Cannonball Adderley, Herbie Hancock, Dee Dee Bridgewater, Ray Brown, Quincy Jones, Roberta Flack, Wynton Marsalis. The list goes on and on. Just meeting them would be any jazz fan's dream — but to organize an entire festival with them, to hang out with them, to play with them?

"It gets interesting," Doan, a piano player, says with a cool smile. "At a lot of music clinics, judges tell you a lot of technical

Judges' jam: Jimmy Heath on the sax, 1985.



UNIVERSITY OF NOTRE DAME ARCHIVES



MATT CASHORE '94

and listening to musicians who do it well is like listening to where life itself comes from, moving in and out of being in one creative, interpersonal act.

Dwyer, Doan and all jazz musicians love this challenge. “You’re on the creative edge at every moment, and you can fall off.” Fall where? Into selfishness. Banality. Awkward silence. “Listeners can tell,” says Doan, and Dwyer leans in for emphasis. “The key is listening,” even for improvisers as skilled as the judges who come to Notre Dame.

What is so valuable about the CJF is that students can listen extensively not only to each other but to such seasoned professionals as Gene Bertocini '59 and Jeff Clayton, a saxophonist who has played with Ella

obscure or musicological. Doan nods vigorously and says he could talk all day about where jazz is headed. “It’s not some separate genre anymore,” he explains. “People are covering Radiohead tunes, playing on all kinds of records from rap and funk to contemporary R&B and ambient music. Jazz has always done this — think of all those Broadway tunes that became jazz standards. We’re at our best when we expand the boundaries of what is jazz.”

We look at the dining room around us, packed like a hothouse with students and faculty in every subject area, from nearly every state in the country and beyond. The same channel is on the television, but the sound is off. Dozens of students are listening to their iPods in personal silence.

Doan is saying “What we need is more

See *Big Noise from Notre Dame* (Notre Dame Press) by Joseph Kuhn Carey '79 for a splendid history of the festival up to 1985. All past festival programs are online at archives.nd.edu/research/texts/cjffprograms.html.

things, like what saxophone mouthpieces they use, how you can substitute one chord for another, and so on, but at Notre Dame, the education is holistic. They get into the zen of jazz. That’s what sets our clinicians apart.”

After a few minutes, we’re joined by Larry Dwyer '66, director of Jazz Studies at Notre Dame and two-time winner at the CJF for Best Trombonist. He listens to what Doan is saying, waiting to leap in. He begins a chain of anecdotes about what it’s like to be a student jamming with world-famous jazz masters. “Terrifying,” he says grinning. “I was once asked to play piano with the judges at their after-hours jam. They took a quick poll of what tunes to play.” Then he shrugs. That was it. Did they agree on a key to play them in? An order for soloists? “No,” says Dwyer. “That was the whole rehearsal.”

The experience of making complex, enjoyable music is exhilarating because of this risk. Learning how to deal with it, right in the moment, when your participation is vital and everyone is looking at you, is a challenge. Dwyer recounts his experience of playing at the CJF with trumpet legend Clark Terry. “Oh man, on one tune, it was a blues, he’d come up with a little background melody, which I’d then harmonize on my trombone.” Simple enough, I say, feigning nonchalance. Dwyer smiles. “Every 12 bars, at a fast tempo, he’d come up with a new one.” This kind of informed and inexhaustible creativity is the essence of jazz,

Fitzgerald and Stevie Wonder. “We share as much as we can,” Clayton often says. Judges give advice to students immediately after students perform, going into great detail for 30 minutes and covering everything from tone, precision, balance, dynamics, improvisation and rhythmic feel.

I venture the idea that it all sounds rather technical. Does this mean the CJF is music for musicians only? There is a pause. Doan looks at me like I’ve started a solo in the wrong key. “It’s so accessible!” he exclaims, surprised. “Everybody should be able to relate to it and have fun. . . . The students in the audience see their peers giving their all, playing with a lot of energy and passion. It’s not that different from an athletic event. I think that’s why the CJF sells out every year.”

The festival’s reach is also international. This year, the University of Western Ontario is stepping up, and who will come next? And from where? “It’s always evolving,” Dwyer says with admiration. “And the judges love it because it’s student-run, which gives it a spontaneity, joy and freedom they don’t find at other places.”

The music can hardly be said to be



Dave Holland and Butch Miles playing bass and drums at the 1985 festival.

UNIVERSITY OF NOTRE DAME ARCHIVES

exposure.” What about pick-up jazz throughout the year? The way things used to be after hours at famous jazz clubs like Minton’s? Doan picks up the idea and nods. “I’d like to organize something in the basement of LaFortune.” Dwyer, who has been around, smiles and talks about local players. I suggest the ground floor of Washington Hall, with windows open when the leaves are green.

The ideas are just warming up, but we have to go. Soon enough, the outside temperature will rise as it always does, a few birds will return to the trees, and the Collegiate Jazz Festival jazzers, playing melodies yet unheard, will presage the springtime chorus. □

BY JOHN MONCZUNSKI



©ISTOCKPHOTO.COM

THE POWER OF WIND

A mini wind farm is about to sprout in White Field on the north edge of the ND campus this spring — if it hasn't already. A couple of 30-foot rotor blades spinning on two 54-foot-high stands will generate about 50 kilowatts of power once the wind turbines go online.

"We are not going to light up the campus," says Professor Thomas Corke, director of Notre Dame's Institute for Flow Physics and Control (FlowPAC), "but what we make, the University can have." The wind-generated electricity will be enough for about six houses, or 1/40th the power demand of the wind tunnels that are housed in FlowPAC's White Field lab.

The turbines are being built to test rotor designs that incorporate devices known as "plasma flow actuators." These high-tech gizmos, which look like a swatch of duct tape on the rotor blade,

ionize the surrounding air. This alters the blade's aerodynamics, which, in turn, should increase the turbine's efficiency.

In fact, Corke and his ND colleague, Professor Robert Nelson '64, '66M.S., have run computer simulations that show a potential 20 percent increase in efficiency from the plasma flow actuators.

"It turns out that the single feature that determines the cost of a wind turbine is the weight of the rotor," Corke notes. "So the larger you make them, the more power they generate, but the heavier and consequently more expensive they become."

Plasma flow control, however, offers a handy solution to the problem. Acting like virtual flaps on a wing, the actuators modify air flow across the turbine blade. The increased efficiency allows for a smaller, lighter and, therefore, less expensive turbine.

"Simply by reducing the diameter, we reduce the weight and the cost," Corke says.

The actuators also have the potential to extend the life of the turbine. By reducing the effects of wind gusts, they lessen the aerodynamic forces that, left unchecked, can cause metal fatigue and cracks in the rotor blade.

The beauty of Corke and Nelson's plasma actuators is that the "duct tape swatches" could easily be retrofitted onto existing wind turbines. In fact, Sorian, a start-up company headquartered at Innovation Park adjacent to campus, has partnered with Notre Dame to further develop and market the technology.

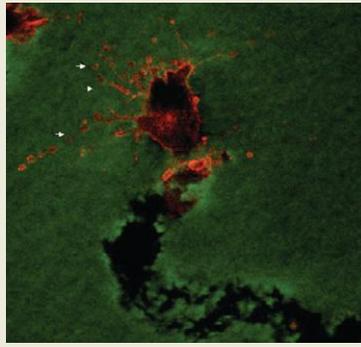
In addition to retrofit devices, Corke, Nelson and their colleagues are developing novel rotor designs that incorporate plasma flow control. For example, instead of the familiar blades, the new rotors might use cylinders.

"It takes some effort to convince people to try shapes that are aerodynamically bad, in and of themselves, but better once we add plasma flow control. This kind of outside-the-aerodynamic-box thinking is something we've been pushing for years," Corke says.

Wind power accounts for about 1.5 percent of the electricity produced in the United States. By way of comparison, 33 percent of the power consumed in Germany, Spain and Denmark comes from wind.

Corke and Nelson estimate that if the United States produced 20 percent of its power from wind, as the Department of Energy proposes, and if the new turbines incorporated plasma flow control, the number of new wind turbines needed could be reduced by 50,000, saving the nation up to \$15 billion.

Micrograph of tumor cell (red) invading matrix (green). Note microvesicles at invasive front (arrows).



JAMES CLANCY (D'SOUZA-SCHOREY LAB)

FIGHTING OVARIAN CANCER

Currently, there is no reliable non-invasive test for ovarian cancer, but Notre Dame's Crislyn D'Souza-Schorey hopes her work may one day change that, and perhaps even lead to a treatment. About a year ago the Notre Dame associate professor of biological sciences and her colleagues identified a class of tiny saclike structures filled with a certain mix of proteins and nucleic acids that are released by a wide spectrum of tumor cell types, including ovarian cancer cells.

Significantly, the formation and release of these sacs seems to be a key step in the cancer's invasion of healthy tissue. These "microvesicles" are filled with protease molecules able to degrade the matrix surrounding the tumor, creating a path of least resistance for the cancer cells. "We believe these sacs also may be able to fuse with other cells in the tumor microenvironment, triggering alterations that enable metastasis," D'Souza-Schorey says.

"If we could identify the mechanisms by which these processes occur, potentially that could help with the design of more effective therapies," she adds. Simply put: Stop the fusion. Stop the cancer.

Additionally, the ND biologist says these tumor-derived membrane sacs might be the basis for a reliable diagnostic test because they can be detected in blood, urine and ascites, the bodily fluid which accumulates in the abdomen of an ovarian cancer patient.

"There appears to be a direct correlation between the concentration of these shed structures and the stage of the disease," D'Souza-Schorey

notes. As the tumor becomes more invasive, more of these particular microvesicles are shed.

The Notre Dame scientist says she is now focused on understanding how the tiny membranes are formed, how the matrix-degrading protein molecules are packaged within the membranes and what cellular factors govern the process.

Her lab is collaborating with local oncologists who specialize in ovarian cancer care. "Our goal is to identify the complete protein composition of these structure in hopes of identifying molecular signatures or fingerprints that might tell us something about the tumor from which it derived," she says. Such information could offer a way to individualize therapy specific to the precise form of cancer that a person may have.

D'Souza-Schorey notes that cancer is not a single disease but actually a group of diseases characterized by a variety of aberrant cellular conditions initiated by an equally wide array of causes. Hence, the focus on individualized therapy.

While the Notre Dame biologist and her lab have focused on the implications of their work for ovarian cancer, she says that since the same type of microvesicles are released by breast, prostate and colon cancers, they might lend themselves to diagnostic and therapeutic approaches for those cancers as well.

REGULATE RARE PLANT SALES

Thanks to Internet sales and quick FedEx-style shipping, endangered plants these days are growing in more places they shouldn't. And that is a big, expensive problem that needs policing, ND ecologists Patrick Shirey and Gary Lamberti write in a recent issue of the journal *Nature*.

The biologists report that rare plants which have been transplanted outside their native ranges cost the United States an estimated \$30 billion annually in economic damage. The alien vegetation harms crops, pastures and ecosystems by crowding out native plants and introducing plant pathogens.

Shirey and Lamberti note, for example, that the Australian paperbark tree, a weed which causes millions of dollars of damage in the United States, is an endangered species in its native Australia, where it is losing its coastal habitat to economic development.

Conducting an informal Internet survey, the Notre Dame ecologists found that nearly 10 percent of the 753 plants identified in the U.S. Endangered Species Act could be bought online. Further, they found that about half of these plants could be purchased by buyers outside the plants' natural range. And that is a worry.

"Most online shoppers seem to be amateur horticulturists seeking flowers for their gardens," they write. "But anecdotal evidence from online forums suggests that the purchasers of rare and endangered plants increasingly include those trying to protect them."

The ND researchers note that regulations governing re-colonization efforts of endangered animals are

much stricter than those governing vegetation. The U.S. Fish and Wildlife Service, for instance, allows endangered animals to be moved from their natural range only if the native habitat has been irreversibly damaged. No such laws govern the movement of endangered plants.

As the Notre Dame ecologists see it, the problem is twofold: existing laws are not enforced and sellers exploit loopholes in those laws. They argue, therefore, that the current patchwork of state laws protecting endangered species should be replaced with a rigorous, enforceable federal code.

Shirey and Lamberti recommend that the U.S. Fish and Wildlife Service be given authority to monitor the online sale of endangered plants. Also, they argue that the agency should have the power to restrict consumers from buying rare plant hybrids and that the Convention on International Trade in Endangered Species of Wild Fauna and Flora should be enforced.

NO-BOOT COMPUTE

You know that annoying 1- or 2-minute delay after you turn on your computer, when the machine just stares blankly back at you, making those popcorn popping noises and occasionally flashing a message like "running startup scripts"? That ritual soon may be a thing of the past. The age of instant-on computing could be just a click or two away.

Recently, Notre Dame researchers demonstrated the feasibility of a revolutionary computer technology that uses incredibly tiny magnets to do the computing and information storage.

Professor Wolfgang Porod, the director of Notre Dame's Center for Nano Science and Technology, says nanomagnetic logic (NML) technology has the potential to make computers that are more efficient, run cooler on less power, and — best of all — don't need that annoying boot process.

The system employs tiny nanomagnetic "islands," each made up of many electrons positioned in an array. Flipping the pole of one nanomagnet induces a similar flip in an adjacent magnet, setting up a switch that transfers information down the line. The switching process can represent the binary ones and zeroes that are the backbone of all computing operations.

Since the nanomagnets are outrageously small, only a few 100 nanometers in size, incredibly powerful computers are possible. Just to give some sense of the size of the nanomagnets, a human hair is about 75,000 nanometers in diameter.

Unlike conventional transistor technology, which wastes power because transistors require electric current just to remain in a standby mode, NML requires no such standby electric current. Also, transistor-based circuits lose information once the current stops, hence the need to boot up every time the computer is turned on.

Notre Dame's Center for Nano Science and Technology recently received a \$9.9 million contract from DARPA, the Department of Defense's research and development office, to investigate the system. Cooperating with Notre Dame on the project are research teams from the University of California-Berkeley and the Technical University of Munich, as well as industry partners IBM and Grandis, a firm that specializes in cutting-edge computer memory technology.



FIR00027/FLAGSTAFFOTOS

Seat of Wisdom

BY WILLIAM G. SCHMITT

Providing childcare at a crowded orphanage in the western African country of Senegal during the summer of 2009 “challenged and changed me personally,” Kaitlyn Kiger ’11 says. “I was blessed to be a vessel of love for two months — holding, comforting, feeding, changing and giving the babies a chance to get out of their cribs and walk and play.”

The Notre Dame student says her International Summer Service Learning Program (ISSLP) experience through the Center for Social Concerns “was a chance to learn about poverty and development in the classroom of the world. It strengthened me in faith, hope and love.”

Such opportunities to combine a broader grasp of the world and a deeper grasp of religious values have opened up to more Notre Dame students in recent years. That’s because donors to the Spirit of Notre Dame campaign have given generously to two academic engines that make such connections possible. Contributions to the Center for Social Concerns and the Institute for Church Life, whose joint goal totaled \$18 million, had reached \$43 million as the Spirit Campaign entered 2011, six months from the campaign’s finish line.

“Our international program will have grown by 50 percent during the years of the Spirit Campaign,” says Rev. William Lies, CSC ’93M.Div., executive director of the Center for Social Concerns. Its service learning programs in Africa, Asia and Latin America have grown in popularity, and recent contributions have increased the travel possibilities despite high costs. Indeed, Lies says, the center has been able to develop community-based service learning courses at many of Notre Dame’s study-abroad sites in Europe, too.

Additionally, says Lies, “We have been able to foster the integration of Catholic

Bill Schmitt is the communications/media specialist of the Institute for Educational Initiatives/Alliance for Catholic Education at Notre Dame.



PHOTOS BY MATT CASHORE '94

social teaching principles throughout the campus in a way we weren’t able to before.” Campaign support made possible the expanded funding of an administrative position focused on the Catholic social tradition. An academic minor studying that tradition has grown in enrollment from a handful to some 50 undergraduates.

Perhaps the clearest sign of integration springing from the Spirit Campaign is the building that houses the Institute for Church Life (ICL) and the Center for Social Concerns, as well as the offices for the academic minors in Catholic social tradition and in poverty studies, and other kindred organizations. The building is Geddes Hall, crowning the site of the Center for Social Concerns’ former TV-station home. It was the biggest line item in that \$18 million campaign goal.

Lies calls Geddes Hall “a world-class venue for interdisciplinary dialogue informed by a Catholic perspective — a Catholic perspective that seeks to better understand and address some of the most challenging global issues of our time.”

Bringing together the Center for Social Concerns and the Institute for Church Life, says ICL director John Cavadini, embodies what Pope Benedict XVI expressed in his encyclical, *Deus Caritas Est*. The pope points

out that Church life classically involves three functions — celebration of the sacraments, proclamation of the word and service to the poor — “and they’re intrinsically united,” notes Cavadini. As one enters Geddes Hall, the English translation of that encyclical’s title can be seen engraved overhead, inviting visitors into that unity: “God is Love.”

Visitors to the building have been plentiful. It has been a leading place of outreach and hospitality since it opened in 2009, attracting partners of all sorts, including a growing number of organizations serving the poor and marginalized in the South Bend area. Continued growth in opportunities and needs prompts both Cavadini and Lies to note their reliance on benefactors’ generosity extending far into the future.

“We’ve been able to be on the cutting edge of community-based research largely because of the Spirit Campaign,” says Lies, whose social concerns center nurtures relationships with some 50 organizations, from AIDS ministries to the YWCA. “We put the University research at the service of those community agencies that work with professors and student groups to investigate the very important issues they need research on.”

The Institute for Church Life has taken its own approach to putting Notre Dame

research capabilities in the service of community organizations — in this case, Catholic dioceses and parishes around the country. It is partnering with the Center for the Study of Religion and Society, whose director is noted sociologist Christian Smith.

“We hope to offer absolutely first-rate theological research that helps bishops and parishes decide on priorities,” Cavadini says. “What are the catechetical needs they face, where should they put their money, where should they hire?” Consultants and survey-takers don’t necessarily “get it” when addressing theological and pastoral concerns, so parishes “may not always have what they feel is authoritative guidance on their needs,” he adds.

That’s the kind of initiative he is planning to bring about through collaborations around campus and beyond. The Spirit Campaign has helped build a sturdy launch pad for initiatives by establishing an endowment for Cavadini’s ICL post — the McGrath-Cavadini Directorship.

“We have a renewed sense of confidence based on a sense of stability and a sense of room for growth,” says Cavadini. As director, he was able to supplement a President’s Circle initiative that created the position of coordinator for University life initiatives. When Mary Daly ’10 inaugurated that post, fulfilling a recommendation of the University’s Task Force on Supporting the Choice for Life, she was able to take an office in Geddes Hall. The task force, convened by President Rev. John I. Jenkins, CSC, in September 2009, was co-chaired by Cavadini.

There is no shortage of ideas being hatched in the institute director’s office. The Notre Dame Initiative on Spirituality in the Professions is up and running, with Brother Robert Sylvester, CSC, heading a program to provide spiritual care to lawyers.

All the programs of the Institute for Church Life and the Center for Social Concerns “emphasize service to the Church and to mankind” and together constitute “a critical part of the mission of Notre Dame,” says Daniel Reagan ’76, associate vice president for University relations. They’re benefiting from a powerful message visible in the Spirit Campaign — “a desire by the University and our constituency to see the Catholic character of the place always nurtured.”

That desire is carried out every day by all sorts of Notre Dame people and enterprises, Reagan says. They range from the Alliance for Catholic Education to the Haiti Program

to the Theology Department’s new Master of Sacred Music program, to the recruitment of pre-eminent professors committed to the University’s Catholic mission. But the Spirit Campaign highlighted how the Institute for Church Life and the Center for Social Concerns together fit that desire to a T, says Reagan. “It’s a real testimony primarily to Father Bill Lies and John Cavadini.”

Of course, the ultimate aim for the donors and administrators alike is to serve and educate the students involved in all the programs. “We’re forming them for witness,” Cavadini says. “We’re very much interested in education unto witness.”

He cites examples like his Institute’s Notre Dame Vision program, a summer camp-type experience for high school students that helps them to think about their lives in relationship to the Catholic faith and God’s call to live as witnesses to that faith. About 65 Notre Dame undergraduates serve as counselors in that program. The Satellite Theological Education Program (STEP) offers an online curriculum in theological formation for lay ministry and continuing education for all ministers in the Church. Also, the two-year service program called Echo trains master’s degree students to

are looking towards the ICL and Echo to see where Notre Dame will be leading us next.”

Lies agrees that that’s what Notre Dame is all about: “We want to be a university that is a resource to the Church and to society.” Such a vision that extends to the whole world has transformative effects in the classroom, he says. “Students become inspired by the synthesis of faith and action.”

Ann Marie Ferry ’11, who has participated in several service learning endeavors, including the Migrant Experiences Seminar in Immokalee, Florida, says Notre Dame is a resource for transformation. “The trend that people are becoming aware of social issues all over the world is great, but the Center for Social Concerns’ vision — to engage in discussion about why this is happening and how we as students in South Bend can be in solidarity with those we meet in Immokalee — is what makes this institution especially unique and effective.”

Cavadini says one word, wisdom, describes what students are looking for and what Notre Dame offers: “Wisdom is more than knowledge. It’s inherently connective of disciplines and inherently both theoretical and practical.” Students are seeking ultimate truth,

Geddes Hall (exterior on facing page) was constructed with funds from the Spirit Campaign and provides a gathering place for programs and people serving the Church and the world.



assume positions of catechetical leadership in parishes, dioceses, campus ministries and high schools.

John Paul Lichon ’06 completed Echo in 2009 and is now director of Catholic campus ministry at Southern Methodist University in Texas. “Notre Dame is leading the way with offices like the Institute for Church Life and, in particular, the Echo program,” he says, adding that catechetical ministry meets “a dire need” in the Church. “Many people

he says, and that requires an orientation toward the mystery of God’s love. That’s what brings all studies together, just as the proclamation that “God is Love” helps to unite all the different pursuits in Geddes Hall.

Resources from the Spirit Campaign that underwrite future initiatives of the Center for Social Concerns and the Institute for Church Life are a good investment in wisdom and witness, says Cavadini. “It’s strengthening not just Notre Dame but the Church.” □



Wonder of

BY JAY WALLJASPER

ILLUSTRATION BY MIGUEL CARTEGENA



Wonders

Notre Dame physicists gaze into the heavens, searching the stars and infinite darkness, reading the clues to make sense of the awe.

Astronomy must be the most baffling of all sciences. In what other discipline do researchers freely admit they don't yet understand 96 percent of their subject? According to astronomers' best calculations, only 4 percent of the universe is made up of matter that is recognizable to us — the rest is mysterious stuff called dark matter (23 percent) and dark energy (73 percent).

The image on these pages is a painting of the Milky Way by Peruvian artist Miguel Cartegena, personifying celestial bodies and meteorological phenomena important to Incan astronomers centuries ago. The original hangs in Qorikancha, the physical center of the Incan empire and its most revered ceremonial temple.

And even this is hypothetical. Dark matter is an invisible element in the universe that does not emit or reflect electromagnetic radiation, but astronomers can detect its gravitational pull on stars and galaxies. Its existence was first postulated in 1933 by Swiss astronomer Fritz Zwicky to account for discrepancies in scientists' measurements of distant galaxies. Dark energy, which fills the empty spots of outer space, was identified only in 1998 when astronomers discovered that the universe was expanding at an accelerating rate rather than slowing down as was previously thought. Another big discovery, however, could challenge the existence of both dark energy and dark matter, setting research back to square one.

Yet for Notre Dame astrophysicist Peter Garnavich — who played a key role in discovering dark energy — the almost maddening complexity of the subject is the appeal. “I’ve always liked to understand how things work, even when I was a kid. And when you’re that kind of person, you don’t want the easy stuff. You want to understand what no one understands.”

This is what inspires him, his colleagues on the Notre Dame astrophysics faculty and astronomers everywhere to devote their careers probing what happens light years away in places they will never experience as anything more than specks on a telescope. “Patience is very important in this work,” notes Garnavich, 52. “We’ve been waiting 300 years to see a supernova go off near us in the universe. I myself have been waiting since 4th grade.”

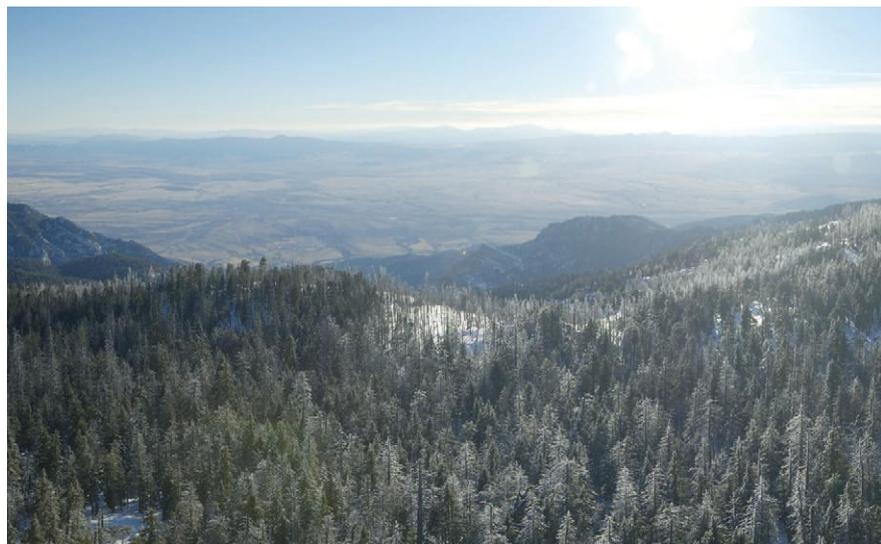
As baffling as it is, astronomy stirs a keen sense of adventure. Astronomers are grappling with questions so immense it makes your head spin. What is the nature of the universe? How far does it extend? How did it begin? Will it ever end?

“This kind of research gives us a different perspective on things,” Garnavich explains. “I marvel about how small the Earth really is. When I look at faraway images on the telescope I realize that each of these dots could contain many planets with people who are looking at us right now. I’d be crazy not to think about other forms of life in the universe because there are just so many possibilities out there.”

Making a trek last winter to the Large Binocular Telescope (LBT) observatory in southeastern Arizona, I discovered that astronomy’s spirit of adventure is not all theoretical. Notre Dame owns a small share of the LBT (along with a consortium of German and Italian research institutes and six other U.S. universities), which is the world’s largest optical telescope with 10 times the clarity of the Hubble Space Telescope. It’s located at the peak of 10,700-foot Mount Graham alongside the Vatican Observatory, where Garnavich also conducts frequent research (see sidebar).

While distances like a billion light years can feel hopelessly abstract, I have a new appreciation for just how far 10,000 feet actually is after driving up the mountain through five ecological zones ranging from Sonoran desert where I started my ascent to spruce and Douglas fir at the top, where traces of snow could be seen on the ground. It felt like I covered at least half the distance to the stars.

I had been skeptical when Garnavich told me it would take an hour-and-a-half to cover the last 25 miles to the observatory, but it ended up taking me two-and-a-half. I climbed 7,200 vertical feet on



a road consisting of one hairpin turn after another where the white line at the edge of the pavement was often no more than a few inches from a sheer cliff. But this wasn’t the most nerve-racking part of the drive. That came at the very end when I turned up a steep gravel road and was required to announce my presence through a handheld radio given to me in the base camp at the foot of the mountain. They warned me the road was too narrow for two vehicles to meet, so I must wait at the bottom if I hear word of anyone coming down. My radio, however, did not seem to be working so I crept along the gravel with white knuckles gripping the steering wheel.

Nonetheless, I was enraptured by the magnificent vistas and ever-changing scenery out the windshield. This landscape is sacred to the San Carlos Apache and White Mountain Apache people, and I can certainly understand why.

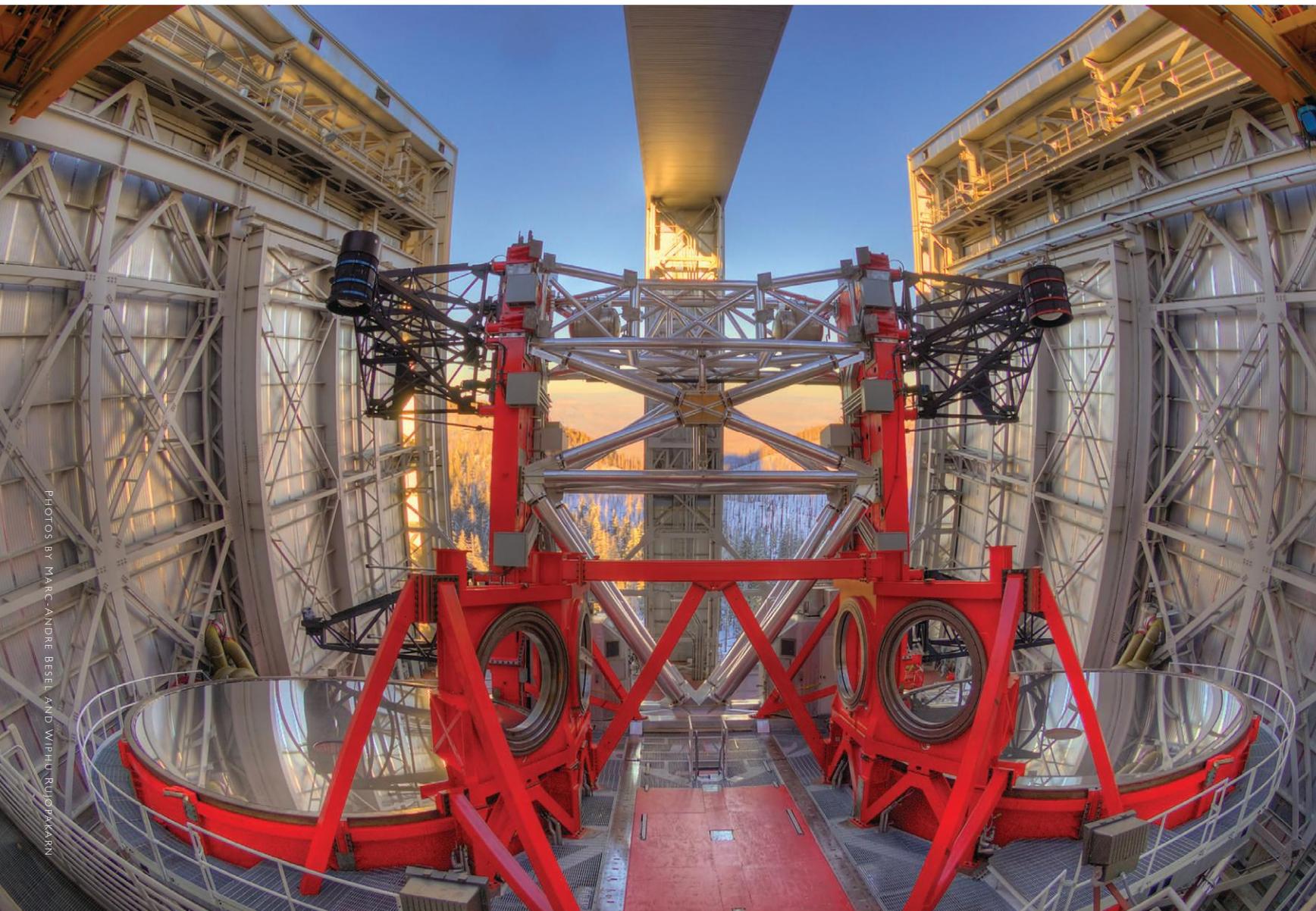
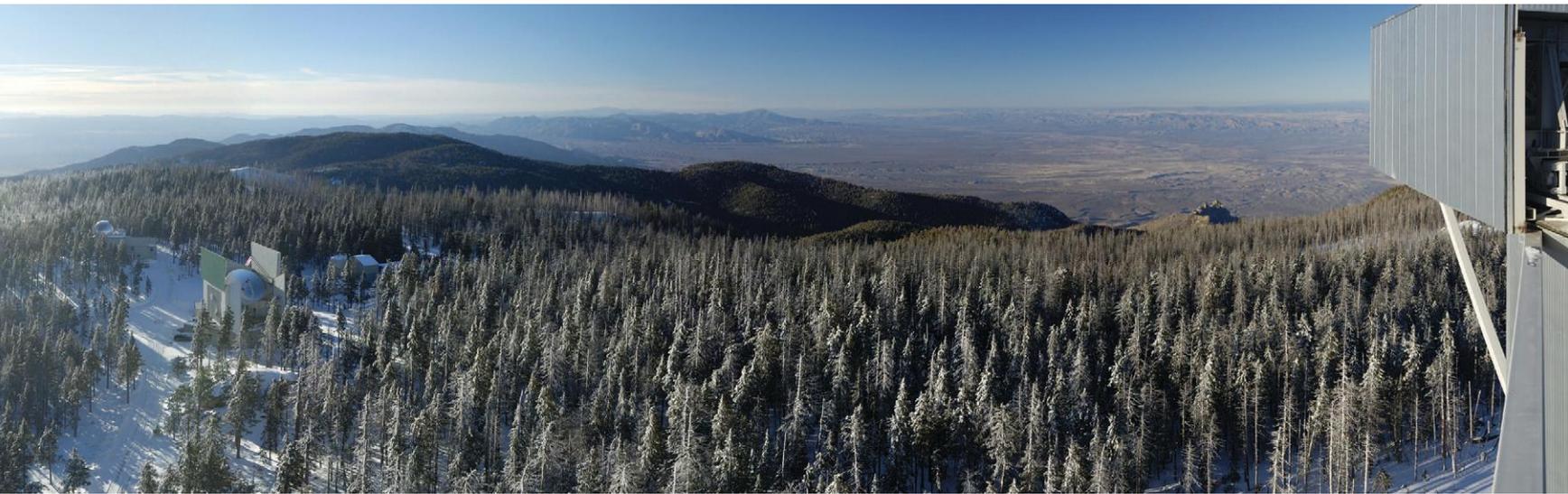
Upon finally reaching the top, the observatory reminded me of a hideout in a James Bond movie — a hulking industrial facility in a remote location sheathed in white metal atop a huge concrete slab where a diabolical villain hatches his evil plans. Adding to the intrigue was a small fence cordoning off the whole area, which I later learned was part of an effort to keep humans from interfering with the habitat of a rare species of red squirrel found only on Mount Graham. Construction of the observatory was vigorously opposed by both native peoples and wildlife conservationists, so strict measures are enforced to protect the surrounding landscape.

Peter Garnavich greets me at the door of the towering facility (my radio worked after all!) wearing jeans and a blue “Notre Dame Physics” sweatshirt. Once inside, I notice a preponderance of oxygen tanks. “Some people get altitude sickness at this height,” he explains, adding ominously, “It’s not a pretty sight.”

He’s just out of bed after an all-nighter scanning the heavens but is game to give me a tour of the observatory, which opened in 2005 and continually adds state-of-the-art equipment. The telescope itself reinforces my James Bond fantasy. It’s four stories tall, looking like a gigantic modern sculpture with thick silver tubes sprouting out of red metal hubs. It’s precisely the spot where 007 and the villain would engage in an extended shoot-out near the end of the movie, both of them narrowly averting numerous plunges to their deaths.

At the heart of the telescope are two mirrors, each 8.4-meters in diameter (about 9 yards), which are large enough to easily park a Humvee on but only 1.6 millimeters thick (6/100 of an inch). At dusk when a section of the ceiling opens to the stars, this huge

Jay Walljasper is the author of All That We Share: A Field Guide to the Commons, which features a vision of South Bend in 2035 excerpted on the ND magazine website at magazine.nd.edu/news/115907-state-of-the-commons-2035/. He is editor of OnTheCommons.org and a contributing editor at National Geographic Traveler. His website is JayWalljasper.com.



PHOTOS BY MARC-ANDRÉ BÉSEL AND WIPHU RUIPOYKARIN

The Large Binocular Telescope sits atop Arizona's Mount Graham, a 10,000-foot summit sacred to the Apache and a perch it shares with the Vatican Observatory (upper photo).



Back at Notre Dame, Garnavich discusses his explorations — involving the supernova remnant (left) — in Jordan Hall's Digital Visualization Theater.

apparatus swivels back and forth tracking distant targets chosen by the team of astronomers upstairs.

The rest of the facility consists of a spacious kitchen with a wall of refrigerators stuffed with provisions to last a team of astronomers a week — equally proportioned between healthy choices and junk food; a recreation room outfitted with a pool table (a tradition in observatories around the world, Garnavich tells me) and a big-screen TV tuned to a sports channel; sleeping quarters that look positively monastic; and the observation room where the astronomers get down to work once the sun sets.

Think of Peter Garnavich as the lucky kid who grew up to be what he always dreamed — like many who imagined becoming baseball pitchers or ballerinas. Born into a military family, he had seen a lot of the world before landing in Bowie, Maryland, outside Washington, when he was 7. But he continued to explore new places from the vantage point of his backyard — the heavens.

While in high school he hooked up a 35mm camera to his telescope and captured an image of an exploding nova that was studied by Harvard researchers and written up in *Sky & Telescope* magazine (which is to astronomers what *Rolling Stone* is to rock musicians). That hooked him on astronomy for good.

“Sometimes I wonder what I would have done if I had not become an astronomer,” Garnavich muses. “I can’t imagine. This is even better than being a baseball player because you keep doing it after age 35.”

It became clear to everyone that the rate of expansion in the universe was speeding up, not slowing down. This means that over the course of millions of centuries, distant galaxies will move farther and farther away from us.

He majored in the subject at the University of Maryland, earned a master’s degree in physics at MIT, a Ph.D. in astronomy at the University of Washington and a post-doctoral fellowship at the Dominion Astrophysical Observatory in Victoria, British Columbia, where he met his wife, Lara Arielle Phillips, who is also on the Notre Dame astrophysics faculty.

Along the way he also branched out to become a cosmologist — the study of the nature of the universe,

which was once part of metaphysics but now is a subset of astronomy. Although, Garnavich admits, “there’s still a lot of philosophy involved.” He developed research specialties in supernovae (stellar explosions) and gamma-ray bursts (brilliant flashes of light produced by explosions in distant galaxies).

His next post was at Harvard, where in 1994 he helped assemble the High-Z team, a collaboration of 20 astrophysicists around the world studying supernovae as a way to measure the expansion of the universe, a concept established in the work of Albert Einstein and Edwin Hubble. “We had no idea we were studying dark energy when we started,” Garnavich confesses.

For decades scientists thought the universe was expanding at a decelerating rate, a belief so strongly held that Albert Einstein repudiated his own theory of the cosmological constant because it contradicted this prevailing view. But data collected by the High-Z team over several years tells a different story. Their study of far distant supernovae found that explosions were less bright than could be explained by the theory of decelerating expansion.

At first, as Garnavich pored over data from the Hubble Space Telescope, he thought there was a mistake. “It’s like you a threw a ball into the air expecting it to come back down, and instead it kept going. But when I sat down with my collaborators we saw the findings were right.”

When a competing team of scientists, the Supernova Cosmology Project, arrived at the same conclusion, it became clear to everyone that the rate of expansion in the universe was speeding up, not slowing down. This means that over the course of millions of centuries, distant galaxies will move farther and farther away from us.

In 1998, Garnavich was lead author of one of three articles that announced these shocking astronomical findings in the *Astrophysical Journal*. Their research points to the existence of some sort of mass energy in the vast empty stretches that comprise three-fourths of outer space, which was called dark energy.

“This work was absolutely a breakthrough — a real game-changer,” says Ohio State astronomy professor Paul Martini, who frequently shares time at the Mount Graham observatory with Garnavich. In 2007, the Gruber Prize in Cosmology was awarded jointly to the High-Z and the Supernova Cosmology Project teams. It is one of astronomy’s most prestigious awards honoring scientists “whose groundbreaking work provides new models that inspire and enable fundamental shifts in knowledge and culture.”

“Einstein provided the toolbox,” Garnavich says. “This work depended upon him and Hubble. The tools were there, they were just not being used.”

ASTRONOMY PAST, PRESENT AND FUTURE AT NOTRE DAME

The study of astronomy at Notre Dame got a boost in 1867 when French emperor Napoleon III gave Father Joseph Carrier, CSC, a 6-inch refraction lens, which was state-of-the-art technology for the time. The lens is still in use at the University's observatory in Nieuwland Science Hall.

But it's no longer the big-lens-on-campus. A new two-and-a-half foot mirror lens soon will be placed in the Jordan Hall of Science, inaugurating a new era for the Notre Dame astrophysics program. The program's 10 faculty members and hundreds of students will have handy access to distant galaxies without making the trip to the Large Binocular Telescope (LBT) observatory in Arizona.

UNIVERSITY OF NOTRE DAME ARCHIVES



"For me this will be very valuable," says astrophysics Professor Peter Garnavich. "I will have time to do extended projects that I can't do in just a week down in Arizona. And this is a great opportunity for our students to get some real experience observing."

Astrophysics Professor Terrence Rettig is most responsible for Notre Dame owning a share of the LBT, the most powerful optical telescope in the world. He was regularly doing research

at the Vatican telescope on Mount Graham in Arizona when he heard in 1996 about plans to build a state-of-the-art telescope right next door. He proposed that Notre Dame invest in the \$120 million project. "It was pretty

adventurous for the administration to become part of such a thing, but it's really developed our astrophysics program," he says.

Rettig visits the LBT regularly to study disks around stars — the concentrations of gas and dust that eventually form planets, comets and meteors.

— Jay Walljasper



Garnavich, who has taught at Notre Dame since 2000, now explores the meaning of this discovery. In a PowerPoint he presents to his ND classes, he offers six explanations for the existence of dark energy, ranging from gravity leaking from "extra dimensions" to serious flaws in Einstein's General Theory of Relativity. Another possibility he lists is "something we have not thought of." So there seems little danger that Garnavich will run out of things to understand.

"The point of science is to test things," he says, "not just stop when you are satisfied with the results."

Garnavich reassures us, however, that we needn't worry about the acceleration of the universe busting the earth apart, as Woody Allen's neurotic teenage character Alvy Singer did in the film *Annie Hall*, prompting his exasperated mother to declare: "Brooklyn is not expanding!"

"Woody Allen did not understand astrophysics very well. At least not as a kid," Garnavich says. "While the universe is expanding, the Earth's gravitational pull is strong enough to keep Brooklyn safe." He's quick to add, "*Annie Hall* is still one of my favorite movies."

At the observatory atop Mount Graham, the pace picks up as the last rays of yellow-gold sun stream through the windows. The tapping at keyboards and shuffling of papers, which once sounded random, becomes steady and purposeful.

When blackout shades roll down over the windows around

5:30 on this December day (prime time for viewing because nights are the longest), the observation room is full. There are LBT staff technicians and astronomers from Notre Dame, Ohio State and the University of Arizona, all of whom are co-owners of the telescope, along with visiting grad students from Arizona State and the University of California-Davis — 11 males and one female. The sole woman, Erica Hesselbach, a Notre Dame post-doctoral student, remarks, "It's not usually this unbalanced. More women have been entering the field."

Everyone looks dressed for the weekend at a cabin — jeans, cargo pants, hiking boots, running shoes, sweat shirts, fleece jackets, ball caps — which in some ways this place is since the nearest store sits almost two hours away. Garnavich has brought a fresh-made pumpkin pie from a bakery he discovered in the small town of Willcox on the road from Tucson. Through a long career as an astronomer, he has learned that treats immeasurably aid the search for clues about dark matter, dark energy, black holes, white dwarfs, novae, quasars and other phenomenon that comprise our universe. You grow weary scrutinizing tiny images from the telescope projected on a computer screen all night long, he explains, so looking forward to a piece of pie becomes a keen motivator to keep going.

The room itself looks like an office anywhere, decked out with swivel chairs and marker boards but perhaps more computer screens than usual, some mounted overhead like in photos of the trading

floor at the New York Stock Exchange. The only decorations are a short string of Christmas lights and a single framed photograph of the Milky Way that shines in green, gray and purple tints. Garnavich wanders off to the kitchen and puts a frozen pizza in the oven, which burns to a crispy brown as he becomes engrossed in conversation with Hesselbach, Ohio State graduate student David Atlee and me.

Discovery doesn't always come as a flash in the sky, he says, sometimes it's a flash of insight. "It's exciting when you see a gamma-ray burst but a breakthrough can also come over a period of months sitting at your desk."

After a couple of tests on the telescope, a technician announces they are ready for the first target. "Get ready!" Garnavich quips. "We're starting to do some science."

"Yes, now it will really start to get boring," responds Ohio State's Martini.

The astronomers work out the timetable of who uses the telescopes when based on how many hours they are allotted by their share of ownership. Notre Dame owns 3 percent, which means Garnavich and other Notre Dame professors are able to observe a few times a year. (His colleagues Chris Howk and Terrence Rettig will arrive just after Garnavich heads home for South Bend.) He usually books some time at the less powerful Vatican Observatory before or after his LBT slots.

Tonight Garnavich plans to focus on Supernova 2009ig, 20 million light years away. "One important aspect of studying dark energy," he explains, "is to make supernovae better distance mark-

ers. On Earth, we have all sorts of tricks we use to measure what's far in the distance, like looking at streetlamps — if one streetlight is dimmer than another, we know it is farther away."

Supernovae, he says, are the streetlights of outer space, offering a sense of just how distant galaxies actually are.

This particular supernova captured Garnavich's attention because it is relatively close and was very bright when it exploded a year earlier. "I want to see if the way it fades tells us something about how it exploded. If we know the physics of the explosion we hope to make them even better distance indicators."

If there's time he also hopes to explore a newfound research interest — binary stars (two stars located very close together with frequent eclipses, which reveal insights not seen otherwise).

But everyone agrees that Martini goes first to test out some new techniques in studying an enormous cluster of galaxies 12 billion light years away. "This dense region of space is 100 times more dense than usual," he explains, "and could give us clues on how galaxies form."

The first image from the telescope pops up on computer monitors about 6:45, and I can see astronomers' heads bob back and forth between the screen and reams of data flowing across their laptops. But soon there's a problem with the telescope, and the energy in the room cools down.

"The telescope is so complicated that every night something usually goes wrong — at least for a little while," Garnavich says.

Checking his email, he announces that an amateur astronomer discovered a new supernova last night in Japan. Amateurs play a surprisingly large role in the field, according to Garnavich. "It's a big

universe out there, and there are a lot of places we aren't looking." In fact, he says other scientists envy the enthusiastic support astronomers enjoy from the general public. "You don't have that in particle physics."

By 7:45, the telescope is back in action and David Atlee reports, "The viewing is really good after all of this." It had been cloudy the night before — a relatively rare occurrence in the Arizona desert, which is one reason why major observatories like LBT and Kitt Peak are located here — so everyone is ready to get some work done.

Martini begins scrutinizing faraway galaxies as others occasionally glance over his shoulder. Cooperation trumps competition in the observatory because there is more than enough universe for everyone to study. With new technology it may soon be possible for astronomers to scan the heavens through distant telescopes in the comfort of their offices back home, but Garnavich believes the camaraderie of the observatory is important for swapping ideas, staying up-to-date, fixing glitches and making connections in the field.

By 8:20 the machine is on the fritz again, and the technicians are videoconferencing with colleagues back in Tucson in search of a solution. Yet Garnavich, who has peered through telescopes longer than anybody in the room, remains cheery. As he drinks Earl Grey tea, he gives the impression that even a brief opportunity to gaze out toward distant horizons of outer space is not time wasted.

One by one, everyone abandons their stations and scoots their chairs into one end of the long, narrow room. At first, the assembled group awaits news that the telescope is fixed but eventually a wide-ranging discussion launches covering history, current events, football and so forth. At one point a couple of guys are poring over an Internet map of the 1924 election results ("Hey, Robert LaFollette took Wisconsin").

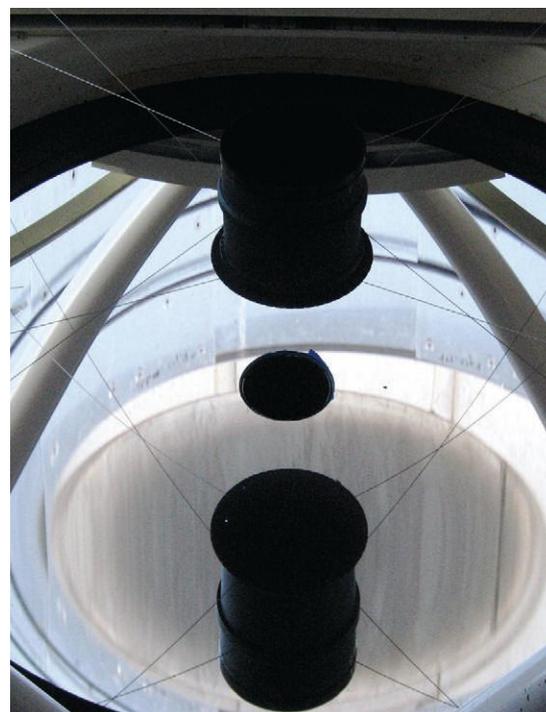
When Garnavich mentions he brought a pumpkin pie, a chorus of cheers erupts. The art and science of pie making suddenly becomes the focus of conversation. A surprisingly high percentage of those present baked pumpkin pies for their families' Thanksgiving feasts the week before, and everyone agrees the secret to success is getting the crust just right. I am especially intrigued by the grad student from UC-Davis, who details how he made his crust out of ginger snaps. This is a long way from investigating the nature of dark energy or the origin of galaxies but the same curiosity, creativity and rigor that drives scholars to study the heavens also fuels their collective passion for pie making.

Around midnight, growing anxious about my morning drive back down the mountain, I say good night and retreat to my room at the Vatican Observatory. About 5 a.m., I hear the visiting students from Arizona State and UC-Davis come in, laughing.

Later, by phone, Garnavich tells me the telescope never worked again that night, but the next "was one of the best nights ever for viewing." He got a good look at Supernova 2009ig and observed some binary stars about 2 million light years from Earth.

Then he shares something that struck him as he hiked along a national forest trail below the peak that afternoon. "It was a beautiful day, not too cold, and I went up to a firetower to see the view," he says. "I took a close look at the trees, at the colors, and thought about all the elements it takes to make up the universe. It's not a simple process that got us here. We are part of a bigger universe, even if we don't think about it much. When I look at the stars, I see wonder, awe. There is still that unsolved mystery — we don't know how it all works." □

Supernovae, he says,
are the streetlights
of outer space,
offering a sense
of just how
distant galaxies
actually are.



PHOTOS COURTESY OF VATICAN OBSERVATORY

THE VATICAN ADVANCED TECHNOLOGY TELESCOPE

Many would be surprised to know that the Holy See maintains two observatories — one at Castel Gandolfo, the pope's summer residence outside Rome, and another on a mountaintop in Arizona.

The Catholic Church's interest in astronomy dates back centuries, in part because Easter and other holy days are determined by the astronomical calendar. The first Vatican observatory was built in 1774, and the papacy built a number of others around Rome until the 1930s when proliferation of light pollution and air pollution hampered stargazing. That's when the observatory was moved to Castel Gandolfo, although the same problems eventually arose in this spot 16 miles southeast of Rome.

Another Vatican observatory, called the Vatican Advanced Technology Telescope (VATT), opened in 1993 atop Mount Graham in southeastern Arizona. The project grew out of a partnership with the Steward Observatory at the University of Arizona.

A plaque inside the front door welcomes those who study the stars: "May whomever searches here night and day . . . use it joyfully with the help of God."

The building itself looks like a modest, metal-sided townhouse, except for the silver dome on top that opens up to the heavens every

evening. The telescope there is diminutive compared to the neighboring Large Binocular Telescope (LBT), but it was built with much of the same equipment as a prototype of sorts.

Notre Dame astrophysicists often use the facility. On his trip last December, Peter Garnavich spent three nights at the VATT before shifting his research to the LBT. "On large telescopes you get small amounts of time, but with the VATT you can get a lot of time — and that's exactly what you need with some projects."

On the night I stayed at the VATT, Jon Stott, a Jesuit brother from Tucson, was looking at an open cluster of stars formed at roughly the same time that moves as a group around our galaxy. His particular interest was "a cluster that was noted over a hundred years ago but apparently has not been surveyed using modern [post-1950] telescopes. My hope is to see if there are any interesting or peculiar stars in it, which would become targets for follow-up studies."

Stott's work continues a long tradition of Jesuit astronomers, who not only run the Vatican observatories in Rome and Arizona but enjoy the honor of seeing more than 30 craters on the moon named after their colleagues.

— Jay Walljasper



Into the Deep

At the end of this life on earth we all face a journey into the mysterious unknown.

BY PATRICK DUNNE '60

ILLUSTRATION BY BEN CAIN



Recently my closest friend for many years telephoned me from Dallas to tell me that the melanoma that metastasized in his lung last year, and for which surgery was successful, had metastasized again — to his groin, his lymph glands, his stomach, his spine, everywhere. His doctors told him that with very good luck and very aggressive treatment, including possible enrollment in an experimental program, he might yet live eight months.

Matters of treatment he seemed to have covered, but it was clear to me that his real and immediate need was relief from the terrible inner torment, the disquiet of the soul, the relentless interior suffering such a prognosis must inevitably engender. I spent the rest of that day and all the next thinking about what I might say to him to impart some kind of inner peace. Then my wife and I drove up to Dallas, and I had my say.

I am glad to report that I was able to help, and he asked me to write down what I had said to him, so that he might keep it by his bedside to read when things got him down. The essay here is the result.

So, my dear friend.

Your melanoma has returned and the doctors have spoken. It is good that they have leveled with you — good that we live at a time when doctors no longer keep the patient in the dark about his condition, leaving the dying to discover the “prognosis negative” by terrible accident, like Bette Davis in *Dark Victory*. Now at last we can talk with frankness to our health-care providers about metastasized melanoma: cancer at its most ruthless, its most relentless, its most intractable.

Since your telephone call a while ago, my mind, like yours, has been fixated on little else. I am glad, at least, that you have the possibilities of treatment, of medical and holistic approaches, of enrollment in experimental programs, well in hand. But it would appear that your more immediate need is help with your quite natural inner turmoil. Interior peace will not only ameliorate these final months but will surely go far to assist the more medical approaches and strategies against this formidable opponent.

While we were talking, I was struck — *amused* won’t do, for there was certainly nothing amusing about this phone conversation — *bemused*, then, by what you said about your “Baptist upbringing” conjuring feelings of hellfire and damnation, of God’s punishing you now for your many sins. Believe me, the Baptists at their most intense had nothing on the Catholic Church I grew up in so long ago, in the skill of laying on guilt trips. I don’t know about the Baptists, but I am happy to say that the Catholic Church has progressed greatly from those long-ago days when stealing 49 dollars was a venial sin and 50 a mortal one — something I was taught with a straight face in the 11th grade at St. Thomas High School.

Patrick Dunne lives and writes in Houston, Texas. A former teacher of literature, he later practiced immigration law until his retirement in 1999. Robert Terral “Terry” Wooten, the recipient of Dunne’s “letter to a dying friend,” passed away peacefully on the morning of February 22, 2011, one week after his 60th birthday.

I was 17 years old when I graduated from high school and went off to Notre Dame in the fall of 1955. The University required us freshmen to live in on-campus dormitories, and I was duly assigned to a room on the second floor of Farley Hall. Every floor of every dormitory had a resident priest from Notre Dame's Congregation of Holy Cross living in a room at the end of the hall who would act as a kind of floor monitor or proctor, maintaining law and order, making sure all the boys were in bed when the lights went out at 10 p.m., seeing that we were all up the next morning ready for Mass and a grim breakfast in the dining hall, and making available to us a sympathetic ear when studies or personal problems assailed us.

‘What we want, after all, is to somehow know that our self, the Me we know and remember, somehow survives.’

That first night in Farley I padded down the hall in robe and slippers and knocked on his door, troubled by guilt trips for which I badly needed help. For the life of me I cannot remember this wonderful man's name, but what he told me that night changed my life and my outlook forever, as I hope now it will change yours.

I was obsessed at 17 with Mortal Sin, with my innumerable personal lapses: impure thoughts, missing Sunday Mass, harboring resentments, telling lies, masturbation, procrastinating, doubting God's existence — the works.

“Listen,” he said to me. “Let me tell you about mortal sin.”

Mortal sin, he told me, meant Evil. *Evil*. And by Evil, he said, we mean the ways of men like Adolf Hitler, like Joseph Stalin, and the terrible men and women who worked with them. Evil meant delight in machine-gunning innocent villagers lined up in a field, joy in gassing naked Jews in the ovens of Buchenwald, in remorselessly starving slave laborers in the Siberian gulags, in complaining of writer's cramp after scrawling “Shoot him” on stacks and stacks of individual secret-police reports.

In words I can never forget, he said, “You've never committed a mortal sin in your life. No 17-year-old boy is even capable of Evil, of mortal sin.” What I had described to him, he said, was nothing more serious than the natural and perfectly normal adolescent acts of immaturity, immaturities that I would, in the course of growing up, grow out of and overcome.

And so with you, my dear friend.

I have known you for many, many years. I know you well — as well as one man can possibly know another. And I know you to be utterly incapable of Evil. There are indeed evil people in this world, but you are not one of them. You are not on the same planet, not in the same universe with Hitler, with Stalin, with Pol Pot, Papa Doc, Charles Manson, Jeffrey Dahmer. If there is hellfire and damnation — and that by itself is a very big *if* — it does not await the likes of you. Like me, like everyone you and I personally know, you may

have lied, resented, cheated, backslid, insulted, failed to live up to expectations, fallen down on the job, overslept, overdone. Weak and immature you may have been, but never, never evil. What you face now is not hell.

But what you do face, as you well know, and as you told me today, is death. And the question is this: What can we know about death? What can we know, except that death is the other side, the far bank of the river of life that all of us must wade across?

You will remember that many years ago I, too, was given a fatal diagnosis, along with the hope of maybe living out the next year or two. Fortunately for all concerned, medicine then marched on and foiled the plans of my doctors. But I can never forget what my brother John, a Holy Cross priest at Notre Dame, wrote to me when things looked terribly bleak.

He said, “Think of this as a *memento mori*. We all live our lives with the sword suspended above us, in darkness, never knowing when the sword may fall. All that has happened to you is that someone has switched on the light, and you have seen the sword.”

You, too, have now seen the sword. And now that the light is switched on, let's have a look at that sword.

Thomas Aquinas, deservedly famed for brilliance and insight, has never been celebrated for his poetic gifts. But in at least one inspired moment he gave us one striking figure of speech that is useful right here. God, Aquinas said, is the most knowable thing in the universe, in the same way that the sun is the most visible thing in the universe; but when the eye focuses directly on the sun, it is instantly blinded. So, too, he said, when the intellect focuses directly upon God, it is utterly boggled.

I will add to Aquinas' simile by pointing out that death is the most obvious thing in the universe. And in the way of the eye focusing on the sun, and the intellect focusing on God, when our hopes and fears focus on death, we are baffled. We spend our emotional lives automatically glancing off the prospect of our own death, just as our eyes instinctively shun looking directly at the noontday sun.

Katherine Anne Porter has said, talking about her novel *Noon Wine*, “We are born knowing death.” *Knowing*. Now, there's a word for you. It's the *sapiens* part of *homo sapiens*. It's the *surely* part of God's promise to Adam, that if he ate the fruit of the Tree of Knowledge he would *surely* die. Of all the creatures on this planet, we are the only ones who know the inevitability of our own death. And that, in fact, is all we really know of the matter: inevitability.

Science, upon which we rely nowadays for knowledge, would appear to have little to tell us about death. But sometimes we can learn something useful about a thing by examining its opposite — in the case of death, by examining life. And science can tell us quite a bit about life.

Science tells us, for example, that our living bodies are composed of some interesting chemical compounds and elements, without which life as we know it could not exist. Water, for example: our living bodies are made largely of water. And iron and calcium, and many others listed on the labels of the things you buy at the supermarket as minimum daily requirements, and, perhaps most essential of all, carbon.

If you've kept up with your science reading, you know that none of those things existed at the instant of the Big Bang. They came into existence much later. The elements essential to life formed in the deep interiors of dying stars, created in the final milliseconds before a doomed star exploded in a grand supernova, spewing its guts, including the iron so necessary to your circulatory system, into

the vast reaches of interstellar space, from whence somehow over the course of millions and billions of years that same iron found its way into the corpuscles of your bloodstream, calcium into your bones, water into your tissues, carbon into your very flesh. Somehow it seems hard to believe, would seem exceedingly strange, that so gigantic an evolution, taking as it did astronomical eons to accomplish, could be an utterly random, utterly pointless process.

We are also told that our living bodies are made up of many billions of microscopic cells, each with its hundred thousand moving parts, each going about its work every second, every minute, every hour, every day, year in and year out, knowing nothing of each other, knowing nothing of you. And yet out of this vast churning systematic conglomeration of atoms, molecules and electrical intercellular business has long since arisen a Self, a Mind, a Person, a You.

Even more amazingly, we learn that all these cells regularly die off and are replaced, so that over a period of about 10 years all the cells that once comprised you have died and have been entirely replaced by new ones. The living body that was you 10 years ago is already long dead, and your previous body 10 years before that, and 10 years before that, and before that. . . . And yet the you who lived and loved and dreamed all those years ago is still here, still subsisting, still hoping, still wondering.

The boy you were at 17 is still alive, although his body died and disappeared long ago. And if all this gives rise to the realization that there is far more to life, death's opposite, than we ever before dreamed of, it gives rise also to the hope that there is far more to death, life's opposite, than we can possibly imagine or foretell — and even leads to the suspicion that perhaps eight months from now, if your doctors are correct and you exhale your last, the 17-year-old boy you were all those decades ago, the 59-year-old man you are now, might just possibly live on.

Ah, here we seem to be getting into speculation — or, if you like, faith.

Faith and belief are all very well and good, but they don't quite measure up to *knowledge*, do they? No, not by themselves. And I have to give short shrift to the faith of the Hindu in reincarnation, in "past lives," in the so-called transmigration of souls. I can find little comfort, nor I think could you, in an amnesiac survival of the self, affording little or no memory of one's former life. What good would be a survival if we could not remember ourselves, our life? What we want, after all, is to somehow know that our self, the Me we know and remember, somehow survives.

But faith, in itself not quite as secure as knowledge, can lead to *wisdom*. And as it turns out, wisdom can surpass even knowledge in showing the way to inner peace.

One way of getting from faith to wisdom, of affording real insight into the question of what happens to the You when you die, is by playing the "What if" game.

To go ahead with the worst possibility, the one you presently dread, What if when you die the You dies too? Let's consider that in a couple of ways.

What if this much at least of our Judeo-Christian faith is correct,

that there really is a personal and omniscient God? *Omniscient* means "knowing everything." In fact, if you think long and hard about it, God would hardly be worthy of the title *God* if he didn't "know everything."

You can't remember the 11th word you said yesterday, but an omniscient God could. You can't remember, never even paid much attention to, 99 percent of your life, but an omniscient God would. An omniscient God would remember every breath you ever took, every dream you ever dreamed, every word, every sigh, every gesture, every haircut, every glance, every infecting virus, every trip to the mall. An omniscient God has been living your life right along with you, living it far more fully than have you, knowing every motivation, every reason, every justification. He has been You far more really than you have been, and when you die, that You continues to be, whole and entire. Therefore at the moment of your death your life would not be *over*: It would be *complete*.

Aquinas' own ultimate proof of the immortality of the soul was that every person desires, longs for, immortality. He felt that God would not have endowed us with such a desire, would not have played such a trick on us, were it not so.

But then, still considering the worst, What if there is no God? What if our faith is entirely mistaken? What if when we die, we die all over, completely, vanish into nothingness? What if that?

To that we do know the answer. To such a question, wisdom leads us to a truth greater than mere *knowing*.

For, whatever happens at death — the best of all possibilities or the worst of all possibilities — it is the way of all the earth, the way of the universe, the way things are. As Marcus Aurelius wrote in his *Meditations*, whatever happens, happens rightly.

The way things are, being the way things are, is the way things should be. The way things should be is of necessity good. And we should not fear the good.

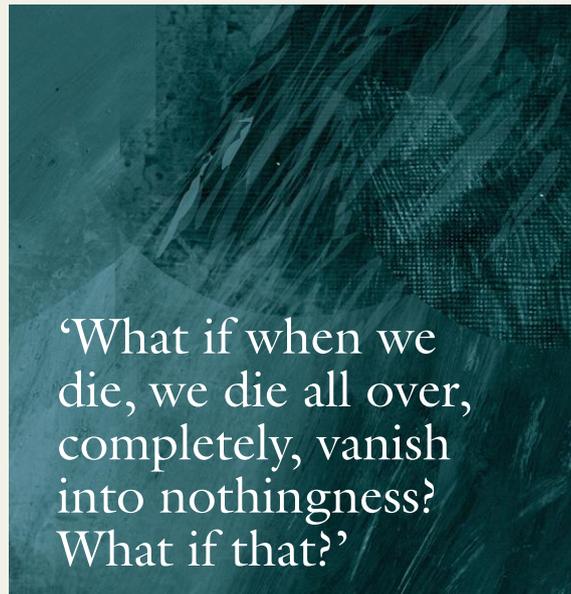
Elisabeth Kübler-Ross, who sat at the bedside of many a dying person, observed that no matter how we fear death while we are living, those in the final act of actually dying have no fear of death — welcome death, in fact.

There is a wonderful parable by the ancient Chinese philosopher Chuang-

Tzu that goes like this:

How can I tell if love of life is not a delusion? Lady Li was the daughter of a border guard of Ai. When the Duke of Chin first took her captive, she wept until her dress was soaked with tears. But once she was living in the Duke's palace, sharing his bed, eating his delicious food, she wondered why she had ever cried. How can I tell whether the dead are not amazed that they ever clung to life?

When you are gone, my dear friend, I shall miss you terribly. I will grieve for you. The day will not pass that I will not wish for you. But I will envy your knowing at last the answer to the question of death, for your having experienced the last and greatest adventure of life. And I will rejoice that you have leapt the river that we, who must remain behind, have yet to wade across. □





THE GLOBAL GOOD

'Whether globalization contributes to the common good is a question that has been answered: Yes, some of the time. The more pertinent question is how globalization, through business, can serve society.'

BY CAROLYN WOO

On my trip to Hong Kong in December 2005, the taxi could go no further beyond the edge of Causeway Bay because of protests by South Korean farmers. I walked the rest of the way to my hotel, witnessing rage and ferocious outbursts. Livelihoods were on the line.

Carolyn Woo is the Martin J. Gillen Dean and Ray and Milann Siegfried Professor for Entrepreneurial Studies in the Mendoza College of Business.

The farmers' plight related to the World Trade Organization (WTO) agreement that would increase rice imports by South Korea from 4 percent to 8 percent in the next decade without additional compensation to the farmers. Bold characters on protesters' banners read, "Globalization kills farmers."

Through the years, demonstrators who gather at the WTO meetings in various cities have protested their grievances against globalization in dramatic gestures and scorching accusations. The issues are diverse: protestations of the shift of jobs to low-wage countries;

condemnation of environmental degradation; censure against fast-food restaurants for spreading unhealthy lifestyles; concern over the loss of local cultures; assertion of threats to national sovereignty; and moral indignation about export subsidies enjoyed by developed countries that depress both the price and vitality of agricultural sectors in developing regions.

An overarching vision of the issues of globalization can be seen in *Caritas in Veritate*, the 2009 encyclical by Pope Benedict XVI, which declares that economic activities are inherently human with profound moral consequences for people's well-being, and should entail justice for those who are most vulnerable.

Charity, the encyclical states, "gives real substance to the personal relationship with God and with neighbour; it is the principle not only of micro-relationships (with friends, with family members or within small groups), but also of macro-relationships (social, economic and political ones)."

As one of the key principles of Catholic social teaching, the notion of the common good, which is given explicit attention in *Caritas in Veritate*, stipulates our responsibility to contribute to the whole society. The rectitude of any economic activity must be assessed by the extent to which it advances or threatens our life together as a community. In this current encyclical, Pope Benedict XVI sets a high bar, noting that our global economic interactions should not only bring us into close proximity as neighbors but also bring us together in solidarity as brothers and sisters.

It is difficult to imagine any response to *Caritas in Veritate* that does not embed a healthy dose of skepticism about whether globalization can deliver on the vision of the common good. Can free markets extending across the world and integrating all forms of cross-border trading activities — an impersonal force motivated by financial gains — truly consider and advance the welfare of all people? Is this a call from the wilderness so far from the realities of our economic life as to have no resonance, and thus no enduring power to grip our hearts and motivate our actions? Or is this a call that recognizes the potential of globalization that is not only reachable, but is the *raison d'être* of its very promulgation, and the absence of which would diminish our ability to serve each other?

Such questions were on my mind when, during a 2008 trip to Ethiopia as a board

CONSIDERING THAT THE
THREE PRIMARY CAUSES
OF CONFLICT ARE COR-
RUPTION, POVERTY AND
SOCIAL INEQUALITY, IT
IS NOT DIFFICULT TO SEE
THAT COMMERCE CAN
ENHANCE PEACE. FEW
THINK OF THIS, BUT THE
MOST VALUABLE EXPORT
FROM AMERICA TO THE
REST OF THE WORLD IS
CIVIL SOCIETY.

member of Catholic Relief Services, I visited what seemed like miles of greenhouses established by conglomerates from Europe. Such farms provide jobs in this desperately poor region and are supported with tax breaks from the local government.

But there are drawbacks to these operations. These greenhouses drain the river — the lifeblood for local families, as well as for their farms and cattle. Chemical fertilizers and pesticides are deployed in poorly ventilated spaces, putting workers at a higher risk for developing cancer. I also learned about differential regulation between Kenya and Ethiopia, whereby the former sets higher regulations for worker safety.

I love flower arranging and have enjoyed the bounty of roses available back home for as low as \$15 for two dozen blooms. But from that day on, I have not been able to bring myself to reach for these roses.

At home in the United States, it is sobering to note that after the last 15 years of unprecedented prosperity and economic growth, income inequality has risen to alarming levels. The income of the top 1 percent of earners has risen from 8 percent of total income in the 1960s to 20 percent today. This gap is the highest among advanced countries. At the same time, unemployment has risen to a rate not seen in the last 30 years. A day at a Catholic Charities office brings us face to face with some of the 44 million Americans living in poverty. In such stark differences, where is the vision of the common good?

A child of globalization

While being as open-eyed as possible about these miseries, I cannot shake from my mind my first-hand experiences of the benefits of

globalization while growing up in Hong Kong. My parents were refugees from China. As land and business owners, they would have no future in Mao's Communist regime. They left behind all possessions and the ancestral home passed down through generations to start a new life in Hong Kong.

I am an offspring of globalization: born ethnic Chinese in a British colony to a father whose profession was shipping; taught by American missionary nuns, the Maryknoll sisters, who offered instruction in English starting in the second grade as their Cantonese could carry them no further; nurtured throughout my life by Catholic institutions, which are among the oldest global organizations; educated in the United States on scholarships provided by American donors and the government; married to a U.S. citizen of Irish and Lithuanian descent; given a Chinese name, Yan, that stands for Confucius' canons for human relations, and an English name that supposedly came from my father's fascination with Irish names (and maybe Irish dames) when he studied in Europe.

My story is the norm, not materially unlike my classmates or the 1.5 million refugees who relocated to Hong Kong from 1945 to 1950. Without global trading, what would we have become, in a colony of 426 square miles, with no natural resources except a deep harbor and an overwhelming influx of refugees? Hong Kong could not supply its own food and had to purchase water from China. It had little habitable land and was not endowed with deep deposits of valuable carbons, metals or minerals. Yet it not only provided a shelter but helped newcomers achieve prosperity. Today, with a population of 7 million, Hong Kong continues to have, as the U.S. Department of State says, "one of the world's most open and dynamic economies."

Behind that general statement are the stories of many I knew who gained better lives through a rising economy.

One, my distant cousin Choi, came to Hong Kong with only the proverbial suitcase and no money. What I remembered most was his recounting of how, when a person was called to report to the prefect in charge of his neighborhood in China, shoes would be the give-away of "despicable, bourgeois" tendencies. This character flaw subsequently was punishable during the Cultural Revolution by the donning of a dunce cap and kneeling on broken glass. Since then, I have never taken the ownership of shoes for granted.

Once in Hong Kong, Choi showed his own bourgeois tendencies by starting a little



store that sold and repaired transistor radios in a dingy landing of a multistory residential building. He eventually parlayed this skill into a small job shop that sold components to local assemblers and later as exports to Japanese manufacturers as he improved the quality of his products.

Our family driver, Mr. Lai, was an educated man from China who spoke no English, Hong Kong's official language. He tutored me in Chinese for my Primary Six public exam, while I corrected his pronunciation as he struggled with his "Rs" and "Ls." Eventually, Mr. Lai's ability to speak English enabled him to qualify for a taxi license and save enough capital to acquire his own taxi. Both assets — which were subject to government quota and could be traded in the market — appreciated significantly during the tourist and industrial boom in Hong Kong. Mr. Lai's abode, which started as a lean-to on the hillside, was finally upgraded to a private condo by way of a one-room apartment in public housing. All of his three children graduated from the University of Hong Kong with professional degrees.

Last but not least, our *amah* — a maid/nanny of sorts — would stop into the bakery to buy a few fractional shares of multinational companies on her daily visit to the market. As the prices of the shares appreciated, she eventually became a lender, making loans to other *amabs* at loan shark rates.

'FREE MARKET' IS
A MISNOMER; NO
MARKETS ARE EVEN
CLOSE TO FREE.

A rising tide

In Asia, the city of Hong Kong's ascent is shared by six countries that are collectively known as the "seven tigers": Indonesia, Malaysia, Singapore, South Korea, Taiwan and Thailand. Today, Vietnam and Cambodia, re-grouping after war and coups, are industrial cubs mimicking the example of the big tigers.

In other parts of the world, information technology and liberalization of trade have opened up a variety of markets. At Notre Dame, for example, jewelry made from

recycled magazines by women's co-ops in Uganda was sold during a Christmas fundraiser in the lobby of the Mendoza School of Business. And a women's collective in Colombia, through the Clinton Foundation, has engaged Notre Dame MBA students for an analysis on how they can increase demand and prices for their spices.

Despite the unevenness in income benefits, U.N. reports show that infant mortality worldwide has dropped from 12.6 million in 1990 to 9 million in 2007. Access to education has climbed noticeably over the last 20 years in sub-Saharan Africa, from 58 percent to 78 percent of all children who receive some primary schooling. The prediction that parents would place their children into the labor force when jobs are created in developing countries produced the opposite results. Parents with opportunities want a better life for their children.

In Afghanistan, I witnessed how the success of women in enterprise groups triggered the desire for more education for both themselves and their daughters. Development experts repeatedly note that education for women is the most effective approach to addressing the millennium challenges.

It has been shown that direct foreign investments, market economies and participation in the global economy can increase prosperity. Benefits to citizens include employment, job training, higher standards of

living and financial stability. Even for non-profits, I saw how global interactions can improve life. In a clinic in Kenya, nuns transmitted X-rays through a computer to Italy, where physicians in a Catholic hospital diagnosed the problem in real time.

Participation in markets plays a significant role in setting conditions for trade, stimulating savings as well as developing infrastructures for roads, ports, rail, information systems, monetary policies, regulatory frameworks, education and financial institutions. Multinationals with operations in developing countries can set requirements for revenue distribution and reporting protocol that promote transparency and multi-lateral collaboration between local governments, non-governmental organizations and transnational agencies such as the United Nations, the International Monetary Fund and the World Bank. The countries that had the lowest corruption scores are also those with the most open economies.

Considering that the three primary causes of conflict are corruption, poverty and social inequality, it is not difficult to see that commerce can enhance peace. Few think of this, but the most valuable export from America to the rest of the world is civil society. Universal suffrage was not a feature in any nation in 1900; by 2000, it is present in 62.5 percent of all countries.

Clearly the outcomes of globalization depend on the global actors, particularly large multinationals. According to author Bruce Piasecki, of the world's 100 largest economies, 51 are corporations. In addition, 300 multinationals account for 25 percent of the world's total assets.

Whether globalization can contribute to the common good is a question that has been answered by evidence: Yes, it can, some of the time. The more pertinent question, I believe, is how globalization, through business, can serve society.

Socially responsible conduct

In 2000, U.N. Secretary General Kofi Annan called upon corporations to become voluntary signatories of a new program, the United Nations Global Compact (UNGC), by which they would abide by 10 principles. These pertain to the advancement of human rights, labor rights, environmental sustainability and anti-corruption.

Now, in the compact's 10th year, signatories have grown from 50 inaugural members

COMPANY SOURCING DECISIONS, WHILE OFTEN CHARACTERIZED AS A RACE TO THE BOTTOM TOWARD THE LOWEST WAGE COUNTRIES, ARE ACTUALLY CRITICALLY AFFECTED BY A HOST OF OTHER FACTORS, SUCH AS POLITICAL AND ECONOMIC STABILITY, AVAILABILITY OF SKILLED LABOR, LITERACY RATES, PROTECTION OF PROPERTY RIGHTS, SOUND MACRO-ECONOMIC POLICIES, LOCAL INFRASTRUCTURE AND QUALITY OF LOCAL INSTITUTIONS.

to more than 5,000 businesses and 1,500 non-business organizations in 135 countries. The most active country is France with 512 organizations. The United States ranks sixth with 203.

Signatory organizations have the flexibility to create their own implementation plans. Most companies have enacted policies focusing on nondiscrimination and workplace safety, as well as restrictions on child and forced labor. Sustainability practices have become central to corporate operations, and, to fight corruption, some companies have established oversight systems that include hotlines and sanctions for breaches.

Many believe that budget-conscious but socially responsible conduct will become the "new normal" expected by customers, governments and civil society. In a 2010 Accenture survey of more than 700 CEOs from UNGC-participating companies, 81 percent reported that they have incorporated environmental, social and governance issues into their core strategy, up from 50 percent in a similar survey in 2007.

Many other companies, large, small, private or public, also abide by socially beneficial

practices similar to the UNGC. New business models that explicitly align profit and social objectives include micro-ventures (made famous by Nobel Laureate Muhammad Yunus), fair trade (which apportions greater bargaining leverage and profits to local growers and producers), and B Corporations (based on formal corporate charters that specifically include social responsibility as their objective). Note that these socially oriented business models stand on, and do not depart from, the foundations of capitalism: protection of property rights, voluntary transactions and contracts enforceable through rule of law.

Businesses do not operate in a vacuum but achieve success and make contributions within a certain regulatory, political and social context. Relaxing in my hotel room in London in the summer of 2002, I sprang to my feet for a straight-back salute when Queen Elizabeth II came on television for her golden jubilee celebration. It was not an instinct from my days as a colonial citizen but a deep appreciation for how the British government, despite the way it came into possession of Hong Kong, enabled an economic miracle that lifted up the lives of about 5 million people. By then, I had seen enough of the contrasting consequences between good and corrupt government; intelligent and nonsensical rule; and government for and against the people.

"Free market" is a misnomer; no markets are even close to free. Taxes, regulations, standards, tariffs, investment incentives, trade agreements, social institutions for education and health, physical infrastructures for transportation and communication, all come together to shape, enable, restrict, facilitate and hinder the activities and competitiveness of business. Whether or not globalization works for a country depends critically on the prudence and fortitude of its government in formulating corresponding strategies, policies and programs.

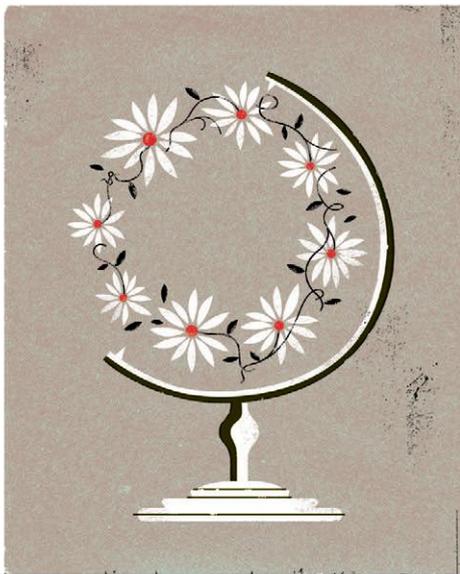
Company sourcing decisions, while often characterized as a race to the bottom toward the lowest wage countries, are actually critically affected by a host of other factors, such as political and economic stability, availability of skilled labor, literacy rates, protection of property rights, sound macro-economic policies, local infrastructure and quality of local institutions. Asia receives 20 times more foreign direct investments than sub-Saharan Africa because of strong showing on these criteria.

More, not less globalization

Clearly the benefits of globalization are uneven, and substantial variation in socially responsible behavior among companies exists. Yet we should heed the observation in a recent International Monetary Fund issues brief that “the biggest threat to continuing to raise living standards throughout the world is not that globalization will succeed but that it will fail. It is the people of developing economies who have the greatest need for globalization, as it provides them with the opportunities that come with being a part of the world economy.”

We must recognize that the engines that propel globalization are operating with full steam. For centuries, trade has been going on between tribes, societies, countries and continents. Globalization is a historical process of increasing integration of economies around the world and cross-border movements of goods, services, information and capital (including financial, labor, knowledge, know-how) enabled by technologies and policies. What is different today is the scale. The amount of foreign exchange transactions is approximately \$2 trillion a day versus only \$80 billion in 1980.

The sense of my own country versus yours has certainly dulled in light of Foreign Direct Investments, which have surged from 6.5 percent of world GDP to more than 30 percent in the last 30 years. Capital, as in your and my pension investments, certainly seems to cross boundaries without hesitation



toward the pull of opportunities. And information is easier to share. I could not make a phone call to Hong Kong from Purdue University in 1972 without decimating my monthly allowance. Now it is free on Skype.

Pertinent to the success of American companies is the fact that almost all sectors — such as health-care technology, auto manufacturing, aircraft, electronics — now include leading competitors outside of the United States. The rules and playing field for business are global in nature with attendant challenges and opportunities that transcend the resources of any single company, as well as the jurisdiction of an individual nation-state.

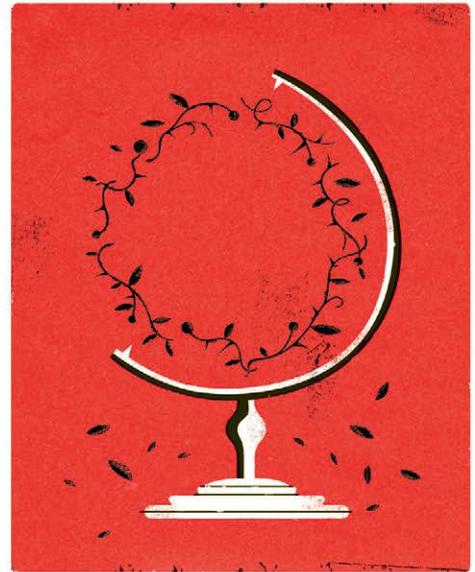
Should this intimidate or energize us? Should we reject the future because we cannot traverse the familiar paths of the past to get there? Will the common good be better served if we retreat?

Papal teachings remind us that markets can serve society. As Pope Benedict writes, “The Church has always held that economic action is not to be regarded as something opposed to society. . . . Society does not have to protect itself from the market, as if the development of the latter were ipso facto to entail the death of authentically human relations.”

On prosperity achieved through development, the encyclical makes clear that more, not less, trade is needed: “the principal form of assistance needed by developing countries is that of allowing and encouraging the gradual penetration of their products into international markets.”

A vital key lies in differentiating the instruments of the global marketplace from the actors who direct it. As *Caritas in Veritate* states, “Instruments that are good in themselves can thereby be transformed into harmful ones. But it is man’s darkened reason that produces these consequences, not the instrument per se.”

According to the 2009 U.N. report on its Millennium Development Goals, while the percentage of people in the world living on \$1.25 a day or less has dropped from 42 percent in 1990 to 25 percent in 2005, some regions such as sub-Saharan Africa have not enjoyed this progress. More sobering are the percentages of people living at this level of income while employed: 64 percent in sub-Saharan Africa and 44 percent in South Asia. Food insecurity in the world remains staggeringly high, with about one billion people suffering from chronic hunger and two billion people living with malnutrition. Together, these represent about half of the world’s population.



Globalization has eased some of these problems, and I believe proper business practices followed by men and women of moral character with a people-centered sense of responsibility can indeed deliver on the vision of the common good. I see the recurrent worldwide miseries as a call to make globalization work for more people, not as a justification for retreat. The latter is neither feasible nor effective in raising the quality of life.

Trade is a necessary good, not a necessary evil. However, the “invisible hand” of markets cannot become “fists” — “handshakes” must prevail as the most common form of interaction. The solution for the Ethiopian flower farms is not to stop operation but to adopt strict environmental controls that safeguard worker health and safety, invest in water recycling methods to preserve the water table, develop effective irrigation approaches to increase crop yield, raise prosperity for the villagers and offer opportunities for children, particularly girls, to get an education.

I want to enjoy the roses, yes, at a higher price, and know that I am part of a global supply chain that lifted people out of poverty rather than exploited their lack of bargaining leverage. □

THE INVESTOR

Paul Tierney '64, once known as a corporate raider and a savvy, successful fund manager, is now making bold impacts by bringing venture capital into what he calls frontier markets. And doing some real good.



BRIAN BLOOM

BY LORI BARRETT

Paul Tierney '64 owns a home on each coast, runs two successful investment groups, advises or sits on the board of several large institutions, and teaches classes at Columbia University's business school. So, on this snowy Friday morning in New York, he's keeping an eye on his watch ahead of a meeting with some very important people: his grandkids. Tierney is flying to San Francisco in the afternoon to join his wife, Susan, who

flew out a day ahead of him, to babysit their three grandchildren for the weekend.

In an average week, Tierney says, he spends about half his time running his businesses, including Development Capital Partners, a fund he runs with his son and partner, Matthew, that invests in emerging markets, and Aperture Venture Partners, a healthcare-oriented group that invests in early-stage companies. He spends the other half of his time serving as chairman of the board of TechnoServe, a non-profit organization that provides training, technical support and guidance to entrepreneurs in struggling economies. Another half of his time is devoted to his passions: family, friends, bicycling, soccer and reading the classics.

Lori Barrett is a freelance writer and editor living in Chicago. Her work has appeared in The Wall Street Journal, Time Out Chicago, Venus Zine and the book Mamas and Papas: On the Sublime and Heartbreaking Art of Parenting.

“So, that adds up to one and a half,” Tierney says with a laugh.

We’re sitting in Tierney’s living room on the Upper East Side of Manhattan, a room that, like Tierney himself, is warm and elegant. The walls and furniture are muted pastels and creams; the choral music coming from the speakers is hushed; and the city outside is quieted by Central Park across the street and the falling snow.

This juggling of all his time, plus half, is done with equal elegance. Tierney, 68, has amassed a fortune in his career as an investor, enough to invest in Washington D.C.’s Major League Soccer team and to travel the world to read classics in the cities where they were written. And even as he climbed his way to the top, he carved out time to help others.

“I’m fortunate that I can go back and forth between these different worlds. I don’t feel it’s a big tug,” he says. “The mix of things constitutes a satisfying life for me.”

Park, a suburb of Chicago, and went to Fenwick High School, a Catholic school in the Dominican tradition, in Oak Park. Tierney says his parents placed a high value on education and service, devoting extra time to church and PTA activities. Oak Park is where Tierney met Susan as well. He was a new kid in town when Susan’s mother, in an altruistic moment of her own, invited Tierney to her twin daughters’ 16th birthday party.

He also credits the education he got at Notre Dame and, in particular, the advice of his friend, Father Ted Hesburgh, CSC. Tierney recalls his confusion as a young man, approaching college graduation with a major in philosophy and debating whether to pursue a doctorate in political science or philosophy, apply for business school at Harvard, or go to law school.

Hesburgh was president of Notre Dame at the time, and Tierney had come to know him through his involvement with campus poli-



In his mind, balancing a desire to do well and a desire to do good isn’t all that complicated. “In order to be successful, it’s my theory that you have to be able to focus,” he says. “Just as a baseball player has to be able to bat well or pitch well, he’s not also trying to be fair to the opposition or to improve the environment or to do anything on a lot of social issues. But he doesn’t play baseball all day long. After the game’s over, after his job is finished, he does other things.”

Tierney credits his wife, Susan, and his parents for instilling and fueling his commitment to public service. He grew up in La Grange

tics. “I remember one evening when I was a senior,” says Tierney. “I was living in Walsh Hall, where you could see [Father Hesburgh’s] room, and I could see that the light was on in his room. He was notorious for staying up late at night.” Tierney called Father Hesburgh and was invited to come over and talk. “He gave me the obvious advice that I didn’t know what I was doing, and a good thing to do would be to join the Peace Corps and grow up. So that’s what I did,” Tierney says.

He spent the next two years in Chile with the Peace Corps, where

he initiated a program to help small farmers become more commercially successful. While he was there, Hesburgh came to visit. So did his friend from high school, Susan, the girl he'd met at the 16th birthday party. She spent part of that time in Chile as well, working as a teacher at a Holy Cross school. It was in Chile that Tierney proposed and the two got engaged.

Tierney came back from his time in the Peace Corps with a motivation to help those who are struggling, but his drive was mixed with skepticism. "I was critical of the international and American aid missions at the time, because I thought they were very wasteful and built dependency, rather than independence," Tierney says. He'd seen "a lot of good people, a lot of well-educated and smart people, but collectively not doing very well."

Back in the United States, Tierney pursued the advanced degree he'd been considering before graduation, becoming a Baker Scholar

at the Harvard Business School. He did some volunteer work while at Harvard and started a company called Development Entrepreneurs, which aimed to bring venture capital to what he calls frontier markets. The firm backed entrepreneurs in inner-city areas of the United States, the Dominican Republic and a few other places.

His knack for venture capital, in and out of frontier markets, carried him through the next several years: he managed funds, his own firm and the investments of some large corporations. He also settled in Connecticut, and had three children with Susan — besides Matthew, he has a daughter, Patricia, and another son, Michael. During these years, Tierney also took time out of his work schedule to coach soccer, play

soccer and travel. When asked if he has an exceptional ability to pick markets or businesses in which to invest, Tierney smiles and says, "I hope so. I'm going to lose a lot of money if I don't."

Tierney became known during these years as something of a corporate raider and a proponent of strategic-block investing, a practice in which investors purchase enough shares — a strategic block — to have an active voice in company affairs and instigate changes. The funds never plan to take ownership, only change control. Tierney's fund, Coniston Partners, broke up struggling travel conglomerate

Allegis Corp. in 1987 after buying a stake. *The New York Times* described it as a "genteel takeover" that same year, and a *Fortune Magazine* profile of Coniston depicted the three investors, Tierney, Keith Gollust and Augustus Oliver, as calm and cerebral, saying they "do the brain work themselves, sometimes while cycling through Central Park; they pay other lawyers and investment bankers to attend to the pedestrian details." That same article says each man personally earned \$50 million in May and June of that year.

By the mid-1980s, the drive to help others took hold, and Tierney was introduced to TechnoServe through his friend and fellow Notre Dame graduate, John Caron '45. Caron had been a longtime supporter of TechnoServe, which was founded by Ed Bullard. In the 1960s, Bullard, like Tierney, had volunteered overseas, working at a hospital in Ghana. He came back wanting to help developing countries, but without building dependency. So he launched a nonprofit to provide technical assistance to the rural poor. Thus the name TechnoServe: technology in the service of mankind.

Tierney started as a member. In this role, Tierney says, he visited projects in El Salvador, Peru and Ghana, "to understand what the work on the ground was really like, and to help out with business advice and strategic planning." He's been chairman for the past 20 years. This means Tierney works closely with TechnoServe's chief executive officer, Bruce McNamer, a former investment banker and management consultant from McKinsey and Company, on the overall governance of the organization, and he often visits countries with programs.

TechnoServe has a team of about 900 people working in 31 countries. This includes industry experts who volunteer their time and talent to host-country nationals. Each country has a director, who, Tierney says, tends to be an entrepreneurial person. Working alongside the country directors are product specialists. "We have a guy who probably knows more about cashew processing than anybody in the world," he says. TechnoServe also has a lively presence on the Internet. Its website is updated often and the Facebook page has a genuine communal feeling, with posts and "likes" from around the world.

The organization's commitment to building solid business structures and then tracking progress is different from the practice of institutions that offer microloans. "Only in rare instances do we arrange financing," says Tierney, who takes off his venture-capital hat when working with TechnoServe. "Microfinance is more an urban phenomenon than a rural phenomenon. And, we're primarily working in rural sectors." Another issue is the culture: Attitudes toward capital and paying back loans are different in some of these areas than they are in America.

Tierney travels a couple of times a year to Africa, once a year to India, and a couple of times a year to Latin America, "to be sure that I have my fingers on the pulse," he says. Often he travels with McNamer, who attests to Tierney's business acumen and altruism. "Paul likes people. He likes give-and-take. And he is keenly interested in the work we're doing," McNamer writes in an email message from Davos, Switzerland, where he attended the World Economic Forum. "He has figured out some things about life and success that few other people seem to balance so well."

As TechnoServe's chairman, Tierney meets with host-country public figures, ministers or presidents, and international donors. Groups such as the Bill & Melinda Gates Foundation, the Clinton Bush Haiti Fund and the International Finance Corporation back TechnoServe projects. U2 lead singer Bono praised TechnoServe's work in fighting poverty in Africa.

Tierney came back from his time in the Peace Corps with a motivation to help those who are struggling, but his drive was mixed with skepticism.

TechnoServe's real impact is in making information and technology available, he says. One broad area of business is what TechnoServe calls its value-chain work. Consultants help small growers in a supply chain produce a better and more dependable product. In Haiti, for example, in an effort to help sustain a long-term recovery, TechnoServe and the Coca-Cola Company launched the Haiti Hope Project in early 2010. Coca-Cola's Odwalla subsidiary makes a Haiti Hope Mango Lime-Aid, with mangoes supplied by thousands of Haitian farmers. TechnoServe's advisers and volunteers work with the farmers to improve growing conditions, so they can produce more mangoes of uniform quality. They also help arrange a delivery system for the mangoes, lining up trucks and a workable schedule. TechnoServe provides access to pricing knowledge, bookkeeping, banking and production techniques.

"It's not the same thing as sending a man to the moon or curing cancer, but it's important technology in these primitive economies," Tierney says.

Among other recent projects he is particularly proud of is TechnoServe's Coffee Initiative. It's funded by the Gates Foundation and has been implemented in Rwanda, Ethiopia, Kenya and Tanzania. The goal is to upgrade the value of the coffee, so that it's a branded, specialty coffee of the sort available at high-end coffee shops, thus bringing the growers more income. While these countries all grow good coffee, Tierney says, "Our work has been to make the coffee more uniform and getting buyers to come." Local farmers are taught better planting and harvesting methods, while local coffee processors are changing the way they wash, dry and roast the beans. Now, says Tierney, "you can go into a Peet's Coffee shop and see coffee from our growers."

David Browning, senior vice president of the Coffee Initiative, has worked closely with Tierney. Like many of TechnoServe's leaders and members, he left a prestigious corporate job because he wanted to lend a hand in the fight against world poverty. In their dealings in Africa, Browning says, Tierney has a great balance of urgency and patience. "Paul is very committed to whatever he turns his attention to." He says Tierney shows tremendous curiosity and interest when meeting with young entrepreneurs, and he's always prepared to devote time to figuring out how TechnoServe can help. "He's a remarkable example of what Notre Dame inspires in its graduates," Browning says.

Tierney says having majored in philosophy has helped him focus on the larger picture. This likely helps him to juggle the many passions in his life — including philosophy and literature.

For a time, from 1990 to 2004, the Tierneys had a home in Santa Fe, New Mexico, where Susan pursued her interests in art and Native American culture. While Tierney stayed busy as always, even played soccer, hiked and rode his bike, he started looking for a more intellectual activity. St. John's College was close to their house, so Tierney took a few seminars, got to know some of the tutors and the president of the college and, finally, was asked to be on the board. "The summer courses were always good, because the books were always good. I mean, they're classics for a reason," he says.

The students, however, were not always as engaged as he was. So, he gathered about a dozen friends to form a classics reading group. The first seminar, 10 years ago, dealt with existential philosophy. Since then, the group has grown to about 100 friends and friends of friends. And they've moved on from the St. John's campus to travel the world. Last year's seminar was in Athens, where the group read and studied the life of Alcibiades, a politician and military leader. The year before, they read British poets at the Notre Dame facility

TECHNO
SERVE



Tierney travels a couple of times a year to Africa, once a year to India, and a couple of times a year to Latin America, "to be sure that I have my fingers on the pulse," he says.

in London, and studied with ND Professor Greg Kucich. This year, they'll head to Prague and read Kafka.

The planning doesn't just involve choosing a writer to study and lining up a tutor. Each year, about 50 of the 100 people in the group attend. They break up into two rooms of 15 or 20 students during the day, and the spouses who don't do the readings go sight-seeing or do their own thing. In the afternoon, there are lectures or tours and dinner in the evenings. So planning takes a good deal of time. "I have one dedicated person who works for me as the administrator of the seminars," Tierney says. "The work of selecting the literature, the venues, the themes — that is a labor of love and involves countless, satisfying hours."

But it's worth it, Tierney says. "So often, friends get together and conversation is about how many angels you can put on the head of a pin, or how was your last golf game, or what's the best way to get to LaGuardia airport. And, instead, here we have an excuse to talk about some very good things."

Seeing and talking about these very good things is Tierney's gift. He acknowledges how fortunate he is to have the time and money to pursue his interests — interests that include fighting poverty. But doing good while doing well doesn't require power, success or wealth. "I think most people have jobs that they have to perform. And in the performance of that task, you do do good," he says. "It's not the same as being in a political or a not-for-profit organization, where your intention is to produce some societal good, but I think that indirectly you do produce it."

Tierney takes another look at the time. "I needed to leave like five minutes ago," he says. He's headed to a meeting where he won't be the leader; Susan will. "I love it." □



HARRY CAMPBELL

Driver's Ed, Khmer Style

ADAM KRONK '02, '09MNA

I never thought I'd ride, much less own, a motorcycle. My mom had hit one once with her Chevrolet Nova, breaking the driver's leg and earning herself the only ticket of her otherwise immaculate career behind the wheel. Forever wary as a result, she drilled into my sister and me as we logged hours on our permits in suburban Detroit the importance of cutting a wide swath around anything with less than four wheels and an enclosed frame.

And yet here I am in Cambodia, 15 years later, astride my very own Honda Super Cub — not exactly a crotch rocket or chopper, but a motorcycle nonetheless. Thus far, I'm happy to report, my wife, Jacqueline, and I have only six scars between us as a result: two matching sets of road rash on our right knees and elbows (courtesy of a narrowly avoided crash and

Adam Kronk and his wife returned from Southeast Asia this spring with newfound gratitude for their family and friends from around the world.

the ensuing pavement slide), one gash on my left leg (a souvenir by which to remember the first time we tried to fit three people on the bike at once) and the seemingly requisite exhaust pipe burn on the back of my calf (a rite of passage in Southeast Asia, and the only one, I assure you, I will ever sustain).

With shoddy brakes, a British racing green body, and a dinky, fuel-sipping 49cc engine capable of putting out a whopping 3.9 horsepower at 7,000 rpm, our refurbished Cub

made its way into our hearts immediately. Honda has made the model since 1958 and, as of three years ago, had sold more than 60 million, making it the best-selling motor vehicle of all time. The thing's basically indestructible, is a breeze to drive and certainly gets one from A to B.

The journey between these points has been an education.

A typical morning finds me kick-starting our bike and heading to Caltex, a nearby



WHEREVER THEY'RE HEADED, WHATEVER THEY'RE WEARING, MOST OF CAMBODIA IS UP WITH THE DAWN AND MOVING WITH PURPOSE, DODGING ONE ANOTHER WITH A STOIC EASE THAT STILL ESCAPES ME.



gas station that makes a mean iced coffee. First gear gets me across the gravel to our gate, second suffices as I negotiate the gauntlet of potholes and mud pits on our street, and third (the highest) propels me out onto Road #6 and into the throng of Khmer people wending their ways through the quiet chaos of traffic in Siem Reap. A few haul tranquilized pigs slung sideways across the backs of motos, tongues dangling. Some transport dozens of chickens suspended by their feet, beaks inches from the ground.

Others don the pale peach oxfords of tour guides, the green coveralls of street sweepers or the varied getups that the town's dozens of resorts have their porters wear so that tourists on tuk tuks, motorcycles trailing little one-axle wagons, already heading back from watching the sun come up over Angkor Wat, feel like they're getting an authentic experience during their five-star stays. Skinny security guards in navy uniforms head toward shops, banks and other businesses, where they will stand with their nightsticks, looking like dispensable extras in an action movie.

Children on bikes too big for them — just the tips of their flip flops touch the pedals at the bottom of each revolution — either sport the smart white-top-blue-bottom combo schools require or, in stark contrast, the ragtag garb of trash sorters. Pickup trucks overflowing with people barrel to and from Poipet, the sleazy border town a few hundred kilometers away that serves as a gateway to Thailand and its promise of better (albeit risky and undocumented) earnings. Occasionally a spotless black Lexus SUV with state plates and tinted windows zooms past, horn blaring.

Wherever they're headed, whatever they're wearing, most of Cambodia is up with the dawn and moving with purpose, dodging one another with a stoic ease that still escapes me.

Initially, there was shock. Like anyone who had just made the trans-Pacific flight would be, Jacqueline and I were in a jet-lagged fog last March when we braved the streets of our new home for the first time. To our further disadvantage, we were coming from a nation where cameras take pictures of our license plates when we misbehave at intersections, after which Big Brother mails us a ticket. Not so in the Kingdom of Wonder, where pretty much anything goes when it comes to driving. In any lane, at any moment, any kind of vehicle can be found going in just about any direction. For the first several minutes, this was quite alarming. Until we realized the first rule of the road — the one with less inertia simply swerves aside. It isn't order, per se, but it jives with instinct and is a relatively reliable (if not so relaxing) method.

Next came fascination. Someone carrying a full-size refrigerator on a moto. Seven people on one moto. A patient on the way home from a clinic holding an IV above her head riding on the back of a moto. Transportation is just different here, and the swarm of activity, with its close calls and oddities, can be a spectacle to behold. This stage can last a while, and indeed most visitors spend their handful of days here happily enjoying what there is to see, documenting when possible the more outrageous examples for Facebook posts and travel blogs. If they miss the shot, picture books capturing the classics are sold in shops downtown and at the airport.

But then there's me — an island of anger in a sea of calm. As any of a number of eventualities forces me to screech to a halt, I seethe and look at the drivers around me to share a moment of exasperation. Instead, I encounter only smiles. This adds embarrassment to irritation, and a barrage of criticism (internal unless my wife happens to be with me, in which case she is the lucky witness) is unleashed. Wouldn't a traffic signal solve a lot at this intersection? Why can't there be a system? Wouldn't it make sense to look to see if other vehicles were coming before pulling out? Why doesn't all of this bother anyone else?

On one such occasion, Jacqueline gently suggested the obvious, using the special second-person-singular-disguised-as-first-person-plural code that spouses sometimes do: "What if we try not letting it bother us?" A good idea, but so much harder than it sounds.

Whether we had ever stated or consciously thought it, we came over here to fix things. I was armed with a recent Master's in Nonprofit Administration from Mendoza

and a healthy dose of the Notre Dame spirit, and my wife and I had 10 years of experience working at the Center for the Homeless in South Bend between us, so we quit our jobs and sold our house to use what we had learned to help a developing country — benevolent enough in terms of motivation.

It's the execution that's been unexpectedly difficult. As much as I know about the way things could be in Cambodia, I recognize more and more each day that I have a lot more to learn about the way things are. And while I'm here to show local staff at a grass-roots educational organization founded by Daniela Papi '00 how to operate more effectively, the Khmer people are teaching me larger lessons on how to manage myself.



Maybe my frustration with the traffic is a symptom of the sneaking suspicion I've had that this country might just be getting along fine without me. They don't do things the way I'm used to, and somehow they're a lot less alarmed by it than I want them to be. Yes, things could be better here. Corruption, especially of the low-level, bald-faced variety, is rampant. The education system is insanely under-resourced. And in the wake of the recent genocide, both a sense of fatalism and a lack of critical thinking understandably pervade the adult population, making change an uphill battle. These factors add levels of complexity to the work we do but don't detract from the beauty and poise that persist in this place — a reality which challenges not

only my technical abilities but also, and more important, the way I live out each day that I'm given.

Sure, Siem Reap could use a few more stoplights and a police force that does more than sporadically set up checkpoints and levy arbitrary fines to passersby. But from the seat of our Honda Super Cub — the starter of which was recently fixed by a mechanic using only a needle and a cigarette filter, by the way — it sure seems that resourceful, graceful Cambodia is more tutor than pupil. And when Jacqueline and I are once more back in the land where road rage is routine, I hope I'll once again be the odd man out, this time the inexplicably unfazed one sitting patiently behind the wheel. □





The Natural

AFTER A DECADE AS A DOCTORAL STUDENT,
GEOFF KEATING '00M.A. FINDS HIS TRUE CALLING
AS A FURNITURE MAKER.

BY KERRY TEMPLE '74

PHOTOGRAPHY BY MATT CASHORE '94



LET'S START WITH THE

CHAIR. I CAN'T GET THE

IMAGE OF THE CHAIR OUT

OF MY HEAD. AN ELEGANT,

HANDMADE, SPINDLE-BACK

CHAIR WITH SPLENDID LINES

AND A FINISH SMOOTH AS

SATIN. SNUG AS A SADDLE.

LOVINGLY CRAFTED FROM

WALNUT AND ASH. A COMFY,

HARDY, WOOD-GRAINED

WORK OF ART.

The chair is the only finished piece in Geoff Keating's workshop. The workshop is in the close-coupled basement of his parent's smallish South Bend home. A basement jammed with all manner of saws — big table saws and shiny hand saws — a joiner, drill and lathe and other power tools, a bounty of hand tools, snaky vacuum hoses and bags to collect sawdust. There are stacks and shelves and scraps of wood — red and black walnut, ash, poplar, cherry, oak, even pine — a blackboard and sketchbook, flasks of linseed oil and glue, vise grips, utility cords and wooden works in various stages of progress: rough cut, finely tooled, sanded, squared or honed into elements beginning to resemble legs, panels, crest rails, desktops and doors.

And over in the corner is the chair. Just a simple chair.

It's been a couple of hours since I left Keating '00M.A. in his workspace, but I keep thinking about the chair. A thing of beauty. Silky to the touch, surprisingly comfortable to sit in.

"I wanted something that was light, delicate and airy," Keating says of the chair he designed and built. "Something that wouldn't dominate a space but would still command enough presence to be noticed. Something that would fit into smaller spaces, could serve as an accent chair in a living room but also as an everyday chair at a

Kerry Temple is editor of this magazine. For more photos of Keating and his furniture, go to magazine.nd.edu.





dining table. I wanted the person sitting in it to feel that the chair was hugging them. As soon as you sat in it, I wanted you to forget that it was light and delicate and instead to focus on the comfort and the feel of the wood.”

The chair is mostly black walnut, but combined with lighter-colored ash. “The colors complement one another,” he explains, with the ash softening walnut’s dark stare. “And the flexible strength of ash works well for spindles and legs.”

The ash, of course, originally came from a living, breathing tree, but most recently from the wood heap in Keating’s basement shop, that he milled and cut into “blanks” to be turned on the lathe and delicately, patiently hewn into spindles for the seat-back and legs.

The seat began as a 2-inch thick slab of American black walnut cut into three equal pieces and glued seamlessly into a seat blank. Keating drilled holes at appropriate angles through the seat blank for the four legs and eight spindles. He then carved out the seat shape on a band saw and slowly scooped and shaped the seat bottom for comfort and visual effect.

Then there’s the crest rail, with holes drilled at precise angles so the tops of the spindles that converge from different angles will meet at the correct orientation. Legs and spindles travel snugly through the walnut, and Keating slices a diametric “kerf” across each end, then drives a wedge into the slot to tightly secure the fitting. The seat, too, has

to be exactly positioned to ensure sustained comfort.

Each element was carefully, repeatedly sanded and smoothed throughout the build, a four-day process with each task, each unique piece of wood presenting its own problems and challenges. Once completed, Keating did a final sanding and began applying a blend of natural oils — five coats over the next six days — to complete the chair’s fine, soft finish, each coat evenly applied, then drying, curing.

“If you ordered one chair and I had nothing else to do, it would still take 10 days to two weeks to complete it,” says Keating, adding, “Once complete, the chair is extremely durable. It is built to bend rather than break. That’s to say, there is a great deal of intentional flex to it, which — especially in the spindles — provides some of the comfort. When built correctly, it should last several generations.”

Such a simple chair.

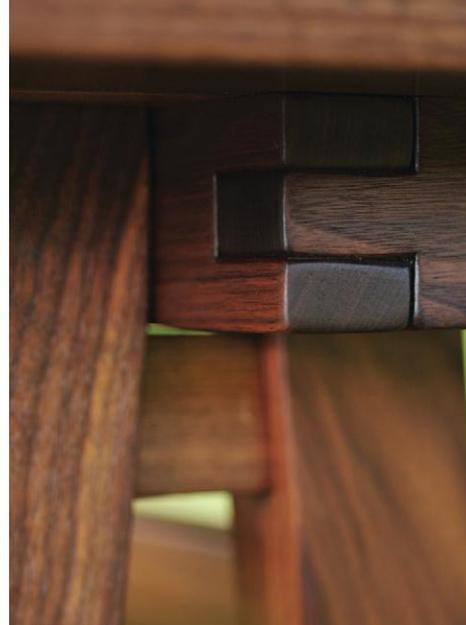
It’s a chair, he says, that achieves “the balance that has to be drawn in trying to weigh the competing elements of the right visual aesthetic with structural integrity, and not compromising either.” Keating doesn’t build just chairs. He makes tables and beds, hutches, dressers and desks, even lamps, stools and big strapping cabinets (once necessitating the furniture maker to tear out the basement steps to remove it from his workshop). And that balance of grace and function is the aim of each piece.

KEATING DIDN'T SET OUT TO BE A FURNITURE MAKER.

The Amarillo, Texas, native almost ignored the DNA. Generations ago, the men on his mother's side of the family were master builders and woodworkers. The specialty of the Keller clan was churches — small, country churches — erected all over east and west Texas, even into Arkansas, and not only the steepled buildings but the pews, pulpits and ornamental details. For most of his life the closest Geoff Keating came to that vocation was occasionally hanging out in his uncle's workshop and looking at old photographs of ancestrally built churches.

Keating earned a master's in theology from Notre Dame in 2000 and spent the next nine years as a doctoral student in theology, living the academic life as scholar and teacher. Over that time, however, he gradually came to suspect that he was not exactly being called to a career in the academy by the weighty texts or students he would teach.

He started dabbling in carpentry, making a few things on the side for himself. He realized he liked it, and that he was good at it. It seemed to come naturally. Colleagues and friends began asking him to make things for them. In fall 2006, he bought himself “a big cabinet saw, a furniture-maker's saw, and a whole bunch of hand tools.”



Keating found a new appetite for books, but books that showed him how to make things out of wood. Even then, he says, when the how-to guides explained difficult joints and techniques and advised the apprentice not to get frustrated because it could take a long time to get this down, Keating found it all came naturally.

“It all just seemed very intuitive,” Keating says. “I don't really have to sit and think about how the shapes go together. I don't do a lot of measuring. I was always good at geometry.” He smiles. “I'll do a rough sketch and start building. You kind of see it where it needs to line up, and feel like you need to cut here or cut there, and it all kind of comes together that way.”

Keating continues: “I started to build things a lot quicker than I thought I could, and I started to really like some of the lines on the pieces I built, and other people did, too. That's a very intuitive thing, but another reason it was so easy to distance myself from the schoolwork. I was good at it, and I really enjoyed it. I'd spend a full day in my studio making things, and at the end of the day

would be surprised that it'd already be time to go.”

Soon, the hobby that had turned into a part-time venture to help pay off student loans became the mistress, begging from Keating 14-, 16-hour days seven days a week. After teaching in the spring of 2009, the Ph.D. candidate, who'd spent a decade in graduate school at Notre Dame, stepped out of academia. “I can still complete the program,” he says, and has till April 2012 to submit his dissertation. But he's also got people waiting in line — eight or nine months out — for exquisitely made, high-end, expensive furniture pieces that will likely become family treasures, or more.

“There's that perfect balance I would like to draw,” he says, “between doing pieces that are still functional, that you have in your house and use, but is also considered art. I still want to build things that people use. I mean, that's part of the pleasure — that one of your tables is there every day.” But, he adds, “30 years down the road, it'd be nice for people to say, ‘Oh yes, that's a Geoff Keating.’”

MEANWHILE, KEATING, 35, IS IN HIS CRAMPED AND CLUTTERED SHOP, SPINNING A SLENDER STAFF OF WOOD ON THE LATHE — SAWDUST AND CHIPS SPEWING INTO HIS FACE, FLAKES SPRINKLED THROUGH HIS HAIR.

He is a man happy at work. He and his wife, Anna Nussbaum Keating '06, are expecting their first child this spring. When he holds the piece up for inspection, I suggest he could make a fine baseball bat with that cudgel of ash and that lathe of his. But he evidently is not interested in making baseball bats. He has found his calling. That in itself is an achievement for a lifetime.

"There was this time before," he says, "I wasn't going anywhere, you know. I don't think you need to get the job as CEO of a Fortune 500 company, be the president or anything like that, to make a ride. But I think if you're doing something you enjoy, in some ways then it becomes its own reward, its own fulfillment. And I didn't feel that way with the schooling stuff. So I was a little aimless and wandering, bouncing around a little bit.

"Now with this sense of direction and fulfillment, I'm more at peace with myself and my surroundings. I'm really lucky," he says, "to have found out I can do this and then parlay it into something I do every day."

Keating's detour into furniture making might appear to be a real track-jump from his former path toward teaching, research and the nebulae of scholarly discourse. He's a band of one. He works with hands and tools, transforming raw material into real, tangible, functional objects. And each piece of wood, he says, has its own personality traits, revealed in their natural grains, patterns, lines, knots and, often, quarrelsome blemishes and splits.

Prior to construction he sifts through his wood pile, hunting down candidates to be cut, planed and fashioned into his next project. "Maybe for a chair that gets smaller at the top," he says, "I want something that has kind of a feminine feel, so you try to hold that idea of the feminine in your head and at the same time work with wood that brings its own issues to the table. You know, sometimes you'll see a big plank and you'll think, 'Oh, that's kind of a masculine guy,' so you set it aside and use it for something else. So it's not only how you shape it but also how you work with what you've got — what the wood is giving you, I guess. And that's part of the beauty, too, of using something that's natural."

It may take a day or two to line up the right pieces of wood, to get the right grain, lines, colors and contrasts aligned. Books and hands-on experience divulge valuable lessons — what woods work well and in what ways, how they machine, meld and cut, what's durable, what splits, what's expensive, what plank is properly aged for a specific task. "And sometimes," he says, "you see the boards and they'll tell you where they want to go."

Woodworking has its own intrinsic satisfactions, he says. "There's this organic feeling and pleasurable tactile experience running your hand over the board," Keating says. "One of the things that's nice, but also really frustrating, is that it *is* organic and every board is different, with its own little, unique



differences and problems. So even when you're trying to make a set of chairs, every chair is different. But that's what keeps it interesting."

The difficulty *and* appeal of his work, says Keating, is also the problem-solving — reading the wood and tackling the intellectual puzzle of creating furniture. Keating credits his advanced education for tuning his analytical skills. "One thing I think the academy does best is to show how a problem needs to be solved, how to distill the right information from what you read, how you can figure your way through it, creatively and toward a solution. The academy teaches you how to do that."

Making furniture, however talented the woodsmith, is an intellectual challenge, a constant stream of problems to be solved — "especially when you're building a new piece," he says, explaining, "How do I construct it so it's sound, so someone can sit on it and still get the look I want? And

you're holding these things in your head and trying to get from the starting point to the finishing point with the shape still intact and structurally sound and working with the materials in a way they're complementing the piece, not detracting from it.

"Even when you're sanding, you're concentrating on getting all the nicks and imperfections out, you're hoping to reflect the light just right, you're checking a split on the end, wondering if it's going to hold, do I need to fill it. So there are many levels of problem-solving you're working through to come up with the right solution in the end. And that's an intellectually demanding thing." And why he's so tired at the end of the day.

"People, even my parents, ask me what I think about all day, do I listen to the radio. But there is a cerebral side to this," he says. "I'm always in a state of focused attention. First of all, you're trying not to cut your thumbs off. You're always focused on that."

And then there's the flight of the imagination, the call to create, the making of art. "It's very similar to the academy, too," Keating explains, "in that you're working out of a tradition. There's all these basic joints you can use and, when I started, I thought there's one way to build something. But there's really a few basic building blocks you can use and after that everything's open game; you can run with it in several directions."

That's where he is now, in his South Bend shop, investing his ample talents, building furniture, finding his voice, exploring his new directions and saying of his future, "I want to do my thing." □

A Wiser take on television

BY ERIC BUTTERMAN

Paige Wiser '92 is dressed and ready for work. In a comfortable-looking striped, button-down shirt and black pants, a dinner beside her, she nestles in, her 6-year-old daughter, Audrey, on the couch nearby and 5-year-old son, Jack, lying on a mattress in the room. She'll at times need to shut out all distractions for her work assignment, which is to critique the reality show *The Bachelorette*.

She takes in the nuances of which of her few remaining suitors Ali from San Francisco might choose. There will be Ali in poses, Ali whisked off to an island destination. There will be drama. Wiser hangs on the show's every word, sporadically rolling her eyes and laughing at the absurdity of it all. But she loves it. Her son or daughter will occasionally ask a question, confused by the romance blossoming.

Wiser types away among a Buzz Light-year action figure, a toy guitar, splayed dolls and light wood TV trays. She is expected this evening to post her show reactions on the Internet for instant reader gratification. She is also expected to look over when her son makes a funny face. She will do both.

But before the show begins, and despite sitting on some gum left on the chair by one of her kids, she takes time to reflect on some questions, to figure out how she even got into this. Wiser was once the girl about town for the *Chicago Sun-Times*, the one who partied and told you where to party. She's still at the same paper, but now her office can be the family room — and turning the TV on sometimes signifies her day starting, not ending.

Eric Buttermann has previously profiled Regis Philbin and Anne Heaton for this publication. Contact him at ericbuttermann@yahoo.com.



PHOTOS BY KAREN MORGAN

Family is never far when Wiser goes to work.

“One thing I knew is that I always wanted to write,” she says, subtly adjusting her glasses. “I literally have journals from second grade.” She did, however, have a challenge to her television upbringing. “We did not have cable,” she confesses. “That’s the TV version of underprivileged. We didn’t have a library in town, so I would read the same books over and over — that prepared me for reruns.”

While attending graduate school at Northwestern University, she began an internship at the *Sun-Times* — “paid well, very rare!” — and became a copy editor in 1992. Her toiling at syntax ultimately led to a reporter position and later a column called “Planet Paige” — a look at nightlife or whatever she found interesting in the moment. When the TV critic position opened up, she was thrilled to try out for it. She wasn’t quite as thrilled when she didn’t get it. The second time it opened she didn’t want to bother and, of course, the second time it was hers. “That was an unbelievable day,” she says, “I talk about TV all the time anyway.”

But where that romance started may actually have been from her occasional lack of one. “I think it was when I was the single girl in Chicago,” she says. “You’d get home and there would be no one there. TV became my company.” She certainly isn’t lacking for company now as her son vies for attention and wonders who the note-taking guest might be.

Her husband, a producer for local WGN

Radio, peeks in once in a while. I ask his view about Wiser taking over her gig. “Not many people get to live their dream,” he says. “What’s funny is we don’t watch TV together anymore. She spends so much time watching that we try to find other things to do. It’s kind of nice.”

What’s also nice, in this day of downsizing newspapers, is that Wiser still has a job. “I try to focus on the positive of getting to do something I enjoy, but I also understand that the business is changing,” she says. “I think a key to newspapers continuing to be successful is to get involved with your readers in the way they like. You post about a show right away, give them something immediate. We have to embrace technology.”

An oddity of her position is the parenting dilemma that comes with it. How many times are children told to turn off the TV and go outside and play, that this contraption will dumb them down? Wiser can’t say that, since the “idiot box” is now in essence a family cash register, contributing to the roof that’s over their heads.

It actually is a beautiful evening, hints of sun, still warm, framed all the more by the pervading glass of the family room of Wiser’s house, skylights and all. In fact, all of us should probably be outside throwing a Frisbee. And we would be, except that Ali has to find love and we can’t, as responsible Americans, miss out on her experience.

Family hour

TV critic Paige Wiser may enjoy *Dexter*, but she also has a lingering fondness for child-friendly shows old and new.

“Children’s television is fascinating to me because of its sheer weirdness. Consider Sid and Marty Krofft [TV producers], who had us watching the *Banana Splits* and *Sleestaks*. Then I had kids, and I wanted to see what was out there for them. The first time I saw the recent kids’ show *Oobi*, I was totally disturbed — it’s just people’s hands with big googly eyes on them, talking like toddlers. But the show grew on me,” Wiser says.

Some of her favorites:

Gigglesnort Hotel — “You know how you can give kids expensive flashy toys, and all they want to do is bang on pots? Kids’ TV is a lot like that. On *Gigglesnort Hotel*, the most vivid character in my memory was a blob of clay named Blob that whimpered and grunted while

Bill Jackson sculpted him. It really speaks to the power of imagination — and the ingenuity of shows with small budgets.”

The Brady Bunch — “Was just so impossible to escape! There’s a fair amount of brainwashing involved. Growing up, no one has the perfect family, so I think we all accepted the Bradys as the ideal family. They showed us how we were supposed to act, and how profoundly wise parents are supposed to be.”

Freaks and Geeks — “We live in a world where something like that would be canceled immediately. Seth Rogen was on it, Ben Stiller showed up, what an incredible show! The characters just seemed so true to life.”

Raising Hope — “My favorite show right now is *Raising Hope*, with a family that is essentially just trying not to kill the baby. That takes off a lot of pressure, doesn’t it? It makes me feel better about serving so many Pop-Tarts.”

— Eric Butterman

“Yeah,” Wiser says, “how exactly can I punish them from watching TV?”

As this thought settles, Wiser suddenly grows more animated. “Ooh,” she says, “the show’s starting!” Sitting Indian style, her pink laptop at the ready, Wiser clutches the remote control like it might just have all the answers. She’s particularly interested in what Frank will reveal — he’s the suitor with a secret. “Why he’s waited to take her off to paradise to tell her this big revelation, I have no idea,” she says with a laugh.

Wiser will admit her sensibility lines up well with the present state of television. What may have begun with *Survivor* has put every scripted show on notice, desperately trying to stay alive against the push for more reality television. Unlike many of her colleagues, Wiser doesn’t condemn this paradigm shift. If it entertains her, it works. If it entertains her, it’s not the end of television.

“Now I’m not going to tell you that I see it as a complete evolution either,” she says. “There’s a lot of bad reality out there, and scripted shows can be great. . . . But I can’t say that I don’t enjoy watching regular people make a fool of themselves. They do things you’d never imagine doing. A camera

on you is like being drunk. People might not do it if they were sober, but it’s still them doing it. You have to watch with your eyes closed in horror sometimes.”

Horror, in fact, is actually her favorite kind of scripted these days. “*Dexter* had me right from the start,” she says. “He’s a serial killer, but he only kills bad people. He’s messed up, yet he tries to get married and have a child. You wouldn’t think it could pull you in, but it does.”

Describing her critical style, Wiser says, “I’m not trying to give this snobby analysis.” She quietly thinks a bit before her voice slowly rises in declaration. “I’m more of a regular person with a regular approach — I’m a fan of TV. . . . I love TV! Every show I want to like!”

Her face slowly crinkles into a smile as Frank reveals that his feelings for Ali have reminded him that he actually, of all things, loves his ex-girlfriend. Wiser rolls her eyes, already privy to information that his ex may never have been ex to begin with.

Frank tries to soften the blow, “I gave up everything to be here, too.”

“Apparently not everything,” Ali says.

Wiser pumps her fist in the air at this



winning retort. Her son has long disappeared, replaced by a slightly floating mattress with feet. “Mommy,” Jack says, “can you see me under here?” Wiser beams. How many lawyers could hear that loving question in the midst of litigation? How many surgeons as they call for a scalpel?

As commercials play, Wiser turns and pulls at her shirt. “You know, I’m just not taking care of myself with this job,” she says. “I’ve been sitting behind a TV for a year. I have a cycle, a treadmill, we have DVRs and DVD players. There’s all kinds of ways I could be exercising, but it’s not happening.”

The format of *The Bachelorette* means Ali must eliminate someone at the end of each show, but tonight is an exception. By Frank recusing himself from the competition, she will allow the two remaining to move on. And it truly bears out that these are people just like us. Frank is a retail manager — or was, depending on where his 15 minutes take him — who lives less than an hour away from where we’re watching right now.

Though Wiser admits to the show’s periodic lameness, she’s clearly pleased overall with the last two hours of entertainment, enjoying the fact that the woman on the show is the one firmly in control. “It’s better to have more to choose from, Audrey,” Wiser offers up as a lesson to her 6-year-old daughter. Audrey nods, somewhat getting it. “So,” Audrey figures, “she’s down to two husbands?”

Wiser just shakes her head and thinks of a way to explain, all while a mattress starts to hover again in the background. □

The screenwriters' novel road

BY CAROL SCHAAL '91 M.A.

At the Hollywood life of a screenwriter: making a pitch to Steven Spielberg, working with legendary animator Chuck Jones, selling a script for three-quarters of a million bucks. As James Jennewein '77 will tell you, such red carpet moments are interspersed with real life: begging the assistant to the assistant of an influential agent to read your screenplay, networking until your calendar is overrun, and writing, rewriting and rewriting some more.

Over the last two decades, Jennewein and writing partner Tom S. Parker have sold more than 20 screenplays to major Hollywood studios. Their movies include *Stay Tuned*, *Major League II*, *The Flintstones*, *Getting Even with Dad* and *Richie Rich*. They are happy with the films and pleased that their comedic vision has been so honored.

And yet, as Jennewein also will tell you, that “fairy tale come true” of becoming a full-time Hollywood screenwriter has a creative dark side. “Since movies and TV are such collaborative mediums, what ends up on screen can often bear little resemblance to what you may have written,” he says, “and you can begin to yearn for a different kind of creative experience.”

So after 15 years of what Jennewein calls “a fair amount of success in the movie world,” the writing duo decided it was time to enter a different world: the novel.

To write one, Jennewein and Parker went back a thousand years to the world of Norse mythology.

They read such epic stories as *Beowulf* and “Hrafnkel’s Saga” and “Laxdaela Saga”: *Hall rowed in the forehold of the boat . . . and as he jumped to land Thorolf happens to be standing near, and forthwith hews at him, and the blow caught him on his neck against the shoulder, and off flew his head.*

Amid those strange names and violent events and mythic lore, the duo found their novel idea. About three-and-a-half years later the young adult novel *Rune Warriors* was finished.

The book is the coming-of-age tale of a Viking boy named Dane the Defiant, who, after the death of his father, must embark on a mythic quest to save the girl he loves and defeat an evil tyrant. Unlike the Norse sagas, *Rune Warriors* offers a special brand of action and comedy. “A page-turner with definite appeal,” wrote *Kirkus Reviews*, adding, “boys especially will enjoy the pell-mell action, the wisenheimer narration and the belch-and-flatulence humor embedded in the adventurous tale.”

Amazingly, the new novelists lived another fairy tale come true. Two publishers wanted the book. The writers settled on HarperCollins, which offered them a three-book deal.

Jennewein, who lives in Santa Monica, California, and Parker, who resides 20 miles away in Topanga, worked on the trilogy in the same way they fashion screenplays. After discussing ideas and developing a storyline, one wrote a synopsis, which both fine-tuned. Each then wrote



Jim Jennewein '77 and Tom S. Parker

alternate chapters and traded them via email.

Lots of discussion and rewriting later, a first draft was finished. The process continued with rewriting until a final draft was ready for the publisher.

The project took six years. The third book was published in December, completing the trilogy of *Rune Warriors*, *Rune Warriors: Sword of Doom* and *Rune Warriors: Ship of the Dead*.

Should the publisher want to continue the series, says Jennewein, “We have the next trilogy mapped out storywise in case we get lucky.”

Jennewein, who has “a passion for storytelling,” won’t pick a favorite between writing for print and the screen. “The film world offers unique pleasures and satisfaction,” he says, such as seeing your work 20-feet-tall on a movie screen.

Writing a novel “is the ultimate artistic experience. It’s just you and the reader.” Jennewein adds, laughing, “For that luxury you usually get paid a lot less.”

Parker says it’s “great to sit in a theater and have an audience enjoy a movie I’ve written,” but finds, “it’s much more rewarding to write a novel, because I’m communicating directly with my audience.”

These days Jennewein and Parker are in both worlds: they’re writing another novel and pitching a pilot for a one-hour TV show.

Regardless of the format, Jennewein says, he has strong advice for students: “Keep writing. Master the craft. Tell a great story.”

He admits that succeeding as a screenwriter or a novelist does take a bit of luck. “Still it comes down to: just do the work.” □



Rune Warriors coming attractions

For their *Rune Warriors* trilogy, Jim Jennewein '77 and Tom S. Parker spend eight to 10 hours a week on social media. “It is like having an ongoing dialogue with your readers, teaching them about the world they visit in your books and continuing to entertain them as well,” says Jennewein.

To match the trilogy’s comical tone, says Parker, “we knew the best way to promote it was with humor.” As screenwriters, they used the idea of “coming attractions” for the *Rune Warriors* books, including a page on “The Characters Speak,” where snippets of dialogue can be heard. They also post fun videos and quizzes and tidbits about Viking culture.

Find out more at the websites runewarriors.net/ and runewarriorsbookblog.blogspot.com/.

Carol Schaal is managing editor of this magazine.

CAFÉ CHOICE

like a man gone mad: Poems in a New Century, *Samuel Hazo '49* (Syracuse University Press). The poet takes up the theme of time — vitality and longevity, legacy and oblivion — in this new collection of poems that offers both lamentation and celebration, wry humor and spare imagery. “I trust you to say everything I know but never know I know until I write it,” he says in “To the Next Poem.” Hazo is the former State Poet of Pennsylvania and a National Book Award finalist.

Good Knights: Eight Stories, *Ralph McInerny* (St. Augustine’s Press). Among the many novels written by McInerny, the beloved Notre Dame professor of medieval studies and philosophy who died in 2010, were mysteries featuring the Knight brothers — Roger, a ND professor of Catholic studies, and Phil, a semiretired private detective. In 1997, the duo appeared in *On This Rock*, the first of his 13 ND-centered mysteries, but before that novel McInerny published a series of Knight brothers short stories in *Crisis* magazine. Those prequels are collected here.

The Open Light: Poets from Notre Dame, 1991-2008, edited by *Orlando Ricardo Menes* (Notre Dame Press). The anthology celebrates the work of 24 poets associated with the University then, including graduates Beth Ann Fennelly '93, Francisco Aragon '03MFA and Anthony Walton '82, and faculty members Jacque Vaught Brogan, Seamus Deane and John Wilkinson. A follow-up to *The Space Between: Poets from Notre Dame, 1950-1990*, this updated collection takes its name from a poem by former ND English professor Cornelius Eady.

The Ringer, *Jenny Shank '98* (The Permanent Press). This debut novel follows two families through the tense aftermath of the fatal shooting of a Mexican immigrant by a Denver police officer. When the sons of the police officer later end up in the same baseball league as the son of the slain man, both families must struggle anew to deal with their pain and anger as they search for healing. The book was a semifinalist for the James Jones First Novel Fellowship and the Amazon Breakthrough Novel award.

The War for Late Night: When Leno Went Early and Television Went Crazy, *Bill Carter '71* (Viking). A media reporter for *The New York Times*, the author followed the sometimes tense, often hilarious and occasionally bitter behind-the-scenes action at NBC, when Jay Leno was moved to prime time and Conan O’Brien took over as host of *The Tonight Show* during the 2009/10 season. His previous book was *The Late Shift: Letterman, Leno, and the Network Battle for the Night*.

Notre Dame and the Civil War: Marching Onward to Victory, *James M. Schmidt* (The History Press). South Bend, Indiana, was far from the fighting, but the Civil War’s impact was ever-present on the ND campus. The author, who counts himself among the ND “subway alumni,” traces the

University’s participation in the war, from the Holy Cross priests who went to the camps and battlefields as chaplains and the sisters who volunteered as nurses to the on-campus events, including providing a home for the family of Major General William T. Sherman. A number of archival photos are included.

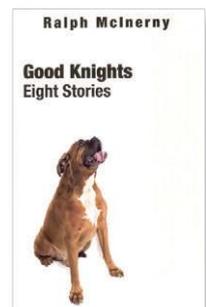
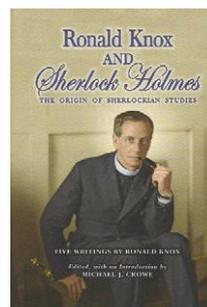
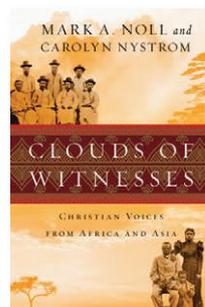
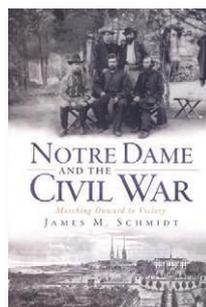
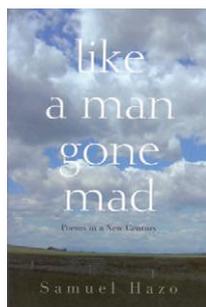
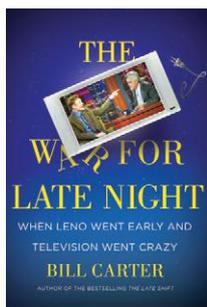
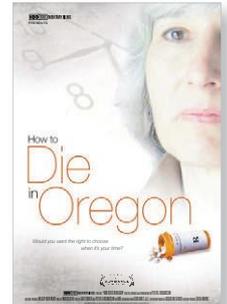
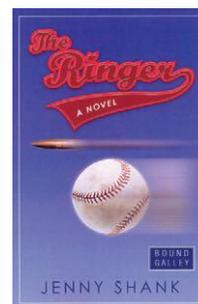
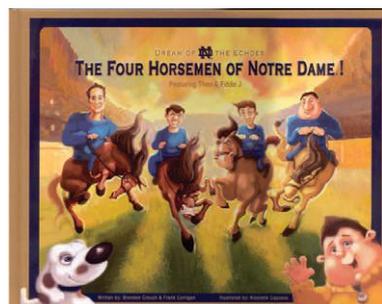
Clouds of Witnesses: Christian Voices from Africa and Asia, *Mark A. Noll and Carolyn Nystrom* (InterVarsity Press). Offering biographical narratives of 17 significant non-Western Christian leaders from the 1880s to the 1980s, the authors say this effort will “help Western believers learn about and learn from the new regions of world Christianity.” Noll is a Notre Dame professor of history.

How to Die in Oregon, directed by *Peter D. Richardson '02* (Clearcut Productions). Winner of the Grand Jury Prize for Best U.S. Documentary at the 2011 Sundance Film Festival, the film follows those with a terminal illness who might wish to end their lives by lethal overdose. The movie looks at the complex issues surrounding Oregon’s 1994 legalization of physician-assisted death and, as reviewers have said, is “deeply rewarding” and “far more life-affirming than we’d expect.” The movie is scheduled to premiere on HBO on May 26.

Ronald Knox and Sherlock Holmes: The Origins of Sherlockian Studies, edited by *Michael J. Crowe '58* (Gasogene Books). In the early 1900s, Monsignor Knox began what is now known as the “Grand Game,” in which readers treat the fictional Holmes and Dr. John Watson as historical figures worthy of careful research. This volume offers five literary pieces by Knox on Holmes and an introduction by the editor, a Notre Dame professor emeritus, who says the scholarly game “brought the great detective back from the non-living.”

Dream of the Echoes: The Four Horsemen of Notre Dame, *Brandon Crouch '96*, *Frank Corrigan '97*, illustrated by *Nicolette Capuano* (Limerick Publishing). Written for children ages 2 to 7, the colorful book using rhyming prose follows Theo and his dog, Eddie J, on their magical trip to the past where they witness the game that made the ND backfield of Jim Crowley, Elmer Layden, Harry Stuhldreher and Don Miller famous as the Four Horsemen. Available through the Hammes Notre Dame bookstore, ndcatalog.com or 574-631-5757.

Compiled by *Carol Schaal '91MA*. Visit magazine.nd.edu for Choices in Brief.



That is so Chuck

The irrepressible Chuck Lennon '61, '62M.A. might never slow down, but the inimitable alumni director says he's retiring this summer.

BY RICHARD CONKLIN '59M.A.

It was an early March day in 1999, and my wife, Annette, and I had just moved into a visiting-faculty house near campus after a major fire evicted us from our home. A knock came at the door. I opened it to find Chuck Lennon '61, '62M.A., laden with bedding, blankets and new ND-monogrammed outerwear. "I thought you might need these," he said.

Even today, when I put on a worn Adidas windbreaker and think of Chuck, I get a little moist in the eyes. And I wonder whether I ought to tell him the zipper still sticks.

The man who lingers softly in my memory will retire this June after 30 years as executive director of the Notre Dame Alumni Association. In his half-century association with the University, he has been a student-athlete, graduate student, Main Building and athletic department administrator, coach, faculty member, club volunteer and, especially, quintessential Notre Dame ambassador. He will depart with virtually every honor the University can bestow, capped by an honorary degree in May.

Chuck Lennon always had your back. Ask former Notre Dame executive and heart bypass survivor Jim Frick '51, one of about 100 persons to receive blood donated by Chuck over the years. Ask lifelong friend Paul Haley, who returned from work one day to find that his visitor from South Bend had spent the day rebuilding a broken picket fence in his Connecticut backyard. Ask Jim Gibbons '53, forced by an illness early in his Notre Dame career to abandon coaching, which of his friends stepped in to mentor Irish baseball and basketball players. Ask classmates from Chuck's Joliet, Illinois, parochial school who maintains the prayer list for the sick among them.

Chuck also never met a hand he didn't want to shake. He never got "people fatigue" — witness the two generations of alumni lined up outside his office on football Fridays, not only for a trademark "Welcome home" greeting but also for one of his legendary hugs. They will marvel, as always, at how Chuck remembers names and graduation dates. Some will get his business card, on the back of which is a quote from Henry

Ford that contains the key to Chuck Lennon: "You can do anything if you have enthusiasm." That word, enthusiasm, appears more often than any in the 100 or so testimonial letters written for Chuck's 25th anniversary in alumni affairs, missives signed by everyone from basketball star Ruth Riley '01 to the president of the United States. The only word-count competitor is "commitment."

Chuck Lennon came to Notre Dame from a Carmelite seminary as a second-semester freshman and received his B.A. in biology and education in 1961. He went on to earn a master's degree in guidance and counseling and spent a few years in the Athletic Department and in research administration before leaving for 11 years in South Bend mental health, urban housing and redevelopment positions. These jobs honed his respect for racial, ethnic and gender diversity.

It was not an accident that Black, Hispanic, Asian Pacific and Native American alumni groups were formed during his Notre Dame tenure or that women and minorities steadily gained leadership responsibility in alumni affairs. His immersion in urban affairs, including several years on the South Bend Community School Corporation board, also gave him a deep appreciation for community service, another hallmark of the Lennon era.

He then spent three years in the insurance business in South Bend before returning to Notre Dame in 1981 to lead its alumni. The rest, as they say, is history. Lennon is now an associate vice president running the largest alumni association in the world, comprising 132,000 living graduates, 214 Notre Dame Clubs inside the United States and 62 international. From a one-man operation under founder Jim Armstrong, the staff now includes 22 professionals, eight support persons and 36 student workers overseeing 74 programs from headquarters in the Eck Center.

Lennon believes in management-by-walking-around. He moves through the alumni office, saying "Good morning" to each person. It isn't a perfunctory greeting; he often adds a personal touch, such as asking how a sick child is doing. As one member of his staff put it, "He is interested in us individually. He realizes that he can get the best out of people if he really knows them, if he treats them with respect, and if he is interested in their lives, not just their output."

Once, when someone complained that he could not get anything done because alumni kept interrupting his work, Chuck gently reminded him, "Alumni don't interrupt our business. Alumni *are* our business." There is a corollary Lennon adage: "You can't afford to have a bad day. People will forget what you said; people will forget what you did. But people will never forget how you made them feel."

Chuck is unafraid to ask questions of his staff, and he is not nervous when the role is reversed. When Mackenzie and Associates was asked to review the Alumni Association a few years ago with an eye toward setting a strategic vision, some felt threatened, as is normal when a consultant arrives and change is in the air. Lennon's response was to commission a large sign for the Eck Center lobby. It read: "We want to be better today than we were yesterday, and we want to be better tomorrow than we are today." Over the ensuing month, the sign drew numerous signatures from staff, alumni, parents and friends who visibly committed to a shared goal.

Innovation and collaboration describe how the Notre Dame Alumni Association became a leader in programming, from the Hesburgh Lecture Series to the pray.nd.edu website. A Lennon colleague put it this way, "Chuck is like a guy who wants to go into the restaurant business serving exotic food, like bear meat. He recruits a partner and sets him up in a cabin in the woods with table, knives, saws — everything needed to skin a bear. He then disappears into the woods, returning a short time later yelling for the butcher to open the door. When he does, Chuck rushes in, chased by a grizzly. As

Dick Conklin retired in 2001 as associate vice president of University relations at Notre Dame.



HATT CASHORE '94

The energetic, peripatetic Lennon makes a rare stop in his office, whose wall offers mementoes of his half century at Notre Dame.

he darts out the back door, Chuck shouts, ‘Clean this one while I get another!’” Collaboration, yes, but Chuck never let forming a committee stand in the way of getting something done.

You can put energy next to enthusiasm when describing Lennon, who as recently as last January walked home — at age 72 — from a campus basketball game through 30 inches of snow. It took him 50 minutes, traveling mainly on cleared streets. I always called him the “Energizer Bunny,” and you only had to see him emcee a pep rally to understand “shock and awe” at the level of athletic fans. As a two-monogram outfielder under the venerable Coach Jake Kline, Chuck often beat infielders to the dugout after a third out.

He remains a firm believer in the importance of athletics to character, both of the institution and the athlete. When he talks with prospective student-athletes, he winds up by stating, “If you want to be good as a person, if you want to be good as a student-athlete, go someplace else. If you want to be great, come to Notre Dame.” His close association with athletics gave him credibility when he would occasionally remind football-neuralgic alumni that graduation rates are as important as win-loss records and that there are 26 varsity teams, not just one.

Another legacy from athletics is a competitive spirit. “Forget Pete Rose,” advised Joe Kernan ’68, a former governor of Indiana and former mayor of South Bend. “The original ‘Charlie Hustle’ was Chuck Lennon. When he coached me on the Irish freshman baseball team, he only operated at one speed — full speed — and that has never changed.”

Another friend recalls a softball game between the offices of alumni relations and

development. “We fundraisers never had a chance. Chuck was the oldest guy on the field, as well as one with a broken finger and bad knees. He approached the game just like he did every day in the alumni office, with great enthusiasm, positive reinforcement, creativity and aggressiveness. He never knew any other way.”

When alumni board winter meetings coincided with campus Late-Night Olympics, Chuck would put together a team of board members and himself to play against students in basketball and volleyball.

Chuck’s competitiveness affected others, sometimes in unintended ways. Lou Nanni ’84, ’88M.A., vice president for University relations and Lennon’s boss, recalls jamming a finger in a South Bend City League championship basketball game some years ago. “I approached Chuck, our player-coach, during a timeout. He seemed to know first-aid, as well as everything else, and I asked him to get my finger back in place. He confidently yanked hard, causing a great deal of pain, and sent me back in. After the game, I went to the ER to have the finger checked out. They told me it was broken in three places and would require surgery.”

Chuck’s competitive streak seemingly extended to merchandising, a perception nurtured in days gone by when the campus bookstore did not extend its commerce to away football games (except for Southern California). To fill this commercial vacuum, Chuck would mount a logistics effort that moved an impressive amount of fleece, T-shirts and caps to bowl sites around the country where Notre Dame followers were waiting with cash and plastic. The resultant income stream supported alumni programming. The bookstore eventually

bought out Chuck’s inventory and started to sell such clothing itself.

The film *Rudy* was ready-made for Lennon marketing. I never heard a happier Chuck than the day I called from the West Coast telling him that Tri-Star Pictures had agreed to a special alumni DVD of the film, this after earlier allowing Notre Dame clubs to preview the movie in special showings. Soon a mannequin of Rudy, wearing his No. 45 jersey from the film, appeared outside Chuck’s Main Building office. Father Bill Beauchamp could be seen wincing every time he passed the display, but the then-executive vice president helped promote the DVD, and 14,000 were sold.

Chuck seldom missed a marketing opportunity. I once gave him for safe-keeping a coffee can filled with tiny flakes of paint scraped from the Golden Dome in a restoration. Next I knew, they had been melted down, diluted and stamped into Alumni Association medallions given to graduating students. I managed to cage a few and have parceled them out to deserving Notre Dame lovers over the years.

I am now a decade into retirement, but a note from Dick Nussbaum ’74, ’77J.D., former president of the alumni association and a neighbor of the Lennons, reassures me that nothing has changed in the Sunnymede neighborhood of South Bend in which my wife and I once lived. Chuck still walks his dog, “Irish,” a leash in one hand while the other grasps the hand of his wife, Joan, his “best friend.” I would like to end with that picture, but my mind keeps returning to a scene 12 years ago. Chuck is standing on our temporary doorstep and asking, “Is there anything else I can do to help?” □

'Frozen Flashback' face-off

BY TIM DOUGHERTY '07

When the puck dropped last spring to determine the unsettled 1989 state championship between New Jersey high school hockey powers Delbarton and St. Joseph Regional, it was surrounded by the sticks of husbands and fathers who never thought they'd play the big game taken from them two decades earlier.

It was a moment they'd all awaited since the day when the much-anticipated contest was canceled because of a suspected measles outbreak. The teams were declared co-champions — a compromise that satisfied no one among a group of competitors which included future college and professional hockey players. After 21 years of disappointment, the men finally found themselves facing off against each other thanks to such sponsors as Gatorade Replay, a division of the sports drink giant dedicated to restaging classic matchups of high school rivals.

The event, dubbed the Frozen Flashback, drew players from coast to coast, including former Notre Dame lacrosse player Kevin Mahoney '96, a freshman forward on the 1989 Delbarton team. For Mahoney, the survivor of a liver transplant in 2004, taking the ice with his old teammates was the kind of thing he had long doubted he would ever be able to do again.

A reality cross-check

Since age 9, Mahoney had battled what the doctors at Minnesota's Mayo Clinic called cryptogenic cirrhosis. For no diagnosable reason, he and his parents had learned, his liver was only 10 to 15 percent functional and would likely one day fail. In addition, his enlarged spleen left him with greater vulnerability to rupture, an injury that Mahoney knew had claimed the life of a friend's brother during a hockey game. As long as he took precautions — like wearing a protective cage around his spleen — Mahoney found support from his doctor and his parents to make the most of his body through sports. He excelled in hockey and lacrosse, and his skills in the latter sport led to a four-year college career that saw him score a healthy 35 goals for the Fighting Irish.

But one day in 2004, as a 30-year old husband and father of two living in Hawaii, he learned that life finally had caught up with his liver as a routine ride on his surfboard took more out of him than usual — and he couldn't get it back.

Doctors said he needed a transplant soon. But before placing him on the depressingly long list of Americans in need of a new liver, they asked him if he knew anyone who might be willing to give him half of theirs. Although live donors account for only about a quarter of all liver transplants, they offer the greatest chance of success. That's because the liver, along with the skin, is one of only two regenerative

organs in the human body. To heal itself, a transplanted liver mainly needs time for the new cells to replace those lost from the operation and space for the transplanted organ to connect to the vital arteries around it.

Mahoney had always been close to his sister Maura, an emergency-room physician working in Arizona. Having dedicated her life to saving others, she was the first to raise her hand. "She always had a big interest in my health and my liver," he says. "And she was pretty adamant about stepping up and getting tested first."

The tests confirmed she was a perfect match. Within a month the surgery was successfully performed at the Mayo Clinic in Scottsdale, Arizona. Weeks later, Maura's liver and blood levels had regained full capacity. Soon after, so did Kevin's.

"She saved my life," Mahoney says. "She's obviously the most important person in my life."

It would take longer to know if the change would last. To a body 30 years accustomed to weakened liver functionality, the new organ was an intruder that required a steady flow of steroids and immunosuppressants to convince the body to accept it as its own. Even then, full health requires thorough maintenance: biweekly blood work,

pills twice a day and a regimented diet, including no booze — a condition he'd observed even at Notre Dame.

While Mahoney hoped for the best after the surgery, he also prepared for the worst, moving back to New Jersey for two years to live closer to family in case his new liver failed. He coached 7th and 8th grade hockey and

Yep, Dad can really do that. Mahoney '96 with daughter Michaela.



varsity lacrosse at Delbarton and worked for its alumni association. Graduates of the all-boys prep school share a bond that is in some ways a high-school analogue for the way Notre Dame connects its alumni, which helps explain why it routinely sends five to 10 students to South Bend each year.

Mahoney credits that environment for reinvigorating his mental outlook. If ever a person could draw inspiration from something like a school motto, he found it in Delbarton's *Succisa virescit*: Cut down, it grows back stronger.

"I went back there in total shambles. It really allowed me to get a new start on life," says Mahoney, who has since moved with his wife and children to Los Angeles, where he is an analyst for a global risk and insurance services firm.

Tim Dougherty, who interned at this magazine, is a writer living in New York.



MITSU YASUKAWA / THE STAR-LEDGER

Mahoney (#22 in the photo at right) settled a score with his body while he and his old teammates took shots at cancer — and a high school rival.

The brief homecoming, however, also rekindled old regrets for having hung up his skates too soon.

“I loved playing lacrosse at ND, but hockey was my first love my entire life,” he says. “I always considered myself a hockey player playing lacrosse to get to ND.”

So when Mahoney got the call about the Frozen Flashback and the chance to suit up one more time for his alma mater, there was no talking him down.

Skating at full speed

Mahoney’s decision to play in the Frozen Flashback was another stand in a lifelong refusal to let his liver dictate the terms on which he’d live. Though it was a personal victory that his mother and doctor were afraid could turn Pyrrhic, Mahoney did his best to assure them there would be no open-ice hitting and that he’d play with the same protective cage he wore as a student-athlete at ND. He’d also have the same armor he wears everywhere he goes — the triune shield of the Mayo Clinic tattooed to his chest.

“It’s the greatest place in the world,” he says.

Mahoney needed three months of regular workouts to reclaim the skating legs that adult responsibility and transplant recovery had diminished years before. Meanwhile, his teammates back in Jersey already had a couple months’ head start.

“When everyone got the hockey bug back, we had too much respect for each other to show up half-ass,” he says.

But as the game approached, it took on a significance that trumped an unsettled sports score. As word spread from the local papers to *The Wall Street Journal* and *The New York Times*, sponsorship swelled. New Jersey Governor Chris Christie agreed to award the state champion’s Tiffany & Co. trophy to the victor.

The game’s purpose grew along with the publicity. St. Joseph captain Scott Williams, whose mother is battling brain cancer, converted the growing national interest into a drive to raise money to fight the disease. His efforts got a boost from the National Hockey League’s Hockey Fights Cancer campaign, ultimately

netting more than \$300,000 through game proceeds and sponsorships. Embodying the cause were two teams of pediatric cancer patients who took the pregame ice alongside former NHL stars for the ceremonial puck-drop.

“That was one of the most special parts of the night,” Mahoney says. “A lot of guys on the team were dads. It could’ve been any one of us having to go through this.”

The moment was a vivid reminder of his struggles and the greater gift of life. Above all, that’s what the game represented for Mahoney.

When the real puck dropped, it uncorked more than two decades of bottled resentment between two squads that Mahoney says were probably better than they’d been in their youth. The game was physical, with scrappy play in front of the goals and on the walls — and even one skirmish.

“We wanted to win this thing,” Mahoney says. They wanted victory both for each other as teammates and, he admits, for their wives and children — including his youngest daughter, Maura, named for his lifesaving sister — most of whom were seeing this part of their hockey past for the first time.

Mahoney says he played a much bigger role than he would have the first go-around, skating on a regular line that didn’t give up a goal during its shift on the ice. He nearly scored one himself when his own shot hit the pipe.

“I definitely wanted that one back,” he says.

In the end, Delbarton held on for a 3-2 victory. Mahoney gives a lot of credit to one of the players whose suspected case of measles set the story in motion two decades before.

More important, the game forged a bond between old adversaries who realized their efforts produced a legacy that would extend far beyond the ice. Organizers have received a lot of queries from groups that see the Frozen Flashback as a fundraising model.

“All of us were a part of such a bigger thing that day,” Mahoney reflects. “Life is pretty amazing that something like this could happen.” □

Cara (Garvey) Coleman '95 recently published *I am Justice, Hear Me Roar*. Available at caraandjusticebook.com/, the children's book is based on the life of Coleman's 5-year-old daughter, Justice, who has a disability. After Notre Dame, Coleman earned a master's degree in public health from Tulane University and a law degree from Temple University. . . . Former Notre Dame All-American and NFL star **Dave Duerson '83**, who served on the University's board of trustees from 2001 to 2005 and had been a president of the Monogram Club, died at the age of 50 in his suburban Miami home February 17. The death was ruled a suicide. Duerson, who suffered from depression, had recently filed for personal bankruptcy after his meat-packing firm had been put in receivership. In his suicide note, Duerson requested that his brain be donated to research for the study of chronic traumatic encephalopathy, a degenerative brain disease linked to multiple concussions sustained by football players and others. Recent research, suggesting a possible link to the disease from repeated hits to the head, is credited with causing the NFL to strengthen its tackling rules, especially of quarterbacks. . . . **Shih Chang Hsu '52Ph.D.** has received the government of China's highest honor for science and technology for his contributions to materials science. The award comes with a stipend of \$750,000. . . . **Scott Paddock '90**, who played forward on the Notre Dame basketball team in the late 1980s, has been named president of the Chicagoland Speedway. Previously he was director of sports marketing for Gatorade. . . . Husband and wife **Naji Boutros '87** and **Jill Johnson '88** were featured in a *Minneapolis Star Tribune* story about their critically acclaimed winery near Beirut, Lebanon. The couple moved in 2000 to Naji's home country from London, where he worked for an investment firm. . . . **Kevin Flynn '86**, president of the advertising agency Caldwell VanRiper, was profiled recently in the business section of the *Indianapolis Star*, on the occasion of the ad agency's 100th anniversary. . . . The Sportsnewser website reports that **Regis Philbin '53** might wind up next football season working the ND sidelines as a commentator for NBC. The website quotes Philbin as saying that NBC Sports and Olympics Chairman Dick Ebersol made the suggestion at a recent banquet they both attended. Regis' response was a noncommittal "I love it." . . . **Beth Doyle '04** was recently named a "Rising Star for 2010" by *Mediaweek*, a marketing communications trade publication. She also was featured on the cover of *Adweek*. . . . A strong love of music led **Ryan Thompson '00** and his brother to establish the Head Jamz Festival, an annual three-day Labor Day music fest held near Nashville, Tennessee. More details can be found at headjamz-festival.com. . . . **Brian Moynihan '84J.D.**, CEO of Bank of

America, was recently profiled in *The New York Times* and by Bloomberg News. Both stories examined his first year at the helm of the banking giant. . . . The Saint Louis Cardinals major league baseball team recently named **Michael Girsch '98** assistant general manager. . . . **Amy B. Carroll '96**, who had been an adviser on Maine Senator Susan Collins's staff as well as a staff member of the U.S. Senate Committee on Homeland Security and Governmental Affairs, was recently named director of governmental relations and community affairs at Brown University in Providence, Rhode Island. . . . **Kelly Sullivan '82**, director of institutional partnerships for the U.S. Department of Energy's Pacific Northwest National Laboratory, has been elected president of Sigma Xi, the international science and engineering honor society. . . . **Chad D. Silker '02,'05J.D.** will compete in the Western States 100 Endurance Run, a 100-mile ultramarathon race from Squaw Valley to Auburn, California, on June 25 and 26. Silker hopes to raise funds for the Wounded Warrior Project, a nonprofit that helps wounded Iraq and Afghanistan veterans to transition back to civilian life. He is writing a blog about his race project at 100milewarrior.blogspot.com. . . . The Irish novelist **Michael Collins '87, '91M.A.**, who attended Notre Dame on a track scholarship and is the winner of six marathons including the Sub Sahara Marathon run in 90 degree heat, followed six weeks later by the North Pole Marathon in which temperatures fell to minus 35 degrees, recently captained the Irish national team at the International Association of Ultrarunners World and European Championships in Gibraltar. He completed the 62-mile course in 7 hours, 52 minutes for a third place bronze medal. The Southwestern Michigan College English professor is the author of several critically acclaimed novels and short story collections. . . . Tenor **Paul Appleby '05**, a member of the New York Metropolitan Opera's Lindemann Young Artist Development Program as well as a student in the Julliard School's Opera Studies Program, was the featured soloist in a recent performance of Handel's *Messiah* at New York's Carnegie Hall. Appleby, who is the son of Professor **R. Scott Appleby '78**, the John M. Regan Jr. director of ND's Kroc Institute for International Peace Studies, also was the featured performer in Schubert's *Die Schöne Müllerin* song cycle at Lincoln Center's Alice Tully Hall. The performance received a favorable review in *The New York Times*. . . . Narrow Gate Architects, a Boston firm led by three ND architecture grads, **Bob Wegener '80**, **Kitty Ryan '78** and **Neal Mongold '80**, specializes in designs for people with low incomes. The firm, which takes its name from the gospel story, was featured on the website Boston.com about its design of Dudley Village, a development of 50 new apartments in five low-rise buildings in Roxbury, Massachusetts.



The mountain in my backyard

BY GEORGE MCALEER '82

AT ABOUT 3 IN THE AFTERNOON the three of us were almost halfway up the mountain. Brennan, our 15-year-old son, went ahead without his backpack to scout out the best route. My wife, Rhonda, and I gratefully sat down to rest and soak in the tranquil beauty of the Blue Ridge Mountains.

We didn't know if we had the energy to continue up the steep incline facing us. And it felt good to stay put. The buds on the trees were beginning to blossom, and the valley below was so picturesque. It was tempting to pitch a tent here, despite the severe slope. We had worked so hard to get as far as we did and would surely be justified if we stopped.

George McAleer and his wife, Rhonda, live in Roanoke, Virginia. He is the immediate past president of the Notre Dame Club of the Blue Ridge. Reach him at avalongm@comcast.net.

But we didn't. We agreed that this was not what we had come for. We were here to get me up this mountain slope near Roanoke, Virginia, so I could set my feet once again on the Appalachian Trail.

When Brennan returned, Rhonda and I slowly continued our journey — climbing the side of a raw mountain without trail or map. The mountain got insanely steeper and rockier the higher we climbed. Brennan led the way, attaching a hook and rope to trees so I could pull myself up. Rhonda supported me from behind, making her climb even more strenuous. And I was glad I had worked with weights through the years to give me the stamina to keep going.

A couple hours later, Rhonda and Brennan dropped their packs and again checked ahead for a route through rocky impediments, leaving me to pull myself up on the rope. Somewhere along its 40-foot length, I



lost my footing, fell and couldn't get up. So I lay there, awaiting their return, trying to enjoy the scenery and thinking back over the events that had led me here.

My affinity for the Appalachian Trail — the AT — started when Rhonda, my girlfriend at the time, and I did a one-hour hike on the trail near Boonsboro, Maryland, during fall break of my sophomore year at Notre Dame.

A year later I was eating in the Huddle at LaFortune when I noticed a guy with state-of-the-art hiking gear and struck up a conversation. It was Charlie Bell, who was near the end of his 10,000-mile trek around the perimeter of the United States. He was planning to stay on the campus golf course, so I invited him to our quad in Holy Cross Hall. His stories of adventure inspired me and encouraged my strong attachment to the AT.

That summer, while I was working for the Department of the Interior in Washington, D.C., weird things began happening to me. My fingers would let go of the steering wheel and my arm would drop. I eventually grew concerned, but doctors and a clean CT-scan suggested my symptoms were due to stress.

Thoughts of hiking the AT that summer continued to spin in my head. I was still inspired by Charlie Bell's accomplishment

and was reading *Zen and the Art of Motorcycle Maintenance*. Meeting a person who had hiked the entire 2,200-mile AT further sparked my desire to live an adventure.

My father's living with as-yet undiagnosed symptoms of multiple sclerosis and other family stresses had created tensions at home that summer. Hiking the AT seemed to be the perfect solution — an enterprising escape. So I took the train early one evening to Harpers Ferry, West Virginia, and set out. After hiking the first few miles while singing John Denver's "Take Me Home, Country Roads," I found a campsite in the pitch dark just a few feet from the Potomac River. I built a fire that lit up the night, pitched a tent and ate dinner. The next day I was on the AT and, several days and 25 miles later, met Rhonda again, where I'd been introduced to the trail the previous year.

The medical symptoms went away soon after I returned to school. But they resurfaced during senior week in 1982 when I had a bout with double-vision while celebrating our graduation with friends on the Lake Michigan beaches. Rhonda and I were married in 1983, and a year later we hiked the AT in Maryland. I had an exciting few years with the American Red Cross and its biomedical services division and earned a

master's in health administration from Virginia Commonwealth University. But symptoms returned, and in 1985 I was diagnosed with multiple sclerosis (MS).

Cognitive impairment related to MS appeared slowly. Managing multiple tasks became inordinately difficult as the years passed. Maintaining employment commensurate with my education became a formidable challenge. The slow erosion of my identity because of MS was facilitated by the decline of my mental abilities and body, even though I looked reasonably okay on the outside. Repeatedly losing jobs and having to move frequently became depressing. Challenging opportunities as a consultant were interspersed with jobs requiring only a high school education — subpar employment taken so I could bring money into the family.

It shamed me that I did not function like I and those who hired me thought I should. How could I explain to others what I didn't understand myself? While the MS symptoms were progressing in full force, I kept thinking that it couldn't get any worse, and I tried to project the image of having it all together.

At one point I thought my decline was my fault, was due to sloth; only later did I learn that fatigue, a result of damage of the central nervous system, is a symptom of

MS which in some can become increasingly prominent over time. Even though I headed a remarkably successful team of blood-drive reps in New York in 1997, I suspected my cognitive abilities were deteriorating. I even tested myself by taking the Barron's GRE, which replicates the test required for graduate school admission, and didn't come close to my score of 12 years earlier. As a matter of pride, I resisted applying for Social Security disability benefits, even though my condition caused our family serious financial stress.

I started avoiding activities related to Notre Dame. I didn't advance professionally like my classmates did, and I didn't fit what I believed to be the Notre Dame profile. Unfortunately I directed a lot of my frustration and anger toward members of my family, the people who became my caregivers as my physical abilities diminished. MS, I saw over time, was bringing about a painfully humiliating loss of my health, income and status within society and even my family.

In 2003 I was hired to manage the Rescue Mission's health clinic in Roanoke, Virginia, and Rhonda was asked to manage Jubilee Acres, a 15-acre retreat complex owned by the Rescue Mission. Jubilee Acres, with a lodge, challenge course and hiking trails in a beautiful Blue Ridge Mountain setting, provides a summer camp for homeless children and team-building opportunities for recovery program participants at the Rescue Mission as well as for local churches and businesses.

Rhonda and I loved the scenic majesty of the mountains and felt blessed to reside in this bucolic environment while serving others. And we were excited to learn that the Appalachian Trail, coursing from Georgia to Maine, ran along the top of the mountains in our backyard.

I managed the health clinic for awhile but, like other jobs, this opportunity ended all too soon. This time, however, the CEO encouraged me to file for Social Security disability. I swallowed my pride, and two years after moving to Jubilee Acres I was approved to receive this support. The consistent income was a relief, but I wasn't the achiever I thought I should be. Even though I was fighting a chronic disease, I still wanted to succeed at something, do more, be like I used to be.

So one spring morning I was lying in bed, thinking of time passing and of the AT along the mountain crest. I saw a vision of my son putting a metal hook around a tree and of me using an attached rope to pull myself along. I could get there one tree at a time! Knowing that my physical condition has the

potential to deteriorate, I thought that if I would ever do this, now was the time.

I mentioned the vision to Rhonda and began taking steps to make it happen. At a utility store I purchased a 3-foot steel rod and 40 feet of thick, blue-white derby rope. I told my friend Bob, a skilled welder who works at a muffler repair shop, about my vision to climb the mountain in our backyard by using a rope and hook. Using a gas torch, Bob bent the steel rod into a shepherd's hook with a loop where I could tie the rope. He added a notch to the end of the hook to keep it from slipping from a tree. I knotted the rope to the hook with two half-hitches and fashioned a loop at the other end that would go around me.

My old copy of the *Boy Scout Fieldbook* was useful for guidance on what to bring and how to pack for the excursion. I borrowed a Kelyt backpack and tent, and Rhonda and I purchased lightweight but nutritive food. We seemed to be all set.

A few hours before the hike I wrote: "Climbing the Blue Ridge Mountains to the Appalachian Trail has been an ambition of mine ever since we moved here. If I'm ever going to do it, it'll be now while I'm on prednisone and it's beautiful spring weather." I noted that Rhonda's backpack weighed 35 pounds, Brennan's 40 pounds and mine 15. "We're leaving soon, and I am banking on completing this by 2 p.m. Two people recommended that we overnight up there and come back tomorrow morning. Energy conservation is important here."

Knowing that Brennan had taken about 75 minutes to reach the AT from our house without a backpack, I figured it might take us three times longer because of my MS. Ah, such optimism.

We headed into the woods at 11 a.m. After passing the familiar team-building ropes course and crossing a small creek, we entered the land of the unknown, with no trail or map to show us the way. Brennan served as our guide, steering us gradually left and away from the sheer cliffs higher up the mountain.

I soon became concerned that I was leaning too much on Rhonda for balance and support. As the backpack got heavier and heavier with each step, I ditched it after 150 feet. We decided all three of us would sleep in one tent and transferred the bare essentials from my pack to the other two. The next hurdle was a fallen tree we couldn't walk around, given the brush and topography. Getting over it gave me a strong sense of accomplishment, but the log was nothing compared to what was to come.

The slope soon got steeper and forward movement became increasingly difficult. It was time to use the hook and rope, and I admit to an adrenaline rush when I pulled it out of the backpack, put the loop around me and watched Brennan climb to a tree about 40 feet away. I then pulled myself to the tree, just as I had envisioned. Somehow the slope and tension of the rope increased my stability as I continued up the hill, hand over hand, one small step at a time.

Brennan and I continued this ritual of placing the hook and pulling on the rope as the topography became more rugged and the angle of the incline more acute. The minutes of initial excitement gradually turned into hours of repetitive hard work.

Occasionally Rhonda would go ahead to fit the hook, but she typically stayed back with me, holding me up, pushing me upward from behind and sometimes using her foot to push my feet forward. The strain and support of her backpack and my weight were exhausting her. And we soon realized we hadn't brought enough water.

Moving higher up the mountain meant rock climbing for about an hour. "Partly having to use the rope myself, I stood behind George on slick, slanted rock several stories high, using strength that I didn't even know existed in me," Rhonda later wrote. "I thought we had lost our minds to attempt something like this. One little slip and we could be killed or seriously injured. If someone had previously showed me what it would be like, I would never have attempted something this ridiculously dangerous. I prayed continuously for God to protect us. It's amazing what humans can do when they are in a situation where there is no choice but to press on."

And press on we did, our team of three: me, the initiator; Rhonda, the encourager and physical impetus; and Brennan, the Sherpa and Hercules.

Toward the end of the day Brennan strapped on his mother's pack in addition to his own and headed on up the mountain to look for a campsite. The skies were darkening as he made it to the top, to the Appalachian Trail itself, dropped both packs and came back for us. As all three of us neared the height of the mountain, the terrain became smoother, the ground more level. The rope-pull was no longer necessary, but I could barely walk or keep my balance, so I hooked my arms around the shoulders of Rhonda and Brennan as we neared the top.

Nightfall approached, and my heart beat in anticipation as the three of us made our

way along. Then in the dark dusk I saw it. The Appalachian Trail. It was 8 p.m. It had taken us nine hours to get here, this place that seemed distantly out of reach despite being close to our own backyard. We had made it.

Rhonda and Brennan hurried to set up camp and cook dinner, and I was soon crawling into my sleeping bag — missing the bear that Rhonda and Brennan heard venturing into our campsite.

The next morning Brennan and I prepared breakfast, and the three of us posed for photos. Then it was time to descend from the mountaintop we had struggled so laboriously to reach the day before. For me, even walking down the mountain was difficult. When we got past the rocks near the top, I primarily slid down with Rhonda belaying me with the rope or simply pulling me toward the bottom.

When the ground leveled out, I once again wrapped my arms around Rhonda and Brennan's shoulders. We finally crossed the creek and entered the challenge course, the sign we were virtually home. It was midafternoon; it had taken us almost five hours to come down.

Our Great Expedition was the first step in mending relationships and introducing humility, gratitude and teamwork in a way that brought us together. But the clock ticks and the meter is always down. The struggle between a tenacious "I can do it" attitude, the despair of learned helplessness and the feeling of humble gratitude is a daily affair five years later as my MS symptoms progress.

Today I use an electric scooter for mobility, and my left foot, leg, arm and hand are significantly impaired. Occasionally I fall, and sometimes it's hard to stand because I am exceptionally weak in a way I never

have been before. But I do what needs to be done and summon a firm inner resolve to do it. Many times I think of the climb to the AT when I felt like I could not take another step but did anyway. That memory gives me the strength to do what I initially think I can't today. Writing this article is one example.

And often I think back to the summer I walked the AT and was reading *Zen and the Art of Motorcycle Maintenance*, which concludes: "Trials never end, of course. Unhappiness and misfortune are bound to occur as long as people live, but there is a feeling now, that was not here before, and is not just on the surface of things, but penetrates all the way through: We've won it. It's going to get better now. You can sort of tell these things." □

Look who's watching

BY JOAN SAURO, CSJ

YOU ARE THE EYES AND EARS of the neighborhood," the police chief tells us at the neighborhood watch meeting. "Law enforcement counts on you to report any unusual activity." He elaborates on gun violence, theft and crime-fighting strategies. Metal signs are placed throughout the area. They say, *Welcome. This is a neighborhood watch area.*

Our neighborhood is lower middle class. In among houses and apartments are 10 churches, including a Russian Orthodox with gold domes and a Ukrainian with green ones. Two churches ring daily bells over our heads. There are four well-attended pubs, one gym, one laundromat, a public school, two restaurants, a supermarket, a couple of pizza joints, four auto fix-it shops, an Irish dance studio, a library, two funeral homes, a florist long past its heyday and two pawn shops looking for broken gold. In the midst of all this stretches a fine park with a nine-hole golf course and a world-class zoo. Sometimes the monkeys compete with the church bells.

One Christmas Eve a young man watched with great interest the tan house on the corner a half mile from my own. Most in the

neighborhood were celebrating Mass in the church down the street or were over at the Irish pub with out-of-town guests. Some were home wrapping last-minute gifts.

That night the eyes and ears of the neighborhood were not watching the one who entered an elderly woman's kitchen and stabbed her repeatedly while her small pan of soup bubbled on the burner. On the table, five Ritz crackers waited like casino chips on a napkin next to her bowl. The Neighborhood Watch sign nearby never meant to welcome the young man who watched her house for just the right moment.

Now, at the penitentiary, guards watch his every move as they cautiously open the cell to let in Sister Maura, the chaplain, who tries to be the face of God for the young man who sits comatose. The guards clang the bars shut and keep watch. She hears them mumble: *What kind of person murders an old woman in her kitchen and then turns off the flame under her pan of soup?*

Every Wednesday after the noon Mass, a handful of the neighborhood faithful keep watch with the Blessed Sacrament in the former convent, unaware that it is Christ who keeps watch over them. There are fresh baked cookies, with warm and cold drinks in the kitchen should the watchers begin to nod. And by midafternoon they do. At dusk, a priest takes their place under the church domes. He could be

Joan Sauro, a sister of St. Joseph of Carondelet, is the author of the children's book Does God Ever Sleep? (Skylight Paths).



over in the rectory watching a baseball game with his feet up, but no, he is kneeling upright, stalking the Divine. Like those before him, he takes his watching seriously. After all, someone should be waiting to hear should God care to speak. The neighborhood counts on these people, watching on our behalf, praying that God comes not like a thief in the night but like a loving Savior.

The two elderly women in a Sarah Orne Jewett story also keep a night watch. They have washed and laid out their dead friend in her upstairs bedroom. Miss Tempy's funeral will be in the morrow, but for now her two friends keep watch, reminisce over their friend's goodness, then slip into self-revelations not feasible in broad daylight. It is a long night punctuated by periodic visits to Miss Tempy upstairs under the sheets, then back down to the kitchen for some of Miss Tempy's quince preserves on warm bread. Soon enough the watchers nod, as does the priest under the dome and the faithful in the convent chapel. But God neither slumbers nor sleeps. Not now. Not ever.

Throughout the neighborhood, street lights work the night shift. In an upper room I watch the sanctuary lamp in the window of the church across the street. The red light spreads like a stain, signaling the Eucharistic presence housed in the small gold tabernacle box where Christ keeps watch. He sees the kitchen light next door and blesses baby Ruth and her parents, rocking and feeding her during the night. Christ blesses their 93-year-old neighbor, four sheets to the wind, and the nighthawks in the 24-hour laundromat pulling the day's clothes out of the dryer. He blesses the widow of two years who cannot sleep, who rises at 3 a.m. to read and pray to Him and to her deceased husband. *As watchmen wait for the dawn, so do I wait for you, my God.* Finally, light dawns over the nearby hills. She dresses and heads for the 7 o'clock Mass, and only Christ knows the extent of the breakage.

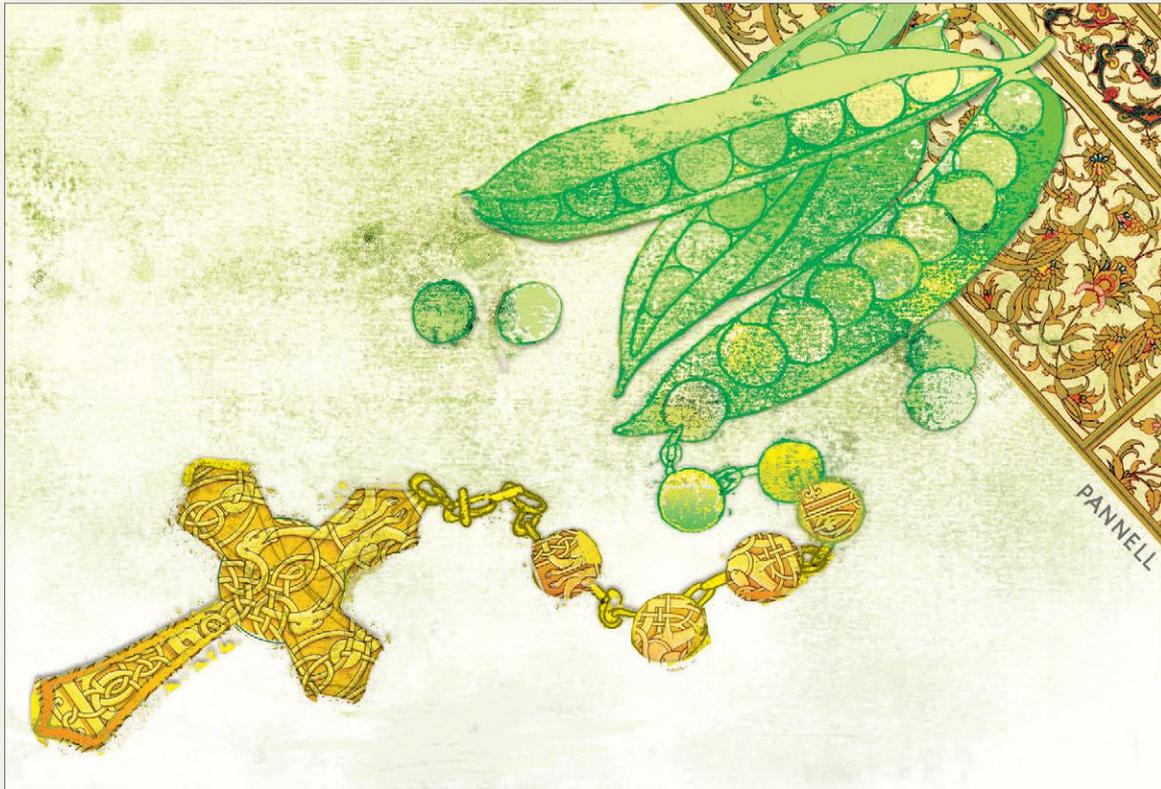
Directly from Mass a couple arrive at the gym. They married

late in life and perhaps for that reason relish every moment. Side by side on treadmills, she is gray-haired and trim, he is bald and bent, clearly 10 years her senior. She keeps an eye on his heart rate, watching that it not climb too high for his weakened heart. Many a young man strolls the gym, flexing abs and pecs. What they would not give for the sweet smile she gives her husband, luminous, dear, as if there were no one else in the gym, only the two of them, he, the former Father Paul, she, the former Sister Monica.

The poet says that Christ plans in 10,000 places. He also weeps in 10,000 places. For good or ill, we are the hands of the neighborhood as well as its eyes and ears. A man holds a door open for another at the post office, a woman smiles and defers at the stop sign, while down the block a car eases up so the driver can hand a 10 and a jug of cold water to the man living under the bridge. Teens slouch through the neighborhood in colorful displays of underwear. One of them tries to sell a stolen TV at the pawn shop. The corner deli delivers free take-outs at the end of the month, while a man buys an extra meal at the grocery and slips it inside his neighbor's door. Cars with open windows blast away, a biker takes the hill with no hands, dogs bark, the home for battered women is on lockdown.

Early Sunday morning, Rev. Lucy Barnes-Holdsworth sweeps up the broken glass from the church parking lot. Her sign out front advertises BARG IN — SCHOOL CLOTHES for 25 cents. Of course, we know something more than a letter is missing here, but the clothes are bright and clean and serviceable, and that space invites the Divine into our need.

Soon a rock 'n' roll service heats up the church, rises to fever pitch and into a glorious, strung-out *Amen*, telling the whole neighborhood what we sorely need to hear. That the God of mercy and benevolence watches over us with love beyond all reckoning. Always has. Always will. □



A sacrament of food

BY HEATHER KING

I THINK OFTEN of Saint Maximilian Kolbe, the Polish priest who offered himself up to starve to death in another man's place at Auschwitz. I think of his sacrifice, of the terrible phenomenon of depriving people of food. And it occurred to me recently that perhaps the one worse, more corrupt torture vis-à-vis food would be to *make* people eat. To tie them down and force massive amounts of sugar-, fat- and salt-laden artificial food down their throats until they blew up like balloons, until they became morbidly obese, until they became so lethargic mentally, emotionally, spiritually that they could barely move. Until they started suffering from diabetes and heart attacks and gout and hardening of the arteries. Until they couldn't tie their shoes or walk normally or comfortably rise from a sitting position. Until their idea

Heather King is the author of three memoirs: Parched; Redeemed; and the forthcoming Shirt of Flame: A Year with St. Thérèse of Lisieux. She lives in Los Angeles and blogs at shirtofflame.blogspot.com.

of taste had been so thoroughly laid to waste that they could never have the true pleasure of food again.

That very week I read a piece in *The New Yorker* about America's epidemic of overeating. The trouble started in the 1960s, according to the article, when a movie theater owner from the Midwest discovered that if you give people a giant serving of popcorn, more often than not they'll eat every last bit of it. Ray Kroc, founder of McDonald's, later signed on to the idea that one way to get people to buy more is to serve a bigger bag of fries. More recently, the author of a book called *Mindless Eating* devised a trick bowl with a tube that continuously refilled the bowl with soup, corroborating that if you keep putting food in front of people, they tend to keep blindly, atavistically, chowing down. Hence, the advent of supersized portions. Hence, with the support of the advertising, fast food and chemical engineering industries, a population of which a full third is now obese. My nightmare scenario had come

true. Except that no one is tying us down and force-feeding us. Many of us have come to eat this way voluntarily.

One reason we're fat is that much of our food, especially fast food, is so full of chemicals and additives that, no matter how much we eat, we never seem to be really sated. We hunger for real food — homemade bread, trout caught fresh from a stream — and the farther away we move from the real and toward the artificial, the more our taste is blunted, just as watching pornography eventually blunts the taste for actual sex: intimate, vulnerable, imperfect, surprising, and, once in awhile at least, glorious.

I have a sober friend who says that drinking never made him happy but it made him feel like he was *going* to be happy in 15 minutes. That's the effect, to my way of thinking, of fast food — which doesn't appease my hunger but makes me feel like, if I ate more, I *might* be appeased in 15 minutes. In addict circles, this is known as the phenomenon of craving.

Another reason we're overweight is that we've lost sight of food as a sacrament, one of the most basic ways we have to connect with each other and with God. More and more, we tend not to eat together. We tend not to say grace. We tend to miss the tastes, colors, smells, shapes, textures and sensual delights of the food and to therefore miss remembering that for much of the world, any food at all is cause for rejoicing.

We often don't know where our food comes from. We seldom see the people who plant, pick, pack and ship it. We've lost sight of the rising and setting of the sun, of the rainy and the dry seasons, of the cycles of nature, of the wonder of our bodies, and souls.

We've lost sight of the fact that if one of us is sick, we are all sick, that while we're stuffing ourselves, someone else is going hungry. We've lost sight of the rich man and Lazarus at the gate (*Luke 16: 19-31*); of the fact that we're both these characters: on the one hand as bereft, and on the other as grasping and fearful as the next person. Through a combination of genetic luck and narcissism, I'm not overweight myself. But I'm appalled as I type this — an essay about hunger — to find that I'm mindlessly spooning yogurt and peaches into my mouth.

One way to battle obesity *and* to be in solidarity with all the people in the world who don't have enough to eat is to consent always to be a little bit hungry, to eat a little less than we want.

I'm not talking about the obsessive-compulsive illnesses of anorexia and bulimia, or the insistence on, say, eating only organic, which often verges on yet another form of narcissism.

I'm talking about pondering the mystery of a potato or an egg, cooking a meal for friends, giving some of our hard-earned food, time, money, selves away. Consciously honoring the sacrament — by giving thanks for the sheer goodness and delight of food; by purchasing, preparing and eating our food with love — also allows us to derive the true pleasure, emotional, physical and spiritual, that eating is surely designed to give. In fact, maybe it's not how much or even what we eat, but the orientation of our hearts — around food and everything else — that most matters.

In 1926, naturalist Henry Beston built a cottage in Provincetown, Massachusetts, and spent a year in solitude: salvaging lemon sole from a shipwreck, walking to town to buy

fresh bread and butter, keeping a pot of coffee on the hearth for the members of the Coast Guard crew who patrolled the shore by foot at night. In *The Outermost House*, his chronicle of that year, he wrote: "A human life, so often likened to a spectacle upon a stage, is more justly a ritual. . . . Do no dishonour to the earth lest you dishonour the spirit of man. Hold your hands out over the earth as over a flame. . . . Touch the earth, love the earth, honour the earth, her plains, her valleys, her hills, and her seas; rest your spirit in her solitary places. For the gifts of life are the earth's and they are given to all, and they are the songs of birds at daybreak, Orion and the Bear, and dawn seen over ocean from the beach."

We want to love food and people and nature so much, in other words, that we're willing to die for them, not to be in such bondage to them that we let them kill us. We need to engage in the uber ritual of the Mass; we need the Body and Blood of Christ: the True Food. We want to share knowing that we are all beggars, all complicit in the suffering of the world, all hungry for a redemption that may or may not — in this "lifetime" — ever come. We need to remember that the Hitlers and Stalins of the world are only the shadow side of our own souls, writ large, that we are all, at any given moment, in dire need of mercy.

Recently my friend Joan gave me a \$20 gift card from a local grocery chain. I'd earmarked the money for a roast chicken and some toilet paper, but walking to the store the next day I ran into Gene, the homeless guy who hangs out in back of L.A.'s Pio Pico library. He was wearing the same down parka he's had on for months and muttering, as he often does, about the CIA, and suddenly I knew I wanted to give the card to him. I wanted to make *him* happy. I wanted *him* to feel safe — an urge so spontaneous and, I'm ashamed to say, rare, that the urge alone seemed proof of God's infinite and redeeming love. Gene can be temperamental, but when I handed over the card he broke into a smile that was fit for the angels. "My, my," he said, revealing a row of broken, cigar-smoke-stained teeth. "Christmas in July."

I ate other things. But that smile fed me for a week. □

FOR THE TIME BEING

A day will come when nothing
will matter but the day itself.
No one will care if what's
predicted in the *Farmers' Almanac*
comes true or not — or fret
with crossword puzzles just
to pass the time — or ask
why total frankness is acceptable
in surgery or love or art
but otherwise considered shameful.
A day will come when even
the best will not be good
enough.

What's seen as quality
will crumble under scrutiny.
Total frauds will speak as saints
while torturers receive the eucharist
in public and be blessed by bishops.
When salt exceeds the price
of silver, banks will close.
Drivers will spend a month's
wages for a tank of gas.
Armies will be staffed by foreigners.
Doctors will be paid in promises.
Gravesites will be taxed as real estate
and levied on the next of kin.
A day will come when no one
will remember who we were
or where we lived or how.
Headlines will exaggerate the trivial
to make the unimportant seem
important.

History will vary
with historians until the past
recedes and disappears like snow.
False prophets will foretell the worst
and be believed because the dreams
of liars are immune to contradiction.
The world will change from what
it was to what it is although
the earth will keep repeating
its ballet in orbit to remind us
every morning that today's that day.

Samuel Hazo '49
The Song of the Horse

From The Song of the Horse by Samuel Hazo, copyright 2009 by Samuel Hazo. Reprinted by permission of Autumn House Press.

The death of me

BY BETH APONE SALAMON '90

I SIT IN THE PLAYHOUSE THEATER with our Girl Scout troop, watching the pivotal moment when Tinker Bell has ingested poison meant for Peter Pan and can only be saved by the clapping hands of children who believe in fairies. Throughout the room, tiny hands frantically smack together. A sense of hope for the healing power of fairy faith wells up, reaching a clapping crescendo.

Delighted, I turn to the troop members, expecting smiles and childlike wonder.

“Die, fairy. Die,” says Grace, an 11-year-old who would rather be playing basketball or drawing skulls.

The other Scouts laugh heartily. In point of fact, Grace is not a psychopath. She is exceedingly polite and was the only Scout who helped me carry all the sleeping bags to our cabin during our last camping weekend. Still, I shift uncomfortably in my velvet seat.

It has been a week of uncomfortable moments. The preceding evening I attended a “Welcome Parents” night at the middle school that our older daughter, Emily, would be attending. A counselor stood at the podium and began her speech with a warm smile.

“It is the job of the middle-school student to mentally murder the parents during these formative years,” she said.

A gasp rose up from the audience. We thought we were here for a discussion about signing up to become a Locker Buddy and to receive a list of holidays for peanut-free cupcakes. The counselor continued to smile like an all-knowing Buddha speaking to a bunch of newbie monks.

She said students assert themselves during the middle-school years, breaking away from parents in a quest to discover their own ideas. During this physical and emotional metamorphosis, they cling to peers rather than family.

They won’t hold your hand anymore. They will roll their eyes at you. They finish family dinners in a flash to get back to texting. They walk several paces in front so no one will connect you as a familial relation.

You become the enforcer of unreasonable demands, like not wearing that low-cut camisole to Aunt May’s funeral and not staying out all night with Suzy at the Gas & Sip. And for that you are mentally placed in cement shoes and thrown off the Brooklyn Bridge.

It is their job to psychologically kill off the parental units they have worshiped for 11 years, the counselor said in the same calm

Beth Apone Salamon is a freelance writer and a public relations specialist with the Saint Barnabas Health Care System. Her essays have appeared in Newsweek, New Jersey Monthly and the Pittsburgh Post-Gazette. She can be reached at esalamon@sbhcs.com.



manner as if she were delivering a crop report to a group of farmers. Through this process of emotionally breaking away, the not-quite-teens become ready to launch someday. By killing you, they find themselves, she said, closing her speech folder with gusto.

Now we are supposed to go home and embrace these fairy killers who are waiting to drop flowerpots on our heads.

“And if anyone would like to sign up to be a Locker Buddy,” she added, “There is a sign-up sheet by the door.”

It took me years to figure out what I was doing as a parent. I didn’t realize how hard you had to pat to get the big burp. I didn’t know that a day of screaming meant a double ear infection. When I bought the caterpillar that played music, it never occurred to me that Emily might fall on the antenna and blacken her eye so she looked like a boxer in her 1st birthday photos. Through trial and error and tears, mostly mine, I learned how to be a parent.

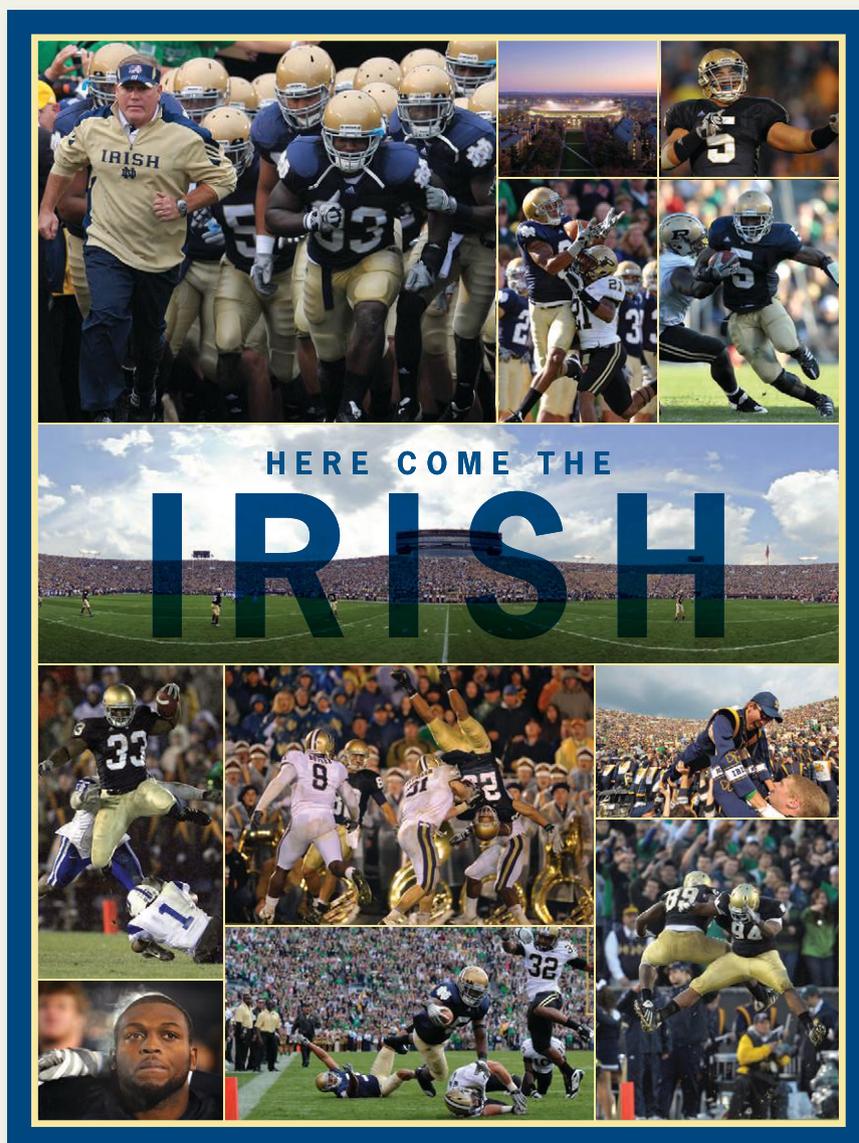
And now it’s starting all over again. I know nothing about this new creature, the one who will wish me ill and steal my shoes and eyeliner. All the wisdom I have accumulated is archaic. All-knowing mom is as obsolete as a mix tape.

I remember several years ago when our younger daughter, Sarah, was only 2 and we watched the movie *Peter Pan*. Her scream of anguish when Tinker Bell collapsed could not be extinguished. We had to stop the video to convince her that the fairy would live, holding her close and wiping away her small, warm tears. It is a moment preserved in amber, the pure sweetness of childhood.

On the way out of the theater, as I am longing for that moment, Emily runs up to me. Making sure no other Scouts are around, she squeezes my hand and says, “Thanks for bringing me, Mom. It was good.” Then she is off down the stairs to join her peers, who are probably plotting to burn Tiger Lily at the stake.

It is another amber moment.

Maybe, like Tinker Bell, I must drink the poison to launch my daughter, who, unlike Peter Pan, very much wants to grow up. She has to let me go, leave her dad and me behind as she flies on to greater heights. Someday, after adolescence, she will clap her hands and tell me she really does believe in mothers. I just need fairy faith. □



Notre Dame Magazine does Notre Dame football.

At *Notre Dame Magazine* we've always thought there's enough to say about Notre Dame and its people without trying to cover, in a quarterly magazine, the football team — a subject that seems to get plenty of attention nationally from other media anyway.

And we've produced nine posters since 1995, including the doors, windows and statues of Notre Dame, the four seasons — but no sports.

That changes this year with our new poster: "Here Come the Irish."

The 18" x 24" poster features the photographs of Matt Cashore '94, whose images have appeared in *Sports Illustrated* and *ESPN The Magazine*. It is available only through this magazine. Here's how.

Notre Dame alumni and parents receive the magazine free, but we depend heavily upon the generosity of our readers to produce it. We need your contributions. So each year we ask for donations and suggest a gift of \$25. Those who give \$35 or more receive the poster as a special expression of our gratitude.

We appreciate donations of any amount, of course. These can be made by responding to our mail appeal (sent out in late February), by calling 574-631-5335 or by contacting us at magazine.nd.edu.

And for all you football fans, remember that all donations to the magazine are applied to the annual contribution necessary for the football ticket lottery. GO IRISH.

