Helping scientists understand the working of the universe

BY CAROL C. BRADLEY, NDWORKS

Physics professor Michael Wiescher is interested in the origin of the elements in the chemical evolution of the universe, and a new particle accelerator that began operations this month in Nieuwland Hall of Science will advance that research. “We try to simulate the reactions that take place in stars,” he says.

Our bodies, he notes, are 70 percent hydrogen—90 percent of which was formed 12 billion to 13 billion years ago in the Big Bang, and the rest formed in subsequent generations of stars.

“You have a direct personal connection,” Wiescher says. “Half of the atoms in your body have been part of supernova explosions of stars.”

The new particle accelerator— housed in a special high-density concrete tower as a radiation shield—was funded by the National Science Foundation (NSF) and represents a major equipment upgrade for the University. It’s the first accelerator the NSF has funded in nuclear physics since the 1980s.

The 15-ton accelerator, built in Wisconsin by National Electrostatics Corp., can generate voltages as high as 5 million volts and can accelerate a wide range of different beams for use on various experiments of interest to researchers from Notre Dame’s Nuclear Science Laboratory.

The department includes five faculty members, a research staff of about 20 and an average of 25 graduate students.

The accelerator will be used primarily to expand the research program at the University’s Joint Institute for Nuclear Astrophysics, which Wiescher directs, and Institute for Structure and Nuclear Astrophysics.

The accelerator will provide beams to the St. George Recoil Separator, installed last year, that can find a single particle created by an alpha capture reaction from 1,015 beam particles. The University’s nuclear astrophysics program, started in the mid-1980s, is one of the leading global centers, attracting user groups from 20 to 50 countries.

The new accelerator will help scientists gain a better understanding of how the universe works, says Ed Stech, associate professional specialist in physics. “It’s basic physics research—and we’re one of the few university-based labs like this left. Our students are trained to go into industry, academia and the national labs.”

Testing of the accelerator has begun, and initial experiments will be conducted over the summer.

The new particle accelerator, shown here being lifted into position on top of Nieuwland Hall of Science, is 21 feet tall, about eight feet in diameter and weighs nearly 18,000 pounds.

Postdoc Dan Robertson and graduate student Stephanie Lyons work on the final cleaning of the hoops inside the accelerator, in preparation for closing the tank. Air will be pumped out and the tank filled with sulfur hexafluoride (SF6), an inert gas that will allow the maintenance of a stable 5 million volts.

The accelerator will generate electrical potentials up to 5 million volts. Then a gas is ionized in the terminal by removing electrons, resulting in a +2 or +3 charge state. “Since like charges repel each other, ions are accelerated out of the terminal and toward the magnet,” says Ed Stech, associate professional specialist.

The accelerator tank, in position in the basement of Nieuwland. The tank itself is about 21 feet tall, but the tower rises approximately 40 feet above the existing roof of Nieuwland Science Hall.


**NEWS BRIEFS**

**RELAY FOR LIFE: FIGHTING IRISH FIGHTING CANCER**

Notre Dame’s eighth annual Relay for Life takes place Friday, April 27, with opening ceremonies at 6 p.m., the Luminaria Ceremony at 9:30 p.m. and closing ceremonies at 8 a.m. Saturday.

Dave Przepiorkowski, director of Notre Dame Food Services, will be honored at this year’s event for his commitment to both leading his team and helping others who have been diagnosed with cancer, even as he undergoes his own treatment for pancreatic cancer.

Since Notre Dame began hosting Relay for Life on campus, volunteers have raised $676,000 for the Third World Relief Fund, the American Cancer Society (ACS), and the Indiana Hotel and Lodging Association’s 2012 Outstanding General Manager of the Year. The association gives the award annually to a hotelier who demonstrates superior professionalism and takes a leadership role in the industry. The award was presented to Beirne at the Feb. 29 Stars of the Industry Banquet in Indianapolis. Beirne, who joined the University as 1988, is currently president of the St. Joseph County Hotel-Motel Association and serves on the Board of Directors of the St. Joseph County Chamber of Commerce.

**BEIRNE NAMED OUTSTANDING GENERAL MANAGER OF THE YEAR**

Bill Beirne, director of the Morris Inn, has been named the Indiana Hotel and Lodging Association’s 2012 Outstanding General Manager of the Year. The association gives the award annually to a hotelier who demonstrates superior professionalism and takes a leadership role in the industry. The award was presented to Beirne at the Feb. 29 Stars of the Industry Banquet in Indianapolis. Beirne, who joined the University as 1988, is currently president of the St. Joseph County Hotel-Motel Association and serves on the Board of Directors of the St. Joseph County Chamber of Commerce.

**THIRD WORLD RELIEF FUND**

Faculty and exempt staff will receive a mailer in mid-April for the Third World Relief Fund, the University’s 37-year-old campus charity that supports a group of eight charities around the world—including the Holy Cross Missions, Holy Cross in Bangladesh and Oxfam. The charity supports projects that have substantial local impact—a women’s dairy cooperative, for example, says coordinator Stephen Hayes, the Entrepreneurial Spirit Endowed Business Librarian in the Mendoza College of Business.

**OIT launches new website**

The Office of Information Technologies (OIT) launched a new website March 13, featuring updated content and a design that meets the new University branding standards.

“We redesigned the OIT web site so we could help people more easily find technology service solutions and answers to their questions,” says Ron Kraemer, vice president of Information Technologies and chief information officer.

The Marketing Communications Web Group partnered with the OIT Website Redesign team to provide research and benchmarking, and helped to set a new direction for the website. The content was thoroughly reviewed and organized to be more customer oriented rather than service oriented.

“Our goal was to implement a more straightforward design and add features to make the site more useful,” says Kraemer. “We are committed to continually making improvements based on input from those who visit the site.”

In addition to the new look, user-friendly navigation and reorganized content, one of the biggest accomplishments of this project is that the website went from a total of 4,100 pages to about 350 pages. You can visit the new OIT website at: oit.nd.edu.

**Holy Cross Harvest raises more than $15,000**

A donation of $15,383 and more than 2,000 pounds of food were presented to the Food Bank of Northern Indiana Monday, March 12, at Mason Services Center. The second annual Holy Cross Harvest took place between Jan. 23 and Feb. 14. “The drive was a fantastic success,” says Anne Kolaczyk, senior technical training professional in OIT and chair of Notre Dame’s drive. “We’re happy to be making a difference in our community.” Three institutions, Notre Dame, Saint Mary’s College and Holy Cross College, participated.

**THE FACES BEHIND THE VOICES**

The OIT Help Desk (631-8111) supports faculty, staff and students in the use of IT services and applications. Located in 128 DeBartolo Hall, the office has 11 staffers and another 10 student workers who handle more than 3,700 contacts per month.

From row, left to right: Stacey Bond, Pamela Miller, Denise Mone, Lauren Froala, Jessica Broshaker Herr.

Back row: Ben Allen, Nick Page, Matt Metzger, Peter Metzger, Matt Pollard, Scott Lamb.
Brennecke, the Kacergis–Crawford Professor of Chemical and Biological Engineering, has been elected a member of the National Academy of Engineering (NAE) for her innovation in the use of ionic liquids and supercritical fluids for environmentally benign chemical processing. Election to NAE is among the highest professional distinctions accorded to an engineer. Brennecke, who also serves as director of the Center for Sustainable Energy at Notre Dame, is internationally known for her research in the development of solvents, specifically supercritical fluids and ionic liquids, for specific applications. Her research interests include supercritical fluid technology, ionic liquids, thermodynamics, environmentally benign chemical processing, and carbon dioxide capture and use.

In Memoriam: Sociologist C. Lincoln Johnson

The campus community is saddened by the loss of C. Lincoln Johnson, 70, associate professor of sociology emeritus, who died March 1. A specialist in statistical methods and social psychology, Johnson was particularly interested in the effects of globalization on the world’s food supply. In addition to teaching, he created a popular course on that subject, “Global Food Systems: The Sociology of Food,” he served for 14 years as director of Notre Dame’s Laboratory for Social Research and directed the computer applications program for the College of Arts and Letters. Contributions in Johnson’s memory may be sent to the Center for Social Concerns, Relief for World Hunger, Geddes Hall.

$6 Million Scholarship Gift

The College of Engineering has announced a $6 million gift from the Fotsch family, to establish a new scholarship fund in the name of Joan F. Brennecke, the Kacergis–Crawford Professor of Chemical and Biological Engineering. The Fotsch family’s generosity will enable the College of Engineering to establish a new scholarship fund in Brennecke’s name. The Fotsch family’s gift will be used to endow a scholarship to support engineering students at the University of Michigan, Burns, Rodney C. Ewing Jr., and Alejandro Nava-Rotstein of the University of California, Davis, call for increased research to help develop predictive models for future nuclear accidents.

A 9.0-magnitude earthquake near Japan on March 11, 2011, triggered a tsunami that wiped out coastal towns, shut roads, severed communications and claimed thousands of lives. It also cut off all electricity to the Fukushima Daiichi nuclear power station, setting the stage for a series of explosions that released large quantities of radioactive substances into the surrounding environment.

“Reactors are designed to high safety standards, but on the anniversary of the accident in Fukushima, we are reminded that the forces of nature can produce unlikely events that can overcome the safety margins built into the reactor designs,” Burns says. “A reactor core meltdown releases radioactive material from the fuel. If the reactor systems fail, as they did at Fukushima, radioactive material is then released into the environment.”

Burns, Ewing and Nava-Rotstein point out in their paper that accurate fundamental models for the prediction of release rates of radionuclides from damaged fuel, especially in contact with water, after an accident are limited. “At Fukushima, a large amount of radioactive material was released when seawater was pumped onto the reactor core that later leaked into the ocean and groundwater,” Burns said. “Little is known about how radioactive fuel in a reactor accident interacts with water and releases radioactive material. This paper examines what is known, points to serious shortcomings in our understanding, and proposes a course of research to address these problems.”

Although some of the needed research can be conducted using simulated core-melt events with fuel analogs that contain nonradioactive isotopes, Burns and his colleagues point out that some of the studies will need to be done with radioactive materials. Although such studies are both difficult and expensive, Burns points out that they are essential to reduce the risk associated with increasing reliance on nuclear energy.

“Nuclear power reactors, of which there are currently 440 operating worldwide, provide about 16 percent of the world’s electricity,” he said. “They also produce extremely radioactive used fuel. “A growing reliance on nuclear energy in the world over the coming decades will make serious reactor accidents more likely, although they will remain rare events. To better protect humanity when accidents do occur, we need a much improved understanding of how water interacts with damaged fuel, and how the radioactive material is released and transported in water.”

The research described in the Science paper was conducted under the auspices of Notre Dame’s Energy Frontier Research Center, a U.S. Department of Energy-funded initiative established to pursue advanced scientific research on energy. Burns serves as director of the center.

New paper examines issues raised by Fukushima reactor accident

Studies will be essential to reduce risks of reliance on nuclear energy

BY BILL GILROY, PUBLIC RELATIONS

On the first anniversary of the Fukushima Daiichi reactor accident in Japan, a new paper by Peter C. Burns, Henry Masman Professor of Civil Engineering and Geological Sciences, and colleagues from the University of Michigan and the University of California, Davis, stresses that we need much more knowledge about how nuclear fuel interacts with the environment during and after an accident.

In the paper, which appeared in the March 9 edition of the journal Science, Burns, Rodney C. Ewing Jr., of the University of Michigan and Alexandra Nava-Rotstein of the University of California, Davis, call for increased research to help develop predictive models for future nuclear accidents.

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Engineering students build hope through bridge construction

Helping residents of impoverished countries

BY BILL GILROY, PUBLIC RELATIONS

“Building Bridges, Building Hope” is the motto of an innovative program in the College of Engineering that enables undergraduate students to use the knowledge they have gained to benefit residents of impoverished countries.

Now in its third year of operation, ND SEED (Notre Dame Students Empowering through Engineering Development) connects rural communities in Latin America and Africa with students at Notre Dame to assist in the construction of footbridges. This year’s project is centered on San Francisco, a river crossing north of the city of Esteri, Nicaragua. The visit occurred during especially heavy rains, and the students discovered that the community where they will build the bridge was isolated for a week from food, medicine and other necessities.

The students were able to meet with the mayor of San Francisco and gained his assurance that members of the local community would assist in the construction of the bridge, which is one of the goals of the program. The group was also able to locate local sources for the bulk of materials needed for the bridge building effort.

During the current spring semester, the students are concentrating on raising the funds necessary to complete the project. They have estimated $20,000 to construct the ND SEED bridges, and although there is a support structure within Notre Dame among interested faculty and administrators, the team members must raise the necessary funds themselves.

Immediately following final exams at Notre Dame, the ND SEED group will depart for San Francisco and spend the next six weeks constructing the bridge. They will work alongside the villagers, putting in 12-hour days and sleeping under mosquito nets at night.

The project will require students to overcome several unique engineering challenges. The river does not have steep banks, so high towers will need to be built on each bank to keep the deck of the bridge above the highest flood stage. Also, walls will need to be constructed to prevent erosion and protect the towers.

ND SEED was formed in partnership with the nonprofit organization Bridges to Prosperity, a volunteer-based charity that seeks to empower poor, rural African, Asian and Latin American communities through footbridge building. Those wishing to support ND SEED can visit ndseed.nd.edu.
Harrisburg 7 and the New Catholic Left

By Michael O’Rourke


Recently published by the University of Notre Dame Press, the 40th anniversary edition of O’Rourke’s book does indeed have something of the ancient and curious about it, concerning as it does, a trial in which the federal government was arraigning seven foes of the Vietnam War for conspiring to raid government offices, bomb Washington’s infrastructure and kidnap President Richard Nixon’s adviser, Henry Kissinger. Six of the seven were married or active Catholic priests and nuns. Although the 1972 trial of these exotic outliers ended in a hung jury, and the radical “conspirators” it mandated—most notably Philip Berrigan and Elizabeth McAlister—eventually remembered considerably less incendiary forms of activism, it was the high-water mark of what O’Rourke believes the legendary G-man (“should be listed as a co-conspirator”) publicized their cause by toppling the Catholic Left from its pillar of moral superiority.

David Black, in an early review of the new edition of O’Rourke’s book, suggests that “the format of trial reporting, an account even 40 years later that is still pertinent to our situation.”

As if in ironic illustration of that point, early last month Nixon had given ominous congressional testimony about the “incipient plot on the part of an anarchist group. …of Catholic priests and nuns, teachers, students and former students” to terrorize the government into ending the bombing of Southeast Asia and the nation into a reassessment of the war.

Although the conspirators’ plot was partially successful, in that Hoover’s obsession with it (O’Rourke believes the legendary G-man should have been listed as a co-conspirator) publicized their cause beyond anyone’s wildest dreams, the government actually won the trial, accomplishing what it wanted to do, trumping the Catholic Left from its pillar of moral superiority.

Looking back at a book about a trial 40 years after the fact is opening a time capsule of sorts, writes William O’Rourke in the preface to his new edition of “The Harrisburg 7,” and the New Catholic Left.

Record attendance at TRiO Student and Parent Leadership Conference

Professional development program for graduate students has ‘wonderful momentum’

Research Sped, which gives students training in formulating a two-minute, broadly accessible pitch about their research—sometimes an opportunity to practice with faculty members and each other in a cocktail party environment. A “Disseration Boot Camp” was offered during spring break, and an “Entrepreneur’s dinner” helped prepare students for onsite interviews. A complete calendar of events appears on the professional development website, trio.nd.edu/professional_development.

In addition, a number of supplemental materials have been created to aid students in tracking their own development progress. An online pre-screening tool indicates the recommended types of workshops for students, based upon the four spires of professional development: research, teaching, career and ethics.

The program—developed by a cross-disciplinary team comprising members from the Graduate School, Hesburgh Libraries, the Career Center, the Writing Center and the Graduate Student Union—emphasizes four “spires” of professional development: research, teaching, career and ethics.

The program has achieved wonderful momentum, says Carlson. In the fall of 2011, more than 1,100 students attended 54 professional development workshops. Last year, graduate students brought more than $1.5 million in grants and fellowships. So far this academic year, students have submitted 268 grant and fellowship applications, a 33 percent increase in submissions over 2010-2011.

The number of graduate student consultations at the Career Center has more than doubled since December 2010, notes Carlson, with 138 students in fall 2011 alone. Seventeen companies held information and interview sessions for graduate students in fall 2011.

Recent professional development events include “Developing your professional development program for graduate students has ‘wonderful momentum’

Carlson

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Award-winning book aims to change perceptions

BY CAROL C. BRADLEY, NDWORKS

Mark W. Roche’s recent book “Why Choose the Liberal Arts?” argues for the essential importance of a liberal arts education—beyond the practical—amidst the gateway to employment after graduation.

The Association of American Colleges and Universities recently named Roche, the Rev. Edmund P. Joyce, C.S.C., professor of German Language and Literature and former dean of the College of Arts and Letters, the winner of the 2012 Frederic W. Ness Book Award.

Why Choose the Liberal Arts?

Mark C. Bradley

The Ness award is given to the book that best illuminates the goals and practices of a contemporary liberal education. The book is already in its third printing.

“I wrote the book because I was concerned about the perception among students—and parents—that you have to major in something practical to get a job,” he says. “As dean, What can my child do with a liberal arts education?—beyond the technical school. I wanted to make the case to both students and parents that a liberal arts education is superb preparation for a career in any number of fields, including business.”

In their post-graduation jobs, liberal arts majors draw upon a wide range of skills, he notes. “The more you move upward, the more you need to be able to learn about new areas, ask probing questions, sift data and use critical thinking to solve complex problems. The most sought-after capacity is communication skills. Study what you love, and you will still be able to get a job.”

But at the same time, Roche argues, education shouldn’t be reduced to just its practical value. “If we reduce the purpose of education to that of getting a job, we have failed to adorn it with higher meaning. Even more than at awakening a deeper meaning in work, a liberal arts education gives graduates a direction for life.”

There are three partly overlapping grounds for a strong liberal arts education, Roche says: first, the sheer joy of learning for its own sake—asking the great questions that give meaning to life second, the cultivation of the intellectual virtues necessary for success in life; third, character formation and the development of a sense of vocation—a connection to a higher purpose or calling. A great liberal arts education, he says, produces not only educated people but also good people, with a sense of mission.

Finding a vocation begins with great questions—Who am I? What ought I to do with my life? Through the study of such questions, Roche says, liberal arts students develop skills in reading, writing, speaking and critical thinking—skills that will allow them to flourish in whatever career paths they choose.

For the cover of the book he chose a painting by Paul Klee, titled “Highways and Byways,” created in 1929. “I picked it because all roads lead to a blue horizon—whether you go by the straight path or you get there by byways. I want students to spread their wings. The most important thing in the liberal arts is the capacity to continue to learn. “Why Choose the Liberal Arts?” is both a book that captures the essence of a Notre Dame education and a book that transcends Notre Dame, Roche adds.

“We shouldn’t be embarrassed that college is separate from everyday life. At the university, we have a reason to elevate knowledge for its own sake. We are unabashed about saying that we help students develop values and virtues. We believe students should be searching for a higher meaning and purpose in life. What we do at a Catholic university is exciting for anyone.”

Michael Graves named 2012 Driehaus Prize laureate

Michael Graves, whose celebrated career redefined the architect’s role in society, has been named the recipient of the 2012 Richard H. Driehaus Prize at the University of Notre Dame.

Graves, the 10th Driehaus Prize laureate, will receive $200,000 and a bronze miniature of the Choric Monument of Lykeaites during a March 24 ceremony in Chicago.

“Michael Graves is not a classicist, but he opened the door for a lot of us,” says Michael N. Lykoudis, Francis and Kathleen Rooney Dean of Architecture. “Graves gave public buildings dignity again. He celebrated the art of drawing, something difficult to come by in modern architectural training. His contributions to the field have been immense. “He has enhanced not just the architecture profession with his talent and scholarship, but everyday life itself through his thoughtful attention to beautiful and accessible design.”

Graves is Founding Principal of the firm Michael Graves & Associates and the Robert Schirmer Professor of Architecture, Emeritus at Princeton University, where he taught for 39 years.

Graves received the Rome Prize in 1960 as a scholar at the American Academy in Rome, where he is now a trustee. Graves was influenced by “the timeless grammar“ of architecture that he has since applied to his own work. Members of the Driehaus Prize jury commended his commitment to the traditional city—in its human scale, complexity and vitality—as emblematic of a time-tested sustainability.

To mark the 10th year of the Driehaus Prize, through the generosity of Richard H. Driehaus, a special one-time award, The Richard H. Driehaus Prize at the University of Notre Dame Patronage Award, was presented to His Royal Highness Charles, Prince of Wales, advise the bronze miniature of the Tower of the Winds presented to the Prince in January.

“Michael N. Lykoudis (at left), dean of the School of Architecture, Richard H. Driehaus and His Royal Highness Charles, Prince of Wales, advise the bronze miniature of the Tower of the Winds presented to the Prince in January.”

Michael N. Lykoudis (at left), dean of the School of Architecture, Richard H. Driehaus and His Royal Highness Charles, Prince of Wales, advise the bronze miniature of the Tower of the Winds presented to the Prince in January.

The Prince is a forceful advocate for the maintenance of traditional building skills and sustainable urban design, and is keenly interested in how the built environment affects the quality of people’s lives.

He received a bronze miniature of the Tower of the Winds (an octagonal Pentelic marble clock tower on the Roman agora in Athens), and donated the $150,000 prize to his organization, The Prince’s Foundation for Building Community, to establish an undergraduate diploma course in sustainability and the building arts, as part of the charity’s building-skills program. “It is an element of education that we’ve long been desperate for my foundation to re-introduce,” Prince Charles said at the ceremony, “and I’m thrilled that, thanks to the incredible kindness of the Driehaus Foundation, it will be able to do so.”
SERVICE ANNIVERSARIES

The University congratulates those employees who celebrate significant anniversaries in March, including 35-year employee Dennis D. Freeman, Utilities.

30 years
Tamara R. Springer, Mendota College of Business
Marilyn K. Walker, aerospace and mechanical engineering

25 years
Keith A. Bruce, Maintenance Repairs
Ana Laskowski and Sandra K. Tompkins, Custodial Services
Kathy L. Reeves, General Services

20 years
Claude J. Devaney, Academic and Administrative Services
Brenda L. Young, Custodial Services

NEW EMPLOYEES

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

Sophia Ambra Garcia, Cori A. Hunt, Kathleen Long and Susan Webb, Custodial Services
Angela A. Ashendel, Athletic Events
Jessica L. Baron, Reilly Center
Jacquelyn O. Cascarano, Law School Career Development Officer
Joseph Casey, Alliance for Catholic Education
Laurie Cayia, Erin Jones, Patrick Kaiser, Mauricia Marschke and Sharon A. Rankert, Development
Tarek Clark, Lee Purdy, Andre B. Schmidt and Julia A. Schneider, Hesburgh Libraries
Eric Crue, Keenan Hall
Amber Dalton, University Health Services
Jason M. Dewispelaere, Risk Management Officer
Sidney K. D’Mello, psychology
Lesley-Anne Dyre, financial aid
Robert J. Elliott, Harry K. Hiestrand, Joshua J. Reardon and Hugh P. Welsh, football
Carrozza A. Fuehs
Michael J. Kasalo and Clifford Thompson, Building Services
Cynthia L. Fujia, Rebecca Huckert, Kathleen Miller and Beata Nabryzka, Office of Research
David Ganz, Medieval Institute
Mennu Garr, civil engineering and geological sciences
Daniel S. Gehbard, Joyce Center
Raylan Gao, chemical and biomolecular engineering
Jared Hendrickson and Jennifer E. Terlep, Customer Support Services
Anthony J. Hoffman, electrical engineering
Ken F. Hughes, computer science and engineering

A job that, when done well, goes unnoticed

BY GENE STOWE, FOR NDWORKS

Clean living at Notre Dame has gotten easier.
Recent equipment upgrades have cut carpet-cleaning time in half and tile-stripping time to one-tenth, without any chemicals.
Edgar Jeffrey, who became assistant director of Building Services early last year, collaborated with front-line cleaners Mike Crabtree, John Pride, Virgillo “V” Echevarria and Terry Tubbs, most with a decade’s experience, to chart a new course.
“We’re always being asked to do more with less. Technology is usually the game changer,” says Jeffrey.
Support for the transformation came from Shannon Calliman, associate vice president for campus services; Valerie RiChard, director of facilities, building and landscape services; Chris Hatfield, associate director of building services; and supervisor Dawn Bell.
A machine that uses vibration and high-pressure water for stripping replaced numerous chemicals, a process far more friendly both to the workers and to the environment and gets the job done in one-tenth the time.
“We took a process that required a mop bucket, a side-by-side, a wet-vac, another mop bucket to rinse—we took four pieces of equipment down to one and increased their productivity at least times 10,” Edgar says.
Modern walk-behind or ride-on equipment replaced cumbersome truck-based bases for carpet cleaning. A building that took seven hours to clean now takes 3½ hours.
Last fall break, the workers managed to clean the hall and public area carpets on nearly all the floors of 29 dorms. In the past, they reached only the first floor on short breaks.
Dorms are cleaned four times a year—fall, remester, spring and summer breaks—and academic buildings are cleaned twice a year.
The dorms have some 300,000 square feet of carpeting. The scheduled deep cleaning comes in addition to on-call spot cleaning.
“We get work orders every day,” Bell says. “They spill coffee or juice. The winter is really hard on the carpeting. During football season we get a lot of carpet requests.”
The crew also does windows, although the cleaning of upper-floor outside windows is outsourced.
Officials are considering new ride-on equipment that would clean 20,000 square feet of carpet in an hour, a process that currently takes eight hours.

HE GETS TO EVERY BUILDING ON CAMPUS

John Pride’s first assignment as a carpet cleaner for Notre Dame in 2007 was Carroll Hall in the summer, with temperatures more than 100 degrees in the dorms as he dragged 25-foot hoses from floor to floor.
“I thought I was going to pass out,” he recalls. “But I got it done. I had to get it done. There’s a schedule.”
He takes pride in cleaning up after students, faculty and staff, a task that goes unnoticed when it’s done well.
Pride knows the inside of all Notre Dame’s buildings, even off-campus sites such as the Center for Children and Families on Ironwood Drive.
“Every building on campus, I eventually get to. It’s just like a school,” he says. “We keep going around and around.”

NOTRE DAME EXTENDED RESEARCH COMMUNITY

Local teachers attended the fifth Notre Dame extended Research Community (NdEReC) Collaborating for Education and Research Forums in Jordan Hall in late February. The forum is designed to enhance science, technology, engineering and math education in their classrooms.
Cancer discovered thanks to the Mammogram Van
BY BRITTANY COLLINS, NDWORKS

There’s a homemade sign hanging over her computer, a block of wood with a ribbon attached. “Riding for Monica,” it says. “I will think I’ll give that a try,” Hoban says. “It was really scary. There were posters all over the place, I just called the number and set up an appointment. I was working in the Main Building at the time and I just took the shuttle over. By the time I was done, I just walked outside and there was the shuttle to take me back.”

Not long afterward, Hoban found out she had breast cancer. “There’s a high occurrence of breast cancer in my family,” she says. “Even on my mom’s side it’s had breast cancer.”

Hoban, who has been getting mammograms regularly since she was 35, had three tumors. “I ended up having to have a mastectomy. I had another test done because of my age—I’m young and premenopausal—and it came back high. I went through chemo but didn’t have radiation.”

Between December 2010 and December 2012, Hoban had four major surgeries. She found a network of support and encouragement from her co-workers at Notre Dame. “I couldn’t have been in a better place,” she says. “I was working in the Provost’s Office. They said, ‘Do whatever you have to do, take the time you need.’”

“The provost insisted I take his parking space, and then I saw that he parked next to Father Jenkins,” she says with a laugh. “And I said, ‘No, I can’t do this, my car is too dirty.’”

The sign above her desk was made for her by Greg Crawford, dean of the College of Science. “Dean Crawford was my biggest cheerleader for this whole thing,” she says. “One day he called and he said, ‘I want you to watch the news on Sunday.’” Hoban explains that Crawford participated in the inaugural 24-hour Spin-A-Thon for Pink Zone in January 2011. The sign, which has a personal inscription on the back, was hanging on Crawford’s stationary bike throughout the event. The Spin-A-Thon raised $30,000 for Pink Zone, an initiative to raise funds for breast cancer research and awareness that culminates at an annual Notre Dame women’s basketball game. WNDU covered the event and interviewed Crawford, who told them he was riding for Monica. Hoban rode for all 24 hours.

“That meant a lot to me. He’s always been there,” she says. Hoban, a committee member for the Pink Zone, is an active advocate of regular mammograms and self-exams. “I cannot stress the importance of annual mammograms and self-exams,” she says. “I have talked to many breast cancer survivors who found their lumps themselves, even after having a mammogram. For me, mine were not palpable, so mine were found during a routine mammogram. If it were not for that mammogram I had here on campus a year ago, my story today could be quite different. I might not even be here.”

Of getting her exam at the mobile unit, Hoban says, “I thought it was so easy. I really thought it was. It’s so easy to have it done here. You can have it done on a lunch hour. Less than a lunch hour.”

In 2012, Hoban is cancer-free. “Now it’s all behind me. I had two major surgeries in December so I could start 2012 with a new outlook, a fresh outlook, and there’s nothing that’s going to stop me now.”

Dramatic Improvements in Handling 1099 Forms

The Controller’s Office has made dramatic improvements in the amount of time necessary to process 1099 tax forms, with the help of the Office of Continuous Improvement (OCI), says Ed Verhurne, accounts payable manager. “It was a team effort,” he says. A group of seven staff, representing three different departments in the Controller’s Office, partnered with OCI to develop more efficient processes.

Improvements in the way vendor names were entered into the Banner software, for example, resulted in a reduction of review hours from 195 in 2010 to 28 in 2011.

Gina Douthwaite, assistant professional specialist in the Mendoza College of Business, who is chair of the Dream Team Mentoring advisory board, “Someone in the school has identified that this student might need a little extra support in some area,” such as reading, confidence building or just regular relationships.

“The commitment is to meet with your mentee once a week. It’s a variety of activities. We can read, we can talk, we can talk about schoolwork, we can develop our own projects. We try to come in and provide a little stability.”

Shropshire says, “You need to talk about books, you need to talk about school, you need to talk about the child’s schooling and beyond.”

She started visiting a girl in third grade four years ago, and the connection, like the girl, has grown. “In third grade we probably sat and did more reading,” Shropshire recalls. “Now we sit and talk more. She’s taller than I am now.”

Alison Levy, academic advisor for more information on the Dream Team Mentoring program, email partner@notads. k12.in.us. Mentors receive an hour-long training session, and the school system performs a background check.

Licensing specialist one-of-a-kind on campus
BY COLLEEN O’CONNOR, FOR NDWORKS

Tom Gerhold is half of the University’s Licensing department, working with Mike Low, director of licensing, and an outside agency, DLC (the Elite College Licensing Company). She manages all the work involved in preparing license applications for the approval process. Gerhold works closely with the Notre Dame Licensing Committee. This 10-mentor oversight group, selected by the president, is charged with approving requests from organizations to become a licensee, and ensuring that all authorized products bearing Notre Dame’s trademarks are manufactured under acceptable working conditions by companies that have adopted the University’s Licensing Code of Conduct. Any national application must be before the committee for final approval.

In deciding whether to approve a company for the license, Gerhold looks at more than just its product. “While a company may have a great product, an important question is: ‘Who is this company? Are they willing to have the capability to distribute their product,’” Gerhold says. “We look at their entire manufacturing process and where it takes place.”

Additionally, every applicant must submit a detailed business plan that includes the market they are targeting. “We look at a company’s capability to distribute on campus,” says Gerhold. Although Adidas is Notre Dame’s No. 1 licensor, one of Gerhold’s favorite companies to work with is Knights Apparel. “I love working with them because they are so socially conscious,” she says. “They opened their factory, Aliya Gracia in the Dominican Republic, in an impoverished area and pay their workers a living wage that is 3.5 times the prevailing minimum wage.”
The annual Notre Dame drive for the cancer-fighting Pink Zone raised more than $200,000 this year, an increase of more than $75,000 from last year and four times the amount just four years ago.

A cross-campus committee of some 25 people started working in September on a collection of events, including a rare collaboration of the women's basketball team, the College of Science and the Knollwood Country Club, says organizer Stephanie Menio, operations and marketing specialist for the basketball team.

“We start with T-shirt sales in early December, which is a huge part of raising money,” Menio says. “Our fans love those T-shirts.” The kickoff sale raised $30,000.

Other promotions included:

- Spin-a-Thons: This year, for the second time, Knollwood hosted a 24-hour stationary bike spin. Last year’s event raised $30,000, so promoters added a second 24-hour spin at the Rockne Memorial on campus and raised a total of $53,000. Greg Crawford, dean of science, rode for 24 hours straight, and Menio rode for a total of 24 hours between the two locations.

- Corporate and individual donations: Lake Michigan Mailers raised $3,000 from an appeal e-mailed to its clients. Fannie May donated 7,000 chocolate bars for sale, and buttons were for sale for $1. The Catholic grade-school daughter of a committee member sold memory cards.

The bulk of the donations, $111,000, goes to the Foundation of Saint Joseph Regional Medical Center. “They are providing the mammograms and they are providing the awareness and the support,” Menio says.

The total includes $56,500 for summer undergraduate cancer research internships through the College of Science. “That’s part of finding the cure,” Menio says.

Another $37,000 goes to the Kay Yow Cancer Fund, a partnership with the Women’s Basketball Coaches Association and the V Foundation for Cancer Research. Yow, a former N.C. State University basketball coach, inspired the Pink Zone initiative after her third diagnosis of breast cancer in 2006. The national program raised more than $650,000 last year.

This year, organizers have added a summer golf outing at Knollwood Country Club to keep raising awareness and money for Pink Zone.

“It just works,” Menio says. “You have three passionate entities (women’s basketball, the College of Science and Knollwood Country Club) coming together to fight for the cause. It’s outstanding. Every year, we say ‘how are we going to beat last year?’ and we do. It kind of comes together.”

February’s annual Pink Zone basketball game against West Virginia was part of an effort that raised more than $200,000 for breast cancer research. At top left, cancer researchers from Notre Dame and the Indiana University School of Medicine-South Bend and their families were recognized at halftime. Right, Coach Muffet McGraw on the sideline in pink pumps; sophomore forward Natalie Achonwa, from Guelph, Ontario, Canada, battles Mountaineer Taylor Palmer; the Notre Dame Band shows its pink.

Photos courtesy Michael and Susan Bennett, Lighthouse Imaging