from dream to screen

PETER TRAVERS ’93
BRINGS THE IMPOSSIBLE TO LIFE
imagine

... THE RESOURCES you need to succeed

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... THE GORDON LIBRARY... Creating the Library of the Future ... Today
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TouchTomorrow at WPI is a daylong celebration of science and technology—last year’s attendees called it “exhilarating.” With even more hands-on exhibits and interactive events, plus the chance to meet and learn from top robotics teams from around the country, TouchTomorrow 2013 is shaping up to be “out of this world.”

NASA will be on board again, giving you a chance to enjoy its many exhibits, including the popular Lunar Quest, space rovers, and an actual astronaut suit. Enjoy music, food, games and cutting-edge technologies. Admission is FREE and open to the public.
Wandering the Stacks

*Wandering the Stacks*

*A university is a library with a bunch of buildings around it.*

—Shelby Foote

While mankind may have its shortcomings, a reluctance to catalogue knowledge is not chiefly among them. Libraries first appeared some 4,000 years ago, and have proven to be an innovation with staying power.

As innovations go, the book isn’t far behind. Yet, for the last hundred years, pundits and futurists have been predicting its demise with regular frequency. In 1922, no less an emissary of progress than Thomas Edison himself predicted that the moving picture would soon replace the book.

The books-are-going-away meme emerged with the telegraph, grew louder with the talking picture show, louder still when commercial radio arrived, and has been a persistent drumbeat throughout our lifetimes, which includes the era of television, the computer printout, the desktop revolution, the CD ROM, and the sprawling miracle that is the Internet.

Today, it is the portability of smartphones, e-readers, and tablets that will render books obsolete. Yet, the empirical evidence suggests otherwise, for we print—and sell—more bound books than ever before.

Therein lies the difficulty with plans and predictions: they so often run headlong into reality, which can be tough to see, especially if one’s always staring at the future. And in the case of books, we frequently misread the tea leaves of progress. Paper, for instance, has proven to be an innovation with far more staying power than originally thought, as William Powers neatly explains in his 2006 positional paper, *Hamlet’s Blackberry: Why Paper is Eternal*, which is, ironically, available only online.

I deliver this lengthy defense of ink and paper as backdrop so you might better understand my delight in discovering a fellow bibliophile in Richard “Magic Dick” Salwitz, the legendary harmonica player of the J. Geils Band, who, in reliving his WPI student days, let drop the confession that his education was sometimes hindered by a “weakness for libraries.”

Wanting to make sure I hear him right, I ask for clarification, whereupon Salwitz confesses a weakness for the college library that would make a librarian swoon, including an elegant tribute to the library gods and the good karma bestowed upon those brave enough to “wander the stacks,” where inevitably one always stumbles upon a gem, a book so fresh that it proves “irresistible,” its value increased in no small part because of the cosmic randomness of it all.

“Libraries are magical places,” he adds without irony.

A mutual love for the stacks jump-started our phone conversation, which would last more than three hours, as we leapt from libraries to reading interests to cosmology to Bob Dylan to photography to multiverses to Hindu theology to Joseph Campbell to a bit of rock ‘n’ roll gossip (hey, I’m a fan, too), and ending with a playful discussion of whether physicists can mathematically prove karma. “I suppose somewhere between Dylan and Bach it’s been proven,” quips Salwitz, who has shared a stage with rock’s biggest names yet seems as proud of the harmonica patent that he shares with friend Pierre Beauregard as he is his rock fame.

Salwitz’s close friend and bandmate of 40 years Danny Klein says his own WPI experience mirrored the era. *“It was a time of soul-searching. The Vietnam War was pulling you one way, your education another, and the music still another. We couldn’t resist the music. I sometimes wonder how my life would have turned out if I hadn’t met Dick and Jay at WPI.”* Klein pauses, before adding in mock defense, “It’s Muddy’s fault! Muddy Waters made me drop out of WPI!”

Klein, who peppers his stories with crisp one-liners, was a WPI cheerleader, an image that still tickles his fellow band members. Klein says he often enjoyed the honor of picking up Gompei, then a live goat at a nearby farm, and bringing him to Saturday football games. “Cheering got me out of mandatory gym,” he says with a chuckle.

“I ask about mandatory ROTC, which was also required of all WPI students until 1969, wondering if this requirement conflicted with his rebellious rock ‘n’ roll nature. “No,” Klein quickly replies, his voice dropping as though protecting a secret. “WPI was really smart. ROTC had the only computers on campus. And no engineering student could resist playing with a computer back then. We went to ROTC.” Irresistible books, technology, and music. Friendship and karma. The paper you’re holding in your hands. Some things aren’t easily displaced.

**“Muddy Waters made me drop out of WPI!”**

JAMES WOLKEN, EDITOR
The President’s Task Force is in the final phase of development for the campus sustainability plan. Over 200 members of the WPI community joined together in January to determine how to turn our goals into actions.

Follow the development of the plan at wpi.edu/+sustainability and send your thoughts to green@wpi.edu.
Average reaction time in seconds of a Grand Prix racecar driver: 0.39
Of a Greyhound Bus driver: 0.75
Of a typical American driver: 1.50
Percentage of start-up companies that fail within their first six months: 45
Amount of VC funding start-up companies received in the 2nd quarter of 2012: $556,000,000
Percentage of that investment that targeted biopharma companies: 79
Factor by which goat cheese contains more niacin than cow cheese: 3
Factor by which goat cheese contains more copper than cow cheese: 4
Number of weeks “Centerfold” by the J. Geils Band was ranked #1 on Billboard’s Top 40: 6
Number of weeks “Can’t Buy Me Love” by the Beatles held that spot: 5
Number of annual CD sales needed for a recording artist to make minimum wage: 1,859
Number of CDs sold in the U.S. last year: 223 million
Number of WPI alumni who made an Annual Fund gift or pledge via phone in 2009: 2,251
Number in 2012: 6,882
Number of U.S. citizens working as professional TV or film actors: 2,113,424
Number working as special effects creators: 104,471
Number of negatives Oscar Rejlander combined in 1856 to make the world’s first “trick photograph”: 30
Number of weeks it took to finish the project: 6
Total box office revenue from top 10 grossing films of all time: $13,146,000,000
Percentage of these top 10 films that relied heavily on special effects: 100
Rank via box office sales of Harry Potter and the Sorcerer’s Stone among all movies: 15
Percentage of these ticket sales generated outside the U.S.: 67
Percentage increase of Vitamin A contained in goat cheese compared to cow cheese: 47
Percentage increase of the antioxidant selenium found in goat cheese compared to cow cheese: 27
Total dollars raised by WPI phonathon students in 2009: $177,375
Total raised in 2012: $313,578
Average monthly fee Americans paid to watch TV in 1970: $0
Average monthly fee Americans pay to watch TV in 2013: $124
Recommended first-time gift to the WPI Annual Fund: $50
Dear Editor,

I am very saddened to learn the demise of Prof. (Donald) Zwief in the spring 2012 issue of Transformations. Prof. Zwief was an excellent administrator and an educator, an eternal optimist; ever motivating and challenging students to work on innovative projects and novel courses like computer technology. He was a visionary; he introduced many new developments and provided opportunities in the ever changing technological world. He was also a great comforter and a gentleman as well. I always remember his great greeting smile, exhibiting a sense of confidence and positiveness.

When I came to WPI in August 1962 from India with much anxiety and uncertainty, he motivated and encouraged me to enroll into courses which have a promising future and growth potential within M.E. discipline as well as in computer courses (IBM 1620 generation at that time!). He also helped me find research work at the Alden hydraulic Lab., which I needed greatly at that time. I was very fortunate to come in contact with such a good man and the academic world shall miss him greatly.

P. SWAMY (PUTTASWAMY) ’64

I recently received the fall issue of the WPI Journal with the story by Kate Silver about WPI grad Richard Cournoyer. I was pleasantly surprised to see his face on the cover, and after reading the well written story about his accomplishments at JPL, I said to myself, “Well, that’s Ricky Cournoyer.”

As I remember him as a young lad, he was Ricky. My wife and I were close to his dad and mom and we knew the kids as they were growing up. I worked with his dad at Electric Boat in Groton, Ct. When I first started working there in 1968, Dick and I became good friends and he served as my mentor/big brother during my first few years at EB.

I remember Ricky as a very industrious young man and see so much of his father in his interview comments throughout the story about his own accomplishments.

After quite a few years of being out of touch, thanks to this article, Ricky and I have exchanged a few emails and see so much of his father in his interview comments about his own accomplishments.

Well, that’s Ricky Cournoyer.

David Swercewski ’68

Dear Editor,

I grinned upon reading an email from WPI late last year, inviting alumni to share any recent experiences in a class note—in particular, that perhaps I had “landed a rover on Mars.” In fact, for me that was just the case! I have worked at the Jet Propulsion Lab since 2006, and through 2010 was assigned to the Mars Science Laboratory (MSL) project. As a member of the Spacecraft Mechanical Engineering Section, Integration & Test group, I helped design and build equipment, prepare facilities, and develop procedures necessary to assemble and test all of the MSL subsystems, including the cruise stage, aeroshell, descent stage (sky crane), and the rover Curiosity.

To say the least, working on the development of spacecraft that explore our solar system is a uniquely rewarding occupation. In the spring of 1989, I was honored by being featured in the WPI Journal for my work on the Magellan spacecraft, which visited Venus in the early ‘90s. Reminded of that, it is deeply gratifying to know that other WPI alumni, such as Richard Cournoyer ’98, are sharing this experience.

Scott Mathews ’82

Letters to the Editor
Balancing hard work on the field and in the classroom

Capping off a stellar athletic and academic career, aerospace engineering major and stand-out field hockey player Celena Dopart ’12 was chosen as winner of the 2012 Capital One NCAA Division III Academic All-America of the Year award for the Women’s At-Large division, as selected by the College Sports Information Directors of America this past June. She is the first WPI student-athlete ever to receive this honor. At WPI, student-athletes thrive in an environment that encourages active participation, no matter the task. From athletics to projects to volunteering, a well-rounded student becomes a well-rounded community member.

Leading her team to an impressive 11-7 record her senior year, Celena Dopart graduated with a 4.0 GPA and was a two-time academic All American. She is now a grad student at MIT.
Management is doing things right; leadership is doing the right things.
—Peter F. Drucker

Among the many positive outcomes resulting from a WPI education is a high proclivity of our graduates to hold leadership positions in the world of business. This tendency may seem obvious given the natural propensity of WPI graduates to be innovators, but it also stems, in part, from the Institute’s unique educational philosophy. Our emphasis on collaborative learning, our project-based curriculum, our rigorous classroom requirements, and our commitment to the Humanities all combine to produce that rarest of graduates, the technological humanist, one deeply conversant with science, technology, and what is possible in the modern age, trained to solve problems through creativity and innovation, yet keenly aware of human needs and issues.

To determine whether WPI graduates are well prepared to excel in the business world, one need only ask the companies who recruit from this university, some of the largest and most successful companies in the world, who have told us for many years that WPI graduates enter their organizations ready to make important contributions on day one.

The Institute’s penchant for producing business leaders suggested that WPI had both an opportunity and a responsibility to expand our business offerings into a top-tier School of Business, which we did just last year, enabling WPI students to better leverage their innovative thinking and technical prowess into new products, new companies, and oftentimes, whole new industries.

If you are a regular reader of this column, you know I have long maintained that the economic well-being of our country depends upon our nation’s ability to innovate, create, and find solutions to pressing problems, which, of course, is what a WPI education is all about. WPI’s new Business School is a critical part of that vision.

The Institute’s history of outstanding business courses helped paved the way for this important expansion. Our management program has been nationally recognized for many years, while our part-time MBA program has received tremendous regard, having been ranked #1 in the northeast by BusinessWeek magazine, and in the Top 10 nationally by several ranking firms for many years. The Princeton Review recognized our business program as one of the best in the country for women, of which we are particularly proud.

These accolades are a direct reflection of our faculty and their remarkable ability to transcend traditional pedagogical boundaries, deftly guiding our students through the ever-busy, ever-changing intersection of technology and business. WPI is a very entrepreneurial campus, in large part because our faculty is entrepreneurial and encouraged to be so.

Examples of this entrepreneurial spirit can be found in this issue of the Journal, starting with alumnus Mike Caprio ’98 and his winning trip aboard the StartupBus. This issue also showcases one of the exciting new centers to emerge from the School of Business, the Tech Advisory Network (TAN), which has gotten off to a fast start (A Virtual Incubator, p. 48).

Created by business school dean Mark Rice, TAN matches innovative ideas and products developed by WPI students and faculty with experienced alumni business leaders who put these would-be entrepreneurs through a rigorous analysis, with the challenging goal of guiding them from concept to marketplace. In just its first year, TAN has attracted an impressive list of alumni volunteers, and is already advising a number of cutting-edge products and start-ups, from biomedical devices to smartphone apps to new delivery systems for cell therapy.

TAN’s early accomplishments suggest a bright future for this program, but it also represents the type of quality volunteer opportunity that is available to WPI alumni here on campus. There is much going on at WPI for alumni to be proud of, but also to take part in, particularly in the world of business. Alumni involvement contributes significantly to the success of our students and faculty. And as our alumni volunteers tell us, working with students brings a great deal of satisfaction to a volunteer’s life, and it’s the type of satisfaction not easily duplicated.

While the mission of the WPI Journal is to keep you informed about WPI and its many happenings, it is my hope that this current issue inspires you to think about ways you might become more involved with WPI. And if so, the Tech Advisory Network is a good place to start your exploration.

Dennis Burkey
At Worcester Polytechnic Institute, graduate students work in teams with faculty who challenge them to conduct research that matters in the real world. We invite you to discover WPI—a premier university for graduate studies in science and engineering.

To register for an upcoming information session:

grad.wpi.edu  ●  508-831-5301  ●  grad@wpi.edu
FACULTY MEMBER AND AN ALUMNUS who now serves as an intellectual property attorney shared the 2012 Kalenian Award, the university’s top prize recognizing commercialization potential for a given invention. Assistant professor of physics Izabela Stroe was honored for her research in amyloidogenic diseases, which led her to discover a technology to detect specific proteins responsible for the onset of Alzheimer’s disease. Fueled by her desire to contribute to others’ lives, Stroe noted the devastating toll the disease takes on society and, if successful, the breakthrough it would provide for the disease. “First, it improves the lives of millions of families who give care to their loved ones who suffer the hideous consequences of the disease. It is estimated that, in 2011 alone, unpaid caregivers provided an estimated 17.4 billion hours of uncompensated care. Second, it would reduce the cost of care on society as a whole, costs estimated to approach $200 billion in 2012.”

Splitting the $25,000 award with Stroe, Michael Abramson ’05 was selected for his glassware that will identify odorless, colorless, and tasteless “date rape” drugs.

Another alumnus, Kevin Harrington ’10 received $5,000 in in-kind legal services from Boston-based intellectual property firm Wolf, Greenfield & Sacks, P.C. He was awarded for his development of a STEM (science, technology, engineering, and mathematics) education kit for youths.

Established in 2006, the Kalenian Award has supported the ideas and inventions of WPI students, faculty, and alumni. To honor the late inventor Aram Kalenian ’33, his wife, Alba, endowed the award to provide funds to advance novel ideas. Gina Betti, associate director of the Collaborative for Entrepreneurship & Innovation at WPI, who manages the award, says, “The Kalenian Award stands for the future of the American economy by rewarding those that will contribute through invention, innovation, and job creation. It stands also to reward good innovation in practice among the current and extended WPI community.”
COLLABORATION

Archie is Ready to Serve Humankind

MEET ARCHIE, the latest recruit in WPI’s efforts to engineer better robot-human relations. (His name is short for Autonomous Robotics Collaboration.) Archie will serve as a research platform for investigating robot-human collaboration, motion planning, and robotic manipulation. Possible applications for this research include domestic robotics to assist the elderly or disabled and manufacturing robots better suited to work alongside humans.

Archie’s mentor, Dmitry Berenson, joined WPI last summer as assistant professor of computer science and robotics engineering. When he was an undergraduate at Cornell, Berenson didn’t see himself as a roboticist—until the day he discovered the robotics lab. “What really excited me was getting involved in research,” says Berenson. “The more I got involved with robot motion and writing algorithms, the more I knew it was the field for me.” His work has been featured in National Geographic, Scientific American, and Fortune and has been covered by PBS and the BBC.

Berenson was selected to lead WPI’s research group as part of the $2 million robotics challenge sponsored by the Defense Advanced Research Projects Agency (DARPA). WPI is part of one of seven “A teams” selected by DARPA to develop humanoid robots, with up to $3 million from DARPA to fund the work. WPI is tasked with locating and closing a valve near a leaking pipe. The effort combines Berenson’s work in motion planning algorithms with the expertise of several faculty members. Sonia Chernova, assistant professor of computer science and robotics engineering, will apply her expertise in machine learning, and Rob Lindeman, associate professor of computer science, will draw on his knowledge of virtual reality and novel computer interfaces to develop an interface people can use to give the robot high-level guidance.

The DARPA challenge is intended to spur the development of advanced technologies that can enable human-like robots to execute complex tasks in human-engineered environments and to work in locations where it is too risky to send people.

TRADITIONS

Founders Day Brings Out the Goat in Us All

WPI BOARD OF TRUSTEES chair Steve Rubin ’74 makes no bones about his love for goats. When the opportunity arose for two of his own to participate in Founders Day (Nov. 11, 2012), he didn’t hesitate. Pollux (left) and Castor, three-year old Nigerian Dwarf goats, thoroughly enjoyed their day at WPI, garnering a great deal of attention from students, faculty, and staff—including lots of petting, and more than their daily allotment of apple wedges. Rubin’s herd also includes Honey, a Nigerian Dwarf. Another, Howard (a Nubian), now resides at Winslow Farm in Norton Mass. Howard has the distinction of having been named the largest goat in New England. Rubin’s relationship with the farm recently led to some WPI students doing their IQP at Winslow Farm.

POWERBALL POWERPLAY®

BY NOW EVERYONE’S HEARD THAT THE ODDS FOR WINNING LAST NOVEMBER’S $550 MILLION POWERBALL DRAWING WERE 1 IN 175 MILLION. BUT WHAT DOES THAT MEAN EXACTLY? MARCEL BLAIS, ASSISTANT TEACHING PROFESSOR OF MATH AT WPI, PUTS IT ALL IN PERSPECTIVE.

BLAIS SAYS WINNING THE JACKPOT WOULD BE ANALOGOUS TO

- HAVING 27 GRANDCHILDREN THAT ARE ALL FEMALE
- ROLLING TWO DICE 104 TIMES AND NEVER COMING UP WITH THE NUMBER 7
- FLIPPING A COIN THAT COMES UP HEADS 27 TIMES IN A ROW
Liquid Fuel Ignites WPI Music Scene

WPI’S HOUSE BAND, Liquid Fuel, heats up the night with a beat that would put Robert Goddard into orbit. Pictured above are lead guitarist Brian Degon ’95 (top, left), associate director of operations for WPI’s Corporate and Professional Education division; Gordon Library preservation librarian Kathy Markees on bass; her husband, Tom Markees, on guitar; and drummer extraordinaire Rob Provost ’88, who has since moved on to other endeavors. Others who fill in as needed include Glenn Barnett ’00 on keyboard, and FPE lab manager Randy Harris on drums. The group is seeking a new drummer—ideally someone with WPI connections. Their motto says it all: “It’s the Blues: it ain’t Rocket Science!”

GLOBAL
To India and Beyond
Five new project sites expand WPI’s global footprint

THIS YEAR’S GLOBAL OPPORTUNITIES FAIR took students in new directions, with project destinations in India, New Zealand, Russia, Albania, and Bar Harbor, Maine. These new locations bring the number of WPI project sites worldwide to 35.

The new IQP Center in Mandi, India, is situated in the northwest foothills of the Himalayas, not far from the border of Tibet. “Unlike project centers in major cities, Mandi will offer students a deeper, and different, cultural experience,” says dean of interdisciplinary and global studies Rick Vaz. Center director Ingrid Shockey says India, with its colorful saris and fragrant spices, is brimming with unique sensory experiences. “You haven’t lived till you’ve walked through a flower market in India—or passed by a temple. What an extraordinary experience for our students!”

WPI will partner with IIT Mandi, the newest branch of the Indian Institute of Technology. The collaboration is supported by a grant from the U.S. Department of State that includes funds to offset the cost of airfare for students. One of the first projects will examine the impact of the new university, which will exponentially swell the population of this remote river valley with hundreds, and ultimately thousands, of IIT students.

Four project teams, with a total of 16 students, were selected to spend A-Term 2013 in India, working on projects alongside IIT students. Some have never lived outside Mas-
PIRATE TALK

The Very Model of a Modern Major Production
Sir Arthur Sullivan Society gets on board with WPI’s Pirates of Penzance

ROBIN GORDON-POWELL, librarian/archivist and trustee of the Sir Arthur Sullivan Society (SASS) in London, crossed the Atlantic to hoist his baton as guest conductor for WPI’s production of Gilbert and Sullivan’s Pirates of Penzance. His visit, orchestrated by professor and director of choral music John Delorey, also included a lecture (“Learn How to Talk Like a Pirate!”) prior to the performance.

Gordon-Powell, whose love affair with conducting and with Sullivan’s music began in high school, is founder and orchestral conductor of Chamber Orchestra Camerata Santa Dorotea. His lecture provided background on the collaboration between librettist W. S. Gilbert and composer Arthur Sullivan. He also highlighted performance conventions prevalent at the time Pirates premiered in 1880.

The comic opera was presented by VOX, WPI’s musical theatre organization, in association with the Department of Humanities and Arts. The cast and crew featured WPI students, faculty, and community members. WPI touches included references to goats, and QR codes in the program linking to the SASS website.

Gordon-Powell was impressed with what the WPI community bared to the audience. He said, “Given that almost everyone involved in the WPI production was not a professional performer, and the obvious constraints of budget and theatre and technical facilities, I felt that the production was a tremendous triumph, extremely well and inventively produced, technically staged and performed.”

Delorey was equally pleased. “Robin Gordon-Powell added a sense of historic relevance to this production,” he said. A leading scholar on Sir Arthur Sullivan, he brought his extensive conducting expertise to these students, who responded dramatically.” Adhering to a traditional reading of the music in Pirates of Penzance, Gordon-Powell’s conducting presented WPI’s community with a performance echoing the opera’s first productions, thereby serving the timeless piece its deserved honor.

HONOR

World War II Veteran Fields a Special Recognition

BARTLETT HASTINGS ’51 was honored by the Boston Red Sox at Fenway Park on National POW/MIA Recognition Day, Sept. 21, 2012. A World War II veteran of the Army 84th Infantry, 335th Regiment, Company I, he spent almost six months as a prisoner of war in Neubrandenburg, Germany, and was awarded the Bronze Star. Hastings, a resident of West Springfield, Mass., is the last survivor of seven former POWs who lived there. He was profiled in The Republican and interviewed on television—sporting his vintage Red Sox hat—by NESN’s Jenny Dell. A loyal Sox fan, Hastings says it was a humbling experience and a great thrill to stand on the field and to visit the dugout.
Who Owns Our Drinking Water?

BUYING UP WATER WORKS might be smart strategy in Monopoly, but in real life, is private ownership good for communities? Assistant teaching professor Corey Denenberg Dehner studied Massachusetts communities to assess the impact of public or private ownership and management of municipal drinking water systems. Citing the century-old debate over control of this vital natural resource, she asks, “Is water simply another commodity to be traded on the open market? Or is access to clean water a basic human right that should be affordable to all, and thus not subject to market whims?”

Dehner’s findings dispute the perception that private sector participation increases efficiency and reduces the cost to consumers. In fact, her quantitative study found that publicly owned and -run utilities were the most affordable, and that private systems operated at the highest cost to consumers. Her research also refutes the notion that paying a higher cost insures a safer and healthier supply of drinking water, showing that regulatory compliance was not significantly better with privately owned or -managed systems. Her study, published in the Journal of the New England Water Works Association, won the organization’s 2012 Journal Award of Special Recognition.

Dehner—a fan of naturalists from Henry David Thoreau to Barbara Kingsolver—joined the faculty this fall as co-director of WPI’s Worcester Community Project Center. “I was attracted to WPI’s commitment to students and social justice,” she says. I want to get students integrated into the local community so they can experience Worcester beyond Highland Street.” In the fall of 2013, when she assumes the post of full-time director, Dehner says she intends to “continue former director Rob Krueger’s tradition of fostering community-based research that matters.

Knee Re-Placement

Relic from “Old Ironsides” seeks a new home on the WPI campus

LAST YEAR MARKED the 200th anniversary of the War of 1812—the war that earned the USS Constitution the nickname “Old Ironsides.” WPI owns a piece of the famous frigate—a beautifully polished ship’s knee of white oak. The 6-ft. brace was originally displayed in Boynton Hall and later hung in Alumni Gymnasium. Now that renovations are under way in the old gym, the knee needs a new resting place. The unwieldy artifact is in storage in the Gordon Library archives, along with the bronze plaque that tells its story. The plaque reads, in part:

“Knee of original live oak from frigate Constitution presented to Worcester Polytechnic Institute June 1930 by Sixteen of her Students, eleven of whom were members of the naval unit of Reserve Officers Training Corps. In Honor of Dr. Ira N. Hollis, President 1913–1925.

It was a fitting tribute to Hollis, author of a 1900 book about the Constitution. Today, “Old Ironsides” remains a popular tourist attraction, tended by a crew of active duty Navy sailors. It still sails out of Boston Harbor on occasion. From 2007 to 2009, a WPI graduate was at the helm: Commander William Bullard III ’90, now serves in the Strategic Plans and Policy Directorate of the Joint Staff in Washington, but recalls his days as skipper of the Constitution with pride.

Bullard finds it fitting that the ship’s knee has found its way to his alma mater. “WPI is a unique school that has always promoted innovation in science and engineering. The knee itself is an example of innovation in shipbuilding; it’s part of a system of integrated and truly innovative structural components that made the Constitution and its sister ships the most advanced frigates of their day.”
Summer at WPI

WPI summer programs are focused on fun experiences that expand the mind and body. Whether it’s building a robot, researching and learning with a group of new friends, or practicing the finer points of a favorite sport—WPI is the place for summer.

From Frontiers and Launch to Camp Reach, Advanced Robotics, and more, WPI offers overnight and day camps and enrichment programs for elementary, middle, and high school students. To learn more or to apply, visit go.wpi.edu/summer.
Judy Richardson (center, at age 14) at a sit-in that helped end segregation in the South. Photo by Danny Lyon, used with permission.

PHOTOREALISM

Kennedy to Kent State: The ’60s and Beyond

WPI hosts “Photography, Media, and Society” symposium

FROM THE FUNERAL of a slain president, to student protesters gunned down by the National Guard, certain images have come to stand for a moment in history, or an entire era. On Oct. 13, scholars, journalists, and interested citizens gathered at WPI to discuss the impact of these iconic images on our collective memory and to consider their influence on present-day attitudes. The daylong symposium, “Photography, Media, and Society: the ’60s and Beyond,” was co-sponsored by WPI and MassHumanities, and presented by the Worcester Art Museum in conjunction with its photo exhibit “Kennedy to Kent State: Images of a Generation.”

With flashbacks to the Vietnam War era and the struggle for civil rights in the South, speakers showed how highly charged images of one era can resonate across generations. Filmmaker Bestor Cram, a member of Vietnam Veterans Against the War, screened footage from that movement—followed by speak-outs from contemporary warriors disillusioned by their experiences in Afghanistan and Iraq.

College of the Holy Cross professor Jerry Lembcke, author of Hanoi Jane and The Spitting Image: Myth, Memory, and the Legacy of Vietnam, discussed how images can be distorted, falsified, and even fabricated. He researched the widespread claim that returning soldiers were spat upon by antiwar protestors and found no photo evidence or news coverage of these incidents.

Judy Richardson, who has documented the struggle for racial equality through books and films (including the PBS series Eyes on the Prize), spoke of the grassroots nature of that struggle, which is sometimes overshadowed by ubiquitous images of Martin Luther King. “You did not see the price paid by regular people who organized and sustained [the movement] before national organizations got involved,” she said. Standing before a projected black-and-white photograph of young people occupying a segregated lunch counter in Atlanta, Richardson pointed out her 14-year-old self. “In images like this, folks see themselves and understand that people who looked like them were changing the world. That’s important, because unless they know that—they don’t know they can do it again.”

Returning Home From: an excursion often leaves us with more than just a suitcase full of dirty laundry to unpack. WPI’s newest digital publication Unpacked gives the WPI community a forum to share and reflect on their international and intercultural experiences. Assistant director of international students and scholars Colleen Callahan-Panday created the magazine as an outlet for all of WPI’s world travelers: those who travel to global project centers, as well faculty, staff, and international students. Diving into the digital age, Unpacked allows mass distribution and lets contributors quickly send a link to family back home—even if they’re far from home.

In “La Vaca Enamorada,” professor of Spanish and director of the Buenos Aires Project Center Aarti Smith Madan shares highlights of a restaurant dinner that turned out to be “the icing on our Argentine torta for her and her Language and Culture Immersion students. The eccentric proprietor spared no effort to engage with group, despite his limited English—pulling up a chair to converse and resorting to GoogleTranslator when needed. When it came time to order, he flattered and flapped his arms to signify that his nöquis (gnocchi) were so light they would fly like a dove (rather than sitting like a dead weight in the belly). Madan notes, “I’m always eager to showcase the new directions WPI is going with its global initiatives, and I think the Argentina program is a fine example of the Institute’s larger mission.”

Callahan-Panday hopes this sharing will deepen connections. “We all know there are people with interesting experiences at WPI, but there’s so much more we don’t know,” she says. “We are hoping that having these experiences discussed more widely on campus will help increase dialogue, interest, and interaction.”

To leap into an international adventure or two, check out Unpacked at wpi.edu/+unpacked.
Aaron Ferguson, Director Disability Support (center), pitches in with Mass Academy students Rohit Satishchandra and Rachel Maillet to create a greener campus.

**Dirty Work**

**Student Green Team Digs Recycling**

WPI FACULTY, STAFF, and students volunteered to do some dirty work to celebrate America Recycles Day® on Nov. 15. Garbed in protective suits and gloves, they dug into 1,058 pounds of trash from six campus buildings for WPI’s second annual Waste Stream Audit.

Physically sorting through the contents of trash barrels provides a graphic impression of how much is thrown away on an average day, and how much could have been recycled, says Student Sustainability coordinator Kate Roosa ’14, an environmental engineering major from Cottekill, N.Y. She organized the event with WPI’s Student Green Team. “When most people throw something out, they don’t necessarily think about where it’s going,” Roosa says. “Although you have to gear up to sort other people’s trash, I think that everybody should try it at least once, for the educational value.”

Liz Tomaszewski, who serves as sustainability coordinator for the university, says, “This year’s results show that our academic buildings are doing a great job recycling. The residential buildings show a much lower recycling rate, and we really need to work on this. We expect that the EcoRep program, which uses peer education to build awareness, will help improve these results in the future.”
DOE Ambassador Rallies Energy Awareness
Fuel-efficient vehicles displayed on campus

BRYAN MANNING '14 is committed to energy: the right kind of energy. The junior from Quincy, Mass., spent last summer as an intern in the Office of Energy Efficiency and Renewable Energy at the Department of Energy in Washington, D.C., where he used the Capital Bikeshare program to commute every day.

This year, Manning is one of eight DOE Ambassadors, a national program that charges college students with raising awareness of energy concerns and encouraging their peers to pursue careers at the Department. To that end, he has brought speakers to campus, given presentations, and become involved with WPI's sustainability efforts.

Manning's "huge interest in pure electric vehicles" emerged during his first year at WPI, when he took a Great Problems Seminar, Power the World. "Ever since," he says, "I have found anything that isn't gasoline-driven pretty interesting."

This fall, Manning organized a Fuel Efficient Car Show at WPI, joining forces with the Student Green Team, the WPI chapter of Students for a Just and Stable Future, and the Massachusetts Clean Cities Coalition to showcase four vehicles using alternative fuel.

The students brought WPI's own EV1—one of the first electric vehicles, donated by GM for MQP work—out of storage for the first time in years and set it up by the fountain at the heart of campus. The WPI community also had a chance to view an electric-powered Chevy Volt, a Honda that runs on compressed natural gas, and a BMW Isetta, a tiny car manufactured from 1956 to 1962.

"The event was set up so that absolutely everyone on campus had to see them at some point during their day," Manning says. "People were taking pictures all day long."

To really understand transportation, I think, one must first try to understand the people. It is truly a combination of the humanities and engineering!"

WHEN FILMMAKER ALEX LAFERRIERE '09 sits down for chat with his dad, he wants the world to listen in. His weekly video podcast, Dine and Sign, features lively conversations in ASL (American Sign Language) on topics ranging from long hair to Occupy Wall Street. Alex is a CODA—child of deaf adult. An IMGD graduate of WPI, he is exploring ways to use new media and technology to break down barriers for people with disabilities. Dine and Sign broaches the generation gap with humor, but does not shy away from difficult questions about what it’s like being deaf in the 21st century.

Growing up, did you think of your family as different?
My father is deaf from birth, my mother is hard of hearing, my brother and sister and I are all hearing. When people ask me how I learned to sign, I usually respond, “How did you learn English?” Growing up just happened—I never really thought about us as different. I wasn’t even aware of the term CODA until I was in my 20s. I’ve been called a “born again CODA,” because I’ve only recently discovered that I have this second heritage of deaf culture.

What was the inspiration for Dine and Sign?
When I would drop by to watch Sunday football with my Dad, we’d have these great conversations about my latest philosophical quandary, or his different perspective on things. Typical father-son interactions, yes—but with a twist. I saw an opportunity to put a spotlight on deaf culture and to promote ASL through the “hands” of a vivid personality—my dad! Dine and Sign has connected me with a growing audience and led to my involvement in the first “talkie” deaf film, by Rustic Lantern Films, a subsidiary of Deaf Empowerment Awareness Foundation (DEAF Inc.). I play a CODA in Lake Windfall, which is scheduled to premiere in March 2013.

What opportunities—and problems—do new media and technologies create for deaf people?
The deaf rely heavily on social media. It gives them a national platform to connect and to be politically active. YouTube is a terrific channel, because it has a built-in capability for closed captioning. You just upload a text file and the site does the rest. Other forms of media aren’t so readily captioned. This is an ongoing struggle for the deaf community. On the horizon are innovations like Google Goggles, which could project translations of spoken word into text or ASL. Imagine a 3D hand translator affixed to the TV, or gloves that use motion capture to translate signing into speech. I’m in the developmental stages of a tech start-up to work on technology that will change the way the deaf consume their media. Star Trek isn’t science fiction anymore.

Watch Dine and Sign at YouTube.com/Podsmiths, or connect with Alex (@LaffRaff) on Twitter or Facebook.
His Solution Lies Within the Words
By Kristin Boudreau, Associate Dean, Humanities & Arts

When Ned Rowe ’61 returned to campus for his 50th class reunion, the former civil engineering major stopped by the Humanities and Arts office to offer a complaint—and a gift.

As a first year student, Ned had placed out of the freshman writing class (once required of WPI students)—he’d been told his writing was advanced enough that he didn’t need the course. He felt the loss later in life, he said, as he took on an impressive array of jobs in engineering, sales, management, marketing, strategic planning, and leadership training. In all these positions, he rediscovered the importance of strong and effective communication skills. Whether lobbying for resources within a broader organization or trying to convey technical details of a project to a co-worker, he regretted the absence of formal course work in writing. He continues to believe that formal writing instruction should be required of all WPI students.

You don’t need to talk with Ned Rowe for long before realizing he’s motivated as much by his love for surprise and adventure as by hard-nosed practicality; indeed, his life has been shaped by his many serendipitous, and even eccentric, choices. While working on a master’s degree in structural engineering at MIT, he took an additional course at Harvard in the politics of the Middle East, simply because it appealed to him. After earning his graduate degree, he found himself in London with WPI classmate Jim Kachadorian. Perhaps because of his experience in that Harvard course, he talked his friend into directing a 10-week trip toward Istanbul. When Jim departed for the U.S., Ned bought a round-the-world airplane ticket, which led him to Pakistan for a month.

Ned earned an MBA from Stanford and changed jobs almost compulsively every few years; his employment history includes work in Saudi Arabia as well as the American west and southeast. A late marriage brought him two children, who have recently graduated from college and seem to have inherited his wanderlust and his intellectual curiosity.

He recalls with amusement the words of his mother, who warned him that he would “never be satisfied” as an engineer. Yet, he’s enjoyed an outstanding career as an engineer, project manager, and CEO coach—and he’s kept young and agile by his restless curiosity. “I’ve gone to great lengths to broaden myself,” he says.

When considering the WPI Plan, which was implemented after he left WPI, Ned believes that the “worst part” of his own WPI curriculum is now gone: the “never-ending rote labs” that were required of all students. But he insists that writing instruction should be part of the Plan.

That’s his complaint. As for the gift? The study of writing is so important to Ned that he’s leaving WPI a $50,000 bequest in his will to support writing instruction. While browsing through an issue of Transformations, he considered the question posed by the Annual Fund office: “What is the next great problem that will be solved?” And he reflected on his career and the many occasions when his job required him to communicate the “options, benefits, and perils of not taking a particular course of action.” In every case, he recalls, his success in doing his job depended on how well he could communicate these elements to another person. He believes that WPI’s writing program should be supported in its efforts to help students communicate more effectively. “I always knew I had an excellent technical education,” he says. And now with his gift, he will help WPI match that technical education with strong instruction in communication.

Ned Rowe’s realization comes at a timely moment for WPI. A steering committee of faculty, led by associate teaching professor Lorraine Higgins, has piloted a program to offer writing-intensive courses in different disciplines. To date, 15 faculty members in seven disciplines have taught writing-intensive courses; student transcripts will soon indicate which courses are writing-intensive. The academic deans of Arts and Sciences, Engineering, and Business have given financial support to the program, which Higgins hopes will eventually include writing-intensive courses in every major at WPI.

Ned invites his fellow alumni—in particular, his fraternity brothers from Phi Kappa Theta—to join his effort to expand WPI’s writing program. If you are interested in supporting the Arts and Humanities at WPI, and especially Writing Across the Curriculum, contact Kristin Boudreau (kboudreau@wpi.edu) or Audrey Klein-Leach (akleinleach@wpi.edu) to discuss current initiatives.
A CHANCE MEETING ON THE QUAD LED TO ROCK & ROLL FAME FOR WPI STUDENTS DANNY KLEIN, RICHARD SALWITZ, AND JOHN “JAY” GEILS
BY PAMELA REYNOLDS

Musta Got
PHOTOGRAPHY BY
KATHLEEN DOOHER

LOST
It was the mid-1960s.

The United States had just authorized a war with Vietnam; civil rights workers were being attacked and murdered in the South; President Lyndon Johnson had declared the War on Poverty; a Presidential Commission concluded that Lee Harvey Oswald was the sole assassin of President John F. Kennedy; IBM announced the development of its mainframe computer Systems/360; and on the music scene, The Beatles, The Beach Boys, Bob Dylan, The Supremes, Stevie Wonder, and The Mamas and the Papas ruled the day.

In the midst of it all, three engineering students struggled through their classes at Worcester Polytechnic Institute. One of them wasn’t doing too well in organic chemistry. Another, crushed by the weight of differential equations, felt an impending sense of academic doom. Looking for an escape, they formed a jug band.

And with that simple decision, they forever changed music history. The J. Geils Band was born. John “Jay” Geils (ME), Danny “Dr. Funk” Klein (CM), and Richard “Magic Dick” Salwitz (EE), calling themselves Snoopy and the Sopwith Camel, began playing at local coffeehouses and fraternity parties. In a few years’ time, they would pack stadiums across the country and even open for The Rolling Stones.

This is how it began, recollects Salwitz: “I was walking across the Quad one day when I saw Jay playing an acoustic guitar and Danny playing a washtub bass, which was really cool. I had just started playing the harmonica over the summer, and since I had one in my pocket, I asked if I could sit in. They said, ‘Sure.’ That was the seminal beginning of the J. Geils Band.”

Ain’t nothin’ but a party

Aficionados of ’70s rock know the J. Geils Band best as a high-energy party band playing rockified covers of older rhythm and blues tunes. Though begun by Geils, Klein, and Salwitz as they agonized over WPI course work, it quickly grew to six members, including lead singer and songwriter Peter Wolf, percussionist Stephen Jo Bladd, and songwriter and keyboardist Seth Justman.

By 1968, the founding members would leave WPI to pursue music full time: Geils traded his acoustic guitar for an electric model, Klein moved to the electric bass, and Magic Dick wowed audiences with his trumpet and virtuoso harmonica playing. The band’s rock covers of more obscure R&B songs like the Nicholas Brothers’ “First I Look at the Purse” (1971) and The Show Stoppers’ “Ain’t Nothing but a House Party” (1973) pushed albums like “Live Full House” and “Bloodshot” into gold status in the early ’70s. The band continued to churn out records throughout the 1970s (with their album “Sanctuary” going gold in 1978) but it wasn’t until 1981 with the release of “Freeze Frame” that the band’s fame soared into the stratosphere. At that point, no unsuspecting American could escape the reaches of hit songs like “Centerfold,” “Freeze Frame,” and “Love Stinks”—all of which received generous airtime on radio stations across the country.

But success and nearly two decades of gigs wasn’t enough to keep the band together. In 1985 the J. Geils Band split up. Lead singer Peter Wolf had already left the band in 1983 due to artistic differences with the others. The group’s final album without Wolf, “You’re Gettin’ Even While I’m Gettin’ Odd,” was a commercial bomb. For the next decade, members set off on their own projects. Then, in 1999, the group reunited for a 13-date tour across the East Coast and Mid-West. The tour was enough of a success that in 2006 all six original members met for a surprise
reunion at Klein’s 60th birthday party in Cambridge. Since then, the band has played together periodically, including at the House of Blues in Boston in 2009, Fenway Park in 2010’s “Double Play” when they shared the bill with Aerosmith, and a seven-date tour in 2011 that included the Bank of America Pavilion in Boston. More gigs are planned for 2012.

By now, it seems clear that the J. Geils Band has secured its position in rock and roll history. In fact, the band was nominated for the Rock and Roll Hall of Fame in 2011 along with such rock and pop luminaries as Alice Cooper, Bon Jovi, Donna Summer, Neil Diamond, and Tom Waits.

A lifetime of tour dates and album releases has left its mark. The founding members are older now and partying a little less (“I get my drugs at Walgreens now,” jokes Klein.) Geils opened up a vintage auto restoration shop in Groton, Mass., for a while, but has lately immersed himself in the jazz and swing of the 1940s and ‘50s. A 2009 disc, “Jay Geils: Toe Tapping Jazz,” might surprise fans expecting hard-driving ‘70s rock or catchy, riff-laden ‘80s pop. He keeps a low-profile and did not respond to repeated requests for an interview. Salwitz maintains more visibility. He has used an interest in physics to design a new style of harmonica and continues to refine his technique in various groups, including the Legendary Rhythm & Blues Revue and Mark Hummel & The Blues Survivors. Klein’s interest in chemistry morphed into an interest in cooking, which led him to cooking school in the years immediately following the band’s break-up. He’s been a chef and part-owner of several culinary ventures, including the now-defunct Cambridge restaurant Z Square. Today he’s back to mostly music and plays in a band called Danny Klein’s Full House, specializing in performing J. Geils Band tunes.

In some ways, life has come full circle back to the Worcester Tech quad where the J. Geils Band members first met. Salwitz says of his endeavors in recent years, “I’ve been doing, without a degree, some of the very essential stuff we were learning about then.”

“WHAT I NEVER, EVER LOST WAS THAT DEEP INTEREST IN PHYSICS WHICH TO THIS DAY, HAS EXPANDED INTO A HUGE INTEREST IN COSMOLOGY,” SAYS SALWITZ.
STILL A FULL HOUSE

Bass player Danny Klein, now 65, does indeed live in a full house—an 1890 red clapboard farmhouse in the Hyde Park neighborhood of Boston, shared with his wife, Valerie, and filled with vintage rock and roll posters, a fair amount of clutter, and seven lively dogs, including a Pomeranian named Elvis. Out back, his garage studio is filled with computer equipment, musical instruments, and the weights he lifts six days a week. A typical day involves walking the dogs (“that takes me a few hours,” says Klein) and getting in some practice time with his Full House band. He spends a number of hours tinkering with his computer recording equipment and settles in, when he can, to “watch the Pats, watch the Bruins games.” His voice is a little raspy from years of smoking, but he’s as quick as ever with a quip.

Growing up in New Jersey, Klein says he chose WPI because it was one of the top engineering schools in the country, and he thought at the time that chemistry would be his destiny.

“I really didn’t know what I wanted to do, and I liked chemistry so I just thought I’d try it,” he says.

WPI was an all-male school back then. Though the campus reflected the conservative values of the era, in the 1960s a feeling of change and exploration was in the air. Klein joined Alpha Epsilon Pi in part to escape the tediousness of the dorms, and reveled in his newfound freedom away from a sheltered life in suburban New Jersey. He became co-captain of the cheerleading team “to get out of gym.” There were blackouts and panty raids, crazy hazing rituals and plenty of parties. All the craziness didn’t leave much time for academics.

“I went to summer school every year,” Klein says. “I didn’t do too well there. I remember organic chemistry—I got something like a 39 on the curve, a D. That’s how hard it was.” One of his physics professors, Ralph Heller, was called The Red Vector “because,” says Klein, “he would draw vector marks with red ink beside the wrong answers!” Clearly, Klein wasn’t the best student, but he remembers loving his time at WPI because it felt like home. “I just didn’t apply myself,” he says, “so I don’t know if I would have been a great engineer or a chemist or whatever. It was the ’60s and everything was changing. The atmosphere was ‘down with authority and the Vietnam War’.” (See sidebar.)

When Klein met Geils and Salwitz, chords resonated. He hadn’t played an instrument while growing up, but had been introduced to the blues, Motown, and R&B through the records his sister would bring home. He listened to Aretha Franklin, Otis Redding, all the Motown stuff. In college, he developed an interest in folk. Listening to music and fooling around with his washtub bass—the only instrument he could play at the time—began to seem a whole lot more exciting than periodic tables and steam charts. He and the others would spend much of their free time jamming in their “practice room”—a dorm laundry space and stairwell. “The turning point was when I was on a field trip in New Jersey,” says Klein. “I went to a munitions plant, and then a fertilizer factory, and then a
There’s something happening here. What it is ain’t exactly clear…”

For the first half of the ’60s, however, WPI was largely mired in Eisenhower-era conformity. Campus consciousness, say those who were there, was notably slow to rise, even lagging behind other urban campuses where elements of the beatnik and folk movements had long-since taken hold.

Pat Moran, who graduated in 1965, jokes that the school was “a hotbed of rest” during his undergrad years. He recalls students at the then all-male campus sporting short haircuts, studying through the night, and participating in ROTC training.

“The whole thing was just a grind—four years of engineering education,” Moran says. “Was there change in the air? I wasn’t aware of it.”

As the decade progressed, America’s political consciousness rose and many folks, particularly on college campuses, grew wary of the United States’ escalating involvement in Vietnam. At the same time, social change began to accelerate. Opposition to authority grew as a mood of permissiveness and experimentation took hold in art, music, fashion, literature, drugs, and sexuality.

Women were admitted to WPI in 1968. Only two initially enrolled, and lived in an off-campus apartment, but alums say the arrival of coeds coincided with accelerating on-campus change.

The ROTC program was the target of a notorious WPI prank with anti-war overtones. A student took over the Alumni Field master control panel and rigged the sprinklers to come on full-blast in the middle of the cadets’ final review.

Campus journal Tech Today, reporting the story in its July 1968 issue, assured readers that “none of the men in formation broke ranks” and noted that trustee George W. Smith, who got thoroughly soaked, quipped that he was “glad to have had the advan-
tage of Navy experience to cope with an amphibious operation.”

Elsewhere, however, dissatisfaction with the war and campus unrest had taken a darker turn.

On May 4, 1970, Ohio National Guardsmen marched on students demonstrating at Kent State University, killing four and wounding nine. About a week later, there were two fatalities at the hands of local police and state troopers at Jackson State College in Mississippi.

Those enrolled at WPI honored a nation-wide student strike as a form of nonviolent protest, skipping classes en masse.

“We marched to the flagpole in Lincoln Square and lowered it to half staff,” recalls Forcella, who documented the protests in photographs he later donated to the WPI archives.

Phased in throughout the decade, the Plan “made campus a very exciting place for students and faculty,” and to some extent bound them closer together, says Thomas Keil, a WPI physics professor since 1967, who has twice chaired the department.

Some who were there say they were profoundly changed. Forcella says he gained a keen social awareness that inspired him to use his engineering skills for environmental planning. He’s remained politically active and has worked on several local-level campaigns. WPI “took some of my left leanings and moved them further out,” he says.

Keil’s a bit wistful on that subject: “It seemed like revolutionary times. It seemed like everything was about to change. I don’t think the revolution succeeded.”
Muddy Waters gig in the Village. I went back to campus and quit.”

By that time, recalls Klein, Geils and Salwitz had already left WPI, though Salwitz would return briefly before deciding to drop out for good. The three moved in together in Boston, took on Wolf and Bladd, and pretty soon became famous. They played about 130 dates a year and spent 6 to 8 months each year working on an album. They played venues such as the Fillmore East in Manhattan’s East Village, Winterland in San Francisco, and the Oakland Coliseum in California.

“We were lucky because the ’70s turned out to be the golden age of rock, and because FM radio came in. Before that, everything was AM and it was all so structured with playlists. And suddenly there was this whole different type of radio that played album cuts. So we had that going for us. And WBCN started, along with a million other stations. And there were clubs. Bill Graham [rock concert promoter] was very good to us. Our first gig out of New England was the Fillmore East. We played with Black Sabbath. And the audience was throwing stuff at us the first time. And Bill said, “You want your money back, get your money back, otherwise shut up and listen to them.”

After the band’s break-up, Klein plunged headlong into a passion for cooking, attending the Cambridge School of Culinary Arts, graduating near the top of his class. Since he became more involved in cooking, he’s managed to keep chemistry in his life. “It just didn’t seem like I had the aptitude to be a chemist or chemical engineer. But now that I cook, I do get my chemistry in.”

**FREE SPIRIT**

**A YEARBOOK EXPOSE**

“Whoa! That nude centerfold’s my physics professor!”

More than a few shocked WPI students likely uttered words to that effect in 1975 when the late Professor Thomas Keil, who passed away recently after a short battle with cancer, let it all hang out in a four-color spread in *The Peddler*, the yearbook of WPI.

Truth be told, Keil let most of it hang out, relying on a strategically placed bottle of Almaden wine to provide a modicum of modesty and keep the proceedings from plunging into X-rated territory.

The shot’s reminiscent of Burt Reynolds’ iconic 1972 nude layout in *Cosmopolitan*. Sort of.

For *The Peddler*, a disrobed Keil posed on a plush rug, snifter in hand, his legs tucked behind him. He looks your average “nice guy” in his Clark Kent specs, more the type you’d take home to mom than pick up for a smoldering one-night stand.

The whole thing, of course, was intended as a goof, a parody of popular culture and a snide commentary on mass-media motifs that had been accelerating since the ‘60s.

“You need to understand the times,” explained Keil, who twice chaired WPI’s physics department (he held that post, so to speak, when he bared almost all) and until his passing in late February served on the faculty. “That yearbook was intended as a parody of *Playboy*,” he said. “Feminism was rising, and the magazine was a legitimate target for parody.”

By the mid ’70s, the men’s magazine was gaining mainstream respectability by mixing its racy airbrushed pictorials—displays of feminine “perfection” as unattainable as perpetual motion—with serious articles about politics and social issues.

The *Peddler* approach was designed to skewer the magazine’s editorial schizophrenia and its increasing dichotomy of purpose. Keil was cast as both the objectified centerfold and the subject of a lengthy, serious interview, the likes of which *Playboy* conducted with politicians, scientists, authors, and movie stars—the subjects of which, in that era, were almost exclusively male.

**Beyond the centerfold, the ’75 Peddler contained other oddball elements, in keeping with the tenor of the times but unusual for a basically conservative campus like WPI’s. There was gritty, candid photography and a generally anti-establishment tone that wasn’t always flattering to the school. One notable section was titled “A Guide to Individually Prescribed Instructions in Coloring.” It contained heavy-handed spoofs of testing and educational themes in the form of cartoonish pictures to color and games to play. In its best gag, readers were encouraged to use crayons to “connect the dots in numerical order.” (On that particular page there are precisely two dots, numbered 1 and 2.)**

“There was a lot of flak and controversy,” recalls Barry Tarr ’76, who served as *The Peddler’s* photo editor in 1975. “A lot of people were expecting a more traditional yearbook.”

Keil recalled that “the admissions office stopped putting the yearbook out on their table” fearing that particular issue would generate “bad publicity for the school,” though he believed that might have had more to do with photos of student living conditions than with the centerfold.

There was lots of good-natured ribbing, Keil said, but “most of the people I associated with reacted with amusement”—and he didn’t get a single indecent proposal.
physics. He typically spends the morning reading books like Michael Talbot’s *Holographic Universe*, Bob Dylan’s *Chronicles: Volume One*, or Walter Isaacson’s *Einstein: His Life and Universe*. The rest of the day is spent practicing. He continues to perform with two blues groups, in addition to the occasional gig with the reunited J. Geils Band. He also teaches harmonica to a few lucky students and, when he has time, catches science lectures on YouTube.

Thoughtful and intensely self-reflective, Salwitz still has a serious streak. He is deeply curious about everything, which, he admits, proved to be a fatal drawback in his WPI days. “My propensity was to hang out in the library and just look at one book after another,” he says. “I would go down the aisles in the library and just look at the spines of the books and see what would intrigue me and pull it out and open it up to the middle and start looking through it. I did that a lot. And I’m not sure what that did except open up even more possibilities to me. But the time I spent in the library doing that, was time spent not doing the assignments.”

Salwitz was intrigued by all his courses. “I had this love, and still do, of mathematical equations and the way they look and the implications of it,” he says. But he was feeling increasingly daunted by the amount of course work he was shouldering. He cut back his credit load from 18 to 12 hours but felt stressed and fearful about letting his parents down back in Pittsfield, Mass.

Around that time is when he met Geils and Klein. “Being 19 or 20 years old, there’s a lot going on in a person’s life,” he says. “Especially then. The Vietnam War. Draft deferments. All that stuff. It was a hard time...psychologically, really deep. The world back then was an uptight, confusing place and it was difficult to concentrate on that much of a work load. At the same time, I was totally enthralled by all those subjects. It was like tug of war.”

Eventually music won. “What I never, ever, lost was that deep interest in physics, which, until this day, has expanded into a huge interest in cosmology,” he says. When he designed his Magic Harmonica with co-creator Pierre Beauregard (an invention that was patented though never produced commercially), he was thinking of physics, or rather, pitches and mathematical relationships between notes and chords. “It’s a fascinating instrument from a mathematical and musical point of view. Much of what I learned in college helped me understand something about the physics of the way the harp is working.”

**SANCTUARY AT WPI**

A lot of time has passed, but considering they are legendary rock stars, both Klein and Salwitz are surprisingly appreciative of their time at WPI. Just as the J. Geils Band music progressed from blues covers to rock to pop, life is a progression, filled with transitions, modulations, and chord changes. Though their preoccupations have changed since those distant engineering days, the basic lessons remain.

‘WPI was about learning how to think,” says Salwitz. “That’s the point of a technical education—learning what steps you need to take to figure out a problem.”

Klein looks fondly upon his college days for a different reason: Without WPI, says Klein, “I would have never met Jay and Dick. I got introduced to the wider world. I learned what I wanted to do. It was a good school. There were some very bright people there. Especially the ones I bribed to do the Fortran computer stuff that I couldn’t figure out!”
Although you may not have seen his name in the credits, if you’ve been to a blockbuster movie in the last 20 years, you’ve likely seen the work of Pete Travers. Whether you’ve cheered on Harry Potter as he soars above the Quidditch pitch, or shrieked at the black, multitentacled Sentinels that lurk beyond the Matrix, or watched Frodo fall prey to the Dead Marshes in *The Two Towers*, you’ve been moved by his magic. As a visual effects supervisor for Sony Pictures Imageworks, it’s Travers’s job to make the impossible look real.

**PHOTOGRAPHY BY DAVE LAURIDSEN**
**T WAS DINOSAURS** that set Pete Travers on the path to Hollywood. Fresh out of WPI in 1993, he was expecting to use his mechanical engineering degree for more pragmatic purposes. That was the summer Steven Spielberg brought cloned dinosaurs to life on-screen, scaring kids to death, and accelerating the evolution of computer animation. Watching *Jurassic Park*, Travers felt his own DNA being altered. "Suddenly a light went on in my head," he says. "I thought, ‘What is that?’ — and once I began to research it, I knew it was what I wanted to do."

His first stop was the Vancouver Film School, but a few months after enrolling, he realized he had taken a wrong turn. "We were competing for workstations, and I wasn't getting enough time to truly absorb what I wanted," he says. Determined to find a way into the film industry, he started calling companies that made special effects software, to offer himself as an unpaid intern. At the time, there were three. Only one—Wavefront Technologies—returned his call.

A lowly post on Wavefront’s customer support hotline evolved into a role on the development team for Dynamation, the animation technology used in the 1995 thriller *Crimson Tide*. Travers netted his first film credit creating digital torpedo wakes for the film’s nuclear submarine—and his career was launched.

He worked at several small studios and, for a time, ran his own before joining SONY Pictures Imageworks (SPI) in 1999. His first project with SPI, *Hollow Man*, starred Kevin Bacon as a scientist injected with his own invisibility serum. The film features
The WPI Annual Fund is about opportunity

For... a deserving student to attend WPI; a world-class scholar to join our faculty; new equipment and technology to enhance research, teaching, and learning; students to shine at national conferences and competitions.

When an unexpected opportunity arises, the WPI Annual Fund makes it possible. Right now.

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EMAIL: giving@wpi.edu
a long, terrorizing scene set in an elevator shaft digitally created by Travers—it got an Oscar nomination for best visual effects.

**HEY PETE, CAN YOU PAINT OUT THAT HIGHWAY?**

Visual effects, says Travers, boils down to anything that can’t be shot in camera. It’s not always flesh-eating aliens or tsunamis. “We can paint out a pimple on an actor’s skin, or the wires that make them fly,” he says. Sometimes whole buildings need to vanish. In *The Aviator*, Travers put Leonardo DiCaprio in the cockpit of a vintage FX-11 spy plane, and dialed the Beverly Hills skyline back to 1946 to recreate Howard Hughes’s devastating crash.

“To use a nerdy Star Trek analogy—the visual effects supervisor is like the chief science officer on the *Enterprise,*” Travers explains. On location in the pre-production phase of a movie, the director might turn to him and say, “Hey, Pete, can you paint out that highway and put something else in there?” The answer is usually yes—at a price. It’s up to Travers, who might have hundreds of people working under him, to provide the budget breakdown. “That back-and-forth never stops,” he laughs. “Up to the very end of the shoot, they’ll be asking those questions.”

Viewers don’t always recognize what they’re seeing as visual effects. In his most recently competed project, *Here Comes the Boom*, Travers’s challenge was to pack the stands of a UFC championship with 20,000 spectators—without the cost of employing 20,000 extras. “We shot at a real event, and then shot Kevin James at the 6,500-seat Tsongas Center arena in Lowell, Mass. By merging the two environments, we got an absolutely photoreal event with Kevin surrounded by tens of thousands of fans. The logistics were challenging, but the result was rewarding. That’s what keeps me interested—creating solutions to the problems of each script.”

**TIME MACHINE: WORCESTER**

In the early 1990s, WPI’s classrooms didn’t look like the launchpad to a Hollywood career. But Travers insists it was perfect career preparation. “There was no curriculum for the industry I’m in, back when I was in college,” he says. “If I had a

**FRESH FROM A YOGA RETREAT IN BIG SUR, TRAVERS IS FILLED WITH REALIZATIONS ABOUT HOW WPICHANGED HIS LIFE. TWO PROFESSORS IN PARTICULAR LAID THE FOUNDATION FOR THE WORK HE DOES TODAY. BY TEACHING HIM HOW TO THINK AND HOW TO WORK.**

time machine, and I had to go back and do it over—given what was available at the time—getting a degree in mechanical engineering from WPI was probably the best option for my path.”

Fresh from a yoga retreat in Big Sur, Travers is filled with realizations about how WPI changed his life. Two professors in particular laid the foundation for the work he does today. In Thermodynamics, Jack Boyd taught him how to think; and Bob Norton’s Kinematics class taught him how to work.

“Professor Boyd would ask us to picture a tennis ball dropping off of a building, and have us consider all the forces involved. We would discuss things like control volume, and force manipulation, but he was really developing the problem-solving abilities of our minds.
The Business of Being Creative

Despite the aura of glamour, Travers defines his work as almost pure engineering. “People mistakenly think that engineering is not creative. I was artistic as a kid, but I also had a mathematical side, and that’s why I went to WPI. I had a hard time resolving those two skill sets, because for a long time I thought I would have to pick one. Now, I see engineering—the breaking down of something—as the highest form of creativity. Being creative is a discipline. It’s being able to operate within a set logic to produce something. “The people who are really good at this stuff are the ones who realize that this is a business,” he says. While running his own visual effects company, ShadowCaster, Travers did some of his most artistic work—and learned the brutal economics of competing with big studios. ShadowCaster rendered the lush “painted world” afterlife environment for Academy Award winner What Dreams May Come (Best Visual Effects, 1999). After a fatal car accident, the film’s protagonist (played by Robin Williams) awakens in a life-scale impressionist painting. The camera follows Williams as he runs through a field of flowers, smearing jewel-toned gobs of paint as he moves. The five-minute sequence represents more than six months of computer graphics work by ShadowCaster’s team of 10.

“If you’re in it to make a profit, you’re in the wrong business,” Travers says. These days, location is everything, with governments wooing companies to shoot in Canada, for example, or India. A multinational studio like SPI, with a net worth of approximately $300 million and overseas facilities, has the resources to go after big subsidies—which can amount to 20 to 40 cents on the dollar for a $50 million job.

Even now, with a position at a major studio, life is still nomadic for Travers. He points out that every movie is like a start-up company, with a specific shutdown date. Everyone—including actors and directors—is working freelance. Visual effects are contracted out, piecemeal, to numerous companies. “Once a project’s done, we’re all out looking for work again,” he says.

The rapid advancement of software that was so dynamic when he joined the industry in the 1990s has slowed down, Travers notes, but the challenges still satisfy. “No matter how good the tools, it’s not just a matter of plugging data into a computer and out pops a realistic image. There are very few solutions that are complete solutions. And if it doesn’t look right, anyone off the

A Pete Travers Filmography

*Filming* Cloudy With a Chance of Meatballs 2: Revenge of the Leftovers
2012 Here Comes the Boom
2011 Zookeeper
2009 Watchmen
2006 Click
2005 Zathura: A Space Adventure
2004 The Aviator
2003 The Haunted Mansion
2003 The Matrix Reloaded
2002 The Lord of the Rings: The Two Towers
2002 Stuart Little 2
2001 Harry Potter and the Sorcerer’s Stone
2001 Evolution
2000 Hollow Man
2000 Road Trip
2000 Supernova
1998 What Dreams May Come
1997 An American Werewolf in Paris
1997 Spawn
1994 Crimson Tide

*Songwriting* (with Moby) for “Out of This World” on Moby’s 1997 album Play. Travers wrote and performed the song with Moby, Nathan East, and Kevin Eubanks. The song was used as the opening title theme for the 1997 film MouseHunt.

*Special Clean-Up* On November 11, 2005, Travers and his family were among the many people who were affected by Hurricane Katrina, at the time the worst natural disaster to strike the United States. The Traverses were among the many families who were displaced by the disaster, and Travers was later honored by the Academy of Motion Picture Arts and Sciences with a star on the Hollywood Walk of Fame for his service.

*Oscars* Travers has been nominated for an Academy Award for his work on What Dreams May Come (1998) as Best Visual Effects. He has also been nominated for a BAFTA Award for his work on The Matrix Reloaded (2003) as Best Visual Effects.

Despite his many accomplishments, Travers remains humble and down-to-earth. “I still love what I’m doing,” he says. “I’m fortunate to be doing something I enjoy and get to work with some of the greatest creative minds in the business.”
Making Dr. Manhattan

He’s big, he’s blue—and he’s the one that can save the world from nuclear annihilation.

Meet Dr. Manhattan, the enigmatic superhero from the graphic novel Watchmen. Transformed by a nuclear laboratory accident, he can soar to 40 feet tall, split up into multiple versions of himself, and rearrange the universe through sheer mental energy.

Pete Travers’s biggest feat in bringing the melancholy blue man to the screen wasn’t pulling off the superpowers—it was endowing a digitally created character with heart-wrenching humanity. To do that, Actor Billy Crudup was outfitted with a specially designed high-resolution motion capture suit, and marked daily with 200 digital reference points for his face alone.

“I knew that fidelity was essential for a character that was going to facially emote alongside human actors,” says Travers. “We analyzed and digitally mimicked the little tics, the movement of his brow, the way the surface of his face responds to light.” The result was a CG character who feels real, right down to the pores and peach fuzz.

Actors are used to playing against “green screen,” so that digital effects can be inserted later. But in Watchmen, Crudup acted out all his scenes on camera. “We could have told Billy he wasn’t needed on set once his character was replaced with CG,” says Travers. “But how can actors have emotional interactions with someone who’s not there? It’s hard to imagine that you’re fighting a dragon when all you have is a tennis ball.”

Dr. Manhattan lit up the screen—literally—with 2,500 LED bulbs sewn onto his suit. Travers faithfully rendered the way that blue glow reflected off surfaces, including the faces of the other actors. It took more than two years to complete 38 minutes worth of scenes. “But it was all worth it,” he says. “It goes back to the lessons of Professor Boyd, on problem solving and analysis. Every little subtle thing that we got in there added so much to the movie.”

Despite the aura of glamour, Travers defines his work as almost pure engineering. “People mistakenly think that engineering is not creative. I was artistic as a kid, but I also had a mathematical side, and that’s why I went to WPI.”
The house that WPI built...

leading an international, multi-university team

The only home in the Solar Decathlon China to be built in the United States is under construction in Worcester by Team BEMANY—students and faculty from Ghent University-Belgium (BE), WPI (MA), and NYU-Poly (NY). Worcester Technical High School students are also working on the house.

Follow our progress all the way to Datong, China, for the August 2013 competition.

solatriumhouse.org

Taoning Wang ’14, WPI architectural engineering, is one of several students with a hand in crafting this net-zero energy home, which the team branded “Solatrium.”
By John Shaw
CALL CENTER OPERATORS ARE ON THE LINE FOR WPI

WPI is call

1
2 ABC
3 DEF

4 GHI
5 JKL
6 MNO

7 PQRS
8 TUV
9 WXYZ

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It was almost October, and Lindsey Machamer ’13 was a little nervous. The mechanical engineering/environmental sciences double major had not yet found a compelling subject for her MQP, the major qualifying project all seniors need in order to graduate from WPI. She had kicked around a few ideas, but had found nothing that truly excited her.

Her worries, however, would have to be put aside temporarily as she walked across campus to the WPI Call Center at Higgins House, where she would join several other students and spend the next few hours reaching out to some of the university’s more than 33,000 alumni.

It wasn’t long into her shift before serendipity struck in the form of Ted Coghlin ’56. Machamer began with basic housekeeping details that keep the school’s database current, such as confirming his email and work phone number. When that was finished, Coghlin, a steady donor who has been very much engaged with WPI since graduating, turned around the conversation and began asking Machamer questions: What’s your major? What do you hope to do when you graduate? What’s your MQP?

“I haven’t decided about my MQP,” Machamer admitted. To which Coghlin countered, “Would you be interested in attending a meeting on a sustainable energy project at the Treasure Valley Boy Scout Reservation in nearby Rutland? There might be something there you can find for your project.”

So Machamer went, and learned how a company with which Coghlin is connected, North Andover-based Nexamp, was developing one of the largest solar panel arrays in New England. She couldn’t have dreamed of a better project. “It was perfect,” recalls Machamer, whose MQP will design solar panels to light many of the campsites at the Boy Scout camp. “It had the environmental element I was looking for and the practical aspect I needed.”

Now in her fourth year working at the Call Center, Machamer has developed a light-hearted style that makes it easy to speak with graduates. Her secret? “I smile when I’m on the phone,” she says. “If they can sense I’m excited talking to them, it makes it easier to have a good conversation.”

Machamer’s high school science teacher encouraged her to pursue engineering and defy the archaic stereotypes that still abound that women are only cut out for the liberal arts. Coming from Berkley, Mass., a town of just over 6,000 residents located between Boston and Providence, she liked WPI’s small-campus atmosphere and its unique seven-week term structure.

Moving into Morgan Hall as a freshman, she befriended her new roommates and quickly developed the kind of college friendships that can last a lifetime; three years later, she continues to live with them, now in an apartment in the neighborhood near campus.

She also plunged headfirst into campus activities, taking on leadership roles on WPI’s Student Green Team and in the body image peer group Positively. She also has been inducted into the Tau Beta Pi engineering honor society and Chi Epsilon civil engineering honor society.

Upon graduating in May, Machamer hopes to join a civil engineering firm to analyze how a project will affect the land on which it is to be built.

DIALING FOR DOLLARS

Every weekday throughout the academic year, a team of two dozen students from a wide range of backgrounds take to the phones. They speak to upwards of 60 potential alumni donors during each shift, updating contact information, sharing recent happenings on campus, and—most important—asking these graduates to support WPI. That adds up to more than 8,200 quality conversations each year, leading to more than 3,000 gifts to the Annual Fund.

“The student Call Center is one of our most important ways to engage alumni,” says Jennifer Gamache, director of the WPI Annual Fund. “For many alumni, this is the only personal interaction they have with the school after they graduate, so it’s very important to WPI on several levels.”

Finding the right students to work at the Center can be challenging, especially at a school full of engineering majors who might be more comfortable pulling an all-nighter in the Stinger Lab than picking up a phone to talk with people they don’t know. But according to Ashley Hubacz, the assistant director of annual
giving who manages the Call Center, there are always more than
enough students who’ve got what it takes to be that friendly
voice on the other end of the phone. “The students who become
callers tend to be very invested in WPI and are involved with
multiple organizations,” explains Hubacz, who is responsible for
recruiting the calling team. “They’re constantly on the move,
which is great when conveying current news to WPI alumni and
parents.”

While Hubacz prefers students with a fundraising background—even something as simple as participating in a high school sports
team car wash will do—it’s the intangibles she really looks for. Those
include communication skills, a good attitude, and commitment.

Each of the 3,000 alumni who pledged received a “Call Center
Bunch” postcard, with a note penned by the caller. It’s these little
personal touches, says associate director of annual giving Ajayi
Harris, that can make all the difference the next time a graduate is
contacted.

“Alumni can relate to callers better since they share a common
bond, even if they haven’t returned to campus since they graduat-
ed,” Harris says. “Sometimes they can talk for 20 minutes or longer,
reminiscing about their time at WPI. And that’s the kind of conversa-
tion that strengthens their bond with the school.”

**LONG DISTANCE CALL**

When Ahmad Abojaradeh ‘15 first arrived at WPI, he had yet to de-
cide upon a major. A conversation with an alumnus during a Call
Center shift in his freshman year changed all that.

“I had a great conversation with a graduate who convinced me to
major in mechanical engineering,” says the native of Jordan. “It’s been
a great decision for me, and I’m fortunate to have made that call.”

As a freshman, Abojaradeh figured he’d be camped out in Gor-
don Library when he wasn’t in class, based upon the school’s rigor-
ous academic reputation. He still spends a fair amount of time
there studying, but he jumped in to a number of activities, includ-
ing becoming a Crimson Key tour guide, treasurer of the Muslim
Student Association, a member of the Social Committee and Habita-
t for Humanity groups, and a rower on the crew team. This year,
he became an RA in Founders Hall.

“One of the best things about WPI is that you’re encouraged to
get involved,” he says, referring to the more than 200 activities
available to students. “I’ve had to learn how to manage my time so
I can do all these things.”

And if that means putting in a shift calling alumni instead of
heading out with friends or hanging around the dorm, he says it’s
a small inconvenience. Besides, he has learned a lot about the
school’s past, which he values.

“I get to hear what it was like when alumni were here, and it’s a
great experience,” Abojaradeh explains. “Plus, I get to hear what it’s
like for them after they graduated, to hear how successful they have
become. It’s a good motivator to do well in class.”

Abojaradeh admits it’s not easy being so far away from his family,
although he did get a chance to return home for a few weeks last
summer. Next year, he plans to spend a term in Switzerland, which
will temporarily put his Call Center activities on hold.

“I’ve had some great days talking with alumni,” he says. “I’ve
known that I would want to give back to WPI, but I thought I’d have
to wait until I graduated. This has been a great way to help the
school as a student.”
When funds are needed to complete renovation projects, upgrade technology in classrooms, purchase resources for the library, or send students to conferences and competitions, that’s where the Annual Fund steps in.

Donations to the Annual Fund play a crucial role in WPI’s success, which is why the 8,200 conversations Call Center students had with alumni, parents, and friends during the past year are essential to reaching this year’s $2.5 million goal.

“The Call Center is our most successful way of engaging alumni to make an investment in WPI,” says Annual Fund director Jennifer Gamache, “and it’s becoming more important each year.”

During FY 2012, the Call Center generated $313,578—a 30 percent increase over the previous year’s tally. Most of it came from alumni, but Gamache notes that parents of both current and former students also contribute regularly.

A large portion of Annual Fund donations help financially challenged students afford WPI, bridging the gap between tuition revenue and the actual cost of educating a student. Money is also used for such things as purchasing lab equipment, renovating or expanding classrooms, and attracting and retaining the university’s world-class faculty and researchers. It also plays a role in allowing more juniors to complete their Interactive Qualifying Projects at one of 35 centers around the world (a full 60 percent decline an off-campus IQP because they say they cannot afford it).

Gifts for which the donor does not specify how the money is to be used are called unrestricted donations, which allow WPI to be flexible in how best it can use the money to meet that year’s most pressing needs. “This is a technology-driven school, and having the best equipment is very expensive,” Gamache says. “Every gift, whatever the amount, has a powerful impact on current students.”

For alumni, the value of a WPI degree corresponds to an increase in donations because the many college-ranking surveys (such as U.S. News & World Report and The Princeton Review) incorporate alumni participation rates in their formulas. High participation improves the chances of securing grants from foundations and corporations, reducing its reliance on tuition, and, in fact, helping to keep tuition as low as possible.

“In some ways, attending college today has become a transactional experience because of the high cost,” says Gamache. “Donations to the Annual Fund go a long way toward ensuring that future generations of WPI students receive the same high-quality education that all our alumni have received.”

SLIDE RULES RULE

Tenell “TJ” Rhodes ’15 has learned a lot from older alumni during his hours in the Call Center—like, how they did complicated equations before the advent of computers and graphing calculators.

“One time I was talking with a guy who had graduated in the 60s, and he was telling me how they used to do math problems with their slide rules. And I said, ‘What’s a slide rule?’

“So now I know what a slide rule is,” he says, adding, “not that I would know how to use it.”

Rhodes was born and raised in Hartford, Conn. As a freshman at the University High School of Science and Engineering, located on the campus of the University of Hartford, he was part of a team that entered a regional FIRST Robotics Competition WPI hosted. While his team didn’t win, he remembers spending the night in Daniels Hall and getting his first taste of college life.

Fast forward four years. He arrived at the Worcester campus intent on studying electrical and computer engineering. But then he discovered WPI would become the first university in the nation to offer a bachelor’s degree in robotics engineering. He quickly added that as a second major.

Like so many of his fellow students who work the phones, Rhodes is involved with a number of activities, including building two houses with Habitat for Humanity, serving on his class’s board of directors, playing Ultimate Frisbee in intramurals, working as a crew member with Lens and Lights during on-campus shows, and joining Phi Kappa Theta.

He also enjoys working with students ages 7–15 in Robokids, a club at Worcester’s Friendly House, to teach them about science, technology, engineering, math, programming, and electronics. Many WPI students participate in the program, showing the youngsters such hands-on activities as counting in binary and designing linkages, to making basic circuits, programming LEGO Mindstorm robots, and building spaghetti and marshmallow structures. “Just showing them how cool things are can really change their future,” he says.

Rhodes, now a sophomore, says his parents were surprised he took a job at the Call Center, especially since his father regularly hangs up on telemarketers. “I was the last person he thought would do this,” he laughs. But he contends that a student phoning an alumnum is completely different.

“I realize it’s tough for a lot of people to donate, especially when they are trying to figure out how they’re going to pay for their own kids to go to college, so I appreciate anything they can do,” Rhodes says. “Any engagement is good.”

He points out that alumni contributions both large and small can affect a wide variety of the student experience, such as assisting the construction of the Sports & Recreation Center, which opened in September 2012. And despite other building improvements on the horizon that he may not see while he is a student, he remains committed to doing his part now to secure WPI’s future—one phone call at a time.
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wheels of
even in the gray chill of a long New York City winter, new ideas are germinating and Mike Caprio ’99 is thinking ahead to spring. Time to take those ideas and start them up. ¶ The self-styled Bon Vivant of Brooklyn knows and loves the Big Apple. He has a steady job as a software engineer with InterActiveCorp’s About.com division working on cutting-edge technology in the ultra-cool Chelsea neighborhood in Manhattan. So when spring approaches, what would make him pack light, pile onto a bus with 20 or so virtual, albeit likeminded, strangers, and head to Austin, Texas? ¶ Caprio knows ideas alone aren’t enough. They have to be ignited and set into motion. “Nothing happens until something moves,” Albert Einstein postulated. And that’s when the StartupBus rolls up. Caprio first learned about StartupBus in 2011 from an old hackathon friend on Twitter. The unlikely premise sounded sketchy—as if it were some kind of drunken bar bet—which it was. What if you put a bunch of IT entrepreneurs (aka hackers) on a bus outfitted with wifi and traveled from San Francisco to Austin and the South by Southwest Interactive Festival and ask them to create start-up companies while rolling away the miles for 72 hours? ¶ The experiment began in 2010 when StartupBus founder Elias Bizannes made good on his bar boast and set his crazy idea into motion. The surprising result was that a bus full of creativity fueled by Slim Jims, Cheetos, and RedBull (the hackers, that is, not the bus) can indeed get things started. It’s a friendly competition, yes, but the payoff is that the hacker teams actually get to pitch their new start-ups to high-tech moguls and venture capitalists assembling at the tech-geek mecca and fast-growing SXSW conference.
IF... WE INVEST IN STUDENTS. IF... WE INVEST IN FUTURE LEADERS AND INNOVATORS. IF... WE INVEST IN PLACES AND SPACES.
The Campaign to Advance WPI — a comprehensive, $200 million fundraising endeavor — is about the students we educate and the leaders they will become. The Campaign will provide the critical financial aid and supply the facilities, programs, and people that help us prepare our students to thrive in and contribute to our rapidly changing world.

If… you help us reach our goal, you will strengthen an already robust and critically relevant institution and provide our students with the means to achieve their aspirations for the benefit of us all.

If… we imagine a bright future, together we can make it happen.

PETER TRAVERS, CLASS OF ’93.
As visual effects supervisor for Sony Pictures Imageworks, his job is to bring the impossible to life. Just another possibility of where a WPI degree may lead.

IF... WE INVEST IN OPPORTUNITY.  Then... JUST IMAGINE WHAT WE COULD ACCOMPLISH.

if… The Campaign to Advance WPI — a comprehensive, $200 million fundraising endeavor — is about the students we educate and the leaders they will become. The Campaign will provide the critical financial aid and supply the facilities, programs, and people that help us prepare our students to thrive in and contribute to our rapidly changing world.

If… you help us reach our goal, you will strengthen an already robust and critically relevant institution and provide our students with the means to achieve their aspirations for the benefit of us all.

If… we imagine a bright future, together we can make it happen.

WPI
Caprio used his social network contacts to wheedle an official invite on the newly expanded New York City StartupBus in 2011, went through a screening and interview process, and was accepted two days before the bus rolled. “I had a couple of days to get packed. I had nowhere to stay in Austin. I had never been to Texas. Didn’t even have a South by Southwest badge. But the experience changed my life.”

His inaugural team tied for first place in the StartupBus competition out of 38 national teams that year. His team created TripMedi, an intuitive online resource to weigh options for medical treatment and procedures outside the United States comparing quality, cost, and insurance coverage while collecting review feedback from users. The start-up was eventually pitched to seed-stage funding firm Y Combinator in San Francisco, but has since stalled. If it ever does succeed as an operating business, Caprio is assured a 1 percent equity. But that, he says, is really beside the point. He was hooked on the process itself. “I met all these amazing people and we ended up creating this fantastic community of top talent in New York City. They’re all entrepreneurial people who have this common bond of working under these extraordinary constraints and conditions.”

The community-building aspect of StartupBus appealed so much to Caprio that he served as the New York City bus conductor for the 2012 event. Last spring the competition grew to more than 300 “buspreneurs,” including those on buses departing Boston, Cincinnati, Florida, Las Vegas, Los Angeles, Louisiana, Mexico, New York, Silicon Valley, Stanford, and Washington, D.C. Two of Caprio’s New York bus teams made the competition semifinals.

He took the volunteer conductor position because he was eager to give other entrepreneurial talent a taste of the awakening he had experienced the year before. “My role as bus conductor is one of cheerleader, drill sergeant, task master, and mommy and daddy. I have to comfort them, but I also have to challenge them—and it’s a very emotional, wearing process. But when it’s all said and done, I feel so much pride in their work. It’s like being a proud parent.”

And good parenting isn’t always easy. “I sometimes feel like a jerk because I have to put them through a ritual to push them out of their comfort zones in order to show them what they are truly capable of.” He learned the importance of soft skills at WPI, he says, and his time on the bus has taken those skills to another level.

“WPI prepared me well for working with people—project teams were important during my entire program. Knowing how to deal with people in different circumstances and working with social and team dynamics are critical skills I learned at WPI.” The Plan format, more than anything, is what brought him to WPI. “I liked that the WPI program is accelerated with quarter terms, team projects, future problem solving, and plenty of independent study. That appealed to me and gave me the initiative to become an entrepreneur. I also liked the fact that there was a pizza parlor on campus [Gompei’s Place in Sanford Riley, where the Little Theatre is now].” (Did we mention Mike is from Brooklyn?)

Caprio recalls an independent study class at WPI, half lecture and half speaker series, taught by Art Gerstenfeld and Don Berth, that “had a huge, huge impact on me.” The speaker series featured successful entrepreneurs from a wide variety of industries and the readings of renowned management theorist Peter Drucker. “We were taught the principles of ‘entrepreneurial judo.’”

Those judo skills no doubt came in handy wrestling with never-ending issues on the NYC StartupBus. After making stops in Nashville and Baton Rouge to pitch start-up ideas and receive mentoring from community businessmen—and a pit stop at Graceland in Memphis for a quick dose of Elvis (this was a road trip after all)—the bus rolled into San Antonio on the third day to make team start-up pitches at Rackspace hosting headquarters to the likes of Silicon Valley venture capitalist Guy Kawasaki and former Microsoft exec and Rackspace partner Robert Scoble before the official competition even began in Austin. Only one in three applicants got seats on the buses this year, Caprio says. “So we gave them the star treatment wherever they went.”

Competition and cooperation (not to mention some serious sleep deprivation and poor nutrition) goes hand-in-hand
on the bus. Even though multiple start-up teams on the same bus were, in fact, competing against each other, they would also support each other. Caprio recalls a team with better graphics support offering help to another team with a great technical concept but zero graphics support. “That’s exactly the kind of thing we want to happen,” he says, “because that’s community.”

Mobile applications dominated the 2012 competition, but the ultimate winner was more old school. A West Coast team created Cerealize.com—an online business to custom order your own personal breakfast cereal mix. Who wouldn’t want their own personal breakfast flakes? Only a week later, the start-up was featured on ABC’s The Chew. And Time.com did a short video feature on the StartupBus competition.

Whether these start-ups attract seed investment and take off financially is, to some degree, out of scope, Caprio says. “StartupBus is really not about creating companies or products. We are about accelerating people. We put them in the crucible and temper them through these extreme conditions.” What remains is a more confident and invigorated
entrepreneur who now has a support system in place. “If you can create a start-up company from soup to nuts in three days, imagine what you can do when you have wifi that works and electricity that works.” The StartupBus alumni network, some 500 last year, is expected to double for the spring 2013 competition and grow internationally, with the number of buses from Europe increasing from one to six.

And the community reaches beyond the annual road trip. In April, the StartupBus community competed in the International Space Apps Challenge in New York City. The challenge drew 2,083 participants from 25 cities in 17 countries. The New York StartupBus, says Caprio, “created five fully functional products that will truly change the world and disrupt the status quo, per our mission.” Two NYC teams were chosen for global judging for products “that will get further scrutiny from a worldwide community of scientists, activists, and business and government stakeholders.”

The unconference StartupBus Accelerate NYC 2012 was held in December in the form of a six-hour intensive workshop for buspreneurs to network with other entrepreneurs and share experiences with pitching ideas, funding, business design, testing, marketing, etc., and, hopefully, igniting some start-ups.

“My favorite thing about working in start-ups,” says Caprio, “is freedom—the freedom to experiment, to learn new things, to try methods or approaches nobody has ever thought of before. It’s very much like a scientific or engineering project in so many ways; coming up with a hypothesis or theory about how a business venture will succeed, then experimenting, over and over, until you find the right combination of variables for success.”

The flip side, of course, is failure, which is particularly frustrating, he says, “when you’ve done everything right and still can’t find the right formula or come across the right set of circumstances for achieving success. Every failure is a valuable lesson, but that doesn’t make it any easier.”

Caprio sees good things down the road for StartupBus and entrepreneurial networks in general. “Talent is the capital of the future. Nothing is more true than this, especially considering that the growth of graduates in technical disciplines seems to be trending downward or flattening out domestically and even internationally to some degree. The demand for top talent only keeps increasing, and the supply seems to be stagnant. I can only imagine that the future of an alumni organization of the most talented people around can keep getting brighter and brighter! StartupBus alumni will become the movers and shakers globally, founding the next big companies, creating cutting-edge technologies. They’ll change the world and disrupt the status quo—and that’s exactly our vision for the future.”

This spring Caprio plans to attend a StartupBus alumni event pre-SXSW, and maybe even catch a ride on a bus or two as a “floating conductor,” possibly doing stints on the Ohio and Washington, D.C., buses, as well as the New York bus.

So, do you have to literally “hit the road” to get things started? “It takes you out of your comfort zone and presents new challenges. Trying to move more than 300 people from 11 cities to one destination all at the same time just doesn’t happen,” Caprio laughs. Between dust storms in the west, rain storms in the east, massive traffic jams, and a hundred quirky sideshow distractions that just seem to materialize on the side of the road, the spirit of the trip will take over. As king of the road Jack Kerouac once pointed out, “They have worries, they’re counting the miles, they’re thinking about where to sleep tonight, how much money for gas, the weather, how they’ll get there—and all the time they’ll get there anyway, you see.” The trip, the journey, is the thing. Caprio discovered. It allows you to make connections, form an intelligent and trusting network, express your creativity. And all you have to do is just keep moving and never stop starting.
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COMO

The stop in Venice includes a meet/greet with WPI’s Venice Project Center director and students.
THE VIRTUAL INCUBATOR
THE TECH ADVISERS NETWORK TURNS RESEARCH INTO AN ENTREPRENEUR’S DREAM
When Dean Mark Rice was tapping alumni talent to serve on the Strategic Advisory Council for WPI’s new business school, he called Henry Fitzgerald.

A New York City native, Fitzgerald graduated from WPI in 1975 with a degree in mechanical engineering and had more than three decades of experience in capital projects including a 17-year stint as VP of facility operations at Genzyme Corporation. His consulting firm, First Stop Program Management, had a diverse list of large clients, and his resume included plenty of community service in his adopted hometown of Shrewsbury.

Fitzgerald jokes that his swing at the 2010 Reunion Golf Tournament, where he played with Rice, was also a factor.

Since signing on, Fitzgerald has also agreed to be part of the business school’s Tech Advisers Network, or TAN, a group of roughly 40 entrepreneurs, investors, and business leaders who advise and support students and faculty who hope to turn ideas and research into commercial ventures.

“What the group does is bring a dose of reality to projects,” says Fitzgerald. “We give them an honest-to-goodness evaluation of what we think, and offer them our best advice.”

Described as a “virtual incubator,” TAN is a new ingredient in WPI’s rich brew of entrepreneurial support systems and catalysts. TAN is also one of several Business School initiatives aimed at expanding and enhancing the role of alumni, who are key players in a university-based entrepreneurship ecosystem, an economic growth model in which Rice is an expert, and one that is being embraced and celebrated from Boston to Boise, from Portugal to Pakistan.

TAN members offer students and faculty experienced advice about business plans, marketing strategies, and potential partners and funding. In the process, the advisers get a first look at potential ventures that could reap financial rewards and new opportunities for entrepreneurs and investors, bolster WPI’s role as a hub of innovation, and bring jobs and economic growth to the region.

TAN also has the potential to expand and create an incubator/accelerator program that could harness and develop some of the innovative work taking place throughout WPI.

“An astonishing number of students come from long distances, a high percentage from outside the United States. They stay for four years, and then they disperse,” says Fitzgerald, who adds that the advisers may be able to pinpoint opportunities that encourage graduates to invest their ideas and energy back into WPI’s entrepreneurial network.

“If there’s some way to encourage an incubator, we could possibly create a groundswell of activity with some cross-disciplinary interaction. It’s a very interesting idea with a lot of potential, and we’ll see how it goes.”

So far, it’s going well. An inaugural list of ventures presented to TAN in spring 2012 included a smart phone app for detecting heart abnormalities; Campus Libre, an online classified message board that connects textbook buyers and sellers; SI Devices, an automated energy management system; Fivolts, a system that monitors worker fatigue; and VitaThreads, a new delivery system for cell therapy.

“We hear big ideas that are being presented at various stages,” says TAN member Dave Mahoney ’86, a serial entrepreneur with more than 35 years of experience launching, leading, and supporting software companies.

Mahoney says a lot of research projects are run by graduate students focused on the development of ideas and technologies, with little time left over for the business side of ventures.

“That’s one example of the kinds of constituents out there that we can help,” he says. “They have great ideas, but some don’t know how to put a business plan together, or maybe they need help assessing the market. The collective group helps fill out the skill set.”

Pat DeSantis ’11, the point person for the Campus Libre venture, says the company’s website was launched in August 2011 and was an immediate success among WPI students, who were able to save huge chunks of cash by buying used text books directly from other students. TAN was able to help the business expand, and the growth has been fast and steady.

“We are all engineers, so building the website and launching it at WPI was the easy part,” says DeSantis. “With the advisers’ knowledge of the business world, they have been helping us build on our success and replicate it at other schools.”

Each TAN member provides feedback and declares whether he or she is willing to serve on the TAN advising team. The School of Business then forms TAN teams, requesting one of the advisers to serve as TAN Team captain.

“They have to tell their story succinctly,” says Fitzgerald. “That’s followed by about 10 to 15 minutes of questions and answers, so we can see if they really understand the market.”

Fitzgerald acknowledges the setting can be intimidating, but adds, “Everyone willingly jumps into the shark tank.”

Jon Morgan ’11 did the talking for a four-member team of engineering students who developed SI Devices, a system that controls energy use in residential, commercial, and public buildings. SI Devices grew out of technology developed for a senior capstone project and is now closing in on a beta phase for the system.
Meg Lindberg ’04 (ChemEng), ’13 (MBA)
Product Strategy Director, Liberty Mutual Insurance
“It was the first time I pitched the idea to a group of people of that caliber,” says Morgan, adding that TAN’s approach streamlined the stress. “They were all there to listen because they wanted to help.”

For Ki Chon, head of WPI’s Biomedical Engineering Department, TAN is another channel of support for WPI-led start-ups.

“Entrepreneurship has taken off, it’s all around campus,” says Chon. “I think students see what’s happening and say, ‘I want to be part of it.’”

Chon presented a proposal for a smartphone application that allows users to measure their heart rate and rhythms, respiration rate, oxygen saturation, and blood loss by placing a fingertip over the phone’s built-in video camera. Other smartphone apps can measure a user’s heart rate, but Chon and co-investigators, Yitzhak Mendelson, of WPI, and Jineok Lee and David McManus of UMass Medical School, have designed a system that measures a range of vital signs.

“TAN was a positive experience,” says Chon, who already had an established business plan in place and was looking for leads for investors.

Fitzgerald calls the app a “game changer” for healthcare, and says WPI students and faculty are developing technologies that are continually cutting through new ground. But it’s also a rapidly changing landscape.

“Good ideas don’t sit too long,” says Fitzgerald. “There are patents and licenses involved.”

And that’s an area where the tech advisers’ broad overview of industries can be especially useful. As Mahoney points out, the failure rate for start-ups is staggering, and not every idea and innovation needs to go the entire distance to succeed.

“When you look at what’s developing at WPI, there are a lot of things that could be useful to the school if they were licensed and sold,” he says.

After hearing a set of presentations, TAN advisers sit down and – for each presenter – assess the entrepreneurial team, the product and its market potential, the financial requirements, and the challenges that must be addressed. The School of Business staff compiles the feedback from the TAN advisers and sends it back to each presenter. A TAN advising team is then established for each presenter and a series of progress review meetings is scheduled.

“It’s a very detailed process,” says Andrew Aberdale ’89, who says the goal is to find ways to assist each project.

Aberdale, who brings a 20-year background of financial and operational management, including overseeing environmental, health, and safety practices for a global network of production facilities for W. R. Grace, says the advisers look for more than clear business plans and marketing strategies.

“We want to know if this person will stay up morning, noon, and night to work on this venture,” he says, adding that it was the obvious commitment and passion he saw in Yichao Joy Xu ’12, the point person for the Fivols drowsiness detection device, that convinced him to volunteer to advise that team.

For the teams, the tech advisers provide help with solving prob-
problems they don’t anticipate. DeSantis says Campus Libre’s TAN leader, Mark Quinlivan ’81, had plenty of insight on how to build on the venture’s initial success.

“He has helped us anywhere from the basics, such as how to determine your market fit and how to create financial models, all the way up to dealing with investors, raising capital, and hiring employees.”

Beyond advising and supporting individual projects, TAN reflects the Business School’s emphasis on building working relationships among students, faculty, staff, alumni, and the business community in support of individual entrepreneurs and entrepreneurial networks.

With invention and innovation driving so much business, today’s entrepreneurs seem to be taking on a role similar to that of philosophers in ancient Greece, of painters and sculptors during the Renaissance, and of jazz musicians during the 1920s. Entrepreneurs are defining communities and cultures in part because the focus has shifted from single shots of success to broader, deeper, and more inclusive achievement.

“Entrepreneurs want to see things better, and they act on that,” says Morgan. “Whether it’s working in energy conservation, creating a new technology for stem cell therapy, or setting up a network for students to buy used textbooks, the idea is that you can make a difference.”

For Aberdale, who also taught operations management for the MBA program at Babson College when the model for entrepreneurship ecosystems was gaining ground, TAN is part of a positive shift in direction for WPI.

“Most college graduates want to give something back,” he says, adding that Rice’s solid leadership is opening up opportunities for alumni and business leaders to help foster the innovation and economic growth that can potentially bolster the entire region. And TAN is already making significant strides.

“We liked what we saw with the first set of presentations, but since then we’ve met twice and the projects are getting better and better,” he says. “The last round of presentations was really impressive, and I can see many angel investors, venture capital groups, or individuals being interested in making investments.”
Christine M. Drew

Christine M. Drew, associate director of research and instruction at the Gordon Library, passed away Feb. 4, 2012, at age 42, after a courageous battle with cancer. She helped countless students and faculty and staff members become savvy researchers and learners. “Christine loved life, libraries, and WPI, especially its students,” says dean of library services Tracey Leger-Hornby. “This was evident throughout her nearly nine years at WPI, but no more so than during her recent illness, when she showed tremendous grit and determination to carry on.”

Drew joined WPI as instruction coordinator in 2004, was promoted to manager of instruction and outreach in 2006, and was appointed associate director of research and instruction services in 2010. Her outreach to the greater WPI community took many forms, and her legacy includes nearly three dozen guides to resources, as well as a doubling of the number of participants in library instruction programs. Her devotion to a number of causes beyond the campus, including literacy, local cultural organizations, and the environment, was recognized with the 2012 Denise Nicoletti Trustees’ Award for Service to Community; she was tapped by Skull along with members of the Class of 2011. She also enjoyed country living as a keeper of hens and honeybees, and had a personal goal to explore every museum in Massachusetts. In addition to her parents, William and Sandra Drew, she is survived by her domestic partner, Jeffrey L. Forgeng.

William P. Densmore ’45

William P. Densmore ’45, an emeritus member of the WPI Board of Trustees and former executive director of the Colleges of Worcester Consortium, died Jan. 19, 2012, at the age of 88. After taking early retirement from Norton Company, where he served as a corporate vice president, a senior vice president, and a member of the executive committee, he turned to public service in the Worcester community. In all, Densmore helped found or served on the boards of over 25 educational, health, and community organizations. “Bill Densmore was an intellectual with a deep civic commitment who had a wonderful common touch,” says President Dennis Berkey. “His commitment and achievements on behalf of education at all levels were a model of engaged leadership by a true gentleman.”

Densmore served on WPI’s board from 1989 to 1995. An early and enthusiastic supporter of the WPI Plan, he was the Norton Company liaison for the WPI-Norton Project Center and assisted with the founding of the Worcester Community Project Center. He received the Herbert F. Taylor Alumni Award for Distinguished Service in 1990 and the 1976 Albert W. Schweiger Award from WPI’s School of Industrial Management, from which he graduated in 1957. Survivors include his wife, Martha, three children, and four grandchildren.

John M. Nelson

John M. Nelson, former chairman of the WPI Board of Trustees and a noted business leader, died Jan. 21, 2012. He was 81. Nelson joined the WPI board in 1986 just after being named president and CEO of Norton Company, and served as board chair from 1995 to 2000. During that term, he oversaw the recruitment of WPI’s 14th president, Edward A. Parish, was a key volunteer for the $150 million Campaign for WPI (to which he contributed his own leadership gift of $1 million), and was instrumental in working with the city to close a portion of West Street. In 2000 the Alumni Association presented him with the WPI Award for Distinguished Service.

After presiding over turbulent times that included Norton’s merger with the French company Saint-Gobain in 1990, Nelson was fired. He was soon appointed CEO of Wyman-Gordon, and later was asked to chair the board of TJX Companies Inc., from which he retired in 1999. In 2001 Nelson cofounded and served as chair of Commonwealth National Bank in Worcester. He leaves his wife, Linda, a daughter, a son, two step-daughters, and six grandchildren.
Van Bluemel, professor emeritus of physics

Van Bluemel, professor emeritus of physics, passed away Nov. 22, 2012, at the age of 78. He had retired in 1999 after 33 years as a full-time faculty member and remained active at the Institute, most recently helping with the development of a new WPI history.

“Van was a fixture at WPI and played an important role in the life of the Institute as well as the Department of Physics,” said Physics Department Head Germano Iannacchione. “His many passions and activities have touched the lives of countless people. No one could ask for a finer example of a professor or a human being.”

Bluemel joined the WPI faculty in 1966, just as the Institute was poised to undergo the most significant transformation in its history. He took an active role in the discussions and activities surrounding the work of a faculty planning committee that was crafting what came to be called the WPI Plan. After a campuswide Planning Day in 1969, he wrote in an essay in Tech News, urging the faculty to “continue to create opportunities for faculty members and students to talk to each other, instead of at each other”; to yield to students’ requests for greater flexibility in charting their course through WPI, and to tap the creativity and thoughtfulness of students in the classroom.

An educator and project advisor much beloved by several generations of students, Bluemel received the Board of Trustees’ Award for Outstanding Teaching in 1996. His citation opened with this summary of his approach to education:

“Van Bluemel is totally dedicated to his students. In class he is always ready to help anyone struggling with the concepts of physics. In project advising he will undertake topics completely new to him only because a student is eager to work on the topic and can find no local expert. Outside of class, he is a role model. His enthusiasm, openness, and charm have had a lasting impression on generations of students. Finally, Professor Bluemel maintains the highest standards of integrity, doing what he believes is right, not what is expedient, popular, or easy.”

In 2011, he received the inaugural George P. Dixon Award for his many years as a dedicated advisor to Skull, to which he was tapped with the Class of 1982. A longtime member of WPI’s runners club, he is said to have given the group its name, the Footpounders, a whimsical term that alluded to both the activity of running and the term foot-pound, which in physics is a unit of work or energy. In his free time, Bluemel enjoyed hiking, bee keeping, skiing, reading, and photography. He sang with the Worcester Chorus and volunteered for the Unitarian Universalist Church and for cancer research. He is survived by his wife, Polly, two daughters, four grandchildren, and two sisters.

Complete obituaries can usually be found through newspapers, websites, legacy.com, and similar indexes. WPI will share details on the “completed careers” of friends and classmates, if available. To request further information, contact alumni-editor@wpi.edu or call 508-831-5998.
DEAR ALUMNI AND FRIENDS,

WPI is everywhere these days, earning all kinds of well-deserved recognition from media outlets and colleges guides across the nation. Among the most recent accolades, WPI was ranked among the top 20 smartest colleges in the nation by Lumosity, the online brain training and neuroscience research company. Results released in November 2012 are based on the cognitive performance of our students in five areas: speed, attention, flexibility, memory, and problem solving. The study examined game play data from more than 60,000 college and university students at 411 institutions; WPI ranked 19th—rubbing elbows with the likes of MIT, Yale, Harvard, and Carnegie Mellon.

If you attended any of the Project Center receptions this fall, you have a good idea of just how smart WPI students are. We had a terrific event in Washington, D.C., on Dec. 5, hosted by WPI trustee Fred Rucker ’81 and Provost Eric Overström. The students and their project work are so impressive, I’m certain those who attended the Washington event, as well as the Project Center events in Boston hosted by board chair Steve Rubin ’74 in October and Wall Street hosted by School of Business Dean Mark Rice in December, left brimming with pride in their alma mater. More Project Center events are coming up this spring. In February, there are two events: in Silicon Valley, hosted by Karen Kashmanian, and in Worcester in hosted by Dean of Engineering Selçuk Güçeri. And in April Provost Overström will host a reception in Santa Fe. Visit

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On Saturday, April 20, alumni and their families will gather in Worcester and Philadelphia for the third annual WPI Community Service Day. Activities are being organized at several sites in these cities. Sponsored by the Alumni Association, the event features a morning of service activities in Worcester followed by lunch and a presentation by the Alumni Association.

This annual event celebrates the long tradition of WPI students, faculty, and alumni making meaningful contributions to communities locally and globally. Last April more than 150 alumni, faculty, students, staff, and their families participated at nine Worcester project sites and one project site in Philadelphia.

“Community Service Day is an excellent opportunity to reconnect with your WPI friends and meet current students,” says William L. Herbert ’05, chair of the event. “Every year this event gets bigger and better. We’re hoping even more alumni and friends come out to participate in April and make a difference in the Worcester and Philadelphia communities.”

Watch your email for details. If we don’t have your current email address, contact us at alumni-office@wpi.edu or 508-831-5600.

All the best,

Bob Cahill ’65
Event Round-Up—Winter 2012

From Washington, D.C., to New York to Haunted Higgins House, WPI alumni, students, and friends gathered near and far in recent months to celebrate their alma mater.
Social Committee—better known as SocComm—won the 2012 Homecoming Cup!

Alumni and friends reconnect at the New York Project Center Reception.

The Capitol Building in Washington, D.C.

The Student Alumni Society enjoyed a holiday celebration on Dec. 6.

Student teams present their projects at the Washington, D.C., Project Center Reception on Dec. 5.

This team of Student Alumni Society members designed the Haunted Higgins House in October, attracting record crowds at their annual spooktacular tour of this WPI landmark.

The Tech Old Timers enjoyed a performance by WPI student musicians at their annual Holiday Lunch on Dec. 5.

WPI Trustee MICHAEL ZARRILLI ’71, host of the New York Project Center Reception on Dec. 4, with REBECCA (HOFFMAN) BACH ’98 of the New York Alumni Chapter
Shining Bright, 50 Years Later

REMEMBER THE KIDS in high school who would set up the projectors when it was time to see a movie in class?

A few of those kids grew up to establish a similar, though more advanced, club here at WPI in the winter of 1961–62, and then went on to pursue careers in lighting, sound, and film projection. “It was the era of the slide rule—hand-held calculators did not exist—and computers filled rooms,” says Jim Day ’65, the club’s first president.

In December the club celebrated its 50th anniversary with more members, cooler toys, and continuing enthusiasm for all things audio-visual.

A Spark

Day ultimately gave the club its name, Lens and Lights (LnL). It was the name of his high school audio-visual club in Wethersfield, Conn., which he attended with Dick Stone, who was originally in the WPI Class of 1965. The other founding members (all from the Class of 1964), Steve Noble, John Schmidt, and Bill Swiger, agreed the name worked for them—and LnL was born. Once the club was established, Professor Don Howe became the group’s faculty advisor.

But as Day tells it, the club was already up and running in a more informal sense the year before. “It’s really a service organization,” he says, “serving the school and the groups that use its facilities.”

“Bill, Steve, and I started doing some 16mm projection, with equipment borrowed from the ROTC program and set up in Alden Memorial for the monthly movies during our freshman year,” says Schmidt, LnL’s first projectionist. The Arts Society, which had been running the films on its own, sponsored the events.

Audiovisual endeavors have a rich history at Alden. According to Schmidt, the Arts Society found some 35mm projectors in the building, left from when WPI hosted a Navy V-12 officer training program during World War II, and used Alden as a USO theatre. Eventually the Arts Society received some funding and converted the school’s projectors to show Cinemascope on a wide-angle roll-up screen. In time the Arts Society focused on producing the shows and turned the projection duties over to LnL.

Broad Backing

One issue with the monthly movies, Schmidt says, was that no one knew how to fix the projectors or the sound. WPI’s Facilities Department [called Buildings and Grounds back then] backed the new organization, making sure LnL got the tools it needed to keep projectors, lights, and sound systems running at optimum levels.

“No questions asked,” Schmidt says of the maintenance staff, who appreciated the club’s good care of the equipment. “I’d go down to a local electronics supplier and was able to charge the parts to WPI.”

Day says campus support for the fledgling group came from other somewhat unlikely sources. Campus police officer Nils Hagberg, for example, would often check in on how the group was doing, offering encouragement. “Nils had a career in local theatre and had done vaudeville,” Day explains. “Collective support brought the thing together.”

One of the first things Schmidt, Noble, and Swiger did was to run the sound and lighting for the weekly assemblies in Alden. Schmidt also recalls doing sound and lights for at least one talent show, and stage lighting and set construction for Masque plays.

“I can’t imagine the group that could focus on lighting,” says Day, “and do it well.”

Bridge to the Future

The organization also made money via a 1950s 16mm WPI recruitment film that was sent out to high schools. “LnL earned a fee for inspecting, splicing, and rewinding the films when they were returned to WPI,” Day says, estimating they earned about a dollar a reel. “By 1964, there was often as much splice as film,” he says, as the films were so heavily used. He estimated that he and other LnL members saw that film hundreds of times.

The film was called Bridge to the Future, and it was shown at the recent LnL anniversary reunion, which was attended by about 80 people. “It got a big round of applause from everyone. It’s a period piece,” Day laughs, “but so were we!”
Approximately 100 Lens and Lights alumni, friends, and current members celebrated the group’s 50th anniversary on Dec. 1. Highlights included remarks from LnL founding president Jim Day ’65 (inset) and a screening of the WPI student recruitment film Bridge to the Future, created by LnL in the 1950s.

Bridge to the Future
was just one of the reels that became etched in members’ memory banks. Schmidt recalls using borrowed reels of 35mm film to train projectionists. “One of them was the British crime drama The Day They Robbed the Bank of England, and right when the robbers were tunneling underground, the reel stopped,” he says. “For many years, I’ve tried to get a DVD of the movie, because I want to see how it ends!”

Lens and Lights also worked to build relationships in the film industry. Through some networking, Day once got a contact at MGM film studios and took a trip to New York City to borrow some reels for training from production manager Haven Falconer. “I remember sitting in his office with its window just over the famous Camel [cigarettes] billboard in Times Square,” he says, “watching the ‘smoke’ rings move out over the street below.”

Andy Fish ’66, was the fourth president of LnL. He’s now a professor of electrical and computer engineering at the University of New Haven, in Connecticut. He recalls, “In 1965, when WPI was celebrating its 100th anniversary, the ceremony hit a glitch—and it was LnL to the rescue.

“Everyone had assembled in Alden, preparing to march to [now Skull Tomb], where Robert Goddard conducted some of his rocket experiments,” says Fish. “During the assembly, Esther Goddard was going to talk with her husband’s associates in Washington, D.C. The telephone call went by landline from WPI to the famous Camel [cigarettes] billboard in Times Square,” he says, “watching the ‘smoke’ rings move out over the street below.”

We ran Alden’s audio system. We connected the telephone line to the PA system. When the call went through, we could hardly hear Dr. Goddard’s associate. AT&T was sure that we screwed up. (They obviously did not know the quality of WPI’s courses in electronics.) I told our professor that I could increase the PA gain to 120dB, and he said, ‘Do it.’ Right after that, the local AT&T operator came on—you could hear her all the way down to Atwater Kent. AT&T had found and corrected the problem and Mrs. Goddard was able to talk with her husband’s associate.”

Modern Day
These days, Lens and Lights produces concerts and performances in Alden and Harrington, and on the Quad. It has done the lighting for such well-known bands as OK Go and They Might Be Giants, and for campus lectures, dances, and robotics competitions.

Current president Dan Hullihen ’14 says the club has come a long way—and to prove that, some of its vast collection of equipment was on display at the reunion. “We now have enough lights to set up in Harrington using a truss. We can hang lights from the ceiling, and do it safely.”

Safety is, and always has been, the mainstay of the club, Hullihen points out. LnL’s training programs, along with a world-class rigger, provide instruction on tasks like positioning cables in trusses on a venue’s ceiling. “You don’t want a truss to fall,” he says. “Depending on the amount of equipment on it, that can be over a thousand pounds.”

Day agrees that service goes right along with making sure the job gets done right. “Safety is No. 1 and we’re all trained and focused on the needs of the customers,” he says. “This is what’s kept the club going for 50 years.”

Maintained Value
Seeing former club members at the reunion who now have successful AV-related careers is inspiring to Hullihen and the other members, and continues to add value to the organization.

“Maybe they’re working for a company manufacturing soundboards,” says Hullihen. “We can reach out to them and they’ll give us a demo to learn about a new product.”

Schmidt embarked on a career at ABC Television in New York in 1977, where he is now a senior audio/visual systems engineer.

Joe Rimstidt ’88, a former LnL president, is a product manager for Yamaha Commercial Audio Systems in Dallas. He got his first job with Meyer Sound Laboratories in Berkeley, Calif., through past LnL member Jamie Anderson, who graduated from WPI the same year.

Jim Day, now retired, was a mechanical engineer with Chandler Evans in West Hartford, Conn., designing and developing jet engine fuel pumps and controls. His days at LnL primed him for workplace roles, he says. “Things you learn at WPI are elements that make a good club and put you in good steady to learn how to work with people. These lessons have stood by me in my career.”
Setting the Tone

An endowment inspires both student and patron

IRVING SKEIST ’35 was a brilliant chemist and a pioneering businessman to whom hundreds of chemical companies looked for ground-breaking research. He was also a talented classical musician who played in string quartets around the world. Although these two pursuits might seem very different, Skeist’s musical and scientific sides were in fact complementary, says his daughter, who recently decided to honor her father by setting up an endowment at WPI to help current and future students experience the music that he loved.

“You think about a student coming to a school like WPI and receiving a scholarship for music—to have them recognized for an interest and skill that goes beyond their traditional major is unique,” Weeks says.

Irving Skeist was born in Worcester in 1915, and he first picked up the violin as a child. When he attended WPI in the 1930s, the university did not have an orchestra, but Skeist played in the Worcester Symphony. He earned a PhD in polymer chemistry from the Brooklyn Polytechnic Institute and developed the Skeist Copolymerization Equation, which has been used in many fields of chemistry, especially adhesives. In 1955 he founded Skeist Laboratories, which became a successful chemical consulting firm in an era when consulting was a very new profession. But despite this busy career, Skeist always found time to play his violin or viola.

Whenever he traveled for business or for scientific conferences, his daughter recalls, Skeist would seek out other musicians, playing violin or viola in string quartets across the United States and as far away as Europe and Japan. He was often invited to speak at scientific conferences, where he would play music with other chemists in the evenings.

“And these were conferences about adhesives and polymers!” Helen Skeist says with a laugh. “He got to meet people all over the world, in a very different context from staying in a hotel and seeing someone in a business meeting. That might have also made him a better chemist, in a sense of having a worldwide perspective.”

Helen, a physical therapist who lives in New Hampshire, shares her father’s love of music, and as a student at Brandeis University she played viola in the orchestra and in chamber music groups. When Irving Skeist died, he left his daughter his own viola. Over the years, the instrument, made by 20th-century Italian luthier Ansaldo Poggi, appreciated in value, and Helen realized that selling it could earn enough money to set up this endowment and help WPI students well into the future.

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That thought had a particular resonance, because her own son, Richard Skeist Richter ’05, had benefited from an endowed scholarship when he decided to enroll at his grandfather’s alma mater. The Donald and Ruth Taylor Scholarship helped Richter’s family afford WPI, and he and his mother never forgot the Taylors’ generosity. “Just like the Taylors made a big difference in the lives of people they didn’t know, I think it’s great that my mom is doing the same thing,” says Richter, who is now a high school physics teacher in Medford, Mass. “I’m glad I could be a part of it indirectly.”

In addition to endowing the scholarship fund in 1991, Donald Taylor ’49 and his wife, Ruth, were members of WPI’s Presidential Founders and the 1865 Society, whose members have given WPI $1 million or more. Don served as a trustee, and the couple co-chaired the Alden Society, a recognition group for those whose estate-planning includes gifts to WPI. Although Don died in 2011, Ruth remains an honorary chair, and she still feels intimately connected to the university. She was delighted to hear that the couple’s own gift had inspired Helen Skeist, and says her husband would have been pleased, as well.

“That school always meant a great deal to him,” Ruth Taylor says. “He always felt he should give something back, because of his appreciation for all he got. Everyone should feel an obligation, if they’ve had a good education and they’ve profited by it, to give so that others may have the same opportunity.”

Although Donald Taylor and Irving Skeist did not know each other, they had more in common than their educations. Taylor, who retired in 1987 as chairman and CEO of the Milwaukee-based machinery company Rexnord Corp., also spent a lifetime playing music even as he pursued a high-powered career. As a student, he played saxophone in WPI’s orchestra and conducted the marching band. After he and Ruth, a trained classical singer, moved to Milwaukee, he served as a trustee of the Milwaukee Conservatory and as a director and vice president of the Milwaukee Symphony, while Ruth was on the board of the opera. In later years, Taylor’s chosen instrument was the clarinet, and Ruth has many happy memories of accompanying him on the piano. “Everything he did musically, I was there for him, and everything I did musically, he was there for me,” she says.

A similar love of music also bound the Skeist family together. Helen remembers playing duets with her father, as well as his jazzy version of “Happy Birthday.” His string quartets performed at their house so often that she grew up thinking it was normal to hear live chamber music at home. “It energized him, it gave him great joy and happiness,” she says. “He just loved to play.”

“He always had a violin out, there was always sheet music everywhere,” Richter remembers. “It was a huge part of understanding him, at least as a grandson. I knew, going into college, that I wanted to be musical.” At WPI, where he majored in mechanical engineering, Richter was a member of the Glee Club and the men’s cappella group, Simple Harmonic Motion. In his senior year, he founded Audiophiles, a co-ed a cappella ensemble. Music was the core of his social life and a passion that sustained him even when his challenging academic work became a source of stress. “For an engineering school, it has a very strong music program,” Richter says. “And for a university of its size, it’s impressive what it puts out.”

Professor Weeks is proud of the music program as well. Although most of his students are pursuing careers as scientists or engineers, he believes that their participation in music classes and ensembles ranging from string quartets to a full orchestra will make them more well-rounded people. These opportunities also draw students with diverse talents to WPI. “This is the place to be if you’re an engineer who wants to pursue a passion for music,” Weeks says.

Helen Skeist says she is grateful to WPI for helping an “ordinary” person like herself make a gift that will help that strong music program continue for many years to come. “Maybe it will make a difference,” she says. “A student may discover music, keep playing, or just decide to listen.”
WHEN MOST COLLEGE FRESHMEN are focused on prerequisites, first-year students at WPI are engaged in solving societal problems of global consequence. Through the Great Problems Seminars, WPI freshmen address such topics as clean water, food security, significant public health issues, and energy challenges. Now, thanks to a $255,225 grant from the Davis Educational Foundation, WPI is expanding this innovative program to include all freshmen students.

The Great Problems Seminars employ WPI's distinctive project-based, multidisciplinary approach to solving real-world problems identified by the National Academy of Engineering as Grand Challenges. The aim of the seminars is not only to broaden students’ perspectives on the complexity of the challenges they will face after graduation, but also to create innovative and entrepreneurial professionals fully capable of tackling the great problems facing the world today.

"WPI shares the Davis Educational Foundation’s commitment to groundbreaking approaches to undergraduate education," says Dennis Berkey, president and CEO of WPI. "This latest grant from the Davis Foundation is another demonstration of its confidence in WPI’s ability to continue cultivating engineers and scientists with the knowledge and wisdom to lead in an increasingly complex global society."

The Davis Educational Foundation was established by Stanton and Elisabeth Davis after Mr. Davis’s retirement as chairman of Shaw’s Supermarkets, Inc. Conceived as a gateway to project work in later years, the Great Problems Seminars were developed in response to feedback from students who praised WPI’s project-based curriculum but lamented the lack of opportunity for project work and preparation earlier in their WPI education.

"The Great Problems Seminars bring our first year experience so much more into alignment with the subsequent years at WPL,” says Kristin Wobbe, professor and associate dean of undergraduate studies. “We extend our deepest thanks to the Davis Educational Foundation for helping us continue to deliver an exceptional education to our students.”

The program was first offered five years ago with two seminars—Feed the World and Power the World—and were expanded the next year with Heal the World, and Grand Challenges. The success of these seminars, as documented by the Donahue Institute, and student demand led to the addition of four more seminars: Educate the World, Living on the Edge, The World’s Water, and Global Health. With the support of the Davis Educational Foundation, the program will be expanded to 20 seminars so that

WPI Students Solve Great Problems With Support from the Davis Educational Foundation

WPI students display their Treating and Caring for Swazi Children Orphaned by AIDS project at the recent Great Problems Seminar.
every freshman—approximately 1,000 students—can benefit from this distinctive learning experience. The Davis Foundation funds will enable WPI to develop necessary course support materials and a robust annual assessment of the program, the faculty teaching the courses, and the impact on students to ensure the effectiveness of the seminars.

“We also hope that through the Great Problems Seminars, our students see their education not just as a pathway to a job but a pathway to a purpose, that they begin to understand that they can find a career where they can make a difference,” Wobbe adds.

She cites one student team whose seminar project focused on developing a business plan for a woman in Kenya who wanted to start a soap-making business. A year-and-a-half later, Wobbe notes, the students traveled to Kenya on their own to help her implement the plan. Student teams have been invited to present their work to municipal committees, and others have obtained provisional patents for devices they’ve created through the seminars.

Quantitatively, assessment of learning over the first five years shows that students who participated in the Great Problems Seminars are more engaged with current events and societal and human needs, are more information literate, showed improved teamwork skills, and had more opportunity to present and defend opinions and intellectual work. Importantly, these students also reported a stronger perception of the connections between social issues and science and technology. Some graduates also credit their post-college success to their early participation in the Great Problems Seminars.

“The students aren’t necessarily going to solve the world’s problems in these classes,” says Wobbe, “but it’s clear to me from the stories of transformation that I hear from our students that this program is preparing our bright, talented young people to be effective contributors to solutions for our great problems in the future.”

The Gift of Insight

USING DATA TO inspire new ideas. This is the goal of a new Analytics Lab co-founded by Brenton Faber, professor of writing and rhetoric in the Department of Humanities and Arts, and Andrew Trapp and Renata Konrad, assistant professors in WPI’s School of Business. The lab has received start-up grant funds, training, and software valued in excess of $350,000 from Dimensional Insight, a business intelligence firm in Burlington, Mass.

“We are grateful for the support of Dimensional Insight, and we look forward to developing a vibrant laboratory that attracts students and faculty from a wide range of fields who want to learn and apply the techniques of data mining, business intelligence, and analytics to their work,” said WPI Dean of Arts and Sciences Karen Kashmanian Oates.

Faber studies human dynamics and organizational change. Using the capabilities of the new Analytics Lab, he’s interested in how framing insights gained from big data can motivate process improvements, particularly within healthcare settings.

“How you present the data and how you tell the story has a huge impact,” he says. “Once you gain insights from big data sets, you need to know how to make them persuasive and motivational. We’re grateful to Dimensional Insight for helping WPI establish a lab where we can develop and test theories that can have a significant impact on systems and industries critical to our society, such as healthcare.” Working in the lab, students and researchers across disciplines will analyze large data sets using The Diver Solution, Dimensional Insight’s business intelligence software.

“By housing the lab in the humanities department, we hope to address the human dynamics, the narrative, and not just the technical issues,” says Faber, who directs the lab.

Faber learned the importance of using the right language to frame data-driven initiatives while he was director of analytics and new project development at Canton-Potsdam Hospital in Potsdam, N.Y. He found that if he wanted to persuade staff to act, he needed to use the terms they were accustomed to thinking in.

“While a lot of the language used at the hospital was quantitative—blood pressure, pulse rates, and so on—the staff didn’t have a vocabulary for talking quantitatively about hospital operations,” he recalls. “Quantifying everyday things like infection rate and the readmissions rate seemed to motivate the staff to work toward process improvement.”

Faber hopes the Analytics Lab will ultimately be a nexus for undergraduate projects, graduate research, and corporate-sponsored research. As a step in that direction, the lab is working on a large-scale analysis of data related to medical visits by patients with congestive heart failure. They hope to learn the impact of preventative care on outcomes, explore which treatments seem to work best, and to even quantify how much money those measures can save.

“Ideally,” says Faber, “we hope to to eventually be able to cross-link disease, utilization, and finance data to get a more detailed description of medical practice.”
IN A COLD, early December rain, Nick Dembsey, Randy Harris, and Young-Geun You climbed three ladders to the roof of the annex of a new facility on Prescott Street, where they stood among the massive stainless steel components of the building’s exhaust system.

Dembsey, a professor in Worcester Polytechnic Institute’s Fire Protection Engineering Department, Harris, the program’s laboratory manager, and You, an FPE graduate student, were on the first training session for the school’s new fire protection lab.

Once on the roof, they and a handful of others followed a contractor’s representative, who brought them in and out of metal rooftop rooms to show them filters, duct work, controls, safety features, and other aspects of the elaborate exhaust system.

In one of the rooms, Harris cracked, “It’s like a ship in here.”

Down below, where things will soon get very much hotter, workers were putting the finishing touches on the fire protection laboratory, which opened in January 2013.

Located at 50 Prescott Street, the new FPE lab has more than double the lab space available in Higgins Laboratories on the main campus and, with its 30-foot ceiling and 20-by-20-foot exhaust hood, will enable burns that are three to five times bigger, including simulated two-story building fires. It will also allow researchers to run multiple experiments simultaneously.

“We’re going to build whatever size and shape thing we want,” Professor Kathy Notarianni, head of the FPE Department, said of experiments that will be done. “We were space crunched. Now, we can do more.”

Next to the burn room, which is more formally called the performance laboratory, is the fundamentals lab, where bench-level research will be carried out on state-of-the-art equip-
ment. There, researchers will study and document the amount and composition of gases, particulate sizes, and other characteristics of fire.

“We’ll know everything about the fire,” Notarianni said.

The fire protection lab is one of just a few of its size in the country and the only one at an academic institution. It will help keep WPI in the forefront of fire protection education and research, which has become increasingly critical to protect people and property as the world’s population grows.

Corporate support has played a vital role in the development of the new facility, with companies contributing about $1.65 million. Donors include Rolf Jensen & Associates, Honeywell Life Safety, Kidde, Siemens Industry, AON Fire Protection Engineering Corp., and, most recently, Underwriters Laboratories Inc. and the Richard H. Luften Memorial Fund.

UL has pledged $750,000 for the performance laboratory and research projects, while the Luften Fund has provided $250,000 for instrumentation in the performance lab.

“The ultimate beneficiaries of this investment will be individuals and communities worldwide who are spared the disastrous effects of fire, as a result of new knowledge created by our faculty and students,” Notarianni said.

On a tour of the new facilities while they were under construction, August W. Schaefer, senior vice president and public safety officer for UL, was impressed. “The layout and design is outstanding for a university,” he said. “Clearly a lot of foresight has gone into this building.”

Besides serving as the site of the new lab, 50 Prescott Street will house the entire Fire Protection Engineering Department, providing offices, classroom space, and collaborative working areas for faculty, students, industry representatives, and others. The cost of the lab and other department space for FPE at 50 Prescott Street is about $4.5 million.

The 50 Prescott Street building is the second at Gateway Park, an ambitious WPI academic, research, and business development initiative that includes a five-story parking garage and plans for two more buildings. The second facility, not far from the main campus, will also house the university’s Biomanufacturing Education and Training Center and the graduate division of WPI’s School of Business.

It wasn’t until the 1970s that principles of science and engineering were applied to firefighting and fire prevention, and WPI has been out front in that effort. In 1979 the university established a graduate program in fire protection engineering, the first and one of just two in the country, and WPI offers the only PhD in the field.


She noted that the Fire Protection Engineering Department’s diversity is one of its great strengths, drawing from a number of engineering fields as well as from physics, math, chemistry, architecture, and other areas.

“We are a melting pot of academic disciplines with real-world applications,” Notarianni wrote. Indeed, she holds degrees in chemical, fire protection, and mechanical engineering.

FPE faculty and programs are internationally recognized for research and developing groundbreaking approaches to protecting people and property from fire.

Work under way at WPI will help engineer safer buildings, ships, and trains, as well as better exit and sprinkler systems, and will contribute to more effective building regulations. WPI researchers are also working toward a better understanding of the effects of fire and water on building materials; developing tools and land management techniques for fighting wildfires; preventing hazardous dust explosions; and protecting firefighters by developing ways to track them in buildings, monitor their vital signs, and warn them of impending deadly flashovers.

“Worcester Polytechnic Institute has been a great contributor to the fire protection industry and Honeywell certainly wants to help further this mission,” said president Mark Levy when his company’s participation was announced.

There’s a high demand for WPI’s fire protection engineers in business, industry, and government, according to Notarianni, and Rolf Jensen & Associates, which provided the founding gift for the new lab, is proof of that.

With 21 offices, including four overseas, the company uses fire protection engineers to provide analysis and design buildings around the world. Out of 250 employees, 50 are from WPI, according to Mickey Reiss, president and CEO.

He said that because his company hires WPI graduates, it’s well worth investing in a facility like the fire laboratory that enhances their education.

“It makes for a much more rounded student,” he said. Combined with what’s learned in class, “they have both theory and practice.”
DEAR ALUMNI:

If. It’s such a small word, yet it holds so much promise, so much potential. It asks a question, and at the same time speaks to solutions. I don’t think there could be a more fitting name for a fundraising effort to support WPI students and faculty—people who are known for asking critical questions and unlocking the potential of solutions vital to our global society.

I am proud to serve as national chair of if…The Campaign to Advance WPI. This $200 million fundraising endeavor—the largest in WPI history—is aimed at our deepest ambitions: keeping our doors open to bright, talented and deserving students, regardless of their financial background; supporting our faculty, who teach and inspire these remarkable students, as they discover solutions to some of the most pressing challenges facing our world; providing facilities that match the quality of our students and faculty and foster their creativity and ingenuity; and enhancing the annual support that makes it possible to invest in the here and now. Importantly, these ambitions have implications far beyond WPI, as our faculty, students, and alumni work around the world on issues that impact people and communities.

Generous support from you, our alumni and friends, has helped us raise more than $125 million toward our $200 million goal, which we aim to reach by WPI’s 150th anniversary in 2015. On these pages you will find news about some of the recent gifts to the campaign that are already making a positive impact on WPI students and faculty, through scholarships and faculty and academic program support. If you give to WPI, I thank you for investing in the future of this remarkable institution. If you haven’t given to WPI recently, I ask you to consider how your WPI experience has influenced your life.

For my part, I always have considered my WPI education to be the great enabler of my life. The financial support I received from WPI as a student has made so much possible for me—my aspirations of becoming an engineer, a successful career, and opportunities to see the world. I never knew who provided the scholarships that made my WPI education possible, but I am forever grateful to them for what they have done for me and my family. I give to honor them and to live up to my responsibility to help the next generation of young women and men seeking an education from this outstanding university.

At its heart, this campaign is about ensuring we have the engineers, scientists, and leaders who are equipped with the wisdom and knowledge to solve problems we cannot yet imagine, who can envision and realize a future in which engineering, science, and technology, informed by a depth of understanding in the humanities and arts, improve the quality of life for people around the world. There are many good causes competing for our philanthropic dollars. I chose to volunteer for this campaign because I believe WPI presents a noble, compelling and, indeed, vital need worthy of our support.

I hope you will consider WPI among your philanthropic priorities and will join me in ensuring that future generations will have the distinct advantage of a WPI education to imagine and achieve a bright future for the benefit of us all.

With gratitude for your ongoing support,

Michael J. Dolan ’75
WPI Trustee and National Campaign Chair

Learn more at if.wpi.edu
SAVE THESE DATES
MAY 30 - JUNE 2, 2013
FOR A GREAT WEEKEND BACK ON CAMPUS

ACTIVITIES OPEN TO ALL ALUMNI

ANNIVERSARY CELEBRATIONS FOR ALL CLASSES ENDING IN 3 AND 8

VISIT WPI.EDU/ALUMNIWEEKEND FOR THE LATEST INFORMATION. SPECIAL EVENT SATURDAY EVENING FOR GRADUATES OF THE LAST TWO DECADES.
Richard Jasper '41 recently celebrated his 93rd birthday. He is retired and lives in Rockland, Mass.

Dick Weiss '42 and his wife, Dotty, celebrated their 70th wedding anniversary in February 2012. He retired in 1986, after 45 years with Merck.

Arthur Grazulis '43 and his wife have moved to a retirement home in Strongsville, Ohio. "Life is sometimes challenging," he writes, "but our oldest son lives nearby and is helpful."

William Walsh '43 writes, "Further to my continuing business start-up effort to license my patented VGA technology, I presented a paper at the Power-Gen International Conference in Orlando, Fla., in December. The paper, titled ‘Retrofitting Fossil Fueled Industrial and Utility Power Plants with a New Cost-effective Method of Dry Scrubbing for Collection of Sulfur Oxides, Nitrogen Oxides and Mercury,’ won second place for 2012 Best Paper Award in the Fossil Technology Track."

Daniel Katz '45 writes from Cincinnati, "Looking forward to the arrival of my first great-grandchild."

John Knibb '46 shares, "I miss Evelyn, my bride of 61 years, who passed away suddenly and unexpectedly one month ago this month (November). But life goes on. As a minister, I’m still doing sermons. As an aviation enthusiast, I’m still flying, including a wild ride in a Waco open-cockpit biplane this summer."

"Greetings from a Class of ’46 grad," Fred Kull writes, "I was one of the Navy V-12 contingent who were shipped in from colleges all over eastern USA. I was transferred from General Motors Institute in Flint, Mich. Believe me, it was tough, with all the military activities and completing four years of study in three years. Worcester was a great place to be. Despite wartime shortages and rationing there was a lot to do, and they managed to feed us well (although some of the New England-style foods were different from what we Midwesterners were accustomed to). With all of our physical activities most of us were slim and fit.

As an EE, I made my own shortwave radio. I hooked it up to another student’s amplifier and put a speaker in the window. I played Big Ben sounding the hour across the campus. Radios were not permitted, but many of us had them and used ear phones to listen to music during study hours. WPI gave us quality education and a good start on our Naval careers. Many of us stayed on as reserve officers until our retirements in 20 or so years. THANK YOU, WPI!"

I have been retired over 24 years and will soon go into a retirement village near Suwanee, Ga. I have blindness in one eye and problems in the other eye from a mini-stroke, so have been cut off from driving. My three children help me, and the seniors village has a bus service. We stayed there for two years until my wife of 61 years died. Getting down from a four-bedroom house to a one-bedroom apartment is not going to be easy."

Daniel Rice ’46 writes, "I am a certified professional golf club maker, having taken up this avocation in 1993 after retiring from Westinghouse. I specialize in making all the clubs in a set to have the same MOI (moment of inertia) and to raise their balance point by backweighting to enable greater distance. Great results!"

Hal Gruen ’49, ’65 (SIM) writes, "Retired since ’88 and enjoying it. Lots of volunteering, golf, traveling, and bridge." He lives in Palm Desert, Calif.

Jeremiah O’Neil ’50 writes from Scotch Plains, N.J., "Still enjoying my retirement with my wife, Vivian, and two great-grandchildren, Adyson and Kylee."

Les Reynolds ’50 writes, "Greetings: In October 2012, this 1950 graduate (w/wife Diane) moved to a brand new assisted living facility named The Saybrook at Haddam. Our address is 1556 Saybrook Rd., Apt 233, Haddam, CT 06438; phone is 860-554-5595. My chemical career began with Koppers Co., followed by a two-year stint in the Army Chemical Corps, but was mostly (1956–89) at American Cyanamid/Cytec Corp., then at Princeton with the Bonner Foundation. We retired to Connecticut in 1990, and have spent 18 years in Old Lyme, four in Chester. Our first daughter, Pam, (w/David Knecht) lives in Hinsdale, Ill. Second is Kay Reynolds (married to Dan Ramus), lives in Shrewsbury, Mass. Her sons, Jeff and Mark Dietrich (our grandchildren), are now part of Northeastern University in Boston w/their dad, Bob Dietrich. Jeff is primarily at the Ace Hardware store in Watertown. I’m pleased to be serving now on the WPI Alumni Association Board."

Bob Fulmer ’51 is retired and lives in a lakeside community in Stanwood, Mich., with his wife, Marilyn. He plays golf, sings, and serves on the board of trustees of the local hospital.

Bartlett Hastings ’51 was commemorated in Fenway Park during a Red Sox–Orioles game, on National POW-MIA Recognition Day, Sept. 21, 2012. He was interviewed on NESN about his World War II service and his longtime loyalty to the Red Sox. (See p. 15.)
The Instrumental Rabbi
R. D. ABRUZZESE ’76 | CreateSpace

Sixteen horrific murders have occurred as Linda Roth prepares to leave her apartment and go to work on a sweltering August evening. The “Subway Slasher” has called for another murder this evening, and the city of Boston is frozen in terror. World-famous investigator Professor Stuart B. McCauley and his protégé, Jenny Smith, seek to uncover what lies beneath these gruesome murders.

Fall of an Icon—Polaroid After Edwin H. Land
MILTON DENTCH ’64 | Riverhaven Books

Dentch, a former director of materials for Polaroid, offers a history that chronicles the rise and fall of the great company built by Dr. Land. With input from other Polaroid employees, he outlines the early successes and the cultural issues that led to the company’s failure. “This book is applicable to many successful contemporary companies, where historical strengths are becoming current weaknesses,” writes Westerham Group CEO and Founder Carl J. Yankowski.

Insulate & Weatherize, 2nd Edition
BRUCE HARLEY ’85 | Taunton Press

Back in 2002, when Insulate & Weatherize was first released, energy efficiency was an important issue for most homeowners. Ten years later, it’s no longer simply important— it’s critical. This completely revised and expanded edition from Taunton’s Build Like a Pro series incorporates advances in everything from appliances to alternative energy strategies. Harley is an award-winning national expert on energy-efficient residential construction and renovation. He currently serves as technical director for Conservation Services Group. He also conducts seminars on energy-efficient residential construction, energy codes, building science, and mechanical systems.

Honor on the Line: The Fifth Down and the Spectacular 1940 College Football Season
ROBERT J. SCOTT ’69 AND MYLES A. POCTA | iUniverse

Scott looks back to the 1940 season as one of the most exciting on record—and the one that taught America about the values that really matter. With the nation still in the grip of the Great Depression, and war looming abroad, Americans turned to college football for relief from the turbulent world around them. Cornell dominated the national rankings until, on a snowy field at Dartmouth, they eked out a win with a touchdown on the last play of the game—or did they? When it came to light that the touchdown had been scored on a grievous error by the officials, “Big Red” faced a wrenching decision. Scott, who earned a master’s degree from Cornell and was a U.S Army infantry sergeant, was awarded two Bronze Stars while serving in Vietnam.

Daniel Bernatowicz ’52 retired after 55 years at NASA Lewis (now Glenn Research Center) as assistant chief of space station power systems. He lives in Parma, Ohio.


Earl Bloom ’55 writes, “Developed a revolutionary investment system called “MAPS,” which is proving to be in a class by itself with huge returns and unprecedented low risk.” He lives Sarasota, Fla., with his wife, Phyllis, and is chairman/CEO of EMB Investments.

During his career with Philco-Ford, Richard Goldman ’55 worked on microwave devices for the soft landing of Apollo LEM on the moon. He retired from Intel in 1996 and now volunteers with SCORE, advising small business owners. He and his wife, Ruth, live in Mountain View, Calif.

Shirley Sauer tells us that Harold Sauer ’55, ’57 (MS EE) died Jan. 7, 2013. She says, “Hal retired to Ocean Park, Maine, seven years ago. His MSA-C progressed slowly until the past two years when there was greater decline. He never lost his wonderful smile.”

Eric Friberg ’57 writes, “Superstorm in Sea Bright left us with six feet of water in the living room and the town devastated. We are just east of Ft. Monmouth, N.J., where the ROTC grads did their officer intro.”

Bob Galligan ’57 shares that he’s left widower life by marrying Carol Ranger in Des Moines, Iowa, on Sept. 15, 2012. They are living in Arizona and Minnesota.

Al Papianou ’57 just published his second book. “My first was a memoir of my 10 years as an indentured servant in my uncle’s Greek restaurant before coming to WPI. This second one is titled Oogg and the Claret Jug. It’s a tongue-in-cheek fable about the origins of golf and the fabled British Open. Locally, it’s available from RiverhavenBooks@verizon.net (781-447-0167) and also through Amazon.”

Bill Rogler ’57 writes, “Carol and I have just moved into our winter condo in Naples, Fla. We bought it after spending 14 years of winter living in the southernmost island of Key West. Call or email me at wcrogl@aol.com if you’re in the area and we can meet for lunch.”

Herbert Clarkson ’58 says, “Decided this fall to do something special for my 80th birthday—went zip-lining, for the first time, at Big Bear Mountain near Los Angeles, followed next by completing a 10K Labor Day race over the Vincent Thomas Bridge spanning Long Beach Harbor. Seriously considering a parachute sky jump for my 81st.”
James Dunne ’58 retired in 2000, but still works part time for the Northeast Asphalt User Producer Group. He lives in Linthicum Heights, Md.

After spotting a photo of the young Norma Jeane Baker (aka Marilyn Monroe) on Facebook, Bill Rabinovitch ’58 created “Marilyn at 17.” He says, “My Marilyn is reminiscent of a Warhol homage—mine’s not related to pop concerns, but centers on reflecting Marilyn’s young inner beauty as a more pure renaissance ideal. The key thing, however, is I knew Andy and once survived a year because of him.”

Robert Weinberg ’58 is president of First Boca Associates Inc., Boca Raton, Fla. He writes, “Active in mid-market mergers and acquisitions, specializing in confidential representation of established businesses that have achieved trailing EBITDAs in excess of $1 million. I have exceptional experience as the principal of a national award-winning business with personal recognition in trade publication as a leading industry business strategist. My mobile is 561-482-1250 and my email is Bob@FirstBoca.net.”

Jim Alfieri ’59 is raising funds for the Leukemia and Lymphoma Society. “I finished up the year by doing a half marathon (Run with the Jets) near the San Francisco airport,” he says. “It was a real blast, even for a ‘single engine prop’ kind of runner like me. I now place in our age group.”

Richard Ronskavitz ’59 was married June 19, 2011. He and his wife, Marjorie, enjoy traveling, especially cruising. They live in Pompano Beach, Fla.

Dave Sawin ’59 writes, “Lois and I celebrated our 50th anniversary in April 2012. We are now living in Briarwood Retirement Community in Worcester.”

Lawrence White ’59 was married Oct. 9, 2011. He and his wife, Maria, live in Hollywood, Fla.

Raymond Abraham ’60 writes, “I recently lost my closest friend and companion to cancer on her birthday, Dec. 21. I will miss her dearly. I will be moving into her apartment at 122 Bridge St., Apt. 2, Willimantic, CT 06266.”

Last August, Richard Brewster ’60 was honored with the Bruce Kelley Journal Award from the Antique Wireless Association. The award is given to the member who publishes, in the AWA Journal, an article judged to be the most outstanding, original, historical presentation of the award year. Brewster’s article details unsuccessful efforts in the 1930s to develop a television system for Boston. As a result, Boston, unlike New York City, did not get TV until after World War II. He continues as the television editor of the AWA Journal, a quarterly publication, since 1995.

Ann and Doug Kendrick ’60 split their time between Raleigh, N.C., and Cape Coral, Fla. He writes, “Raleigh is our base for exploring the USA by road in a travel trailer. To date we have visited the Western national parks, the Canadian Maritime Provinces, upstate New York, New York City, and New Hampshire’s White Mountains and Lake Winnipesaukee. This year we plan to visit Michigan, Wisconsin, and Tennessee. During the cold months we explore Florida’s waterways by boat. So far we have gone south to Key West and north on the Gulf Intracoastal Waterway to Tarpon Springs with many stops along the way. We also made a loop up the east coast Atlantic Intracoastal Waterway to Stuart, then crossed the Okeechobee Waterway back to Cape Coral. When not boating, bowling is our main pastime, along with playing cards with friends, and activities with the Sea Drifters Power Boat Club. We welcome hearing from WPI people. Give us a call at 239-233-9398 so we can chat or get together.”

Sang Ki Lee ’60 writes, “I send you all very warm and heartfelt greetings, wishing you and your dear ones a very happy, healthy, and blessed New Year, the Year of Chicken. I did it, finally. I retired from the mission fields in Cambodia at the end of 2012, and am now back to Chicago land to be with Helen, my dear wife of 50 years, who has been patiently waiting. Long live 1960! Long live our alma mater!”

Michael Davis ’62 says, “Last May my wife, Rona, and I moved full time to our home in Falmouth, Mass., and we’re getting used to not just summering on the Cape. I am still working part time from home and enjoying tennis, golf, and sailing. We are working hard on our bucket list and last year spent three weeks in China. This winter we will go to Australia and New Zealand for 25 days. Enjoyed the 50th Class Reunion this past fall very much.”

Ralph Johanson ’62 says, “I made the top 10 USMA swimmers (9th fastest 200-yard breast stroke) for my age. I also finally retired from GRW Engineers in Louisville, Ky. I worked on a rotary water project in Uganda for 500 children. Was mayor of Hills and Dales, in Kentucky, for the next two years. Going to Florida in January. Hope to play golf with Dave Lyons, Bill Krein, and Terry Furhoden, all WPI ’62 grads.”


Francis Kennedy ’63, emeritus professor of engineering at Thayer School of Engineering at Dartmouth College, was awarded the 2012 Mayo D. Hersey Award by the ASME for “distinguished and continued contributions over a substantial period of time to the advancement of the science and engineering of tribology.” The award was bestowed in October at the 2012 International Joint Tribology Conference in Denver.

Milt Dentch ’64 writes that he recently had his history of the Polaroid Company published: Fall of an Icon: Polaroid after Edwin H. Land: An Insider’s View of the Once Great Company. It is available on Amazon/Kindle (see p. 75).
Pete Fenner ’64 writes, “We just launched a new website, patentsrealfast.com, to help lawyers, researchers, and engineers get started and perform patent searches faster. This is a result of five years of part-time development. Suzan and I still live in the North Dallas, Texas, area and have two grandsons, ages 1 and 3.


Gary Goshgarian ’64 announces that he has re-edited his first three novels, and they are now available as e-books through Amazon, Apple, Kobo, and other outlets. “Took out the deadwood, chunky phrases, and excessive modifiers—all the stuff I tell my writing students to avoid,” he says. “They’re leaner, meaner, and available for the first time under my pen name, Gary Braver.” His website, garybraver.com, has a complete listing, as well as news and events.

Steven Mittleman ’64 retired after 30 years of government service in the Air Force Research Laboratories.

Nick Barone ’65 is retired and enjoying sailing on Long Island Sound near his home in Milford, Conn. “Hello to Don Tassone ’64 and Gene Sweeney ’65,” he writes.

Mike Oliver ’65 writes, “This was a busy and exciting year for us. When my daughter, Allison, returned home, we were faced with a challenge of finding her both a job and a home. Having a very strong interest in animal protection and services, an ad in our local MLS listings advertising a dog kennel and a three-bedroom house on two acres of land piqued her interest. After extensive analysis, negotiations, and interactions with local banks, I was able to purchase the property and business for her. So, now in the middle of retirement, I’m a partner in the dog kennel business. Allison runs the day-to-day business, and I handle the financial and property maintenance responsibilities. I never thought at my age, I’d be running a business like this. It is especially rewarding that it has made my daughter extremely happy. My WPI education that led to a very good job and career has enabled me to achieve this personal objective.”

Dick Olson ’65 writes, “My professional career spanned 34 years, during which time I was a real estate developer, manager, and broker. I sold my businesses in 2002. My wife, Jane, and I married in 1993. This is a second marriage for both of us. We have five daughters, three of whom are married, and five grandchildren. Our extended family has become a major focus of our lives. We keep a home in Bradenton, Fla., and one in Norwich, Vt. We enjoy playing duplicate bridge and attending a few operas and plays. Jane is a successful real estate agent, and I have maintained some business interests that occupy just enough of my time to allow me to feel productive. I enjoy outdoor activities, including hunting and snow skiing.”

Ron Wood ’65 retired from Northrop Grumman in December 2012 and is doing consulting and volunteer work around Mobile, Ala.

Phil Hopkinson ’66, president of HVOLT Inc., was elected an IEEE fellow in 2001 and won the IEEE Standards Medal in 2012.

Pete Kudless ’66 says, “As project manager for the Vine- land, N.J., municipal electric utility, I recently completed a 60 MW dual-fueled simple cycle CT6 project, on schedule and under budget.”

John Lauterbach ’66 writes, “On Nov. 8, 2012, I led the first COREST (Cooperation Centre for Scientific Research Relative to Tobacco) e-cigarette workshop. There were almost 80 attendees from the U.S., Canada, Europe, India, China, Japan, and Korea. The workshop was co-hosted by Tobacco Vapor Electronic Cigarette Association and Lauterbach & Associates LLC.”

Robert Lisauskas ’66 retired as chief scientist for Riley Power Inc. in December 2012.

John Cahalen ’67 is currently working on his third career—as a home improvement contractor in Virginia under the trade name Repairs-R-Us.

WPI trustee Curt Carlson ’67 writes of the board’s recent meeting, “WPI is making superb progress—SAIs above 1300, new facilities, world-leading R&D, and excellent new staff. The entire WPI community can be very proud of these accomplishments.”

Steve Frymer ’67 writes from Lexington, Mass., that he recently reached Silver Master level in duplicate bridge.

Robert Kennedy ’67 says, “Enjoy biking and hiking with the SEM (Southeastern Mass.) and Boston chapters of the AMC. I miss Bill Grogan’s Saturday 8 a.m. EE circuits classes. Wish I could do them again.”

In November, Steve Halstedt ’68 and his wife, Susan, enjoyed a spectacular day of golf at The Boulders in Scottsdale, Ariz., with Bill McAvoy, WPI’s VP for Development and Alumni Relations.

Richard Kung ’68 is retired and is now spending his time building and restoring violins, as well as playing in a community orchestra.

Cary Palulis ’68 writes, “Still working full time as VP of lubricants at Heritage-Crystal Clean LLC. We recycle used motor oil into high-quality lubricant base oils. My daughter, Lauren, will graduate from Simmons College with a master’s degree this spring. Susan and I split time between Avon, Conn., and Port Saint Lucie, Fla. Both of our moms are still in New England, doing great at 91 and 96.”

Frank Posselt ’68 was able to retire three years ago, “thanks to the excellent education at WPI,” he says. “Special thanks to Professor John Mayer, whose strength course proved valuable beyond belief.” Frank lives in Somers Point, N.J., where he enjoys fishing, traveling with his wife, Joan, and having fun with his grandchildren.

Craig Barrows ’69 and his wife, Dianne, live in Manhattan, Kans. He is retired after 25 years as a physics teacher and head of an independent school.”
Brian Chace ’69, following 10 years of retirement from GTE Government Systems and General Dynamics Network Systems, was ordained a priest in the Episcopal Diocese of Eastern Michigan in October 2012. He is currently serving as priest in charge of Trinity Episcopal Church in West Branch. Brian and his wife, Elizabeth, who was ordained a priest in 2003, reside in Frederic.

Ronald Jones ’69 writes, “In 2012 we were blessed with our first grandchildren—Beckett Jones of Avon, Conn., and John Cowan of Jamaica Plain, Mass.” Ronald lives in West Hartford, Conn., and serves as CEO of Jones Enterprises Inc.

Edward Mierzejewski ’69 and his wife, Aline, toured eastern Europe, including Warsaw, Krakow, Bratislava, Budapest, Vienna, and Prague. “It was educational but sobering seeing what people there went through under Hitler and then Stalin,” he writes. “I continue working part time in the consulting world, and Aline continues full time (for another year or two) as a nurse practitioner at Moffitt Cancer Center in Tampa, Fla.”

Eric Nickerson ’69 is proprietor of Liberty Flights in Milford, N.H., offering personalized hot air balloon rides year-round, with some unique extras. Each passenger receives a souvenir photo as well as a printout of the ground track with the flight path plotted on a local map. “I got my private license in 1999 and the commercial one in 2000,” he writes. “My current balloon (the third—they get porous and the heat leaks out, requiring more fuel to keep it aloft) is a 90,000-cubic-foot Firefly that carries 1,000 pounds. My other passion is sailing. I have sailed from Hawaii to Seattle, and Annapolis to Tortola, plus a number of other coastal passages. However, the passions don’t pay the bills, only the thrills. I’m currently looking for full-time work doing business development and product line management for a manufacturing company.”

Bob Scott ’69 writes, “Since retiring after 32 years as director of planning for the City of Virginia Beach, I’ve turned to writing. I’ve recently co-authored Honor on the Line, a nonfiction book that centers on the 1940 season and the single greatest act of sportsmanship in college football history.”

Former ExxonMobil senior manager Bill Hillner ’70 spoke recently on campus about construction of the Berkut gravity-based structure for Arkutun-Dagi, Russia’s largest oil production platform, located off Sakhalin Island. His talk was part of the Civil and Environmental Engineering Seminar Series. Hillner’s career with ExxonMobil spans over 35 years as a construction manager in all aspects of petrochemical construction, with significant recent international experience in West Africa, the Middle East, and Russia. Past construction developments include greenfield refinery projects, FPSO new builds, onshore/offshore upstream processing and production facilities and offshore substructures, with additional experience as constructability advisor during FEED and detail design.

Claude Mancel ’71 retired from P&G but remains active as a consultant in innovation. “I have been appointed to the Innovation Board of Solvay, a Belgium chemical company, following its acquisition of Rhodia, a French chemical company. I was previously on the Scientific and Innovation Council of Rhodia. I am also on the Scientific and Innovation Board of Eurotab, a French company specialized on tabletting all kind of products, and serve as an advisor to a number of consulting firms, including NineSigma in the U.S., and Sinnagen in France. After six years as the chairman and an additional six as alumni president of my alma mater in France (ENSCPB), I resigned from that latter position. My kids are scattered over the globe: Sebastien is working in San Francisco as a manager at Walmart.com and will finish an MBA from Wharton next May; Pacome (WPI ’94, Chem. Eng.) is in Paris working as the sales manager, Southern Europe, for BASF; and Elodie, my daughter, is living in Doha, Qatar, where her husband is CEO of Informatica Qatar. This makes family reunions quite challenging but fun. I have four grandchildren. I still reside in Belgium, but have a summer house in the south of France.”

Roy Linblad ’72 writes, “I have been a general dentist since 1980. I enjoy my work and have no intention of retiring any time soon. Just like engineers, dentists solve problems, too.”

John “Swanny” Swanson ’72 has put his 40 years of experience in the jet engine business and the worldwide commercial aviation market to use by launching HawkOne & Associates. The firm’s consulting services include evaluation of new and used aircraft, contract review, and help with negotiations. Visit them at hawkone-assoc.com.

Bruce Beverly ’73 writes, “I’m finishing my second year providing management consulting services to small- to mid-size A/E firms at Beverly Management Consulting LLC in Auburn, Mass., and serving as an external director.”

Jay Goldman ’73 and his wife, Tara, spend their summers in Saratoga Springs, N.Y., their winters in Boynton Beach, Fla.

Rich Silwoski ’73 tells us he escorted Steven Spielberg around Virginia’s Capitol Square when the director was scouting locations for the movie Lincoln. Rich later was an extra in the film’s War Department telegraph office scene.

Jack Williams ’73 writes, “Well, it’s hard to believe Jill and I have been retired for nine years now from Shell Oil. This year
we bought an apartment in NYC—spending four months there, six in Arkansas, and the rest traveling. What a great life due to a terrific education and career!”

Robert Bryant ’74 retired from his post as an engineer for the State of New York.

Ken Charak ’74 writes, “I recently retired from Johnson & Johnson after 11 years of service; this follows an earlier retire- ment from Procter & Gamble after 28 years of service. This one is for real, as I will live a portion of the year where I have second home in Naples, Fla. I am thrilled at the prospects of no longer having my life on a schedule and being able to do whatever I choose whenever I choose to do it. Simply stated, I owe so much to WPI for affording me a wonderful education that prepared me well for successful careers with two of the best multinational companies in the world—the WPI Plan was truly an awesome experience!”

Ed Gordon ’74 writes, “My book, Hireni, Here I Am, is available at Amazon and Barnes & Noble in print form, and for the iPad, Kindle, and Nook.”

Joe McGinn ’74 writes, “After retiring to New Mexico in 2004, I have begun working for the Pueblo of Santa Ana as its water resources division manager. WPI’s Santa Fe Project Center has been a great opportunity to discover a number of fellow WPI alumni in New Mexico and to renew acquaintances with WPI faculty, including Fabio Carrera and Guillermo Salazar. We have even been able to begin developing projects on the Pueblo with the Project Center.”

Stephen Page ’74, a founding shareholder of Page, Mirachek, Fitzgerald, Rose, Konopka & Dow, PA., was listed in The Best Lawyers in America® 2013 in the categories of Commercial Litigation, Intellectual Property Litigation, Real Estate Litigation, and Trusts & Estates Litigation. As a trial attorney, he focuses on business and commercial litigation, and travels throughout the state of Florida representing the firm’s larger clients, including pharmaceutical companies, athletic corporations, and healthcare organizations.

Jon Anderson ’75 has been designated by Chambers USA as one of the best lawyers in America in the field of environmental law. He also shared the sad news of the death of his brother, Peter Anderson ’68, who taught electrical engineering at the Clarence M. Mitchell Jr. School of Engineering at Morgan State University in Baltimore.

Bob Fried ’75 was recently elected to the board of directors of the Sperry Federal Credit Union. “I am also the owner/ president of Midarome Electronics, which does consulting and sells semiconductor device test equipment, as well as hard-to-find electronic components,” he writes.

Judy Nitsch ’75 was named president-elect of Commercial Real Estate Women (CREW) Network, the leading advocate for the advancement of women in the industry. She is a long-time member of New England Women in Real Estate (NEWIRE), the local CREW Network chapter. For NEWIRE, she has served on the Steering, Nominating, and Program committees, and as chair of the Public Strategies Committee. Judy won NEWIRE’s inaugural Entrepreneur Award and several NEWIRE Networking Awards. She was also recently appoint- ed to a three-year term on the board of Pennoni Associates.

After 20 years with Arizona Chemical, Bob Simon ’75 com- pleted just the second change of companies in his career and joined Sensient Cosmetic Technologies as sales director. Based in South Plainfield, N.J., Sensient manufactures colo- rants and cosmetic ingredients that are sold globally to all the major cosmetic and personal care companies. Bob writes, “While the North American sales responsibility is similar to my old position, the new industry, new products, and new cus- tomers have made the change very invigorating. While still traveling significantly, the amount of time spent away from home will be reduced. For the first time in my life I am beginning to pay attention to women’s makeup. My wife tells me I have a lot to learn.”

William VanHerwarde ’75 is proud to announce that his daughter, Grania, a sophomore at WPI, made Dean’s List. He lives in Killington, Vt., with his wife, Ellen.

R. D. Abuzzese ’76 is the author of The Instrumental Rabbi, the first in his series of murder mysteries featuring a fictional Northeastern University criminal justice professor named Stuart McCauley and his assistant, former student, Jenny Smith. The story begins as these two try to solve a series of “slasher” serial murders that occurred in the Boston subways. Massachusetts venues figure prominently in the novel, as plot twists take the detectives from Cambridge to locations in Worcester, Sudbury, Weston, and Cohasset, and to a genetic research facility in Easton, Conn. Abuzzese, who earned an MBA at Suffolk University, now lives in northern California.

Stanette COO Rich Allen ’76 participated in a White House roundtable discussion, “Executing a Sustainable Infrastructure Vision,” which included discussions and Q&As with senior government officials. On his company’s blog, he outlines his vision of what needs to happen on a national scale.  

Mark Allyn ’76 lights up the Pacific Northwest with his light art projects, which use many of the disciplines he learned as an engineering student at WPI. Mark’s creations include LED art, jewelry, and clothing designed for beauty and safety. “My childhood fascination with light, coupled with a 15-year career in designing and making unique clothing, has allowed me to merge these two art forms,” he notes. He wears his lighted clothing out and about in the Portland, Ore., area, at community bicycle events, Portland Gay Men’s Chorus concerts, and at events sponsored by his employer, Intel.

Stephen Anstey ’76 writes, “I didn’t land the Mars rover, but was part of the team that launched the rover on an Atlas V rocket from Cape Canaveral in November 2011. I have been a rocket scientist of sorts since the early ’80s when I came to the Cape to help launch test Trident missiles from submarines as part of launch control testing for the Navy with General Elec- tric. I had been with GE since graduation, in Seattle, Charles- ton, S.C., and Virginia Beach, before ending up in Florida. In 1989 I left GE and stayed in Florida to work for the Aerospace Corporation as a launch processing consultant to the Air Force on the Titan and then Atlas rockets. The Mars Science Laboratory launch was one of four Atlas launches I supported last year.”

Robert Cormier ’76 writes, “Our oldest son, Todd, is planning a wedding in the summer of 2013. Life is changing. Best to all.”

Alan Kelley ’76 notes, “Relocated and will be retiring to Santa Rosa, Calif. I moved with my wife, Holly, my daughter, and granddaughter.”

Robert Schuld ’76 has worked with the Commonwealth of Pennsylvania’s Liquor Control Board for more than 34 years. He lives in Rockledge, Pa.
Neal Wright ’76, vice president and DOD market sector leader for Dewberry, has been appointed co-chairman of the Society of American Military Engineers’ (SAME) Warrior Transition Task Force. He will work to help military engineers transition into the civilian workforce. Wright also serves as a regional vice president in SAME.

Bill Cunningham ’77 says, “I’ve launched OneMorePallet .com, a shipping website that provides great rates for 1 to 4 pallet shipments from carriers that have excess capacity. I nurtured the concept through Northern Kentucky’s UpTech Accelerator, and it is now in full production covering 130 metro areas. Our mantra: Ship a little, save a lot!”

Paul Curdo ’77 received a 35-year service award from Raytheon in 2012. He also welcomed his first grandchild, Hazel, and has a second on the way in 2013. He and his wife, Joy, live in Tucson.

David Kinder ’77 writes, “Following retirement after 25 years at Intel, I turned to a repressed passion for photography with a focus on theatre. With so many wonderful theatre companies in Portland, Ore., there’s no lack of opportunity to work with great people both on and off stage. Here’s a photo of mine from a recent local production of Spring Awakening.”

Robert Flynn ’78 has a daughter at WPI—Class of 2016. “Fun setting up Julianne’s room on Riley 2nd,” he writes. “Brings back lots of memories. The new facilities on campus are first class… I’m ready to come back.”

Mark Harley ’78 is now director of engineering for Maponics LLC in White River Junction, Vt.

Peter Mulvihill ’78 was appointed Nevada state fire marshal, responsible for oversight of statewide fire service training and certification program, fire protection industry licensing, plan review and inspections of facilities in rural counties and all state facilities, and fire investigation and enforcement of laws related to fire and hazardous materials. He has over 34 years of experience in municipal fire service and the private sector. He’s worked for the City of Reno and the Boise, Idaho, fire departments, and the North Lake Tahoe Fire Protection District. He spent 10 years with Rolf Jensen and Associates, as vice president and engineering manager of the company’s Las Vegas office, and has previous experience in the highly protected risk insurance and aerospace industries. Peter lives in Reno.

Gary Sowyrda ’78 says, “Four WPI ’78s (Phi Kappa Thetas, as well) and their wives gathered in Houston in December for our oldest son’s wedding. From left, Caroline Kelly, Bill Kelm, Sandy Kelm, Louis Pelletier, Paula Pelletier, Gary and his wife, Susan, and Dennis Kelly.”

Ken Fast ’79 writes, “I was recently honored as a Distinguished Engineer by the ACM, the largest educational and scientific computing society. This was based on my work developing the large-scale visualization system used for submarine design at Electric Boat Corp. I am still a principal engineer at EB, working on advanced manufacturing technology and shipbuilding affordability.”

Arthur Hughes ’79 was inducted into the Ameriprise Diamond Ring Club, recognizing the top 7 percent of advisors. He is a private wealth advisor with Hughes and Assoc. in McAllen, Texas.

Fran Madigan ’79 writes, “The three of us—Francis W. “Bud” Madigan Jr. ’53, Francis W. “Fran” Madigan III ’79, and James E. ‘Jim’ Madigan ’87—are celebrating the 75th anniversary of our Central Massachusetts-based general contracting/construction management company, F. W. Madigan Co. Inc. The company was founded in 1937 by Francis W. Madigan Sr.”

Jason Tuell ’79, previously chief of the Meteorological Services Division of NOAA’s National Weather Service, has been named director of the National Weather Service Eastern Region.

Hans Van de Berg ’79 was promoted to fellow engineer at Westinghouse Electric LLC. He is currently working in the Transient and Design Analysis group.
Mihran Aroian ’80 writes, “I spent the summer teaching Business Strategy in Yerevan, Armenia, at the American University of Armenia and hope to return again this summer.”

After more than 30 years in industry, Steve Kmiotek ’80 joined WPI’s Chemical Engineering Department as a full-time teaching professor. He’s initially teaching the sophomore sequence and advising students, but will be concentrating on increasing the department’s work in process safety.

Joe LeBlanc ’80 and his wife, Penny, live in Allen, Texas; their daughter, Paula, has begun med school at Texas A&M.

Allison Powers ’80 writes, “I just moved out of Ohio after 17 years. I’m now in the southeast Charlotte, N.C., area, in a small town called Waxhaw. My husband is retired from First Energy and consulting in the nuclear business with Powers Engineering Solutions. He also plays bass guitar with various bands. Anyone who wants to know where to go in Charlotte for blues/rock, let me know! As for me, I’m not sure yet, what I am going to do with empty nest!”

Martin Rowe ’80 writes, “In September 2012 I took a new job within my company, leaving Test & Measurement World after 20 years. Now I’m editor-in-chief of The Connecting Edge (theconnectingedge.com), an online community for engineers who design electrical and optical connectivity into circuits and systems. Our bloggers cover connectors, cables, circuit protection, switches, relays, and other forms of connectivity. We feature daily blogs (yes, I blog every day), and we’re always looking for new bloggers. Come give us a look and join the conversation. Running a website like The Connecting Edge is really a 24/7 job. I work at home and my computer is on all day and most of the night. With readers all over the world, time zones are meaningless and comments come in all day that need follow-up. There are no holidays, either. One of our best conversations took place on Thanksgiving between engineers in Canada and Europe. Thus, I post blogs every day except weekends. On the other hand, working at home sure beats commuting every day.”

Mark Burzynski ’81 was recently promoted to president of Arthur G. Russell Co., Bristol, Conn. He previously served as vice president of engineering and engineering manager at AGR, which specializes in automated assembly and packaging systems for the medical device and consumer products industries. Before joining AGR in 1998, Mark held engineering positions at General Motors, Black & Decker, and Becton Dickinson. He lives in Southbury, Conn.

Tom Clark ’81 says, “I recently got back from an eight-week trip around the world, using frequent flyer miles for business class the whole way. I was in southern South America, Europe, and Asia. Had great experiences and met some wonderful people. Check out my blog at blog.live4music.net.”

Mark FitzMaurice ’81 serves as manager of cloud hardware engineering at Intel Corp. in Columbia, S.C. He lives in Lexington with his wife, Ann.

Charles Mendes ’81 writes, “I am employed at GE Aviation as a manufacturing program engineer. The position takes advantage of my chemistry and engineering background to bring new processes and materials to production, increasing aircraft engine performance and profitability. I celebrated my
30th anniversary at GE and 30th wedding anniversary with Jo-Anne—both tremendous milestones. I also received the GE Bush/Badger Engineering Award for the first production introduction of an Ox-Ox Ceramic Composite on an aircraft engine. While all this was going on, I happened to give Jo-Anne a kidney (she had gone into kidney failure and I was a match). Jo-Anne, who graduated from Becker College and works as a transportation coordinator at a martial arts studio, is now recovering from the transplant. Charles, our older son, is a junior at WPI studying chemical engineering. He plays club tennis and has a brown belt in taekwondo. His brother, Bryan, is a high school senior honors student.”

Rick Rykosky ’81 says, “I am working for Valero Refining Corp. in New Orleans as maintenance superintendent. Luc, our oldest son, graduated from Louisiana State University in 2009 majoring in finance and swam for LSU. Arie, a senior at Marshall University in West Virginia, has a swimming scholarship and will graduate this year with a psychology degree. Breanne, her twin sister, is a senior at Delgado University, majoring in business. Dylan, our youngest, is a freshman at Western Illinois University and also has a swimming scholarship, majoring in emergency management. Besides working, my wife, Orlene, and I try to attend as many swim meets as we can at both Marshall and Western Illinois. Both will be swimming at their respective Conference Championships this year. It is great to see them competing at the Division I level.”

John Skrip ’81 and his wife, Rosanne, announce the birth of their first grandchild, Jaden. John and Rosanne have been married 43 years. He is retired but teaches chemistry as an adjunct at local community colleges.

Jay Koven ’82 writes, “Interesting life changes… After being out of the computer science field for many years, I have decided to go back to the field that I really love. I started as a PhD candidate at NYU-Poly this fall on an NSF/IGERT fellowship with a focus in cyber security. This has also been an interesting year for degrees for the whole family. My daughter Belle received her MS in systems engineering from USC, my son Robert received his BS in electrical engineering from the University of Arizona, my son William received his BS in electrical and computer engineering from Harvey Mudd College, and I, finally, received my MS in computer science from Iona College. My daughter Rose must feel left out, but she is not too far behind in her studies at Drewel.”

At year’s end, Ron Rappel ’84 wrote, “Quite a few changes for me as 2012 comes to a close: I will be getting married at the end of the year to my fiancée, Yara Halasa. She is a researcher/graduate student at Brandeis University. The ceremony will take place in Amman, Jordan, where her family is from. Yara and I will continue to reside in Andover, Mass. I have decided to leave my position as principal firmware engineer at Vicor Corp. and accept a position with Keung Inc., developing firmware for its line of beverage brewers. This is a great opportunity for me, one that I’m really looking forward to.”

Irene Sotiriou ’84 co-chaired the second annual Stop Hunger Now meal packaging event at St. Nicholas Greek Orthodox Church in Wilmington, N.C. “We exceeded our goal of assembling 25,000 meals,” she writes. Last summer Irene visited the new Acropolis Museum on a trip to Greece.

Kirk Chartier ’85 retired as a lieutenant colonel in the U.S. Marine Reserves.

Bruce Harley ’85 has written a new and improved version of his best-selling book Insulate and Weatherize. Ten years after
Margaret (Motyka) Shinkle '86 attended Red Sox Fantasy Camp in Ft. Myers, Fla., and met many retired Sox legends. "I played baseball at Fenway Park," she writes, "Even caught a fly ball in the outfield—and the small crowd went wild." Ed Sofio '86 holds the post of senior vice president at Bank of America, supporting e-commerce.

Amy Swotinsky '86 writes, "Akwaaba (Welcome) from Ghana! I recently returned from IBM’s Corporate Service Corps, which is often referred to as the corporate version of the Peace Corps. This wonderful program provides organizations in developing countries with sophisticated business consulting and skill development to improve their local conditions. I spent four weeks in Accra, Ghana, working closely with the Ministry of Health to assess its strategy to improve its national health supply chain and to develop a system to mitigate risks. During my time overseas, I also explored the African continent, visited with kids at a local orphanage, and enjoyed the local cuisine (mostly with my hands!). It was an amazing experience and a once-in-a-lifetime opportunity to work side by side with the Ghanaian people. Although our recommendations are only one piece of the overall plan, I’m glad I was able to help Ghanaians move closer to realizing their vision of an accessible, affordable, and quality healthcare system that, hopefully, will serve as a model for countries faced with similar challenges."

Patrick Tormey '86 writes, "I am delighted to be working at PerkinElmer with several other alumni as a result of the acquisition of my former company, CambridgetSoft. I currently manage sales for our North and South American operations. In addition, I have been able to use my skills as a member of the board of a nonprofit that has built a school and orphanage in Haiti (see panyepishome.com), and have enjoyed many trips there over the last few years both with teams of people and my family."

Mercedeh (Mirkazemi) Ward '86 says, "I was diagnosed with stage 3 breast cancer in June of 2010. After six months of chemo, lumpectomy surgery, and 38 sessions of radiation, I am healthy again. Having wonderful friends and family that supported me through all the treatments is why I am healthy now. I showed up to work through all of the cancer treatments. Going to work made me stronger but, unfortunately, after my hair grew back I lost my job due to a layoff. I keep busy consulting in the toy industry these days. My two kids, Kyle, 20, and Arianna, 18, are both in college. Makes me feel old. :)"

Larry LaFreniere ’88, president and CEO of Electric Supply Center (ESC), was elected by Wentworth Institute of Technology to the Corporation of the Institute. As a corporator, he will serve as part of a key advisory board for guiding, advising, and advancing the Institute. Larry purchased ESC in 1997. His notable projects include the Central Artery Third Harbor Tunnel, Boston Engine Terminal, Fan Pier Count House, and Braintree Light Co-Gen Plant, where ESC managed very large-scale projects from start to successful finish. He lives in Bedford, Mass.

Greg '87 and Kim (Maddi) Johnson '89 recently celebrated 22 years of marriage; they live in Westford, Mass. Kim is a 7th and 8th grade mathematics teacher at the Innovation Charter School in Tyngsboro; Greg manages global logistics activities for Inversys Operations Management in Foxboro. Their son, Jessie, is a member of the WPI class of 2016, pursuing mechanical engineering while enjoying breaking in the new aquatic facility for the WPI swimming and diving team. "Go, Goats!" Their younger son is a junior at Westford Academy, and currently determining his post-high school graduation plans.

Congratulations to Karen (Manello) Davis '88 (MS MG), the new president of the North Carolina Healthcare Information and Communications Alliance. She was elected by the NCHICA Board of Directors at its annual meeting Sept. 11, 2012. Karen works for RTI International as vice president of research and computing.

William Riccio ’88 writes, "Greetings from Newport, R.I., where I have begun my sixth year as director of Public Services (aka public works), overseeing the 42-person depart-
ment that covers maintenance of all city assets/facilities/parks and grounds; vehicle fleet; solid waste and recycling programs; engineering; and roadway infrastructure. Hurricane Sandy did some major damage to our community and I am currently overseeing all of the disaster-related claims and associated projects left after her visit. Professionally speaking, I was recently designated a Public Works Leadership Fellow with the American Public Works Association and currently serve the New England Chapter as co-chair of the Government Affairs Committee (go figure, right?), as well as a technical liaison to APWA National for all technical committees (I also sit on the Transportation Committee). Oh, and I also continue to serve on the WPI Alumni Board, as well as run, cycle, and weight train as much as possible. All in a day’s work!”

Bryan Shepeck ’88 joined Chelmsford, Mass.-based Aspect Software as senior vice president, worldwide sales. Aspect is a global provider of customer contact and enterprise workforce optimization solutions.

Brian Standley ’88 writes, “I am currently working as a WASH Project Manager with Medair in South Sudan.”

Chris Fanning ’89 is president and CEO of SSI, the world’s leading provider of sampling, data collection, and data analytic solutions for survey research. SSI is based in Shelton, Conn., and employs 4,500 people worldwide. Chris, his wife Eileen, and their three children relocated to Westport, Conn., from Portland, Ore.

Rodrigo Illanes ’89 is operations manager at Hayes Pump Inc. in West Concord, Mass. He lives in Stoneham with his wife, Erica, and sons, Dante (8), and Anderson (6). He is a den leader for both boys and coaches their soccer teams. “God continually blesses us,” he writes.

Ed Woodrow ’89 writes, “Living in Kennesaw, Ga., working as vice president of Rebar and Wire Rod Operations for Gerdau Long Steel North America. Married, with children in middle- and high school. Finally switched from rifle to archery hunting.”

Brian Gross ’90, ’91 (MS BE) is a principal scientist and clinical systems architect in the Patient Care and Clinical Informatics business group at Philips Healthcare in Andover, Mass. He came to Philips by way of the Hewlett-Packard Medical Products Group acquisition and has worked for the patient monitoring and informatics businesses for over 20 years, designing, developing, and conducting clinical research and advanced product development, including large animal surgery and instrumentation. He holds dozens of patents and has published in many clinical peer-reviewed journals. He was recently awarded “Research Paper of the Year” by the editorial board of Biomedical Instrumentation & Technology and the Association for the Advancement of Medical Instrumentation. Outside of work, Brian enjoys ocean sailing with his family, teaching and studying Kenpo Karate, (in which he has earned a black belt), and was elected to serve on the School Board in the town of North Andover, where he lives.

Michelle (Brideau) Questell ’90 writes, “I continue to work for Procter & Gamble. Wrapping up a three-year assignment in Puerto Rico, living in San Juan metro area with my husband and two daughters.”

Paul Redmond ’90 says, “Hello to old classmates. After working eight years at the Southwest Research Institute as a research engineer performing metallurgical failure analysis, I have moved on to the oil patch. I am now working at Weatherford International as a metallurgist in the engineering group for Artificial Lift Systems. I am performing metallurgical failure analysis on artificial lift equipment for our clients, while assisting in product and material development.”

Bill and Jennifer Sullivan ’90 welcomed Brigid Rose on Sept. 2. Brigid joins siblings Julia, Billy, Sean, and David in Cary, N.C., where Bill is a senior product manager with Verizon.

Ed Connor ’92 was pleased to see a number of classmates at Homecoming this fall. “Wow, 20 years flies by!” he writes. He continues to serve as WPI’s dean of admissions and lives with his wife, Jennifer, and son, Sean, in Stow, Mass. Ed invites classmates and other alumni to visit him when they are on campus.
Mark Schmidt ‘92 and his wife, Lisa, have been living in San Diego for the past three years, where Mark has been working on UAVs for Northrop Grumman.

David Drescher ‘93 writes, “I am looking for work in the heating, ventilation, air-conditioning, and refrigeration industry near Newark, N.J.”

Jeffrey Rembold ‘93 says, “I am still working for PTC as an applications engineer, helping companies to improve their product development and service processes. I am living in Rochester, N.Y., with my wife, Cristine, and our five children.”

On Dec. 10, 2012, William Solomon ‘93 was relieved as commanding officer of the USS Pittsburgh (SSN720), an attack submarine homeported in Groton, Conn.

Chad Council ‘94 sends good news: “In September of 2011, my wife, Lora, and I welcomed our daughter, Margo, into the world. She’s a feisty and energetic little girl. I was very lucky to have the opportunity to spend the first year at home with her, while finishing up grad school on weekends. In June 2012 I finished an MS in emergency management from Mass Maritime Academy. In December, I started working full time as a geospatial planning specialist in the Response Division of FEMA in the Region 1 office in Boston.”

Ian Faass ‘94 was appointed director of off-highway business by The Timken Company of Canton, Ohio. He has been with the company since 1994, managing sales of friction management and mechanical power transmission products and services to major accounts including Daimler Chrysler and Caterpillar. Ian holds a master’s degree in business administration from RPI and completed the Executive Leadership Development program at the Stanford Graduate School of Business.

Richard Leaton ‘94 reports that he has a new role: Data governance and master data leader/master black belt at GE Appliances. Following his service as a U.S. Naval officer, Rich has worked for GE Appliances for 14 years, leading large-scale quality initiatives from sourced product quality to IT system implementations. “In my current role, I lead the GE Appliances executive data governance boards, implementing data policies, identifying and resourcing data quality initiatives, establishing an empowered decision-making council for shared data, and formalizing an ongoing data stewardship program throughout the business. I lead a team of 50+ focused on implementing an Oracle master data management solution, simultaneously improving the quality and business value of both legacy and new data sources. As a Six Sigma Master Black Belt, I am focused on business process improvements within the supply chain, distribution, and commercial areas of GE Appliances as the ERP system is architected and deployed. Additional focus areas include training and mentoring of Six Sigma Black Belts and Green Belts assigned to the ERP project.”

Bob Mason ‘94 writes, “After eight successful years, I left Brightcove, the company I co-founded in Boston, to start a new adventure. Currently I’m focused on helping other start-ups and entrepreneurs through the TechStars Boston accelerator program.”

Gus Blaschitz ‘95 reports, “Started a new job as a senior validation engineer with SHL Pharma, the leading auto injectors medical device manufacturer in the U.S.”

Cindy (Mitchell) Daly ‘96 and her husband, Joe, welcomed their second child, Lauren, in November. Cindy and her family live in Maine, where she works as a project engineer at Pratt & Whitney.

Dwain DeBoer ‘96 was selected by Vermont Business Magazine as a Vermont Rising Star. She lives in Bennington with her husband, Brad, and children, Callum, 8, and Tyler, 6. Her community involvement includes coaching youth soccer and serving as vice president of AIM (Adults Interested in Monument), the Monument School PTA. “I am involved in the community as much as possible and have spent many a late night planning school and community functions,” says Dwain. “It’s thrilling to watch the light bulb moments as kids realize that teamwork, fun, and winning can all go together!” Before joining Mack Medical 12 years ago, she worked for Saint-Gobain Performance Plastics, GE Plastics (now SABIC), and Monsanto Plastics. Her recent promotion to director at Mack puts her at the head of a new business unit that focuses on the orthopedic and disposable medical device markets.

Christopher Mangiarelli ‘96 married Meghan Lane on Oct. 7, 2012. They live in Cranston, R.I.

Joseph Maraia ‘96, an intellectual property partner at Pierce Atwood, was selected as president of the Boston Patent Law Association. He previously served as vice president, treasurer, and secretary. His law practice focuses on all aspects of U.S. and international intellectual property law, with particular emphasis on semiconductor equipment, power supplies, lasers, image processing devices, optical components, plasma systems, medical devices, alternative energy technologies, financial services, multimedia, multivariate analysis techniques, software and telecommunications systems and software.

Rebecca (Rubenstein) Sgambati ‘96 was promoted to engineering director at Valero Benicia refinery in California.

Pedro Soria-Rodriguez ‘96, ‘98 (MS EE) has been appointed market manager of Financial Services Market at Atos Research & Innovation, based in Madrid, Spain. After graduating from WPI, Pedro worked in the Massachusetts area for three years before returning to Spain; he has been with a number of companies since, including Atos (the largest IT services firm in Europe) since 2005, where he was in charge of the information security research team.

Sean Squire ‘96 has been appointed a technology fellow of the Chief of Naval Operations Strategic Studies Group located at the Naval War College, in Newport, R.I.

After several years in the private sector, Ben Higgins ‘97 has returned to WPI as a network engineer in Network Operations.
Capitola (Lau) Pontrelli ’97 celebrated daughter Isabella Rose’s second birthday on 12/31/12. She has been working for six years in marketing for Invensys, a manufacturer of appliance controls, in Carol Stream, Ill. “My parents are still living in and loving Abu Dhabi, UAE, and working at the Petroleum Institute,” she writes.

Stephanie Torrey ’97 and her husband, John Vuk, welcomed their second son, Oliver Thomas, on Jan. 11, 2012. Two-year-old Elijah is enjoying being a big brother, she writes. Stephanie is a research scientist in poultry behavior and welfare with the department of Animal and Poultry Science, at the University of Guelph in Canada.

Jason Hutt ’98 writes, “I recently took over as chief of the Cargo Integration and Operations (CIO) Branch in the Operations Division of the Mission Operations Directorate at NASA Johnson Space Center. The CIO Branch is responsible for managing stowage, maintaining the operations LAN, and integration of cargo vehicles for the International Space Station (ISS), as well as training astronauts on ISS day-to-day mission execution.”

Sudhir Kaushik ’98 (MS CS) says, “I got my MBA at UC Berkeley and have worked with numerous start-ups in Silicon Valley—and, in fact, have also been on the founding team of many. I have not hit the home run yet, but my technical education at WPI has definitely helped me immensely with my start-up career thus far. Go, Engineers! I hope to see a lot more of you in Silicon Valley soon—we could use your talent.”

Jeannine (Block) Lovering ’98 writes, “Ever the perpetual student, I spent the last two years working toward my nursing degree, and I am happy to report that I am now a registered nurse! It is truly an honor and a blessing to join the ranks of such an incredible profession.”

Mike Stark ’98, who says he’s not known for his running prowess, is going to run the Disney Princess Half Marathon in February 2013 to raise money for the Leukemia and Lymphoma Society. “You can help this cause by donating at http://pages.teamintraining.org/vtnt/dipihalf13/mstarknh.”

Mike Caprio ’99 recently started a full-time position as a software engineer at About.com in New York City. See the article on his adventures as conductor of the StartupBus to South by Southwest on page 42.

Justin Ripley ’99 writes, “I played for the USA Rugby League National Team (Tomahawks) in an international match against Canada on Sept. 22, 2012, in Westport, Conn. I played for the Tomahawks several times last year, including in matches against Ireland and Tonga last year. We qualified for the Rugby League World Cup 2013 to be held in the U.K. I am married to Aimee Vella. Groomsmen at our 2011 wedding included Craig Howitt ’98 and William Shaw ’01. Aimee and I live in Westbury, N.Y., and are expecting our first child. I graduated from Franklin Pierce Law Center (nka the UNH School of Law) in 2005, and I’m an IP patent attorney at the firm of Carter DeLuca Farrell & Schmidt in Melville. I also find time to represent WPI as an Alumni Ambassador at local college fairs, and to serve as a wrestling official for the local high school.”

Jennifer (Reese) and Sean Smith ’99 welcomed their first child, Andrew Brian, born Sept. 10, 2011. Sean and Jen both work for GE Energy in Schenectady, N.Y.

Kristin Connarn ’00 was named partner at McDermott Will & Emery (MWE). She works at MWE’s Boston office as a patent attorney, specializing in biotechnology and pharmaceuticals patent protection and intellectual property counseling.

Marybeth Frantz ’00 was elected partner of the law firm Harris Beach, based in Pittsford, N.Y. A graduate of Georgetown University Law Center and Seton Hall University School of Law, she is a member of the firm’s Public Finance and Economic Development and Tax Law practice groups.
Brian and Melissa (Wright) Hayes '00, along with daughter, Teaghan, celebrated the arrival of their second daughter, Kenley, in March. Melissa completed her PhD in molecular microbiology and immunology at the University of Maryland. Her postdoctoral training at the Johns Hopkins School of Public Health will focus on influenza research.

Robin Zack '00 moved to New York in 2009, and currently is an associate veterinarian at Finger Lakes Equine Practitioners in Farmington, N.Y. While her practice is limited to race horses, her personal menagerie has grown to include several cats, a dog, a parrot, and two retired race horses.

Jim Konz '01 writes, "My wife, Dina (Carreiro) '01, and I recently celebrated the birth of our fourth child. Our daughter Celeste was born on New Year’s Day. Unfortunately she missed being the first baby of the year born in Worcester by one. She joins her three siblings, Colby (6), Lillian (3), and Logan (2)."

Paul and Amanda (Kight) Muller '01 have enjoyed living in the Washington, D.C., area for the past few years. They have been active in doing local obstacle races, including the Rugged Manic, the Run for Your Lives (where Paul successfully escaped the zombie hoards while Amanda succumbed to the brain-eating masses), and the 10-mile Tough Mudder that took them up, down, and around the Wintergreen Ski Resort. When they are not carrying logs up mountains or swimming through icy water, Paul is completing his assignment as a branch chief in the Nuclear Assessments Division of Air Force Headquarters at the Pentagon, and Amanda is working in her third of four rotations in Northrop Grumman’s Systems Engineering Associates Program. In June, they will continue their adventures in Leavenworth, Kansas, where Paul will attend Army Command and General Staff College.

Frederick Tan '01 writes, "This year, I finally got a ‘real job’ and joined the research faculty at the Carnegie Institution of Washington in Baltimore."

Willie Wilson '01 writes, "I’ve finally headed back to school. I’m pursuing my PhD in computer science and cognitive science at Northwestern University."

Starla (Richter) Barber '02 was promoted to senior manager of plant support at Cruzan Rum. She is married to Keith Barber '01.

Joshua Engstrom '02 and his wife, Marie, welcomed their first child, Eve Virginia Engstrom, born Oct. 9, 2012. Eve is doing well and growing fast.

Nikole (Howard) Lewis '02 completed her PhD in planetary sciences at the University of Arizona last year and is now a Sagan Fellow at MIT. The highly competitive fellowship, named after Carl Sagan, will allow her to continue her work on exoplanet atmospheric models, exploring the interplay between dynamical, radiative, and chemical processes to gain a better understanding the physical processes at work in the atmospheres of planets outside our solar system.

CLASS NOTES – A GREAT WAY TO LET YOUR FELLOW ALUMNI KNOW WHAT’S HAPPENING IN YOUR POST-COLLEGIATE LIFE

From career advancements to life-changing experiences to your latest projects or inspiring adventures, through WPI Journal class notes, reconnecting with your classmates is simpler than ever.

It can be a sentence or a paragraph: 250 words max, please.

We welcome photographs: 300 dpi is best.

Submit yours to classnotes@wpi.edu.
Justin Lutz ’02 and Jennifer Donovan were married Oct. 27, 2012, in Massapequa, N.Y. After a honeymoon in St. Thomas, the couple resides in Concord, Mass.

Celine Mcgee ’02 writes from Philadelphia with news of a new job at GE, as sourcing quality manager of casting and forging for GE Wind.

Gregory Milette ’02 gave a talk about Android Sensors at GDG Boston (Google Developers Group) in November. He and co-author Adam Stroud (Professional Android Sensor Programming) explained common code applications and techniques for creating amazing apps using contextual information provided by real-time sensor data.

Joan Norton ’02 married Jeff Felton in September. She is an equine veterinarian and consultant with a private practice in Noblesville, Ind. She has known Jeff since their days in the Worcester rugby league, when she played for the Shamrocks, and he played for the Worcester Men.

Jody (Kenniston) Staruk ’02 writes, “My husband, Daniel, and I welcomed our first baby, Madelyn Jade, on Dec. 2, 2012. She is a happy little girl and we’re loving every second of being parents!”

Chris Cammack ’03 says, “My wife, Jaime, and I are proud to announce the birth of our second child, Genevieve Victoria, on Nov. 27, 2012, in Fairfax, Va. We are all doing very well.”

Ben Parks ’03 joined Eric Jost in a domestic partnership on Sept. 13, 2012. “A celebration is planned for May,” he writes. Ben is a reactor systems engineer for the U.S. Nuclear Regulatory Commission in Washington, D.C.

Justin Schumacher ’03 married Sarah Besse on June 30, 2012. He is a principal engineer for Sweetspot Diabetes Care.

In March, John Baird ’04 presented at SXSWedu 2012, the education track of South by Southwest, in Austin, Texas. Marjorie Scardino, CEO of Pearson, and Secretary of Education Arne Duncan both praised John’s talk in their keynote addresses. They cited him and a few other presenters as key examples of modern educational development taking shape. John also led a pair of workshops at the Conference for the Advancement of Mathematics Teaching (CAMT) in July 2012. He is now teaching Grade 7 math at NYOS Charter School in Austin, having moved from Houston over the summer.

Dave Chiu ’04 writes, “In July I traveled to Belgium and France to shoot the world’s biggest annual sporting event, the 99th edition of le Tour de France, for Embrocation Cycling Journal. The picture shows me in the middle of the photo scrum waiting for the sprint finish in the city of Metz.” This journal is a quarterly publication that serves an ever-evolving cross-section of the cycling community, including road riders, die-hard commuters, racers, mechanics, frame builders, and the like, through high-quality photographs, essays, stories, and illustrations.

Sarah Doherty ’04 was promoted to regional energy manager for the Commander Navy Region Europe, Africa, & South West Asia. She moved from Norfolk, Va., to Naples, Italy, to work under the Naval Facilities Engineering Command. “I am responsible for managing the Navy’s shore installation energy reduction programs, initiatives, and renewable technology implementation to support federal mandates and achieve energy goals throughout the region. I was fortunate to join ’05 Phi Sigma Sigma sisters Angela Martino, Pamela Glasson, Marissa Kahan, and Susan Moussali in Newport, R.I., for a bon voyage trip before I relocated to Italy to embark on this challenging yet exciting assignment. If your travels bring you to Europe, please look me up. Ciao!”

A replica of Daniels 320—the freshman dorm of Jeremy Hitchcock ’04—served as a cozy lounge for employees of Dynamic Network Services (Dyn) in Manchester, N.H. Jeremy and Tom Daly ’04 incorporated Dyn at WPI in 2001, and have hired many WPI grads since then. They drove all the way to WPI to haul back the surplus furniture for their “dorm.” Unfortunately, the replica had to be dismantled last year to create more workspace for their growing company. “Something like that reminds you of your roots,” says Hitchcock. “As for Tom and me, we were never roommates, but I was told to never let facts get in the way of a good legend.”

Gregor Kronenberger ’04 and his wife, Ahra, were married June 30, 2012, in Wiesbaden, Germany. Greg is still employed at Booz & Company, a management consulting firm, and specializes in advising clients in the consumer and retail sector on IT-related topics.
Brooke (Buchholz) Tropf ’04 recently started a new job with Omitron, working at NASA’s Goddard Spaceflight Center. Brooke is on the Flight Operations Team for the Fermi Gamma-ray Space Telescope. She continues enjoying life in Maryland with her husband, Zach.


Matthew Black ’05 earned his PhD in chemical engineering at U.C. Santa Barbara in November 2011.

William Caulway ’05 (MS OIT) says, “After 20 years at EMC Corp. as senior portfolio manager, and four years at Clark University as IT deployment manager, I am currently working in the UMass systems office in Shrewsbury, Mass., as a service performance analyst. I have two daughters (junior and freshman honor students at Assumption College) and a son at Bay Path Regional Vocational Technical High School. I worked with the Red Cross delivering aid during Katrina in New Orleans, and I’m currently active with the Appalachian Mountain Club, maintaining the Midstate Trail.”

Greg Krane ’05 married Farleigh Layfield in Newport, R.I., in August 2012, with many fellow members of WPI’s Sigma Pi Chapter present. After returning from their Hawaiian honeymoon, they moved to Westerly, R.I. Greg works as the medical director at VCA Turco Animal Hospital in Westerly, and Farleigh works as an associate veterinarian at VCA New London Animal Hospital in Waterford, Conn. They look forward to meeting other WPI alumni in southern New England.

Front row, Matt Eaton ’06, Sean Scheriff ’06, Farleigh and Greg Krane, Doug Alexander ’95, Melissa Alexander, Samantha Shields ’06; back, Frank Gerratanna ’94, David Carchedi ’04. Sigma Pi chefs Billy Dolan and Sue-Anne Dolan, and Patrick Shields ’05.

Mary Schubert ’05, ’10 (MS MFE), (second from left), Cristal Chan ’10, Elizabeth McCoskrie ’07, and Amy Cochis ’91, were swift enough to earn medals in the 14th Annual Pratt & Whitney Runway 5K Run and Walk, where 100 percent of the proceeds go to support the United Way of Central and Northeastern Connecticut Community Investment fund. Congrats to all on well representing both your company and your school for a good cause!

Patrick Spencer ’05 is serving in the United States Peace Corps while attending Michigan Technological University as a Peace Corps Master’s International graduate student studying environmental engineering. He is serving in Madagascar with his wife, Raegan, who is completing research on applied natural resource economics. His close of service is expected in 2014.
Jon Gretarsson ’06 received his PhD in computational and mathematical engineering from Stanford after successfully defending his thesis.

Dan Martel ’06, Richard Gilley ’07, Brendan McLaughlin ’07, Tim Buck ’07, Jeff Pelligrino ’07, and Brian Guerette ’07 took their third annual winter trek up Doublehead Mountain in New Hampshire’s White Mountain National Forest. After stowing their gear at their lodgings (a small cabin on the north peak) on the south peak, 2,939 feet above sea level.

Tyrone “TJ” Mellon ’06 attended the Lens and Lights 50th anniversary celebration in Riley Commons on December 1. The event was hosted by the current members of LnL. Members showed off what the club has for entertainment projection, lighting, sound, and power distribution capabilities, along with photos spanning the club’s existence. Two of its founding members, John Schmidt ’64, and Jim Day ’65, spoke on LnL’s origins, and alumni from the 1960s to present shared anecdotes from past events. (See “Shining Bright, 50 founding members, along with photos spanning the club’s existence.”)

Chris Werner ’06 writes, “I married Heather Senecal on Oct. 15, 2012, at Hans Fahden Vineyards in Calistoga, Calif. Joining us on the beautiful autumn day in Napa County were family and friends, including fellow WPI alums Colleen Shaver ’04, Nick Galotti ’05, Brian Loveland ’07, Pam Levandowsky ’08, Paul Ventimigila ’12, Sean Donovan ’06, Gen Desaulniers ’08, Justin Woodard ’06, and Sarah (Miczek) Woodard ’06, as well as Professor Ken Stafford.” [Chris and Heather met at WPI in 2002 during their time spent on the FIRST Robotics team.] “I am currently a product design engineer at Apple and Heather is an AVEDA color specialist and manager at Silicon Valley’s #1 rated salon. We live in the charming Willow Glen neighborhood of San Jose.”

Tim and Cassie (Leduc) Buck ’07 write, “We are living in Norwood, Mass., and doing quite well. Our biggest highlight has been the birth of our amazing daughter, Madelyn Elizabeth, on Aug. 26. She’s just awesome. Cassie is busy balancing her time between working at MGH as a genetic counselor and spending time home with Madde. I finished my MBA in health sector management at BU and started a new career at a consulting firm specializing in healthcare, located in Kendall Square. I’m enjoying the ability to get a bit more breadth beyond pharmaceuticals and into diagnostics and devices. “We enjoyed seeing everyone at Homecoming; can’t believe it’s been five years already.”

Sam Feller ’07 founded awkwardengineer.com (see p. 94) and is currently selling novelties, including the Panic Button Light Switch Kit, through ThinkGeek and other retail outlets. His Cookie Dunker is now in pre-launch.

Edward Pawlowski ’07 writes, “For the last 4½ years I have worked for GE Transportation in Erie, Pa. I have been part of a team developing a new 4500 HP diesel engine to meet a new Tier 4 emissions standard in the US in 2015. I recently was put in charge of running one of the Tier 4 test locomotives and I am responsible for all the testing and validation that is done on it.”

In August, Mark Filomeno ’08 returned to the Connecticut office of CDM Smith after four years of rotational assignments working as a field engineer. He recently purchased his grandfather’s house and is excited to be living in his original hometown while preserving a home that’s been in his family for the last 50 years.

Jill Goldstein ’08 says, “I’m living in New Haven, Conn., and working toward my PhD in cell and molecular biology at Yale. I hope to defend my thesis within the next year or two and then do postdoctoral research in the field of stem cell biology and regeneration. Hope to see you at the 5th!”

Lou Grillon ’08 writes, “After attending MIT’s Leaders for Global Operations (LGO) dual degree graduate program, I accepted a job in supply chain strategy with Caterpillar and moved out to Peoria, Ill.”

Jen Hosker ’08 was awarded her Six Sigma Blackbelt on December 20, 2012. She is a manufacturing and quality engineer, applications tooling, at Burndy, and serves as a FIRST Robotics Team 501 Mentor.

Cheryl (Boquist) Ingram ’08 and her husband, Eric, were delighted to welcome their first child, Tesla Jane, in August 2012. Tesla coincidentally shares her birthday with her mom’s close friend Erica Grygorcewicz ’08.

Steve King ’08 and Bethany Kuhn ’10 were married on Dec. 1, 2012, in Bethany’s hometown of Plymouth, Mass. The beautiful winter wedding and reception was attended by family, friends, and several of Steve’s Lambda Chi Alpha brothers and Bethany’s Alpha Xi Delta sisters. The couple enjoyed a honeymoon in Disney World and now look forward to settling back into normal life with their dog, Moose.
Sean Mokler ’08, USN, started an instructor position at the Naval Submarine School in Groton, Conn., after finishing a 2.5-year tour, including one overseas deployment, on the fast attack submarine USS Hartford (SSN 768).

Ryan Trunko ’08 writes, “I was married to my beautiful wife, Katie, on July 7, 2012. In August we bought a house and are currently enjoying being homeowners.”

Alison LeFlore ’09 serves as conservation agent for the town of Chelmsford, Mass. In a lengthy interview with the Chelmsford Independent she discussed the road that led her to this work, noting that so many schools separate environmental policy and planning, “which seemed strange to me since I had just spent four years at WPI studying all the ways in which planning and policy intersected.”

Gary Tishue ’09 (MS MTI) and daughter Jessica (a graduate of the University of San Diego and the EBoost Executive Digital Marketing program) launched, in August 2012, Disruptive Marketing LLC, a full-service Digital Marketing Agency committed to honest and innovative solutions (disruptivedigitalmarketing.com). “I am so excited that my daughter is able to experience a WPI education ripple effect from my marketing master’s,” he says. “Her expert digital marketing experience and my 36 years of corporate business and engineering success make this paradigm work.” Gary is executive board senior advisor and CEO; Jessica innovates and grows the business as she inspires interns with opportunity.

Matthew Zagaja ’09 writes, “Over the summer I took the Connecticut and Massachusetts bar exams after graduating from UConn Law School in May. I passed both exams and was sworn in as an attorney in November. I am working for the Connecticut Center for Entrepreneurship and Innovation until the end of the year, along with a group called The IP Factory, doing research and economic development work.”

Tobin McGee ’10 joined pharmaceutical supplier Perrigo, as a production engineer at the company’s Bronx, N.Y., site.

Alejandro Solà ’10 (MS SD) bought a house (his first) in Chatham Township, N.J. He works for Novartis in the Decision Analysis area, framing and evaluating strategic decisions to guide drug development.

Andrew Black ’11 is working on a graduate degree in chemical engineering at the University of Delaware.

Lily Clark ’11 has completed the work for her master of science degree in environmental engineering from UMass Amherst. She is continuing her education at UMass to receive a PhD in the same field.

Jon Morgan ’11 writes, “Over the past year I started completing my MBA at Babson College in Wellesley, going to school through the full-time program.”

In December 2012, Marco Peschiera ’11 (MBA) started a new adventure with Hanover Insurance, working in the Hanover Technology Group as a senior delivery manager. He reports that he is very happy to join such a great company. Among his various activities and initiatives, he is looking forward to being involved with recruitment. Look for Marco at the Hanover booth at the next WPI career fair.

Joseph Schlesinger ’11 is founder of ArcBotics, which aims to be the “IKEA of Robotics,” producing a line of low-cost, open-source hardware and associated tools, parts, and software. His intent is to advance the field by dramatically lowering the expense, time, and difficulty typically associated with robotics. He demonstrated his Hexy the Hexapod robots at the 2012 Bay Area Maker Faire, and its success was written up by Wired in an August article called “The Kickstarter That Actually Happened: How Hexy Got Made, and Fast.”
Caitlyn Shaddock '11 writes, “Since graduation in May 2011, I completed my master of arts in teaching, secondary education, and am currently teaching 9th grade physics at a regional high school on the South Shore.”

Ajay Dhesikan ’12 started a company (deltarank.com) that helps businesses get more customers through online marketing. “With so many people acquiring and using mobile devices like smartphones,” he says, “we immediately identified a need for businesses to have mobile-optimized websites. Most regular websites are not mobile-friendly, which makes them difficult to navigate and causes frustration for users. Our mobile-optimized websites just feel right on smartphones and are loved by our clients and the people who visit them.”

Rowing standout John Madura ’12 competed in the 2012 Men’s Under 23 World Championships in Trakai, Lithuania, in July, in the men’s double sculls rowing competition. Although he did not achieve his personal goal of a top half finish, the North Jersey Record wrote that he had defied the odds just by making the roster. Asked about his future prospects, he told the paper that he is thinking about whether to train for the next four years and go for the Olympics, or “do you want to move on with life?” This marked the third straight year a WPI student-athlete competed at U23 Worlds: Hank Moore ’11 participated in the 2010 and 2011 championships in Amsterdam and Belarus, respectively; Ben Johnson ’11 and Tobin McGee ’10 rowed at the 2010 event. A near contender was Ricky Holak ’12, who earned a spot in the finals but finished a close fourth.

Katherine Milligan ’12 writes, “Recently started a new job with Athena Diagnostics as an associate med tech.”

Sam O’Connor ’12 writes, “I hope everyone has been doing new and exciting things with their lives since graduation. I’m still at WPI wrapping up my master’s work, but I’m doing great! I’m still active on the women’s rowing team and looking forward to my last season this spring.”

Michael Solano ’12 joined the Peace Corps to serve as a math teacher in Lesotho. “My mother was a Peace Corps volunteer when she met my father,” he explains, “so without the Peace Corps I wouldn’t be here!” He spent three months living with a host family to learn the language and culture, and will spend the next two years teaching secondary-school math and basic science at a local school.

Mianzhi Wang ’12 writes: “To WPI students: Please enjoy the generosity of WPI. You would not be likely to find a gym accessible throughout the year, workshops with free pizza, public computation clusters for all students, etc., in a state university like I am in now for my PhD program.”
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You might be surprised to learn how often graduating students present their resumes to us for critiques having completely omitted their Interactive Qualifying Project. Sometimes they may keep it there but refer to it as their “junior year project,” (their Major Qualifying Project is their “senior project”). When asked why the IQP is not there, the most common response is, “It’s not related to my major, so I do not see its relevance.” When asked why the real name of the project is not used, they indicate they don’t believe anyone would understand what IQP or MQP really means, so they choose a generic project title to be sure employers understand.

In this issue of the journal, several alumni have demonstrated how their WPI education has had great impact on their ability to be innovators and achievers. I encourage you to consider how much your successful transitions and adaptations in the work place owe to the demands of WPI’s IQP or MQP. From your first year, you were taught to approach and solve problems by working on projects that task not only the skills in your major but the skills required to function effectively on a team. During your sophomore year, you had to work on a project that took you away from your major and into the humanities and arts. Have you ever entertained clients who wish to discuss the last show they saw or a concert they attended, or the painting on the wall? How wise it was for WPI to nurture your ability to step to the right side of your brain power.

In your junior year, you had to manage the challenges of the IQP, collaborating for seven weeks on a team of students who are not usually in the same major, (cross-functionality in college!), in solving a real-world problem affecting the community you were in—from Worcester to an African village or Venetian canal site. And when that was done, you returned to tackle yet another project as seniors, the year-long MQP, fine-tuning your professional skills by working on a technical problem within your major, usually sponsored by a corporation, and sometimes patentable!

Throughout all of these project years, you were challenged early to share ideas, advocate, take rejection, compromise, acculturate, lead, learn when to step back, make deadlines under very tight pressure, write with clarity, present to audiences at all levels, and communicate clearly with teammates to solve the same problem, even when none of you shared the same major—all while mastering cross-functionality. Lest you forget, these are the qualities you carry with you today—the foundational qualities that make many employers wish they, too, had been educated by WPI. These qualities are as relevant to your career as they were when you graduated.

Place digits from 1 to 9 in the triangular grid such that:
1. No digit repeats in any row, column, or diagonal
2. No digit repeats in any of the outlined boxes and triangles

PUZZLE ANSWER ON PAGE 94

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I owe WPI a lot. It gave me a chance to do something meaningful. After World War II my wife, Claytrice and I both attended USC. I got a degree in Mechanical and Aeronautical Engineering. Not only did I fly airplanes, I learned to design them. I worked at Martin Aircraft Company. Then I was assigned to technical intelligence work and worked for the CIA. While in D.C. my wife got a Master’s in Education from Catholic University. She taught at Wright State University School of Nursing in Dayton, Ohio for six years.

“WPI got me on the right path. I probably wouldn’t have gone to college otherwise. I had no money to complete my studies, so I want to help others continue theirs. I don’t want anyone else to have to leave school because they can’t afford it.”

— Henry Poplawski ’39
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