



ILLINOIS INSTITUTE OF TECHNOLOGY

# iit magazine

Summer 2013

**Visionaries.  
Change Makers.  
Innovators.**

**Driven by Passion  
and Imagination**

**WIEL ARETS**  
Not Clark Kent's Metropolis

**MICHAEL MORLEY**  
Working-Class Prosthetics

**ANA MENDEZ MENCINI**  
Immigrant Advocate

# Letter

## from the President

**“Do you know what my favorite renewable fuel is? An ecosystem for innovation.”**

—Thomas Friedman

How should innovation be defined in the twenty-first century?

Has the word become a synonym for “anything that is new” or should it be reserved for something more? Something like the portable cell phone, barcode technology, the wireless remote control, and smart electricity grids—products, processes, and systems that fundamentally change how we live, work, and even think.

Does change need to be wide-reaching for the product or process that caused it to earn the right to be called innovative? Can smaller, sometimes subtle advances in specialized fields, taken separately and together, themselves be called innovations—the necessary prerequisites that make major breakthroughs possible?

For nearly 125 years, IIT has been fueling innovation and specialized advances through the scholarship of our faculty and the accomplishments of our students and alumni. As one of Chicago’s leading research universities, we are motivated to create what does not now exist—and our graduates have a strong track record of coming up with new ideas that have changed the world. As important, they have taken these ideas to market, moving from vision to development, turning ideas from “what if” to “the here and now.”

IIT-educated engineers developed the portable cell phone, barcode technology, and the wireless remote control. IIT faculty and students are advancing smart grid technology. Many of us cannot imagine what life was like without the former devices and the next generation will not be able to imagine a world without the goal of a smart grid—“perfect power.”<sup>1</sup>

But our stories of innovations and innovators do not end here. We have many success stories, some of which we feature in this issue of *IIT Magazine*. And we will have many more stories to come as we continue to attract world-renowned faculty and graduate exceptionally talented students—the next generation of innovators, entrepreneurs, and problem solvers.

This is an exciting time to be at IIT—being with students, faculty, and alumni whose innovative spirit, knowledge, and concern for the environment and social justice will continue to create what does not now exist and improve the well-being of future generations.

IIT is indeed fueling innovation—and moving forward.



John L. Anderson  
President



*IIT President John Anderson [center] is joined by Fueling Innovation: The Campaign for IIT co-chairs Joel Krauss (MATH '71) [left] and Alan “Bud” Wendorf (ME '71) at the campaign launch event.*

<sup>1</sup> *Perfect Power* by Robert Galvin and Kurt Yeager, McGraw Hill, 2009.

**IIT MAGAZINE IS PUBLISHED THREE TIMES A YEAR BY THE IIT OFFICE OF MARKETING AND COMMUNICATIONS.**

*IIT Magazine* is a 2013 recipient of the Publicity Club of Chicago Silver Trumpet Award for Excellence in Newspapers or Magazines, and a 2012 CASE V Silver Medal for Best Alumni Magazine.

© 2013

*IIT Magazine* is printed on SFI certified recycled paper. Read it, share it, recycle it.

**SEND LETTERS TO**

***IIT Magazine***

Office of Marketing and Communications  
10 West 35th Street, Suite 4D7-1  
Chicago, IL 60616

**OR EMAIL [iitmagazine@iit.edu](mailto:iitmagazine@iit.edu)**

**SEND ALUMNI NEWS TO**

**[alumni@iit.edu](mailto:alumni@iit.edu)**

Founded in 1890, Illinois Institute of Technology is a private, Ph.D.-granting research university that awards degrees in engineering, the sciences, architecture, law, design, psychology, humanities, applied science, and business.

**IIT MISSION STATEMENT**

To provide distinctive and relevant education in an environment of scientific, technological, and professional knowledge creation and innovation

- IIT Armour College of Engineering
- IIT Chicago-Kent College of Law
- IIT College of Architecture
- IIT College of Psychology
- IIT College of Science and Letters
- IIT Institute of Design
- IIT School of Applied Technology
- IIT Stuart School of Business

**ADA STATEMENT**

Illinois Institute of Technology provides qualified individuals with disabilities reasonable accommodations to participate in university activities, programs, and services. Such individuals with disabilities requiring an accommodation should call the activity, program, or service director. For further information about IIT's resources, contact the IIT Center for Disability Resources at [disabilities@iit.edu](mailto:disabilities@iit.edu).



# contents

Summer 2013



8

**ON THE COVER**

## Fueling Innovation

IIT's new fundraising endeavor, *Fueling Innovation: The Campaign for IIT*, aims to help the university realize its campaign priorities and ultimate ambition: to be a leader in education and research.

- 10 **INSIDE IIT'S NEXT NEW BUILDING**
- 11 **THE RENOVATION OF E1 AND LIFE SCIENCES**
- 14 **S. Y. CHEN**  
IIT Health Physics Committed to Helping People
- 16 **MICHAEL MORLEY (BME '08)**  
Molding New Directions in Prosthetics
- 18 **JIALING XIANG**  
Fighting Cancer from Within
- 20 **WIEL ARETS**  
New IIT College of Architecture Dean
- 22 **LEON SHAW**  
Storing Energy Electrically and Chemically
- 24 **ANA MENDEZ MENCINI (LAW '01)**  
Teaching Tomorrow's Immigration Attorneys



## Departments

- 2 NEWS BRIEFS
- 26 ALUMNI NEWS
- 36 REWIND

**IIT MAGAZINE ONLINE-ONLY CONTENT!**

Read extended coverage of stories featured in the print edition as well as special online-only content at [www.iit.edu/magazine](http://www.iit.edu/magazine)

# FUELING INNOVATION: AN UPDATE ON THE CAMPAIGN FOR IIT

IIT's six-year fundraising campaign, launched on June 1, 2010 and currently in its public phase, reached a giving total of \$144,688,960 as of May 31, 2013.

## LIFTOFF! IIT LAUNCHES FUELING INNOVATION CAMPAIGN WITH CAMPUS-WIDE CELEBRATION

On Friday, February 8, all corners of IIT converged in The McCormick Tribune Campus Center to watch the flip of a light switch. But this was no ordinary switch; rather, it was a large suitcase-size, student-fabricated switch that revealed a bright light in the form of the university's progress toward its ambitious \$250 million fundraising goal for *Fueling Innovation: The Campaign for IIT*.

IIT President John Anderson welcomed the packed crowd at MTCC Center Court before turning over the stage to alumni campaign co-chairs Alan "Bud" Wendorf (ME '71) and Joel Krauss (MATH '71), who together flipped the switch and unveiled the amount of \$131,791,822 raised as of that day since fundraising efforts began with the leadership phase in June 2010.

"This is a momentous occasion for IIT," said Anderson. "[It is] a campaign to build excellence at the university, and excellence beyond the university, because our students will go out and do great things in the world."

Anderson also announced that five donors had made gifts of \$10 million or more to the campaign to date. They include the Pritzker family, Caryl Pucci Rettaliata, wife of the late John T. Rettaliata, IIT's president from 1952–1973, as well as trustees Craig Duchossois, Ralph Wanger, and John P. Calamos Sr. (ECON '63, M.B.A. '70).

### Write Back

IIT Magazine welcomes all signed letters to the editor and edits letters for content and clarity. Please send correspondence to:

IIT Magazine  
c/o Letters  
10 West 35th Street,  
Suite 4D7-1  
Chicago, IL 60616

Email:  
iitmagazine@iit.edu



For more information about a gift to Fueling Innovation, call 312.567.5000 or visit the campaign website, [fuelinginnovation.iit.edu](http://fuelinginnovation.iit.edu).



## CAMPAIGN PRIORITIES AND PROGRESS through May 31, 2013

### CREATE A TRANSFORMATIONAL INNOVATION CENTER

Goal: \$40 million  
Progress: \$5,529,403

### REVITALIZE CORE CAMPUS BUILDINGS\*

Goal: \$25 million  
Progress: \$19,552,856

### PURSUE ANSWERS TO SOCIETY'S URGENT CHALLENGES

Goal: \$85 million  
Progress: \$59,793,901

### OPEN THE DOOR TO A TWENTY-FIRST CENTURY EDUCATION

Goal: \$40 million  
Progress: \$24,482,434

### BUILD IIT'S DISTINCTIVE ACADEMIC PROGRAMS AND ENHANCE THE CAMPUS EXPERIENCE

Goal: \$30 million  
Progress: \$19,759,980

### GROW RESOURCES FOR STRATEGIC AND OPERATIONAL CAPABILITY

Goal: \$30 million  
Progress: \$15,541,241

\* Includes capital and expendable gifts for multiple renovation projects, equipment, supplies and space

Reflects progress through May 31, 2013; additional giving includes \$29,144, funding initiative to be determined

PHOTOS: BONNIE ROBINSON

## FUELING INNOVATION LIFTOFF

The McCormick Tribune Campus Center, transformed into a winter wonderland, provided the perfect party space for the launch of *Fueling Innovation: The Campaign for IIT*. As part of the festivities, the university unveiled the new Armour Society Wall. The installation showcases the names of individuals and families who are members of IIT's Philip Danforth Armour Society through their gifts of \$1 million or more to IIT.

Students, faculty, staff, and alumni enjoyed interacting with an iPad wall featuring campaign stories, skating on an indoor ice rink, and watching IIT's mascot "Talon" the hawk emerge from a block of ice.

To view more event photos, visit [fuelinginnovation.iit.edu/photos](http://fuelinginnovation.iit.edu/photos).  
You can watch the campaign video at [fuelinginnovation.iit.edu/campaign-video](http://fuelinginnovation.iit.edu/campaign-video).





PHOTOS: BONNIE ROBINSON



## The X-Cube: a Shape-Shifting Puzzle for Generation Next

Dane Christianson (ME 3rd year) isn't intimidated by big numbers, like 125 decillion—that's 125 followed by 33 zeros. He created a twisty-puzzle—the X-Cube—that has 52 moving parts and 125 decillion possible permutations, or positions the cube's pieces can be arranged. Here's another impressive number: A video Christianson made on the X-Cube received more than 1.6 million hits during its first month posted on YouTube.

Christianson crafted the X-Cube's intricate parts using a 3-D printer at IIT's Idea Shop. In June, he set up a Kickstarter online site to raise funds to manufacture the puzzle for possible distribution through Marbles the Brain Store and within one week, surpassed his goal of \$30,000. Christianson made the puzzle open source, giving others the chance to download files to see just how the X-Cube works.

"I'm attempting to share an innovative idea in an equally innovative way," says Christianson.

by MARCIA FAYE



Ian McNair (PED 4th year) traded the thrills he got from skateboarding for the one-meter and three-meter springboards during his sophomore year at Palatine (Ill.) High School and took to the water with a fierce determination. Recruited to IIT by Diving Coach Ryan Nelson, McNair is concluding his final year at IIT as a four-time NAIA national diving champion, with three one-meter titles and one three-meter title. To round out the 2012–13 season, McNair was also named NAIA Men’s Outstanding Performer in Diving.

“Ian’s best quality is his ability to be consistent during meets,” says Nelson. “Divers can get rattled by watching their competitors nail dives. Ian doesn’t—or at least doesn’t show it. He’ll just get up, focus, and perform. Consistency and staying in the moment are what wins in this sport. Ian did just that and that’s why he was so successful.”

McNair hopes to transfer that success into his career as a high school physics instructor and is looking forward to student teaching during his last semester this fall.

“Seeing students learn and enter into higher levels of understanding is the best part of teaching,” says McNair, who will also continue serving as a coach with Windy City Diving. “It’s what I most enjoy, whether the subject is science, diving, or life lessons.”

PHOTOS: MICHAEL GOSS

newsbriefs



# Diving Headfirst Into the Future

# Greatness Out of the Court That Daddy Built

As a former South Carolina Gatorade Player of the Year, a WNBA player with the Indiana Fever, and starter on C. Vivian Stringer's inaugural Scarlet Knights women's basketball team at Rutgers University, Usha Gilmore has executed plenty of jumps. Her biggest one, however, might be the career leap she made this past winter to Illinois Tech athletics, accepting her first women's b-ball head coaching position.

"I've been an assistant coach for 11 years; I'm ready to be head coach," says Gilmore, who came to IIT from the University of Illinois by way of Niagara University, Southern Polytechnic State University, Davidson College, Longwood University, Southern Illinois University, and Wagner College. "This is an opportunity to redo history; the women's program has been gone for a while and now we're bringing it back. This will be the first team of many."

Gilmore intends for the quality of her basketball program to match the quality of IIT's academic one, with an added bonus: Players will be taught how to recognize lessons available from the school of life.

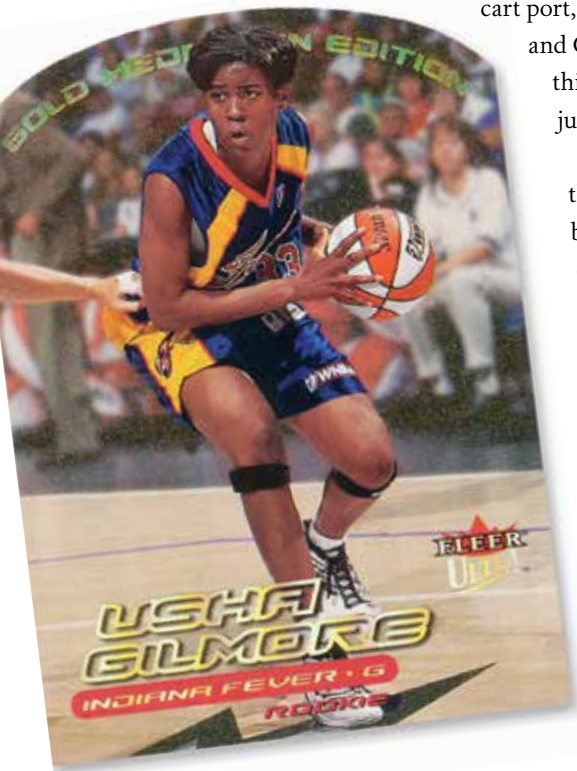
"I want to mold these young ladies into successful human beings, because that is what I had under Coach Stringer and her assistant coach, Jolette Law, who taught our team to straighten up and fly right," Gilmore explains. "Parents are letting their kids come to IIT for four years. I see myself becoming somewhat of a parent and taking on that responsibility. I think this will factor into the success of the basketball program."

Gilmore has her own parents to thank for fostering her athletic gift early on and giving it ample room to grow. Her father built a court behind the family home in the small town of Moncks Corner, S.C., that was a hoops hangout for Gilmore, her brothers, and the neighborhood regulars—Button, Don, and Booby—who all taught Gilmore the gist of the game. That modest but mighty slab is where Stringer went to recruit Gilmore to Rutgers.

"Daddy had the light on the court and we were getting it done with the guys in the neighborhood," recalls Gilmore, pulling a photo of the court, now a boat/golf cart port, from a tote bag. "We were out until about four in the morning and Coach Stringer wondered why we weren't in bed. I told her that this is what we do. We play until we get tired, and we weren't tired just yet."

Though Gilmore plans to work her players hard in preparation for their debut home game against Clark University on October 26, she will be in step right next to them, expecting the same amount of commitment and dedication from herself. With her easy smile and reputation for having been the team comedienne at Rutgers, Gilmore knows that all work and no play won't make for a slam dunk.

"We're really excited for Usha. She's always been a person who has loved the game," says Stringer, Rutgers head coach and Naismith Memorial Basketball Hall of Famer. "She was an outstanding player at Rutgers University on a team that went to the Final Four and was later drafted into the pros. Usha is definitely a people person and someone everyone enjoys being around. The players will thoroughly enjoy playing for her. She has a way of making everything fun."



## MORE ONLINE

Scarlet Hawks Women's Basketball: [www.illinoistechathletics.com/sport/0/6.php](http://www.illinoistechathletics.com/sport/0/6.php)

C. Vivian Stringer: [www.scarletknights.com/basketball-women/coaches/stringer.asp](http://www.scarletknights.com/basketball-women/coaches/stringer.asp)



by MARCIA FAYE

PHOTO: MICHAEL GOSS





**A**ll of these terms could be used to describe Taylor Harvey (SOC 4th year). Confident, curious, and creative, Harvey, and his team at MonkeyBars—a tech events startup he co-founded—coordinated IIT’s first-ever Hackathon in 2012. Harvey brought the 24-hour tech competition to IIT to help foster a sense of community and nurture tomorrow’s Web developers and designers. More than 100 participants attended the 2013 Hackathon, which was held in February at IIT’s Idea Shop.

While the university’s new fundraising endeavor—*Fueling Innovation: The Campaign for IIT*—comprises six priority areas, at its core are students such as Harvey, faculty such as cancer researcher Jialing Xiang [page 18], and alumni such as prosthetics designer Michael Morley (BME '08) [page 16]. The history of IIT is inextricably linked to innovation and IIT is where the next generation of innovators is making history. For Harvey, it is also making something more.

“The concept of making my own life has the strongest appeal for me. ‘Fueling innovation’ requires that one be a student first,” Harvey explains. “I value the learning and experience process. I like the idea of owning my achievements as well as my failures, and having the freedom to express myself, impacting the world around me.”

**Visionaries.**  
**Change Makers.**  
**Innovators.**

# “A Portal to the Future”

## The Next Generation of Chicago-Style Innovation Is Coming to Illinois Tech

By Chelsea Kalberloh Jackson

In July 2012, Chicago Mayor Rahm Emanuel joined IIT President John Anderson in S. R. Crown Hall on the university's Main Campus to announce IIT's plans to construct, in the words of Anderson, “a portal to the future.” The first new academic building to be constructed on Main Campus in 40 years, it comes with an ambitious set of goals, including showcasing IIT's distinctive education and nurturing the next generation of innovators and entrepreneurs.

*IIT Magazine* looks at the potential of this exciting new initiative.

### Hub for Creativity

“It will be more than an academic building,” according to Anderson. “An important role of the facility will be to connect like-minded innovators, creative thinkers, and entrepreneurs in the IIT community to the best and the brightest talent in the city of Chicago. With its flexible and interactive workspaces, it will be the place where ideas are put forward that shake up the status quo and fundamentally change the way we live.”

### Distinctive Education

IIT Institute of Design will have a strong presence in the facility—and the incorporation of its signature approach to design thinking will enhance the university's distinctive undergraduate educational programs: the Interprofessional Projects (IPRO) Program, Idea Shop, Self Leadership Academy, and Entrepreneurship Academy.

### Tool Box

Technology will play a major role in the creation and development of innovative projects. Computer labs and media stations will support the development of mobile apps, digital videos, interactive games, 3-D models, animation, and eBooks. A materials workshop and lab that include fabrication and rapid-

prototyping equipment will facilitate the production of models in wood, metal, acrylics, and wax—and, in the electrical workshop, students can create circuitry and electronic components.

### The Mix

With spaces dedicated to interdisciplinary work, “faculty, students, alumni, and entrepreneurs will gather together for the singular purpose of transitioning new ideas into processes and product designs that improve the quality of life,” Anderson says. “And what happens here will serve as a bridge between IIT's classrooms and University Technology Park.”

### Going Beyond

The opportunities that will come from this new initiative will not be limited to IIT students. Plans are for high school and middle school students, many of them from Chicago who attend summer programs at IIT—including those enrolled in the Exelon Summer Institute, Boeing Scholars Academy, Design Build Workshops, the Computer Discovery Camp for Middle School Girls, and the Academy for Future Leaders in Science and Technology—to have access to the space. These programs are preparing bright young men and women for study and professions in STEM fields, and also help show off IIT to prospective students.

### An Investment in Chicago

The initiative is “essential to the city's bottom line, which is making sure that everybody has a chance at a bright future,” Emanuel said at the announcement event. According to Emanuel, initiatives such as this new facility will help position Chicago to be the “digital startup city of the Midwest” and “ensure that tech employers and entrepreneurs have a steady workforce.”

### A Building Unlike Any Other

Considering IIT's renowned architecture legacy, the design of the building will likely draw significant attention. IIT is committed to ensuring that the center is architecturally distinctive in the tradition of bold structures for which the university and Chicago are well known. ■

*Chicago Mayor Rahm Emanuel high-fives an IIT student at last summer's press conference announcing the university's proposed innovation facility.*



by MARCIA FAYE

# ReVITALization:

## Academic Buildings for the Future



The construction pit is being readied for the Engineering 1 building in 1966. To the west is Main Building with IIT Tower ahead to the south. Source: IIT Archives (Chicago)

Two buildings at the north end of IIT Main Campus bounded by 31st Street—Life Sciences and Engineering 1—have served students and faculty for nearly a half-century. Through the *Fueling Innovation: The Campaign for IIT* priority to “Revitalize Core Campus Buildings,” LS and E1 are being prepped to strengthen science and engineering education for many more decades.

“The mantra is ‘students first,’” says Russell Betts,

professor and dean of IIT College of Science, about the renovation of the Life Sciences building on Main Campus. “Everything we’re going to do—beautifying the building, bringing the classrooms and labs into the twenty-first century, and creating new collaborative space—will improve the educational experience of our science majors.”

The renovation of the Life Sciences and Engineering 1 buildings comprises one of the six priorities of *Fueling Innovation: The Campaign for IIT*, the university’s six-year fundraising effort. Once the renovations are completed, Life Sciences will be renamed as the Robert A. Pritzker Research Center and E1 as the John T. Rettaliata Engineering Center in a ribbon-cutting ceremony.

COL (IL) J. N. Pritzker, IL ARNG (Retired) made a \$3 million gift through the Tawani Foundation for the Robert A. Pritzker Research Center. Colonel Pritzker’s gift was made in honor of his father, Robert A. Pritzker. The gift includes a \$2.5 million match challenge, which will inspire other donors to give to the project. To date, IIT has raised \$925,000 from other donors toward the match challenge. The initial renovation phase, which began design this spring, focuses on upgrading building systems (mechanical, HVAC, and security, among others), exterior painting, and renovations of the first floor.

LCM Architects is planning a west lobby atrium entrance for the Robert A. Pritzker Research Center that will help to showcase science as well as provide an inviting space for students to gather and collaborate. Additional priorities of the first phase of renovation include creating more-expansive classroom environments and a customized Advanced Physics and Instrumentation Laboratory. Improving this building will serve to strengthen science at IIT with the goal of growing science enrollments by 50 percent over the next five years.

In honor of her late husband John T. Rettaliata, IIT’s president from 1952–1973, Caryl Pucci Rettaliata has donated \$10 million toward the John T. Rettaliata Engineering Center and \$2 million to endow the John T. Rettaliata Distinguished Professorship of Mechanical and Aerospace Engineering, held by Hassan Nagib (MAE ’68, M.S. ’69, Ph.D. ’72).

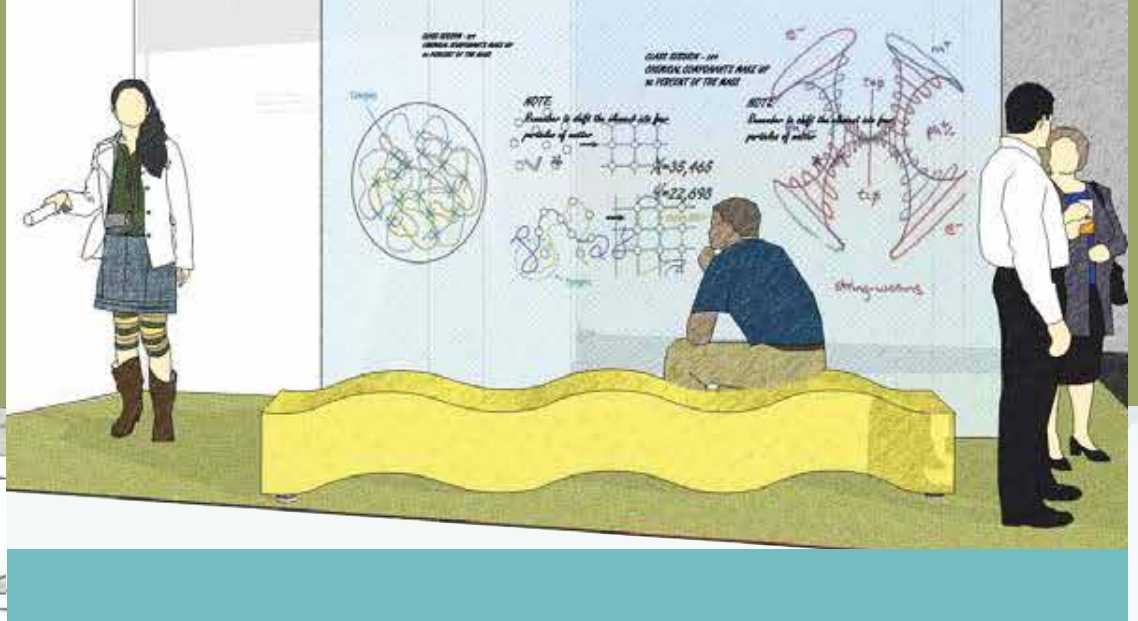
“Architect Dirk Lohan is developing a conceptual master plan for the building,” says Bruce Watts, IIT vice president for facilities and public safety. “Dirk has a deep understanding of IIT’s mission and its campus. His lead designer, David Fleener, studied at IIT and worked with Myron Goldsmith, who was the building’s original designer. Goldsmith was a student and employee of [Ludwig] Mies van der Rohe.”

A new lobby space is being planned for the south entrance to the building along with an improved north entrance, whose focal point will be an undergraduate teaching and research center.



[Left] Students and visitors alike will enjoy the spacious lobby of the John T. Rettaliata Engineering Center.

[Right] One option for a collaboration space in the Robert A. Pritzker Research Center. Rendering: LCM Architects



"The center will help to further encourage the interdisciplinary collaborations that are essential in providing students with the distinctive and relevant education that is part of the IIT mission," says Natacha DePaola, Carol and Ed Kaplan Armour College Dean of Engineering Chair.

"Our building will be flexible enough to accommodate our students well into the future and provide them with a stimulating environment for nurturing their growth as scientists and leaders." ■

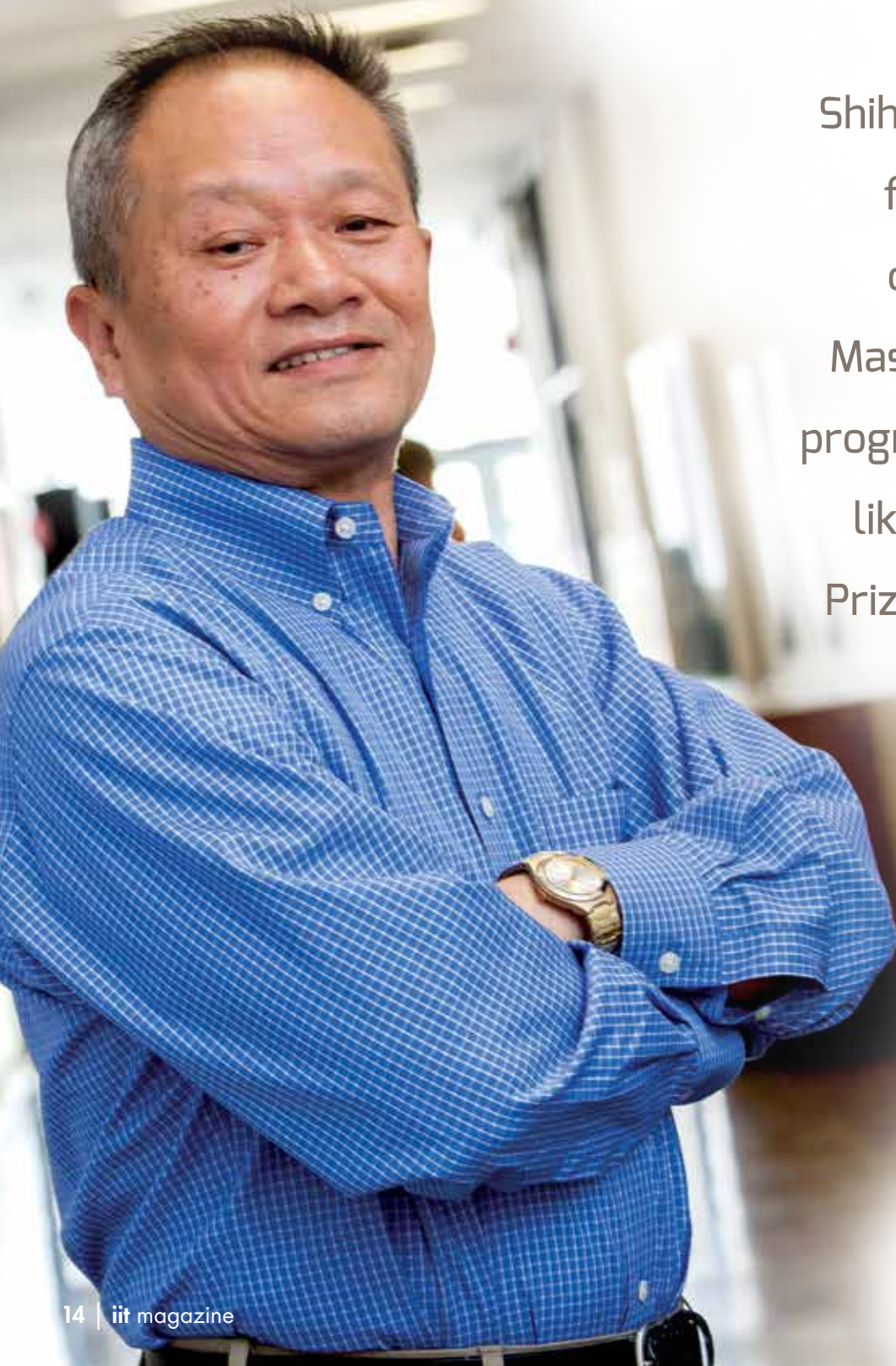
For more information about these projects, funding, and naming opportunities, please contact the Office of Institutional Advancement at 312.567.5000.

[Above] The Robert A. Pritzker Research Center will provide students with ample room in which to gather or relax. Rendering: LCM Architects

MORE  ONLINE

Fueling Innovation: The Campaign for IIT: [fuelinginovation.iit.edu](http://fuelinginovation.iit.edu)

# Vanguards



Shih-Yew “S. Y.” Chen, the first full-time director of the IIT Professional Master of Health Physics program, says that he will likely never win a Nobel Prize. But that realization is fine with him. Chen is content with a more intrinsic type of reward.



# of Advanced Technology

“I’m firmly committed to the health and safety of people,” says Chen, who knew he wanted to work in radiation protection soon after obtaining his Ph.D. in nuclear engineering from the University of Illinois at Urbana-Champaign. “I have peace of mind knowing I’ve helped those who have come to me for advice.”

The field of health physics focuses on how to best manage the beneficial use of ionizing radiation—emitted by instruments ranging from a CAT scan to a nuclear reactor—while protecting employees and the public from its potential hazards.

“As more and more advancements in science and engineering benefit us, we can’t take for granted that, inherently, they are all safe. Who is there to tell you what is safe?” poses Chen. “Members of our profession are the vanguards of advanced technology today. Our important role is safeguarding the usage of these advancements. Deleterious effects take time before they show themselves.”

Being a credible source of information for the public as well as for business is another important role of the health physicist. When the plume from the 2011 Fukushima Daiichi nuclear disaster swept over California, a pregnant woman sought the advice of one of Chen’s colleagues as to whether or not to abort her baby because of potential radiation risks. Locally, two Chicago news syndicates came to Chen to help quell fears about levels of iodine 131 detected in the Midwest as a result of the plume.

Christopher White, professor and chair of the Department of Physics, says that Chen possesses the



PHOTO: THE ASAHI SHIMBUN VIA GETTY IMAGES

*Triggered by a 9.0 earthquake, a tsunami disabled Japan’s Fukushima Daiichi nuclear power station, causing significant power losses and a release of radioactive materials. It was the worst nuclear accident since the Chernobyl [Ukraine] nuclear power station explosion in 1986.*

qualities of the ideal candidate—an experienced health physicist with strategic vision and entrepreneurial tendencies who could be an effective teacher and mentor.

Recently named a Health Physics Society fellow, Chen is busy living up to those claims. He has been connecting with industry leaders to determine how the program could best serve their needs and laying the groundwork to elevate the program to national status. ■

MORE  ONLINE

IIT Professional Master of Health Physics program: [www.iit.edu/csl/programs/professional\\_masters/ms\\_health\\_phy.shtml](http://www.iit.edu/csl/programs/professional_masters/ms_health_phy.shtml)

Health Physics Society: [www.hps.org](http://www.hps.org)

# Work-Centric Prosthetics

**"To say that he's passionate about his prosthetics projects is a real understatement; I just stand back and try to get out of the way," says Kevin Meade (MAE '74, M.S. AMAT '78), professor of mechanical engineering at IIT Armour College of Engineering, about former student Michael Morley (BME '08). "It's been a learning experience for me."**

**T**hat's no small statement coming from the faculty member who was at the forefront of orthotics and prosthetics education in Colombia. Meade also taught the Interprofessional Projects (IPRO) Program course—Orthotics and Prosthetics Education for Latin America and the United States—that fueled Morley's desire to design affordable and simple but well-engineered prosthetics. Morley's experiences in Colombia provided focus for his career shift from medicine to biomedical engineering.

"I became really excited about the future of medicine—the different technologies coming out for stem cell engineering, biomechanics, robotics, prosthetics, and microchip diagnostics," says the high-energy Morley, a senior engineer with EPIR Technologies, Inc., over lunch at a Bolingbrook, Ill., restaurant. He recalls his "aha! moment," which occurred while working at a prosthetics clinic in Bogotá as an international Whitaker Fellow. "I didn't want to be someone implementing the latest technologies; I wanted to be someone who was developing them," he explains.

Born into a British family largely employed in construction management, Morley had observed various types of occupational injuries during his childhood. So, in 2009, when he met carpenter Helcias Rubio in Colombia who had severed all four fingers of his right hand with a band saw and had been on welfare for more than two years, Morley felt as though he were standing on familiar ground.

"The insight Michael had was to make a prosthetic tool that is adapted in such a way that makes it easier for the patient to use carpenter's tools; it's not a tool to attach to the end of a prosthetic limb," explains Meade about the non-jointed, simple device, which was featured in the March 2013 issue of *Popular Mechanics*. "The bottom line is that the patient was able to return to work as a carpenter—quite a significant accomplishment."

Besides providing Morley with great personal satisfaction, his successful and low-cost design earned him a perfect score on his master's thesis at Colombia's Universidad de los Andes. It also sparked a subsequent project: the creation of IPRO 350—ProSolutions: Prosthetic Solutions for the Working World, which he and Meade co-taught.

After developing the design for the hand tool, Morley wanted to see what vision his students had for further developing his concept of affordable, uncomplicated, back-to-work prosthetics.

"The class came up with new designs and the concept of self-moldable fitting as a means of improving accessibility," says Morley. "The second semester, they set up the nonprofit company PALS at Work™, applied for different grants, and won a national contest in Colombia. During the third semester, they built more product awareness by working the social media aspect and exploring crowd funding. This fall's agenda will be focused on performing clinical trials, registering the finalized device with the FDA, and focusing on small-scale production."

The course won the IIT Stuart School of Business Dean's Choice Award at the Spring 2013 IPRO Day held on April 26. Morley will continue to remain active in PALS as a

board member but has already become involved in new endeavors. In June, he taught a ProSolutions course at the

Universidad de los Andes that is much like IPRO 350. In July, Morley and fellow members of the International Space Station (ISS)





PHOTO: MICHAEL MORLEY

Utilization Committee will meet in Denver to help select ISS research priorities and projects.

After flying back to Illinois in August to be best man at the wedding of his best friend, Ray Ballard (CHE '10), Morley will begin studies at Stanford Graduate School of Business to focus on technology innovation. He will continue with EPIR as a consultant and carve out some time for salsa dancing—another talent he developed in Colombia.

Morley barely pauses to take the last bites of his salad as he describes other projects—his role in securing EPIR's place in a technological food safety consortium with IIT Institute for Food Safety and Health, and the proposals he is writing with Matthew Spenko, assistant professor of mechanical engineering, on utilizing flying robots in military and industrial applications. While Morley is

constantly seeking ways to build partnerships among all of his constituencies, he will remain true to the roots of his prosthetics passion.

“By minimizing the complexity of prosthetics, which I see as being a very [Ludwig] Mies van der Rohe ‘less is more’ philosophy,” says Morley, acknowledging the master planner of IIT Main Campus, “we can have very strong and simple aids for a few dollars that get people back to work.” ■

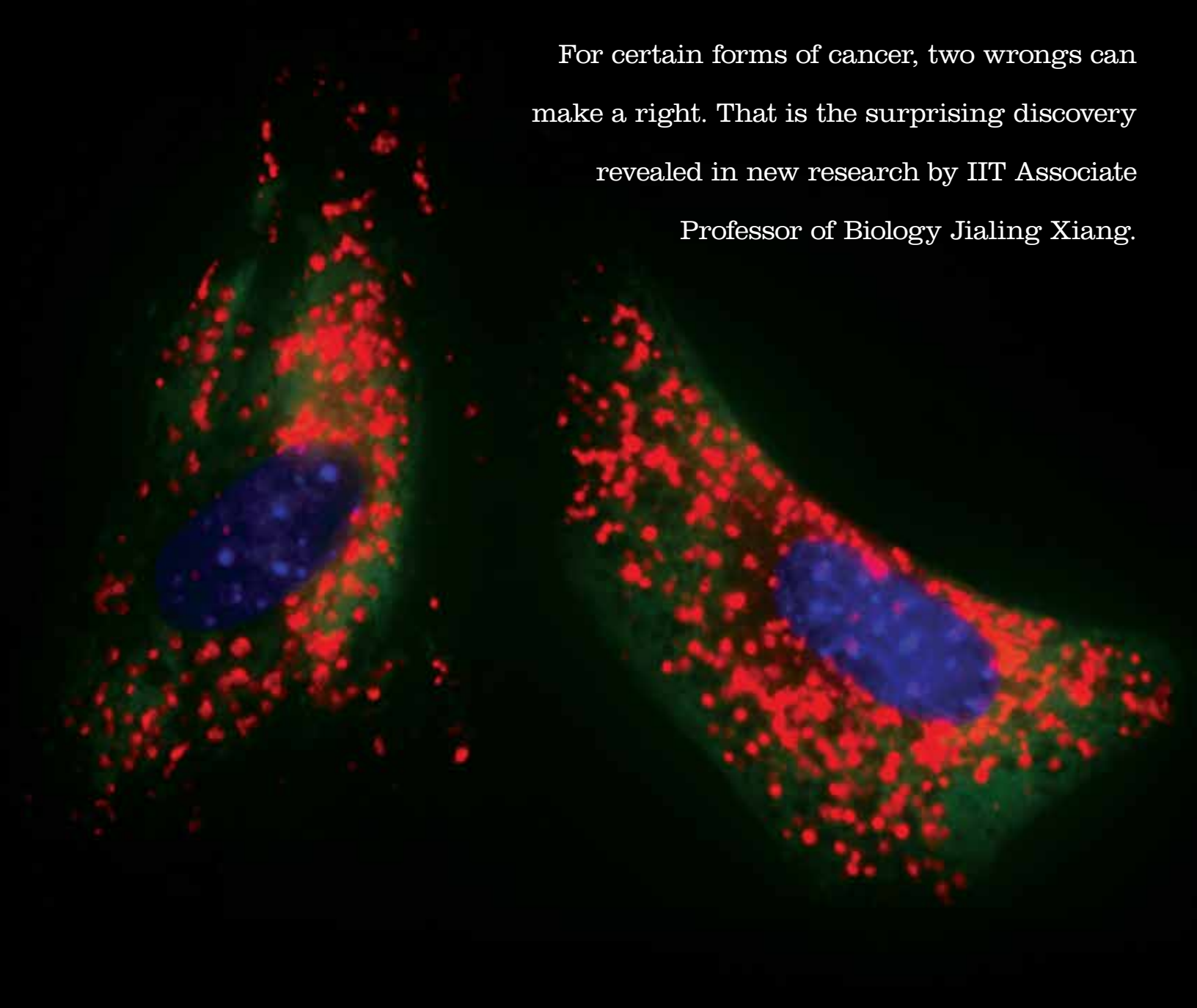
## MORE ONLINE

**PALS at Work Crowd-Funding:** [www.indiegogo.com/projects/pals-at-work](http://www.indiegogo.com/projects/pals-at-work)

**“Hand Prosthesis Empowers Carpenter to Reclaim Career”:** [www.popularmechanics.co.za/multimedia/videos/hand-prosthesis-empowers-carpenter-to-reclaim-career](http://www.popularmechanics.co.za/multimedia/videos/hand-prosthesis-empowers-carpenter-to-reclaim-career)

# Cancer as Cure

For certain forms of cancer, two wrongs can make a right. That is the surprising discovery revealed in new research by IIT Associate Professor of Biology Jialing Xiang.



by RICHARD HARTH

# X

iang's latest investigations deal with the biological mechanisms designed to prevent the growth of tumor cells. One of the most important weapons in the body's cancer-fighting arsenal is a specialized tumor

suppressor gene known as Bax, which codes for an anti-cancer protein.

"Tumor suppressors like Bax are the cells' police force," Xiang says. When abnormal cells appear, the Bax protein attacks their power source, the mitochondria, terminating the diseased cells. This process of programmed cell death is known as apoptosis.

If something goes awry with the Bax gene, however, the suppressor's tumor-fighting abilities are disabled. It has long been assumed that cancer patients who have a mutated Bax tumor protein due to a faulty Bax gene have a poor disease prognosis. But Xiang's research suggests the picture is more complex.

As Xiang explains, there are two common processes that can disrupt the Bax gene, rendering its protective capability null and void. The first is a mutation in a specific coding region of the gene known as a microsatellite. Such regions carry multiple repeats of one of DNA's four nucleotides—A, T, C, or G.

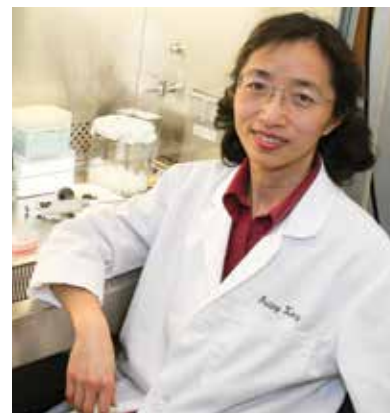
The multiple repeats found in microsatellite regions can sometimes confuse the gene production system that first transcribes the DNA sequence into RNA and then translates it into Bax protein. For example, eight Gs might mistakenly get transcribed as seven Gs—or perhaps nine. If these mistakes are not repaired in time, it will lead to a silencing of

Bax expression, leaving the body vulnerable to tumor growth.

The second threat to Bax comes from a process known as alternative splicing. Before translation into a protein, the non-coding portions (or introns) of the Bax RNA are snipped out and the coding regions (or exons) are stitched together. Mistakes can happen with this stitching process, such that part of the exon is cut out as well, disrupting the Bax gene's "reading frame," which usually disables Bax gene expression.

But Xiang has discovered that something remarkable happens when both of these mistakes occur in tumor cells. When this happens, an alternate form of Bax known as Bax D2 can be created. This hybrid tumor suppressor gene appears to be even more potent than original Bax. The cancer cells with Bax D2 are selectively sensitive to certain chemotherapy drugs. Furthermore, Bax D2 only exists in tumor cells, not normal cells. The discovery has important implications for the selection of appropriate chemotherapy drugs and may serve as a new tumor marker, conferring improved prognosis and leading to targeted, less-toxic therapeutic approaches.

Xiang stresses that such basic research lays the critical groundwork necessary for clinical advances. "We spend so much time trying to kill cancerous cells," she says. "We should spend a little more time understanding them and help cells find alternate means of repair." ■



## MORE ONLINE

Jialing Xiang homepage: [www.iit.edu/csl/bio/faculty/xiang\\_jialing.shtml](http://www.iit.edu/csl/bio/faculty/xiang_jialing.shtml)

Xiang's abstract in the *Journal of Biological Chemistry*: [www.jbc.org/content/287/41/34722.abstract](http://www.jbc.org/content/287/41/34722.abstract)

Video about apoptosis: [www.youtube.com/watch?v=8V5g0eJy4dQ](http://www.youtube.com/watch?v=8V5g0eJy4dQ)

by MARCIA FAYE

With the spring semester just ended, S. R. Crown Hall is uncharacteristically quiet as Wiel Arets—architect, urbanist, and the new Rowe Family College of Architecture Dean Endowed Chair—suggests we pull up two whimsical yet sturdy chairs that his students exhibited at the college’s spring Open House. Wearing a tailored sports jacket and an expression that alters between intense and contemplative, Arets discusses a term some may consider to be as curious as the chairs: *nowness*.

# The Newness of Nowness

A Conversation with Wiel Arets,  
Dean of IIT College of Architecture

“Nowness is our approach at the college because I believe we have to start again every single day,” says Arets. “Nowness is the moment we are living in, but our eyes constantly see new things. Every day the city of Chicago and IIT starts anew.”

The timeless concept of *nowness* is the bedrock for “Rethinking Metropolis,” Arets’s strategy behind the college’s new curriculum.

He says this metropolis encompasses more than the big city and can represent at times suburbia, the world as a whole, or even a new city type; students learn to examine daily life in all its aspects and the role of the architect in shaping the metropolis of tomorrow. Arets believes the word “metropolis” will eventually need to be redefined as society changes its perception of the city.

“Wiel Arets will bring to IIT College of Architecture the necessity of widening discourse,” says Phyllis Lambert (M.S. ARCH '63), founding director and chair of the Board of Trustees of the Canadian Centre for Architecture. “A man of conviction, he will establish a very much needed direction, not of form but that of an open society honed by research, debate, confrontation, innovation, scale, imagination, and a commitment to doing well by this.” Lambert is uniquely qualified to assess Arets’s qualifications. In 1954 she tapped Ludwig Mies van der Rohe to design New York’s Seagram Building, in collaboration with Philip Johnson.

The innovative “horizontal studio” concept of the new curriculum emphasizes history, theory, and research as related to understanding and planning for the metropolis, in addition to giving first-year through graduate-level students the chance to collaborate on design projects using Chicago as a project test ground. Arets says that Lake Michigan and the Loop’s glass office-building corridors provide inspiration to think sustainably, while all of Chicago can be viewed as a living, flexible, and intelligent organism helping students to explore broader issues while focusing on their community. Acknowledging Mies’ legacy at IIT, Arets says the university will continue to make innovative strides.

“Technology, for which this university is known, will always be the most important factor for progress in architecture,” he explains. “Through my deanship, I hope I can contribute to how technology will develop in the next 10 years and how we could incorporate that into student projects and research.”

“Wiel Arets’s high level of energy to implement far-reaching modifications to the architectural education at IIT is impressive,” says Dirk Lohan, principal of Lohan Anderson and grandson of Mies. “It seems to me that it is quite appropriate, 50 years after Mies left and the world changed, to reassess the methodology and focus on the college’s education.”

Space technology—the first manned lunar landing in 1969—inspired the Netherlands-born Arets to study physics, but he changed his major to architecture after reading an influential book his grandfather gave him on the history of the Dutch house. Shortly after completing his architecture education at Eindhoven University of Technology, Arets founded Wiel Arets Architects with studios in Amsterdam, Berlin, Maastricht (The Netherlands), and Zürich. Early in his career, Arets was honored with the Mies van der Rohe Award for Emerging Architect and most recently, his firm received the 2013 AIT Innovation Award for Architecture and Technology for Allianz Headquarters, an office building in Zürich.

Former dean of the Berlage Institute in Rotterdam and president of the jury of the 2012 Venice Biennale of Architecture, an international contemporary exhibition held every two years in Italy, Arets is excited by IIT’s diversity. He says that while many architecture graduates will remain in Chicago, others will return to their native countries to begin their careers. Arets is hopeful they will take with them a simple image—a dot—representing the metropolis and the many contributions they can make to society from one moment to the next. ■

## MORE ONLINE

**Wiel Arets Architects:** [www.wielaretsarchitects.com](http://www.wielaretsarchitects.com)

**Wiel Arets: Autobiographical References:** [www.wielaretsarchitects.com/en/media/publications/wiel\\_aret\\_autobiographical\\_references81.asp?sessionId=1](http://www.wielaretsarchitects.com/en/media/publications/wiel_aret_autobiographical_references81.asp?sessionId=1)



PHOTO: JOHNN BOEHM

# COOL STORAGE:



NEW  
WAYS  
TO STOCKPILE  
ENERGY

*This schematic is of a 3-D supercapacitor utilizing graphene sheets studded with nano-oxide islands.*



According to Leon Shaw, the Rowe Family Endowed Chair in Sustainable Energy at IIT, innovations at the submicroscopic level may help to satisfy society's mountain-sized demands for energy. Rather than hunting for new sources of energy, Shaw focuses on an equally vexing challenge: energy storage.

In a pair of new projects funded by the National Science Foundation, Shaw applies nanotechnology techniques to store energy in two ways: through electrical charge in a device known as a supercapacitor, and chemically as hydrogen.

Hydrogen provides a versatile, clean, and safe energy source, free of harmful emissions. "One of the key issues is how we can store hydrogen in a compact manner as the energy source for fuel cells and use this green technology to compete with an internal combustion engine," Shaw says, describing one of the hurdles on the path to a hydrogen economy.

One way to achieve this is to dissolve hydrogen molecules on the surface of a specialized material—ideally, one with a very high surface area. Shaw's approach involves mixing two lightweight materials—lithium borohydride and magnesium hydride—at nanometer scale. "The [scientific] community has been thinking of mixing these two together for the last 10 years, but nobody could achieve it," Shaw says.

Once lithium borohydride and magnesium hydride nanoparticles are combined, the available surface area for hydrogen storage becomes enormous and the release and uptake of hydrogen can occur very rapidly, at a temperature near 150 degrees Celsius (302 degrees Fahrenheit), which Shaw considers nearly ideal.

The released hydrogen from the nanoscale lithium borohydride and magnesium hydride mixture supplies useable energy to the fuel cell during driving. At a refueling station, hydrogen could be pumped back into the storage tank, returning the chemicals inside to the nanoscale lithium borohydride and magnesium hydride mixture. After rapid hydrogen refueling, the car is ready to drive for another 300 miles.

Storing large amounts of energy in a limited volume is also a central concern for electric vehicles, which have already entered the market ahead of their hydrogen-fueled competitors. While lithium-ion batteries, such as those used in the Nissan Leaf, have high energy densities (the amount of energy stored in a given system per unit volume), they require recharging for several hours after a drive of approximately 100 miles.

An alternative is the supercapacitor, which can recharge quickly from a matter of seconds to a few minutes. Most supercapacitors, however, are too low in energy density to be practical for vehicles. Shaw's version uses graphene studded with nano-oxide islands having exceptional surface area. The new design integrates lithium ions onto the nano-oxide surface (with the graphene serving as the electronic conductor) and alters the electrode configuration, forming a 3-D supercapacitor with very high energy density. Shaw's group has recently patented the technology.

"Once the supercapacitor becomes equivalent to the lithium-ion battery in energy density, you can drive for 100 miles and your charge time is reduced to five minutes," Shaw says. "Then the whole thing suddenly becomes very practical." ■

"One of the key issues is how we can store hydrogen in a compact manner as the energy source for fuel cells."

## MORE ONLINE

Leon Shaw homepage: <http://profshawgroup.webs.com>

Hydrogen and fuel cells: [www.renewableenergyworld.com/rea/tech/hydrogen](http://www.renewableenergyworld.com/rea/tech/hydrogen)

Supercapacitors: [www.energyharvestingjournal.com/articles/supercapacitors-improving-faster-than-batteries-00005281.asp?sessionid=1](http://www.energyharvestingjournal.com/articles/supercapacitors-improving-faster-than-batteries-00005281.asp?sessionid=1)

## IIT Clinical Assistant Professor of Law

Ana Mendez Mencini (LAW '01) says

her students learn early on how high

the stakes can be for their clients.

**S**uch was the firsthand experience of one IIT Chicago-Kent College

of Law student who worked with Mencini on an asylum case involving a human-rights activist from Africa. The activist had been the victim of a brutal sexual assault in her country because of her work on behalf of women and children there. When the client jeopardized her request for asylum in the United States after missing a filing deadline, Mencini and the student argued that the client's post-traumatic stress syndrome prevented her from meeting the deadline.

"Not only did we win on overcoming the one-year filing deadline," Mencini says, "we also won asylum for the client, who is slated to become a U.S. resident later this year."

That case was just one of many that allows students to work alongside Mencini on real immigration cases at Chicago-Kent's Immigration Clinic, which Mencini directs. Her clients may need help securing visas, going through the naturalization process, or dealing with more-urgent matters, such as asylum requests.

As part of the Law Offices of Chicago-Kent, the Immigration Clinic operates on a fee-based system, which teaches students how to help clients while also running a successful business.

Mencini says entrepreneurship can be a challenge for some immigration attorneys, who typically work with underserved immigrants with limited resources. She says, "You are sort of balancing your desire to help the immigrant community along with the fact that you have to put food on your own table as well."

Mencini emphasizes that the Immigration Clinic is an actual working law office, where students get real-life experience meeting with clients, attending court sessions and hearings, and following cases from start to finish.

Her students must learn to juggle several cases in various stages as they would in their own practice. "At some pro bono clinics, they can spend an entire semester on an asylum case," she says. "Whereas an asylum case here is just one of the 200 open files I have at any given time."

If major national immigration-reform legislation does get passed, Mencini says the need for competent immigration attorneys will further increase.

"Really seasoned immigration lawyers are few and far between," she says. Mencini fears a rush of inexperienced lawyers hoping to cash in on immigration reform could be disastrous for those needing assistance.

"You can't unring the bell on immigration," she says. "I've had clients come in who were given the wrong advice and it has literally cost them the ability to get an immigration benefit in the U.S."

Mencini's connection to her own heritage drives her work in helping immigrant communities. Her father was an immigrant from Colombia who became a naturalized citizen, and she still vividly recalls some of her earliest work as an immigration lawyer helping other Colombians persecuted by terrorist FARC rebels seek asylum in the United States. She says the experience was humbling and she was grateful to be able to give back to the Colombian community.

She says, "I love being an American and helping others become an American." ■

---

MORE  ONLINE

Immigration Clinic, Chicago-Kent Law Offices:

[www.kentlaw.iit.edu/seeking-legal-help/client-legal-services/immigration-law](http://www.kentlaw.iit.edu/seeking-legal-help/client-legal-services/immigration-law)

# An Advocate for Immigrant Communities

by DAVID CHONG



PHOTO: BONNIE ROBINSON

## 2013 Alumni Awards Winners

### Alumni Medal

**Martin C. Jischke** (PHYS '63)

### Galvin Award

**John W. Rowe**

### Collens Merit Award

**Burton A. Lewis** (CE '48)

### Alumni Service Award

**Victor A. Morgenstern** (CHE '64)

### International Award of Merit

**Parth D. Amin** (BA '85)

### Outstanding Young Alumnus Award

**Hazem J. Dawani** (CPE '01)

### Lifetime Achievement Award

**Robert A. Pritzker** (IE '46)

### Professional Achievement Award

**Robert H. Bragg** (PHYS '49, M.S. '51, Ph.D. '60)

**Frederica Darema** (M.S. PHYS '72)

**Jack J. Dongarra** (M.S. CS '73)

**Mary A. Melchor** (LAW '92)

# ALUMNI AWARDS 2013

ILLINOIS INSTITUTE OF TECHNOLOGY

## Awards Honor Alumni Leaders and Visionaries

On April 19, members of the IIT family gathered at the annual Alumni Awards ceremony to celebrate a tradition of recognizing alumni and friends who are innovators and leaders in business and the community.



IIT Trustee and Fueling Innovation: The Campaign for IIT Co-Chair Alan "Bud" Wendorf (ME '71) [left] and IIT Trustee Edward Kaplan (ME '65) [center] congratulate IIT Trustee and Alumni Service Award winner Victor A. Morgenstern (CHE '64).



Members of Delta Tau Delta fraternity share a photo moment with IIT Trustee Martin C. Jischke (PHYS '63). Jischke was presented with the Alumni Medal, the highest honor bestowed by the university on a living IIT alumnus.

PHOTOS: MICHAEL GOSS



Mayari Pritzker (Ph.D. PSYC '01), who accepted the Lifetime Achievement Award in honor of her late husband, Robert A. Pritzker (IE '46), joins John W. and Jeanne Rowe at the Alumni Awards. John Rowe, IIT Board of Trustees Chairman and University Regent, was recognized with the Galvin Award for his significant impact on the university.



The 2013 Alumni Awards recipients gather with IIT Alumni Association and university representatives: [left to right] IIT Board of Trustees Chairman and University Regent John W. Rowe; IIT Alumni Association President and Trustee Adrian R. Nemcek (EE '70); Mayari S. Pritzker (Ph.D. PSYC '01); IIT Trustee Martin C. Jischke (PHYS '63); IIT President John Anderson; Burton A. Lewis (CE '48); IIT Trustee Victor A. Morgenstern (CHE '64); Mary A. Melchor (LAW '92); Jack J. Dongarra (M.S. CS '73); Frederica Darema (M.S. PHYS '72); Hazem J. Dawani (CPE '01); and [seated] Robert H. Bragg (PHYS '49, M.S. '51, Ph.D. '60).

# Why a Bequest to IIT May Be Right for You



*“My wife and I have reached a point where we have saved enough for a comfortable retirement, but because we’re still young there’s opportunity for our estate to grow. We wanted to support organizations we believe in, and we believe in an IIT education.”*

**JIM MCMAHON (MET '81)**

## BENEFITS OF A BEQUEST

- You want to help ensure IIT's future.
- You want to leave a legacy of giving back.
- You don't want to affect your current cash flow.
- You want your assets to remain in your control during your lifetime.
- You want to modify your gift to address changing circumstances.
- You want to direct your gift to a particular purpose (be sure to check with us to make sure your gift can be used as intended).

Inspired by his experience as a metallurgy student, **Jim McMahon** (MET '81) and his wife, Mary, decided to benefit future innovators by designating IIT as a charitable beneficiary in their estate plan. As a quality systems manager at Abbott Vascular as well as an instructor at University of Redlands in California, Jim understands how quality education contributes to stronger industries.

### Don't keep your gift a secret!

If you have named IIT as a beneficiary of your estate, please let us know so we may properly thank you and include you as a member of our esteemed Gunsaulus Society.

Visit [www.iit.edu/giftplanning](http://www.iit.edu/giftplanning) to begin learning how you can benefit from these giving methods and more. Contact Stuart Gold, director of gift planning, at 312.567.5020 or [giftplanning@iit.edu](mailto:giftplanning@iit.edu).

**Gunsaulus** | SOCIETY



Share Your News!

We want to hear from you! Send us your class note at [alumni@iit.edu](mailto:alumni@iit.edu).

# classnotes

## 1940s

**Burton Lewis** (CE '48) received the 2013 John F. Parmer Award from the Structural Engineers Association of Illinois for service to the profession. Lewis [center] is flanked by John F. Duntemann, SEAIO president-elect (left) and David Arditi, IIT professor of civil, architectural, and environmental engineering.



## 1950s

**Anthony Trozzolo** (CHEM '50), South Bend, Ind., Charles L. Huisiking Professor Emeritus of Chemistry at the University of Notre Dame, was given the 2012 University of Chicago Professional Achievement Award from the Alumni Board of Governors.

**James Dally** (Ph.D. MEC '58), Knoxville, Tenn., was awarded the 2012 American Society of Mechanical Engineers Daniel C. Drucker Medal. The medal was established in 1997 to recognize contributions in applied mechanics and

mechanical engineering through research, teaching, and service to the community over a period of time. Dally is professor emeritus at the University of Maryland A. James Clark School of Engineering.

## 1960s

**Kenneth Josephson** (M.S. DSGN '60), Chicago, known as one of the "ID 5," a group of photographers that comprised Josephson and classmates Joseph Jachna, Ray Metzker, Joseph Sterling, and Charles Swedlund—had a solo exhibition at New York's Gitterman Gallery in

2012. The images explored abstraction with light and the photographer's dialogue with nature. This was his second one-person exhibition at Gitterman Gallery, which has championed other ID photographers. Josephson has two upcoming exhibits in Chicago—on September 5 at Jennifer Norback Fine Art and on September 6 at the Stephen Daiter Gallery.

**Francis Kulacki** (ME '63, M.S. GE '66), Wayzata, Minn., is a professor in the Department of Mechanical Engineering at the University of Minnesota.

**Daniel Magasanik** (Ph.D. GT '63), Daylesford, Australia, is on the board of directors of Hepburn Wind, Australia's first community-owned wind farm. A founding director of Australia's Energy Research and Development Corporation, he is co-founder of McLennan Magasanik Associates, one of the country's leading consulting firms specializing in the energy industries, and continues to work part-time with the firm.

**Bhakta Rath** (Ph.D. MET '63), Washington, D.C., associate director of research for the Materials Science and Component Technology Directorate of the Naval Research Laboratory, received the first Royal International Award for Excellence. Instituted by the Royal Charitable Trust, the award recognizes persons of international reputation for outstanding contributions in science, engineering and technology, literature, art and culture, peace, social service, or economics.

**Donald Esmond** (BE '66), Corona del Mar, Calif., retired from his position as senior advisor to the president and chief executive officer of Toyota Motor Sales, U.S.A., Inc. Esmond assumed a variety of roles at Toyota during his 30-year career. He is on the Board of Overseers of IIT Stuart School of Business.

## 1970s

**Manu Vora** (M.S. CHE '70, Ph.D. '75), Naperville, Ill., was awarded the 2013 American Society for Quality Spencer Hutchens Jr. Medal for Social Responsibility on May 5 in Indianapolis. Vora received the medal for founding, funding, and leading the Blind Foundation for India, which serves the country's more than 15 million blind people. In April, through remote Web streaming, Vora presented "Power of Social Responsibility to Unite the World" at TedxIITBHU in Varanasi, India.

**Nicholas D. Kokonis** (Ph.D. PSYC '71), Deerfield, Ill., has written his second novel, *Out of Arcadia*, the sequel to *Arcadia, My Arcadia*. The book was launched in a panel format at the National Hellenic Museum of Chicago on October 16, 2012, with LaNisa Frederick, an actress who has performed interpretive readings of several scenes. *Arcadia, My Arcadia* received several awards, including a Homer Prize, a Gold Medal from the International Society of Greek Writers, and a Special Prize from the Academy of Athens. The Greek Ministry of Education also approved the Greek edition of the book for the country's school libraries.

**Lester McKeever** (LAW '71), Chicago, principal at the Chicago-based accounting firm Washington, Pittman, & McKeever, LLC, was honored on January 16 when a street outside an apartment building he owned near 67th Street and Oglesby Avenue was renamed for him. McKeever is father of music industry executive Steve McKeever, the founder of Hidden Beach Recordings.

**Michael Lutch** (M.S. DSGN '74), Milton, Mass., served as a behind-the-scenes photographer for the Democratic National Committee's 2012 Convention held in Charlotte, N.C.



**Bernard Spira** (ARCH '58), New York, had his photographs featured in the show Street Shots/NYC at the South Street Seaport Museum.

**Martin Cooper**

(EE '50, M.S. '57), Del Mar, Calif., and his fellow mobile phone pioneers were awarded the National Academy of Engineering Charles Stark Draper Prize on February 19 at a ceremony in Washington, D.C. Cooper, an IIT Life Trustee, led the Motorola team that invented the first hand-held cellular telephone. The Draper Prize, considered the Nobel Prize of engineering, recognizes engineers whose accomplishments have significantly benefited society and includes a \$500,000 award.



**Robert Zagar**

(M.S. PSYC '75), Chicago, testified before the United States House of Representatives Judiciary Subcommittee on Crime, Terrorism, and Homeland Security in 2012 on his work with Mayor Richard M. Daley's Youth Violence Task Force. His studies resulted in a \$76.7 million U.S. Department of Justice grant to target most-at-risk youth in 38 high schools and to provide treatment in the form of jobs, mentors, and anger management.

**Richard Frainier**

(PHYS '76), San Ramon, Calif., is engineering program director for CyDesign Labs, Inc.

**Kaiser Saifudin**

(M.S. IE '76), Macon, Ga., is a quality engineer for Boeing, supporting the Chinook helicopter and the C-17 Globemaster programs.

**Birendra Prasad**

(Ph.D. MAE '77), Tustin, Calif., was presented with the Orange County Engineering Council's Distinguished Engineering Merit Award in February.

**Susan Solomon**

(CHEM '77), Nahant, Mass., Ellen Swallow Richards Professor of Atmospheric Chemistry and Climate Science at Massachusetts Institute of Technology, was presented with the 2012 BBVA Foundation Frontiers of Knowledge Award in the Climate Change category for her work on determining how human action alters the composition of the atmosphere and how these changes, in turn, affect Earth's climate.

**Karen Berkman**

(M.S. PSYC '78), Tampa, Fla., is research assistant professor and director of the Center of

Autism and Related Disabilities in the College of Behavioral and Community Sciences at the University of South Florida.

**Luke Gong**

(ARCH '79), Morris Township, N.J., has rejoined the architecture and engineering firm Paulus, Sokolowski & Sartor as a senior project manager.

**1980s**

**David Michalak**

(DSGN '80), River Forest, Ill., is the managing member of Beyond Shelter, LLC.

**C. Christopher Muth**

(LAW '80), Cincinnati, was appointed to the Cincinnati Symphony Orchestra Board of Directors in November 2012 and will serve a three-year term on the finance, facilities, and development committees. He is a partner in the Corporate Department of Dinsmore & Shohl LLP.

**Richard Proszowski**

(CS '80), North Barrington, Ill., is senior vice president of information technology services and chief information officer for JMC Steel Group. Prior to joining JMC, Proszowski was vice president and chief information officer of Pactiv Corporation.

**Susan Schneider**

(ES '80), Stockton, Calif., obtained a Ph.D. in psychology from the University of Kansas, specializing in learning from consequences and the mathematical modeling of behavior, and began her study of the systems approach to nature-nurture relations. After an academic career at such institutions as St. Olaf College, Auburn University, Florida International University, and

the University of Auckland, she is currently a visiting scholar at the University of the Pacific and has written the book *The Science of Consequences: How They Affect Genes, Change the Brain, and Impact Our World*.

**William Velander**

(M.S. CHE '80), Bennet, Neb., D. R. Voelte Jr. and N. A. Keegan Distinguished Professor at the University of Nebraska-Lincoln, is co-principal investigator of the United States Army grant-funded project "Technologies for Hemostasis and Stabilization of the Acute Traumatic Wound."

**Michael Marick**

(LAW '82), Northbrook, Ill., partner with Meckler Bulger Tilson Marick & Pearson, LLP, was among 68 newly elected members to the American Law Institute in October 2012. Marick is a founding member of the firm, where he has represented insurers across the country in high exposure disputes over liability coverage for more than 30 years.

**Theodore Koenig**

(LAW '83), Chicago, president and chief executive officer of Monroe Capital LLC, was named the 2012 Middle Market Thought Leader of the Year by the Alliance of Merger & Acquisition Advisors and Grant Thornton.

**James Northey**

(MATH '84, M.S. FMT '97), Houghton, Mich., was appointed to the new Financial Research Advisory Committee for the United States Department of the Treasury. He is co-founder of the LaSalle Technology Group.

**Marilyn Booker**

(LAW '85), New York, head of Morgan Stanley Smith Barney's Urban Markets Group, was named as one of the Top 100 Most Influential Blacks in Corporate America for 2012 by *Savoy Magazine*. The definitive list features African-American achievers, influencers, and executives facilitating global change through their leadership.

**George Jackson III**

(LAW '85), Chicago, a shareholder in the Chicago office of Polsinelli Shughart, was sworn in as president of the Federal Bar Association's Chicago chapter in October 2012. His practice focuses on complex commercial litigation and white-collar criminal defense.

**Kelley Kinsella**

(BA '86), Naperville, Ill., was appointed senior vice president and regional executive officer for ACE USA's Midwest region.

**John Lallo**

(LAW '86), Chicago, past-president of the Illinois State Bar Association and a partner with Amari & Lallo, was honored at the 2012 Italian-American Heritage Month Celebration.

**Vijay Madi**

(Ph.D. MET '88), Mason, Ohio, is chief technology officer of Universal Stainless & Alloy Products, Inc.

**Peter Roskam**

(LAW '89), Wheaton, Ill., won re-election in Illinois's 6th Congressional District in November 2012. The fourth-ranking Republican leader in the United States House of Representatives and chief deputy whip, he has also served on the House Committee on Ways and Means. Roskam has been a state representative for Chicago's western suburbs from 1992-98 and a state senator from 2000-06.

**Ziad Zatar**

(EE '89, M.S. CS '93), Orland Park, Ill., is director of technical sales for Sigma Consulting and

Management, which provides engineering, IT, and asset-management services with a specialization in health care IT solutions.

**1990s**

**Steven Gibson**

(LAW '90), Las Vegas, is listed in the 2012 edition of *Best Lawyers in America* for intellectual property litigation. A member of Dickinson Wright PLLC, he practices in the areas of commercial and business litigation, corporate, gaming, intellectual property, and trademarks.

**Renee Doktorczyk**

(ARCH '91), Wheeling, Ill., owner and president of ArchiTech Consulting, Inc., has been writing architectural specifications for more than 20 years. She has authored articles in *Structure* and *Modern Steel Construction* on helping structural engineers write better specifications. Her work, in tandem with her project team, has contributed to the success of significant projects, including Ann and Robert H. Lurie Children's Hospital of Chicago, the Richard J. Klarchek Information Commons at Loyola University Chicago, and the Wit Hotel. Globally, Doktorczyk has projects in 20 states and three countries.

**Samir Shah**

(M. S. CS '91), Ahmedabad, Gujarat, India, is chief executive officer at Sohamcore Global Solutions.

**Anil Jagiasi**

(M.S. CE '92), Wilmington, Del., is president of the consulting firm Criterium-Jagiasi Engineers.

**Kenneth Johnson**

(ARCH, CRP '93), Philadelphia, is partner and in-house counsel at the architectural and planning firm TMH Associates, Inc.

**Carol Kuhnke**

(LAW '93), Ann Arbor, Mich., was elected judge in the Washtenaw County (Mich.) 22nd Circuit Court judicial race in November 2012.

## Become an IIT Alumni Ambassador!

We are seeking IIT alumni to:

- Attend admission events geared towards prospective students
- Refer prospective students to IIT
- Communicate with admitted students (by phone, mail, and email)

For an overview of the program or to get involved, contact Timothy Lipman (PSYC '10), admission ambassador program coordinator, 312.567.6933, [tlipman@iit.edu](mailto:tlipman@iit.edu), or go to: [www.iit.edu/undergrad\\_admission/alumni](http://www.iit.edu/undergrad_admission/alumni)



**Lisa Sandora** (M.S. PSYC '93, Ph.D. '02), Chicago, is talent and performance manager in Leadership and Organizational Development at U.S. Cellular Corporation.

**John Abramic** (CHE '97, LAW '01), Naperville, Ill., shareholder at McAndrews, Held & Malloy, was named one of the 40 Illinois Attorneys Under Forty to Watch for 2012 by the Law Bulletin Publishing Company. Abramic's clients and peers commended him for his deep knowledge of the medical device and pharmaceutical industries, his confidence and reliability during trial, and his skill as a litigator, as well as for his leadership qualities and innovative thinking.

**Thomas Webb** (M.A.S. MET '97), Massillon, Ohio, was recently named chief engineer for oil and gas (Steel Segment) at the Timken Company, which engineers,

manufactures, and markets mechanical components and high-performance steel.

**Erica Anthony** (EE '98), Baltimore, received a Ph.D. in Management from Purdue University through The PhD Project, an award-winning program to create a more diverse corporate America, and has joined the faculty at Morgan State University. The PhD Project, established by the KPMG Foundation in 1994, recruits minority professionals from business into doctoral programs in all business disciplines.

**John Connery Jr.** (LAW '98), Tampa, Fla., a shareholder at Hill Ward Henderson, was selected to serve as the 2014 Capital Connection co-chair for the Association for Corporate Growth Florida. He is co-chair of Hill Ward Henderson's Taxation Group and leads the general taxation area.

**Mukhtar Taslim** (M.A.S. CM '98), Tustin, Calif., is a senior cost and scheduling engineer at Southern California Edison.

### 2000s

**Damian Gardley** (CHE '00), Dearborn Heights, Mich., director of sales for LG Chem Power Inc., was recognized as one of the 40 Under 40—Class of 2012 in *Crain's Detroit Business*.

**Hazem Dawani** (CPE '01), Chicago, is chief executive officer and co-founder of OptionsCity Software, Inc. The company recently hosted its first industry conference, attracting 250 people, and won a Chicago Innovation Award for Freeway, its electronic trading software tool.

**Adriano Galvao** (M.Des. '02, Ph.D. '06), Evanston, Ill., and Brianna Sylver (M.Des. '03), owners of Sylver Consulting, moved their office to Evanston, updated the Sylver logo, and are busy advising clients through their international innovation research and strategy firm.

**Justin Nardone** (ARCH '02), Whippany, N.J., is an architect and design engineer at Skidmore, Owings and Merrill in Chicago, where he creates and manages complex digital models for the design and structural disciplines. Nardone's subject matter expertise has enabled him to teach a variety of courses at the School of the Art Institute of Chicago and other accredited schools, as well as training architecture professionals in the use of computer-aided design technologies.

**Tianzhu Wang** (M.Des. '02), Portland, Ore., is brand innovation senior design lead at NIKE, Inc.

**Rachel Hinman** (M.Des. '04), Mountain View, Calif., is a senior research scientist in experience design at Intel Corporation.

**Richard Duncan** (AE '05, M.S. FIN '07, Ph.D. MAE '11), Williamson, W.Va., is STEM program coordinator for Mingo County Schools.

**Anurag Srivastava** (Ph.D. EE '05), Pullman, Wash., assistant professor in the School of Electrical Engineering and Computer Science at Washington State University, was one of 72 faculty members from throughout the United States selected to participate in the National Academy of Engineering's Frontiers of Engineering Education symposium held last fall in Irvine, Calif. A faculty member since 2010 and director of WSU's Smart Grid Demonstration and Research Investigation Laboratory, Srivastava is involved in a Department of Energy workforce training program for clean energy and smart grid engineers.

**James Vanderwoud** (LAW '05), Ocoee, Fla. has joined Roetzel & Andress as an associate in the firm's Orlando office, where he practices in the business services group focusing on finance, corporate, and commercial real estate matters.

**Francisco Castro** (LAW '07), Reston, Va., joined Holland & Hart LLP as of counsel in the firm's intellectual property practice, based out of the firm's Washington, D.C., office.

**Laura Grimmer** (MBB '07), Chicago, attended Alpert Medical School at Brown University and is a second-year resident in general surgery at Rush University Medical Center. She recently published a novel based on her experiences caring for critically ill burn patients.

**Matthew Jenkins** (LAW '07), Chicago, an associate with Corboy & Demetrio, was given the 2012 IIT Chicago-Kent College of Law Young Alumni Award. He joined the firm in 2008 and practices personal injury law in all areas, including

cases arising from automobile collisions, construction negligence, premises liability, and product liability.

**Teymour El-Tahry** (LAW '08), Troy, Mich., joined the Intellectual Property Department of Honigman Miller Schwartz and Cohn LLP, at the firm's Oakland, Calif., office. El-Tahry's practice focuses on preparing and prosecuting patent applications, preparing product clearance opinions, and counseling clients on IP strategies and portfolio management.

**Eugene Gargas** (EE '08), Austin, Texas, earned a Master of Science in Electrical Engineering from Georgia Institute of Technology in 2012 and accepted a position as an engineering scientist associate at the Applied Research Laboratories at the University of Texas at Austin. He designs apparatuses and performs sea tests for shallow and deep ocean research.

**Jill Roberts** (LAW '08), Chicago, was one of five attorneys to receive a 2012 Chicago Bar Foundation Sun-Times Public Interest Law Fellowship. The fellowships are presented annually to individual legal aid or public interest law attorneys who demonstrate a commitment to public interest work, academic achievement in law school, and outstanding character and integrity. Roberts works for Cabrini Green Legal Aid, where she represents clients facing eviction as well as those who need assistance with family law matters.

**Megan Kamdar** (LAW '09), Chicago, joined the Chicago office of Quarles & Brady LLP as an associate in the Corporate Services Practice Group. In her spare time, Kamdar volunteers as a college preparation mentor at LINK Unlimited and serves as a board member of PAWS Chicago.

**Salvador Lopez** (LAW '09), Chicago, was appointed by Governor Pat





**Derek Tarnow and Zahra Tashakorinia** (both M.Des. '12), New York and Chicago, respectively, are in production mode with Tidy Tilt, an iPhone accessory they designed as students at IIT Institute of Design. Funding for Tidy Tilt was obtained through the website Kickstarter and raised 2,232 percent more than the duo's initial request of \$10,000.

Quinn to the Real Estate Administration and Disciplinary Board of Chicago. Lopez is an attorney at the Legal Assistance Foundation, helping low-income residents, minorities, and senior citizens in real estate and consumer rights-related cases. He is also a United States Navy veteran who assisted in both Operation Enduring Freedom and Operation Iraqi Freedom.

**Mayank Kashyap** (Ph.D. CHE '10), Lake Jackson, Texas, a process technology fluidization engineer at Ascend Performance Materials, was honored with the 2012

American Institute of Chemical Engineers Best Ph.D. Thesis Award in Particle Technology. One dissertation is selected each year for its novelty, significance, and potential applications of research work in particle science and technology. Kashyap and IIT Distinguished Professor Emeritus Dimitri Gidaspow (Ph.D. GT '62) have also published studies from the thesis in the book *Dispersion and Mass Transfer Coefficients in Fluidized Beds: Experimental and Computational Fluid Dynamics Studies*.

**Jagriti Chander** (M.A.S. BIOL '11), Chicago, is president and founder of The Next Move LLC.

**Teresita Kashyap** (Ph.D. CHE '11), Lake Jackson, Texas, is a senior engineer at The Dow Chemical Company.

**Steven Lowry** (M.S. FIN '11), New York, is a senior associate in mergers and acquisitions investment banking at Kerburn Rose.

**Aaron Penn** (M.D.M. '11), New York, is innovation manager in Packaging Platforms & Design at Anheuser-Busch InBev.



**Sandra Thompson** (LAW '11, M.A.S. IPMM '12), Bloomfield Hills, Mich., is an associate at Rader,

Fishman & Grauer, a leading intellectual property firm representing companies around the globe. She handles patent prosecution for a variety of clients with an emphasis on mechanical and electro-mechanical technologies.

**Katherine Goyert** (LAW '12), Chicago, is an associate in the Employment Relations Practice Group at Michael Best & Friedrich LLP.

**Joseph Morris** (LAW '12), Louisville, Ky., is an attorney in the Intellectual Property Practice Group at Middleton Reutlinger, concentrating on intellectual property litigation.

**Jonathan Walton** (LAW '12), Chicago, is an associate at Swanson, Martin & Bell, LLP, focusing his practice on product liability, commercial litigation and business disputes, and medical negligence and health care.

**Frank Addante** (Former Attendee), Los Angeles, founder and chief executive officer of the Rubicon Project, was featured in a *New York Times* article about electronic ad sales in November 2012.

Join us!

**IIT Visionaries** is a select donor society comprising generous alumni, parents, and friends who understand and value the university's essential mission: to provide distinctive and relevant education in an environment of scientific, technological, and professional knowledge creation and innovation. Members of IIT Visionaries support this mission through personal gifts of \$1,000 or more each year.

**The generosity of IIT Visionaries members fuels the future by:**

- Funding scholarships to attract the most promising and deserving students
- Attracting and retaining talented faculty
- Ensuring state-of-the-art classrooms, labs, and facilities to allow students to excel in their fields

**Become a part of IIT Visionaries: Give a gift online.**

It's quick, easy, and secure to make a gift online at [give.iit.edu/join-visionaries](http://give.iit.edu/join-visionaries).

Members of IIT Visionaries receive exclusive benefits and communications. Visit [give.iit.edu/visionaries](http://give.iit.edu/visionaries), or contact the IIT Annual Giving team at 312.567.5000 or [annualgiving@iit.edu](mailto:annualgiving@iit.edu).

*IIT Visionaries replaces the IIT President's Council as the society through which we recognize the university's leading annual donors.*

**IITvisionaries**



ILLINOIS INSTITUTE OF TECHNOLOGY





**1. Taliesin West Tour** [left to right] IIT Trustee Alan "Bud" Wendorf (ME '71); IIT President John Anderson; a Taliesin West docent; Steve Brady, IIT senior director of major gifts; and Susie Wendorf tour Taliesin West in Scottsdale, Ariz. *Photo: Trumble Photography*

**2. Innovation Speakers** [left to right] Gus Lawson (AE '94); Brian Ippolito (AE '92), president and chief executive officer of Orbis Technologies; and Matt Fernandez (ME '89), Orbis chief operating officer, join Jamie Acton, senior director of alumni relations, at an innovation event in the District of Columbia. *Photo: Chris Stump Photography*

**3. 29th Annual Engineers Week Expo** Robert Carlson, dean of IIT School of Applied Technology, speaks with alumni and families during the 29th Annual Engineers Week Expo at the Daniel F. and Ada L. Rice Campus in Wheaton, Ill. *Photo: Michael Goss Photography*

**4. World Trade Center Visit** John Genovese (ARCH '83) hosted New York City alumni in World Trade Center Building 7 and gave a preview of Westfield World Trade Center future retail plans. *Photo: Char Smullyan Photography*

**5. Rowe Family Endowed Chair** IIT Board of Trustees Chairman and University Regent John W. Rowe and his wife, Jeanne, join honoree Wiel Arets [seated] at the investiture for the Rowe Family College of Architecture Dean Endowed Chair. *Photo: Bonnie Robinson Photography*

**6. Bay Area Gathering** IIT Bay Area Alumni Chapter hosted at the San Francisco home of Brett Bonthron (EE '88). *Photo credit: Splash Studios, Inc.*

**7. LinkedIn Event** [left to right] Bay Area Chapter Chairperson Heidi Rank (ARCH '81), Subodh Toprani (EE '77, M.S. '82), and Dania Ghantous (CHE '88, M.S. '91) at the IIT Alumni Association event hosted at LinkedIn Headquarters in Mountain View, Calif. *Photo: Splash Studios, Inc.*

**8. Naples Gathering** IIT Board of Trustees Chairman and University Regent John W. Rowe [left] hosted alumni at his home in Naples, Fla. Rowe is joined by Ted Brown (CHEM '50), Audrey Brown, Pat Anderson, and IIT President John Anderson. *Photo: Penny Taylor Photography*

**9. Jonathan Club Gathering** Alumni gathered at the Jonathan Club in Los Angeles to hear about *Fueling Innovation: The Campaign for IIT* from Board of Trustees member Andrea Berry (CS '84) [third from right] and IIT President John Anderson [second from right]. *Photo: South Bay Studio*

**10. Happy Birthday, Mies!** IIT President John Anderson, College of Architecture Dean Wiel Arets, and Chicago Mayor Rahm Emanuel at the annual Mies Birthday Party on March 13. *Photo: Michael Goss Photography*

**11. Bob Potter's Alley** IIT Trustee Robert J. Potter and his wife, Mary, at the dedication of Bob Potter's Alley, a space for students to use computers in The McCormick Tribune Campus Center. *Photo: Michael Goss Photography*

# ALUMNI EVENTS

For information about the upcoming alumni events listed here and other alumni activities, please contact the Office of Alumni Relations at 312.567.5040, [alumni@iit.edu](mailto:alumni@iit.edu), or [alumni.iit.edu](http://alumni.iit.edu).

## NEW YORK "WELCOME NEW ALUMNI" EVENT

**Tuesday, July 23, 2013**  
**SouthWest NY**  
**New York**

Mingle and network with IIT student interns and the newest alumni from the Class of 2013! This event is hosted by the IIT New York Alumni Chapter.

## SAN DIEGO ALUMNI GATHERING

**Saturday, July 27, 2013**  
**Rancho Bernardo Inn**  
**San Diego**

Join IIT President John Anderson for a reception and program featuring Jeremy Guralnick (EE '83), co-founder and chief of products at Tachyon Networks, Inc. and IIT Life Trustee Martin Cooper (EE '50, M.S. '57), mobile phone pioneer.

## NORTHERN CALIFORNIA "WELCOME NEW ALUMNI" EVENT

**Sunday, August 25, 2013**  
**Home of Roman Kofman (CS '09)**  
**Northern California**

Join us in northern California to mingle and network with our newest IIT alumni from the Class of 2013! Hosted by the IIT Bay Area Alumni Chapter.

## BOSTON ALUMNI GATHERING

**Monday, September 16, 2013**  
**Boston Public Library**  
**Boston**

Join IIT President John Anderson for a reception and program featuring Susan Solomon (CHEM '77), who will speak about her groundbreaking research in climate change.

## NEW YORK ALUMNI GATHERING

**Tuesday, September 17, 2013**  
**New York**

Join IIT President John Anderson for a reception and program featuring Lori Andrews, Distinguished Professor of Law and director of the Institute for Science, Law, and Technology at IIT Chicago-Kent College of Law, who will speak about the legal implications of emerging technologies.

## HOMECOMING 2013

**Friday–Saturday,**  
**September 27–28, 2013**  
**IIT Main Campus**  
**Chicago**

Join alumni, friends, and current students to celebrate more than a century of Tech Traditions! Homecoming weekend activities include:

### Gather in The Bog

**Friday, September 27**

Join students and alumni for an informal gathering in The Bog for food, drinks, and fun!

### Academic Lectures

Industry experts and distinguished alumni will present lectures throughout the weekend.

### Golden Alumni Society Reunion

**Friday, September 27 and Saturday, September 28**

This reunion recognizes alumni who are celebrating the 50th anniversary of their IIT graduation. Members of the Class of 1963 will receive Golden Society medallions, be recognized for this anniversary milestone, and have a chance to visit with former classmates and current students.

### Carnival

**Saturday, September 28**

Bring the whole family to the Carnival in Morton Park. Interact with current students and catch up with old friends while enjoying food and games.

### Athletic Events

**Friday, September 27 and Saturday, September 28**

Plan to attend basketball, soccer, and volleyball games with students, staff, and fellow alumni while cheering on the Scarlet Hawks. Are you a men's basketball alumnus? Play in our alumni game on Saturday night!



# obituary

## Kenneth Schug

Department of Biological and Chemical Sciences  
Chicago

A longtime distinguished faculty member and two-term chair in IIT's Division of Chemistry, Kenneth R. Schug was known for his love of teaching and generous community spirit. Schug joined the university in 1956, spent a sabbatical in Japan in 1964, and retired as professor of chemistry in 2012. He enjoyed teaching general chemistry and working on innovative learning methodologies.

In 1979, Schug was instrumental in establishing the Chicago Area Health and Medical Careers Program in an effort to increase the number of physicians and other health professionals from historically underrepresented minority populations. Seven years later, Schug spearheaded a structured series of summer and academic year in-service courses for elementary- and secondary-school teachers as part of the Science and Math Initiative for Learning Enhancement Program.

# inmemoriam

**Phillip Henoach**

CHE '35, M.S. '36  
Rochester, Minn.

**Constantine Lisciani**

ME '36  
Westchester, Ill.

**Jacoba Schembs**

ARSC '37  
Mercer Island, Wash.

**George Frost**

EE '40  
Sarasota, Fla.

**Wesley Pipher**

ARCH '43  
Orland, Maine

**R. Thomas Gavin**

CHE '44  
Lansing, Ill.

**Harry Gillespie**

ME '44  
Los Angeles

**Sheldon Jacobs**

CHE '44  
Houston

**Susumu Nakazato**

CHE '44  
Sacramento, Calif.

**Theodore Zaggy**

ME '45  
Western Springs, Ill.

**William Ostrow**

EE '47  
Oak Park, Mich.

**Charles Bradford**

M.S. PHYS '49, Ph.D. '54  
Reading, Pa.

**Bernard Liss**

CHE '49  
Mission Viejo, Calif.

**John Moon**

M.S. CHE '49  
Shelbyville, Ill.

**Morton Sherman**

CHE '49  
St. Petersburg, Fla.

**Richard Stark**

EE '49  
South Holland, Ill.

**Layne Ackermann**

B.S. '50  
Glen Ellyn, Ill.

**Clarence Jorgensen**

ME '50  
Springfield, Mo.

**Edwin Misniak**

ME '50  
Mount Prospect, Ill.

**Leo Kiley**

ME '51  
Whitehall, Mich.

**George Vacek**

MET '51  
Lake Zurich, Ill.

**John Horwath**

MET '52, M.S. '61  
Wheeling, Ill.

**Michael Sprincz**

CHE '52  
Wheaton, Ill.

**Renato Cervelli**

M.S. ME '53  
Granger, Ind.

**Calvin Hall**

LAW '53  
Chicago

**Thomas Prosser**

CHEM '53  
Shelby, N.C.

**Herbert Ericksen**

ME '54  
Springfield, Ill.

**Nicholas Raimondi**

CE '55  
Bannockburn, Ill.

**John Dennis**

M.S. BEA '56  
Palatine, Ill.

**Ronald Armbruster**

ME '57  
Battle Creek, Mich.

**Rosaland Crandell**

LAW '58  
Lynwood, Ill.

**Dan Goldman**

MATH '62  
Crown Point, Ind.

**Alvin Scolnik**

IE '62  
Munster, Ind.

**Aaron Shipow**

EE '63  
San Jose, Calif.

**Joseph Rothberg**

MATH '64  
Anna Maria, Fla.

**Wilford Schreier**

EE '64  
Bensenville, Ill.

**Anita White**

M.S. CHEM '64  
Williamsville, N.Y.

**Thomas Ivas**

EE '65  
Orland Park, Ill.

**Walter Hanna**

DSGN '67  
Sheboygan, Wis.

**Sydney Wright**

M.S. CRP '67  
Paducah, Ky.

**John Borchardt**

CHEM '68  
Houston

**Allan Johnson**

CE '70  
Matteson, Ill.

**Hemendra Maiseri**

M.S. EE '72  
Peoria, Ill.

**Murray Pearlman**

LAW '72  
Chicago

**Vijay Garg**

Ph.D. CE '73  
Los Altos Hills, Calif.

**Kenyon Hapke**

ME '76  
Libertyville, Ill.

**John Dagys**

ARCH '78  
Beverly Shores, Ind.

**Thomas Steinbrecher**

ARCH '78  
Chicago

**Richard Weber**

EE '80  
Allen, Texas

**Michael Jurick**

ARCH '82  
Marietta, Ga.

**Adel Fergany**

M.S. CS '83, Ph.D. '86  
Monroeville, Pa.

**Stephen Burke**

LAW '97  
Flossmoor, Ill.

**Rebecca Gaither**

Ph.D. PSYC '03  
Chicago

**Maya Ronen**

M.S. PSYC '05, Ph.D. '10  
Livingston, N.J.

# Academic Leaders of the Technological Age

*“We invite you to join with us in a creative  
undertaking of high importance to human  
advancement in this technological age.”*

—“Investment in Tomorrow” fundraising brochure



Those words, echoed by three then-members of IIT’s administration—Lester Armour, chairman of the Board of Trustees; Maynard P. Venema, general campaign manager; and John T. Rettaliata, president—served to launch one of the most fertile periods of development in the university’s history. Six buildings, including the Main Campus Engineering 1 and Life Sciences buildings, and multiple faculty and student resource projects, grew out of IIT’s first major fundraising initiative: Investment in Tomorrow—The IIT Campaign.

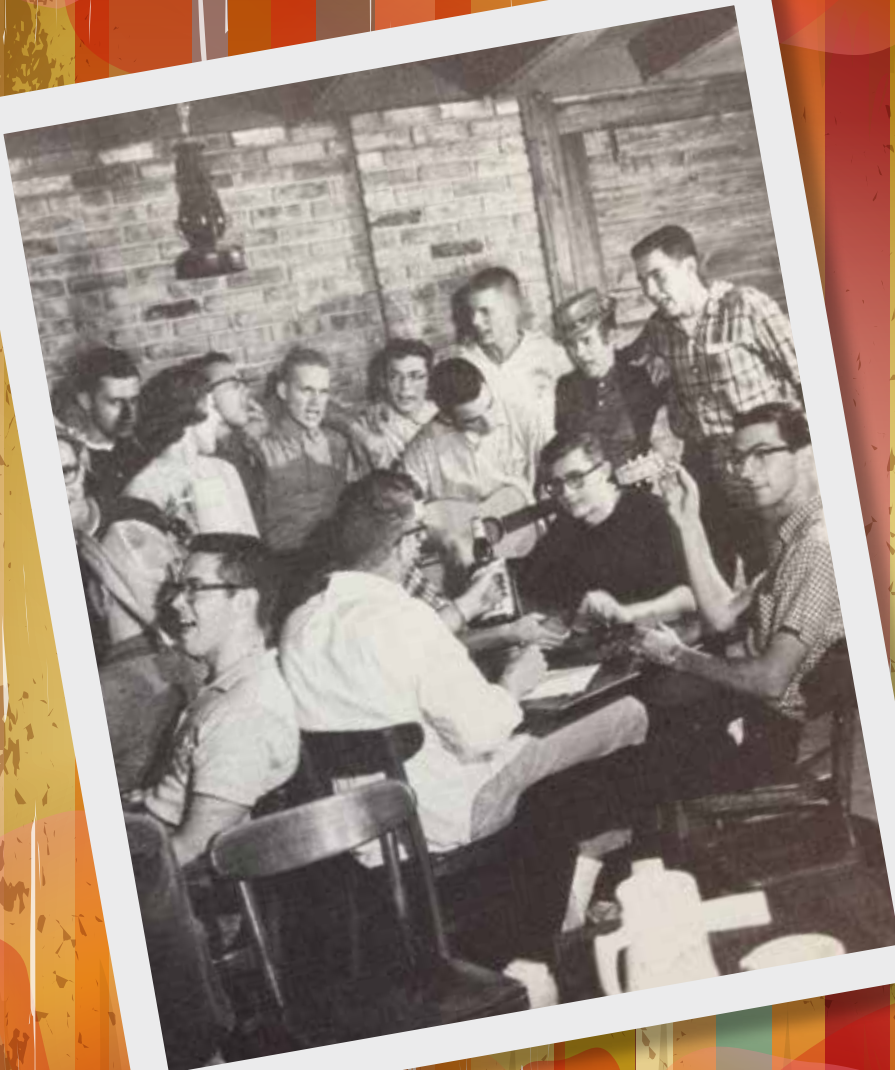
On May 27, 1965, the three-year campaign kicked off with a \$5 million challenge grant from the Ford Foundation, headed at the time by IIT’s first president, Henry T. Heald. Each dollar of the grant was to be matched by IIT with \$3 in gifts from other private sources. The university aimed to raise \$25 million; in fewer than 24 months, \$26,125,000 in campaign commitments had been obtained from more than 6,600 donors. In addition to E1 and Life Sciences, funds raised enabled the construction of three residence halls, a food services addition, and Arthur Keating Hall, complete with a gymnasium and swimming pool. The campaign also provided for increased faculty advancement and student opportunities such as scholarships and fellowships.

The Completion Fund marked the final year of the campaign with the objective to construct the Engineering 2 Building, the Physics–Chemistry Building, and continued development of resources for both students and faculty. The highly successful campaign concluded in 1967–68—IIT’s 75th anniversary year—having raised more than \$33 million in funding.



# Homecoming 2013

**Friday, September 27 and  
Saturday, September 28**



# SAVE THE DATE!

**P**lan to be in Chicago on September 27 and 28 for Homecoming 2013. Alumni are invited to celebrate school spirit and rekindle old friendships. Don't miss:

#### **HOMECOMING CARNIVAL**

Food, rides, games, prizes, alumni beer tent, and more make this attraction fun for both young and old alike.

#### **ATHLETIC PRIDE**

Illinois Tech athletics will be in full spirit all weekend long. Come watch a game!

#### **REUNIONS**

Let us help organize a reunion for your fraternity, residence hall, club, or special group at Homecoming. It's a great time to get together!

#### **CLASS OF 1963**

Come back to campus for your 50th reunion. Celebrate this milestone at the annual Golden Society Reunion luncheon.

#### **DEPARTMENTAL AND COLLEGE LECTURES**

Why not spend some time in the classroom? Come hear industry experts and distinguished alumni.

#### **CHICAGO-KENT BLOCK PARTY**

Join us in the 500 block of West Adams Street on Saturday, September 28, as IIT Chicago-Kent College of Law celebrates 125 years of distinctive legal education. With live music, food trucks, and delicious beer provided by Lagunitas, this is one party not to be missed! The all-class reunion and block party is a family- and dog-friendly event. Contact [alums@kentlaw.iit.edu](mailto:alums@kentlaw.iit.edu) for more information.

#### **CLASS OF 2013**

We would like to especially invite you to come home to IIT. Bring your friends along to celebrate your first Homecoming as alumni!

Visit [alumni.iit.edu/homecoming](http://alumni.iit.edu/homecoming) for more detailed information.