



#### Letter from the President

On May 13, 2,799 students became members of the Illinois Tech Class of 2017. At the Commencement ceremony held at Ed Glancy Field on Mies Campus, I looked at the many faces representing a multitude of cultures within our academic community. They reminded me of our university's continuum of success as our students transform into alumni leaders across the globe.

Some of our recent graduates are introduced in this issue of *IIT Magazine* on pages 4–5 [read their bio sketches at magazine.iit.edu]. All are ambitious and have discovered ways to further develop their passions

in business, engineering, law, psychology, and writing. National Academy of Engineering inductee Sam Pitroda (M.S. EE '66), who helped to lead the telecommunications revolution in India, is profiled [pages 12–13] as is Robin Chaurasiya (PPPS, PSYC '06), recipient of Illinois Tech's 2017 International Award of Merit [pages 10–11]. Robin heads the Mumbai (India)-based nonprofit Kranti, a home for young women from red-light areas. Four Kranti students are now enrolled in various universities thanks to an educational program that Robin, a finalist for the 2016 Global Teacher Prize, has created. You can meet new Institute of Design Dean Denis Weil (M.Des. '01), who discusses design's role in society today [page 21]. Weil has led design efforts within the corporate sector as well as the nonprofit sector, bringing extensive and varied work experiences that will further advance ID's international impact.

As the university makes strides across the globe through our alumni and faculty, Illinois Tech also continues to merit recognition closer to home. The validity of our efforts made itself apparent in a report released earlier this year through the Equality of Opportunity Project. It indicated that Illinois Tech surpasses all other Illinois universities profiled in terms of the highest upward mobility of low-income students. The earnings of all of our graduates are, on average, nearly equal to the top-performing university in the state.

While our recent graduates begin their lives as alumni, the students who remain on our campuses today will soon have yet another opportunity to augment their Illinois Tech education. Construction of the Ed Kaplan Family Institute for Innovation and Tech Entrepreneurship is now underway. I encourage you to view a livestream of its progress at <a href="https://web.iit.edu/provost/kaplan-institute">https://web.iit.edu/provost/kaplan-institute</a>. A hub for innovation on campus, it is a dramatic testament to alumnus Ed Kaplan's belief that our students will become the inventors, entrepreneurs, and leaders of the future the world over.

Sincerely,

Alan W. Cramb

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Illinois Institute of Technology, also known as Illinois Tech, is a private, technology-focused research university offering undergraduate and graduate degrees in engineering, science, architecture, business, design, human sciences, applied technology, and law.

One of 21 institutions that comprise the Association of Independent Technological Universities (AITU), Illinois Tech offers exceptional preparation for professions that require technological sophistication, an innovative mindset, and an entrepreneurial spirit.

#### MISSION STATEMENT

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

> **Armour College of Engineering** Chicago-Kent College of Law College of Architecture College of Science Institute of Design Lewis College of Human Sciences School of Applied Technology Stuart School of Business

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ON THE COVER: [Left to right] Men's Basketball Head Coach Todd Kelly, Professor Shlomo Engelson Argamon, and Anders Bybjerg (BA '17)



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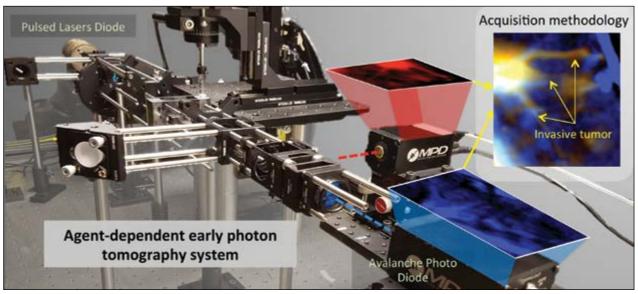


In addition to being a member of the faculty team selected in 2016 to advance to the second phase of Illinois Tech's Nayar Prize I, Kenneth Tichauer, assistant professor of biomedical engineering, was awarded a National Science Foundation CAREER Award this year to further refine the team's ADEPT Cancer Imager.

Tichauer, along with Jovan Brankov, associate professor of biomedical engineering/electrical and computer engineering, and Rajendra Mehta, professor emeritus of biology, developed the imager to spatially map the variable characteristics of cancers at the cellular level. By doing so, it will help to identify new and

effective drugs designed to handle disease variability. Treatment strategies can then be personally tailored to each patient.

The Faculty Early Career Development (CAREER) Award recognizes junior faculty members as exemplary teacher-scholars. Illinois Tech Trustee Madhavan Nayar (M.S. IE '68) and his wife, Teresa, on behalf of the Nayar Family Foundation, established a \$1 million gift to fund the Nayar Prize awards to challenge university faculty, staff, and students to develop breakthrough, innovative projects that will, within three years, produce meaningful results with a societal impact.



The ADEPT Cancer Imager, capable of spatially mapping the variable characteristics of cancers at the cellular level

#### **Transitions**

Illinois Tech congratulates **Michelangelo Sabatino**, Illinois Tech professor and director of the Ph.D. Program in Architecture, on his appointment to **interim dean of the College of Architecture**.

 $The \ university \ thanks \ the \ following \ individuals \ for \ their \ service:$ 

**Wiel Arets,** Rowe Family College of Architecture Dean Endowed Chair (will remain on faculty as professor of architecture) **Charles Bauer,** Emeritus Professor of Computer Science

Patricia Laughlin, Vice President for Finance and Administration

Charles T. Menghini, President, Professor of Music, and Director of Bands (VanderCook College of Music)

**Vincent T. Turitto,** Robert A. Pritzker Endowed Chair Professor of Biomedical Engineering and Director of the Pritzker Institute of Biomedical Science and Engineering



#### Illinois Tech Legacy: John Rowe

University Regent John Rowe, chairman emeritus of Exelon Corporation, has been an advocate for Illinois Tech for nearly 15 years. He, his wife, Jeanne, and the Rowe family recently became the newest members of the Philip Danforth Armour Society's \$10 million or more giving level.

Rowe's engagement with Illinois Tech began through his love of architecture. His first-ever gift to the university was in support of the Mies van der Rohe Society, and he served as a member of its Board of Advisors.

In 2005 the couple took their passion for architecture one step further and established the John W. and Jeanne M. Rowe Architecture Chair through Illinois Tech's College of Architecture. Inspired by fellow regent Ralph Wanger's gift to create the Wanger Institute for Sustainable Energy Research, the Rowes established a second endowed chair in 2008—the Rowe Family Endowed Chair in Sustainable Energy—to support their interest in energy initiatives. In 2011 they created a third chair, again within the College of Architecture: the Rowe Family College of Architecture Dean Endowed Chair.

In addition to his family's involvement, Rowe has also supported the university at a corporate level through his work with Exelon. Now in its ninth year, the Exelon Summer Institute supports students transitioning to college life and gives them an introduction to the rigorous education they will receive during their first year at Illinois Tech. The company also made a gift to STEM schools, including Illinois Tech, in honor of Rowe's retirement in 2011.

In 2015 Illinois Tech and Chicago Mayor Rahm Emanuel announced a partnership with the university, Exelon Corporation, and the Von Steuben Metropolitan Science Center. The new program, now known as Opt4STEM, ensures that Chicago Public Schools students are prepared to excel in STEM fields at four-year research universities. Rowe, although retired, remains involved with this support through Exelon.

The Rowe family now joins the 13 other families who have made transformative gifts to the university at the \$10 million or more level and have ensured their legacy in Illinois Tech history.

#### MORE ONLINE

Office of Institutional Advancement: alumni.iit.edu/giving

# Illinois Tech Class of 2017: Boldly into the Future

Commencement speaker Geraldine Richmond, Presidential Chair in Science and professor of chemistry at the University of Oregon, gave five pieces of advice to the students who graduated in Illinois Tech's 148th Commencement Exercise on May 13: Be willing to take risks. Embrace diversity in your life and work. Up your game. Remember that no one makes it alone in this world. Have the courage of your convictions. Read about six achievers from the Class of 2017 (pictured here) who have already taken Richmond's words to heart at magazine.iit.edu. —Marcia Faye







Student Gift Committee members [left to right] Brianna McKenna, Tristan Bush, and Genevieve Hummel

#### By the Students, for the Students

Last fall Genevieve Hummel (AMAT 3rd year) learned that her friend, an Illinois Tech student, would have to leave the university because his father was considering bankruptcy. Hummel says that her classmate attempted a university aid appeal but was told that no funding was available. It gave Hummel, a University Scholar, an idea to propose to her fellow students on the Student Gift Committee.

"I suggested that the student gift be funding for appeals so that more appeals could be approved," she explains. "I know that the Office of Financial Aid would like to approve more, but the money has to come from somewhere."

The group liked Hummel's idea and the aptly named Hawks 4 Hawks Hardship Fund launched last November on Giving Day, a 24-hour event that connects alumni to giving opportunities at Illinois Tech.

"Approximately 20 to 25 students every year drop out of Illinois Tech and cut their educations short," says Tristan Bush, Student Gift Committee co-chair and a new engineering management graduate. "When we asked for donations and spread awareness about this on the MTCC [The McCormick Tribune Campus Center] Bridge, for example, we had many students stop to ask questions including how can they apply for the award. While the committee can't help each student directly, we don't want them to be in the position to have to worry about their finances."

By the end of the spring 2017 semester, Hawks 4 Hawks raised \$20,000. At \$2,500 per gift allotment, eight full-time students received assistance. In addition to student donors, this year's committee was able to garner support from alumni board members, parents, faculty, and staff, making it possible for more students to receive assistance from the fund.

"The largest proportion of donors were students [at 528 by the end of the 2017 spring semester], but most students, in general, don't have a lot of money to donate," says Camras Scholar Brianna McKenna (Co-terminal BME/CHE 3rd year), Student Gift Committee co-chair. "When Genevieve brought up this idea, it really hit home for me," she says. "In spring 2016 my friend had to leave the university because her dad was diagnosed with cancer; the cost of the treatment would have been too much for her family in addition to paying for school. If there had been opportunities for more financial appeals to be approved, maybe she could have stayed." —Marcia Faye

#### Illinois Tech Headliners



"THERE HAVE BEEN A LOT OF PEOPLE LET OUT OF JAIL AFTER MANY YEARS... BECAUSE OF SOME EVIDENCE THAT WAS REFUTED LATER ON."

Industry Professor of Information Technology and Management **Bill Lidinsky**, in an *Al Jazeera* article about the falsification of thousands of cases of drug testing in Massachusetts

.....

# "The pipeline is not the problem; the meritocracy is the problem."

**Marie Hicks,** assistant professor of history, in *The Guardian*, about gender inequality in front-end vs. back-end jobs in the tech sector



"I wish we didn't need state solutions to what is a nationwide problem of far too few Americans having access to a prudent and affordable savings plan."

William Birdthistle, professor of law, in a Washington Post column about Republican attempts to prohibit states from creating retirement plans for private-sector employees

.....

"Mies appreciated the idea that if he and his colleagues could get it right, they could have an impact on architecture for thousands of years, equivalent to the way the Greek, Egyptian, and Roman builders had had an impact on architecture for thousands of years."

Professor Emeritus of Architectural History **Kevin Harrington**, interviewed with Ludwig Mies van der Rohe's grandson, Dirk Lohan, in a video featured through the *Decades* web-based programming network

# Block, Bounce, and Bunt: Extraordinary Year for Illinois Tech Athletics

During the 2016–17 academic year, two Illinois Tech Scarlet Hawks varsity teams qualified for United States Collegiate Athletic Association (USCAA) tournaments for the first time in the history of the university: men's basketball and women's volleyball. Men's basketball finished 22–6 and reached the USCAA Division I National Basketball Championship game, losing to the Concordia College Alabama Hornets 61–51. [See story on pages 16–19.] Although women's volleyball ended the season 19–18, losing to Rochester College in the quarterfinals, team captain and recent graduate Irena Grauzinis (BCHM '17) was named a USCAA All-American and all nine players received All-Independent Team honors from the Association of Division III Independents (AD3I).

Two additional students were named to the AD3I All-Independent Team: Orlando Cardenas-Juan (ARCE 1st year), men's cross country, and Anida



#55 Samuel Rarick (EE/M.S. CE 5th year)

Phetchanpheng (ARCH 4th year), women's soccer. Besides Grauzinis, three students from the men's basketball team were named USCAA All-Americans: Malik Howze (ARCE 2nd year), Anthony Mosley Jr. (BA 2nd year), and Samuel Rarick (EE/M.S. CE 5th year). To round out her student-athlete experience at Illinois Tech, team captain and new graduate April Wanagas (BME, M.A.S. CHE '17) was named USCAA Division III Women's Basketball Student-Athlete of the Year. A recap of other highlights this past year includes:



Brendan Howley (AE 3rd year)

#### **Swimming and Diving**

The men's swimming and diving team earned a third-place finish at the Liberal Arts Championships (LAC) held in February in Elsah, Illinois, with 15 of 18 swimmers getting on the scoreboard. It was the team's highest finish since 2013. Eight Scarlet Hawks were named to the conference's All-Championship Team. The women's swimming and diving team had an equally strong showing at the LAC, also finishing third. It was the team's highest finish since 2010. Five swimmers were named to Liberal Arts All-Championship Team. Fifteen out of 17 Lady Hawks scored points giving the team one of the highest percentages of point scorers in program history.



Isabella Rubin (ME 2nd year)

#### **Womens Lacrosse**

The women's lacrosse team, established in 2014, ended the season with an overall finish of 15–2, a Midwest Women's Lacrosse Conference (MWLC) finish of 10–1, and a share of the MWLC regular season title—the highest finishes yet for the young team. Alyssa DeLuca (AE 2nd year), Madison Meredith (ARCH 2nd year), Isabella Rubin (ME 2nd year), and Jennifer Young (CE 2nd year) all earned places on the All-MWLC First Team with Cassandra Reineke (CE 3rd year) named to the All-Sportsmanship Team. Meredith was also named Midfielder of the Year and DeLuca Co-Attacker of the Year.



Men's Baseball

The much-anticipated South Side Classic, a baseball game between Illinois Tech and this year's rival, the University of Chicago Maroons, was held on the professional grass of Guaranteed Rate Field on May 6. Chicago won by a score of 8–6.



Mminika Effiong (ARCH 1st year)

#### **Track and Field**

Women's track and field team member Mminika Effiong (ARCH 1st year) long-jumped her way into Illinois Tech's record book hitting the 4.67-meter mark at the University of Chicago Margaret Bradley Invitational. Cole Dammeier (ME 2nd year), men's track and field, broke the indoor school record in the 3,000-meter run, also at the invitational.

MORE ONLINE: illinoistechathletics.com

# **New Grant for Neural Prosthetic Visionary**

solution in the 1990s Philip Troyk, associate dean of Armour College of Engineering, professor of biomedical engineering, and professor at Stuart School of Business, has been working to restore vision to sight-impaired individuals. This year the National Institutes of Health awarded Illinois Tech and six partner institutions a five-year, \$11.8 million grant for an early feasibility clinical trial of a visual device that bypasses the retina and optic nerves, instead connecting directly to the visual cortex of the brain. Troyk is principal investigator of the project, which will feature five human volunteers into whom the system will be surgically implanted at the University of Chicago. The outcome of the trial will be the evaluation of the first intra-cortical visual prosthesis system using novel implantable wireless stimulators. —Marcia Faye



**Searching for a Cure** 

# Using Network Theory to Find a Targeted Treatment for Epilepsy

An epileptic seizure is like a storm that rages across the neural network of the brain, with many neurons firing uncontrollably at once. David Mogul, professor of biomedical engineering, is attempting to understand what happens to that network when a seizure occurs.

ogul's background in electrical engineering led him to realize studying the brain using network theory could hold the key to understanding epilepsy. During a seizure, dramatic changes in the brain's structural and functional networks occur, and Mogul thinks that understanding epilepsy as a network disorder could hold the key to successfully treating it. ¶ More than 1 percent of the world's population has some form of epilepsy, and after stroke it is the neurological disease that results in the second-highest number of fatalities,

says Mogul. The currently available treatments include medications and surgical removal, or ablation, of the affected part of the brain, but both can carry debilitating side effects. About a third of patients aren't helped by either. ¶ Mogul, an Illinois Tech faculty member since 2002, believes that deep-brain stimulation (DBS) could hold promise. DBS uses electrodes implanted in the brain to deliver electrical impulses to brain nuclei to block or inhibit neuronal activity, although the exact mechanism by which it works is still unclear. It has been successfully used to treat Parkinson's disease and has been tried experimentally for the treatment of epilepsy in both animals and humans, but results have been unpredictable, erratic, and largely disappointing, he says. ¶ "If you want to optimize stimulation, you have to understand the dynamics of the brain as it goes into and out of seizures," says Mogul, who received a fiveyear, \$1.28 million grant from the National Institutes of Health (NIH) in February 2016 to continue pursuing this research. He studies these dynamics in rats that undergo chronic repetitive seizures (in other words, epilepsy) by recording and analyzing brain function to tease apart what the brain experiences as a seizure evolves. ¶ "We saw certain characteristic electrical behaviors in brains at the onset of a seizure and as it naturally terminates," he explains. "We initially focused our efforts on trying to see if once a seizure initiates, we could terminate it with electrical stimulation." ¶ Mogul and his colleagues discovered that individual rats had unique neurological dynamics both during seizures and as the seizures naturally subsided. By using DBS that was matched to the observed natural electrical activity of an individual rat's brain, the researchers could artificially terminate seizures significantly more rapidly and effectively than could be accomplished with currently employed DBS protocols that typically do not reflect actual seizure dynamics. He believes his team has found a mechanism that can, in part, help to guide optimization of stimulation, and that such treatment may be translatable to personalized medicine for epilepsy patients that is superior to what is now available. ¶ A paper in the January 2016 issue of Epilepsia describing this research, coauthored by Mogul and Tiwalade Sobayo, a doctoral candidate (and now fellow) in biomedical engineering at Illinois Tech, was recently selected to receive the 2017 Epilepsia Prize for the Best Basic Science Paper of 2016. Mogul's team is also partnering with NIH to analyze patient data from its International Epilepsy Electrophysiology Database at the University of Pennsylvania. They hope to identify unique neurological dynamics of epileptic seizures in patients to help develop optimization of DBS for treating humans with epilepsy. -Jim Daley

#### **MORE ONLINE**

Epilepsy Foundation: www.epilepsy.com





Yes, I'm a whore's daughter," the young women chant before a crowd watching them perform in a play they wrote called *Lal Batti Express*, or *Red Light Express*. During an audience discussion afterward, one performer talks about a common bond all people share.

"Everyone's wounded in some way. Everyone," she says. "Poor, rich, American, Indian, Asian, white, black—everyone is."

A male viewer raises his hand to comment.

"Yes, we are wounded, but you are wounded healers," he says, his testimonial documented in a video recording made of the Mumbai (India)-based group, which traveled to New York, Washington, D.C., San Francisco, and Los Angeles in 2015. "And so, everywhere you go, you heal."

As the young women heal others, Robin Chaurasiya (PPPS, PSYC '06) has been helping to heal them—and, she discovered, herself—through Kranti, a nonprofit organization Chaurasiya co-established in 2010. Part shelter and part school, Kranti is a home for women survivors of sex trafficking, daughters of sex workers, and young women who were born and raised in India's major red-light areas. Chaurasiya, one of 10 finalists for the \$1 million 2016 Varkey Foundation Global Teacher Prize, has developed a novel one-room

"The biggest thing that we tell our kids is that they are amazing and exceptional not in spite of their backgrounds but because of their backgrounds."

—Robin Chaurasiya

schoolhouse curriculum tailored to her "Krantikaries" (from *Kranti*, the Hindi word for "revolution") ages 12–22 who differ by caste, education, literacy level, physical and mental abilities, and degree of victimization.

"The phrase that their local school teachers use on them is 'a whore's daughter can only be a whore," says Chaurasiya, a youthful 32 who could pass for one of her kids, as she likes to call the 18 current residents of Kranti. "The biggest thing that we tell our kids is that they are amazing and exceptional not in spite of their back-

grounds but because of their backgrounds. The difficulties and adversities they have faced give them that extra grit and resilience, along with extra compassion."

In fact, compassion, along with communication, community leadership, critical analysis, and creative thinking, are the five pillars supporting the Kranti way of life, says Chaurasiya, who spoke to a gathering in the Illinois Tech Department of Psychology in conjunction with receiving the International Award of Merit from the university in April. The Kranti school day runs from 8 a.m. to noon with 20-minute sessions as follows: yoga, meditation, journal writing or gratitude note writing, a creative-thinking activity (such as teams building objects out of marshmallows and toothpicks), logic puzzle work, and current events. The remaining two hours differ by day of the week-Music Mondays, TED Talk Tuesdays, Worldly Wednesdays, Thinking Thursday (always a guest lecturer), and Field Trip Fridays (a career-exploration day, such as the girls working alongside trash pickers). From noon until 6 p.m., students take courses at mainstream schools or engage in dance, swimming, or more yoga and meditation. A cultural presentation or program to enhance the girls' computer skills takes place before dinner, which usually begins at 8 p.m.

Chaurasiya also requires that each girl take travel opportunities to learn firsthand about the world outside of India and to redevelop their trust in people and reliance upon the goodwill of humankind. She put a 14-year-old deaf student on a plane to a summer camp in the U.S. with nothing more than flashcards with her name, important phrases, and symbols for Wi-Fi and money exchange. The young woman managed so well that she received a scholarship to the Model Secondary School for the Deaf, a premier educational program in Washington, D.C. All Kranti students who are capable take a gap year to volunteer abroad. Chaurasiya believes that these global adventures will help her kids become better peer teachers and community leaders. The approach comes out of experiences that began while Chaurasiya was an Illinois Tech student. She spent each winter break

traveling solo to other countries, such as Mexico and Uganda, to engage in socially relevant volunteer activities.

"Her double major in psychology and political science made sense to me, since she intended to change the world," says Emerita Professor of Psychology Margaret Huyck, who served as Chaurasiya's academic advisor when she came to Illinois Tech on a United States Air Force ROTC scholarship. "I was adventurous and a boundary-tester for my cohort, but Robin is much more so. I admire that, particularly because I have always believed that her ignoring of boundaries was, and is, in the service of a mission for her life."

But Huyck also says that Chaurasiya's noble ambitions had a dark side, fueled in part by outrage she felt from domestic abuse she suffered as a child and the treatment she received from the government when it learned she was a lesbian. Meditation retreats, psychotherapy, and years spent with her new Kranti family have helped Chaurasiya to grow and "offer new opportunities in a context of love and acceptance."

Normally animated and effusive when talking about her girls, Chaurasiya grows quiet when asked to describe herself. But her answer carries with it the confidence of one who knows that she is on the right personal path.

"If you had asked me this five years ago I would have said, I'm an activist and a human-rights whatever; now I would say I'm someone who is trying my best every day," she explains. "I spent so many years thinking that I was going to fight and change the world, but the best thing I can do for the world is to change myself. I've also discovered that the best part about being a teacher is not what I teach but what I learn. Anyone who spends time with my kids and sees their positive energy and hears their laughter can look at their own life and realize the chance they have to be agents of happiness."

#### MORE ONLINE

"It's Not Too Late: Teens Born in Brothel Get a Fresh Start": http://nbcnews.to/1debGKc Robin Chaurasiya—Global Teacher Prize bio: http://bit.ly/2psjoYb

# APSTRODA ORIGINAL

By Marcia Faye

he white walls and white, plush wall-to-wall carpeting in Illinois Tech alumnus and telecommunications visionary Satyanarayan "Sam" Pitroda's spacious rec room seems the perfect backdrop to showcase some 150 canvases that he created in vivid acrylic or oil-based paints. One, dated 1979, is of pop-culture icon Batman.

"My son, who was five years old at the time, was crying that he wanted a Batman toy from the store," says the charismatic Pitroda, who offers a visitor tea along with conversation at his Oak Brook home. "It was snowing, so I told him, 'Let me instead draw one for you."

He leads the way upstairs to a hall where there rests an ornately carved chest stuffed with thousands of intricate doodle drawings in black and white, others in color. Pitroda, a self-taught, lifelong hobby artist, says that he has always been fixated on structure, geometry, form, and shape.

"Everything has to be straight and flat. If something is not in the middle, I will come and do this," he says, moving a decorative bowl to the center of a table adjacent to his home office, its walls filled with framed honors and at least a dozen magazine covers of Pitroda with his characteristic mane of nape-length gray hair. "If I am in a theater, I'll count all of the lights. If I go someplace else, I'll count all of the windows. I acquired the ability to scan everything. In that scan, I see images and figures."

Pitroda's mind seems to move in as many directions as the swirls and vortices comprising his doodles, yet his calm demeanor and message today, at 75, centers on the philosophy of a historic figure who exemplified compassion, service to others, and right action.

"I grew up in India when it was just getting independence from Britain. In those days, we had nothing; I had never even seen a real toy. I never used a telephone before coming to America," recalls Pitroda, one of eight children. "Mahatma Gandhi was the leader who focused on simplicity, absolute truth, nonviolence, and unconditional love for

everyone and everything from animals to the environment to people. It was a way for people to come out of themselves and really live outside of their lives. I admired Gandhi's philosophy. That became the foundation of my life."

Along with Pitroda's ability to scan and see images came his ability to imagine and see the future. Dubbed by the media over the course of his career as "The Man Who Saw Tomorrow," "Telecom Czar," and "Sam, Sam the Switching Man," Pitroda achieved global acclaim in the 1980s for his bold idea to fix India's sporadic or nonexistent telephone network, bridging the gap between the 800 million people in both urban and rural areas. He accomplished this through a customized digital telecom system of switches and exchanges built by Indian talent, not Western companies. Pitroda obtained a rare meeting with then Prime Minister Indira Gandhi along with her son and future prime minister, Rajiv, and was given approval to establish

"I grew up in India when it was just getting independence from Britain. In those days, we had nothing; I had never even seen a real toy. I never used a telephone before coming to America."

—Sam Pitroda

the government-funded Centre for the Development of Telematics.

Rajiv Gandhi gave Pitroda additional opportunities to further develop Indian telecom as a member of his cabinet, which culminated in Pitroda's subsequent idea to outfit popular public meeting places (think pre-Internet cafés) with "yellow box" telephones managed by entrepreneurs who would receive a commission from each phone call made. These "public call office" phones would remain popular throughout the subcontinent until India's second telecom revolution—the rise of mobile phones. Pitroda (with David Chanoff) tells the story of his telecom experiences in the autobiography Dreaming Big: My Journey to Connect India, published in 2015. Pitroda dedicates the book to Anu. with whom he has been

PHOTO: MICHAEL GOSS

married for 51 years, and his granddaughter, Aria, now 6.

A self-described "risk-taker," Pitroda admits that as a young man who was sometimes brash and naïve, he had largely equated success and prosperity with earnings potential and set a goal to become a millionaire by age 40. He surpassed that goal at age 37, when Rockwell International acquired an electrical switching company he co-founded—and Pitroda received a check for \$2 million. That windfall allowed him the freedom to pursue his Indian telecom project and later, to develop the concept behind C-SAM, a mobile wallet and on-device solutions company that would bring him a second windfall when it was purchased by MasterCard in 2014.



Pitroda co-founded several other hightech startups and devotes most of his time today to writing books and undertaking roles in various international nonprofits. He is co-founder and chair of the Global Knowledge Initiative, an organization that promotes collaborative innovation to build networks that deliver solutions to challenges facing Africa, Asia, and the United States. Pitroda also co-chairs the Paris-based People for Global Transformation, a "think-and-do-tank" focusing on at-scale urban development. Having come from a part of India prone to drought and often affected by food shortages, Pitroda established the India FoodBanking Network, which oversees food banks in 11 regions.

An Illinois Tech Alumni Medal winner and member of the Institute of Design Board of Advisors, he also helped to establish the university's online presence in India. Darsh T. Wasan, Distinguished Motorola Professor of Chemical Engineering and vice president for international affairs, met Pitroda (M.S. EE '66) during his student days and recognized his business acumen. Pitroda delivered the 2016 Darsh T. Wasan Lecture at Illinois Tech.

"Sam has always had great ideas and insights," says Wasan. "He is really good at bringing people together."

Through one book Pitroda is writing—about his vision for redesigning the world—he hopes to inspire readers to apply some of those basic philosophical tenets

that helped to shape his life. For starters, Pitroda suggests being open-minded and engaged with one another. He says that his wife recently hurt her knee and when the couple returned from a trip through O'Hare International Airport, a skycap pushed her in a wheelchair. Pitroda struck up a conversation with the young woman about her future career and before their paths diverged, he gave her his business card and urged her to call him for a networking meeting.

"That's what life is about; she felt like someone took an interest in her," says Pitroda. "That's what Gandhi would also do." ■

#### **MORE ONLINE**

Sam Pitroda: www.sampitroda.com

# A Powerful Passion

By Amanda Cleary Eastep

t was 1976 when a young college graduate boarded the first of the many crowded buses that would transport her from Venezuela to Chile. Although she had originally planned to live in a remote village in the Andes mountains, she ended up living in Chile for six months during the military dictatorship of Augusto Pinochet Ugarte (president 1974–1990). For Margaret Power, it was just the beginning of her love affair with Latin America.

Power, now Illinois Tech Department of Humanities chair, may not claim genealogical roots in Latin America, but her passion for its people, politics, and culture is in her blood. Out of these experiences came her first two books, one of which explores the reasons a majority of Chilean women supported the overthrow of Salvador Allende Gossens's socialist government (1970–73) to make way for Pinochet's military dictatorship.

Power continues to immerse herself in research with a more recent focus on Puerto Rico's Nationalist Party, which led the struggle for the country's independence from the 1920s to the 1950s. She has worked with Chicago's Puerto Rican community for many years and serves on the Board of Directors of the Puerto Rican Cultural Center in Humboldt Park. Power was also active in 35 Women for Oscar, a movement that called for the release of political prisoner Oscar López Rivera. López Rivera was arrested in 1982 in Chicago and convicted by the United States government on charges of seditious conspiracy for his role in Puerto Rico's Armed Forces of National Liberation. The movement 35 Women was named for the number of years López Rivera was imprisoned. President Barack Obama commuted his sentence in January 2017.

At press date Puerto Rican citizens are scheduled to vote on a referendum that offers the options of statehood or independence/free association. "What-

ever the outcome of the vote, the point needs to be made that the U.S. Congress will decide the Island's status, not the Puerto Rican people," Power says.

"Puerto Rico is called either a commonwealth or a free associated state," says Power. "I call it a constitutional anomaly that's really a colony. What happens in Puerto Rico is built on a history of what happens when people are conquered. It's very much about race and colonialism."

Power notes that of far greater concern is the country's current economic crisis. The Island recently declared bankruptcy for the first time in its history. In addition, students at the University of Puerto Rico have declared a strike to protest cuts, and officials from other top universities have resigned in protest.

In April Power traveled to Peru to research an upcoming book that will explore why Latin Americans in the '20s, '30s, '40s, and '50s advocated for Puerto Rico's independence and reincorporation into Latin America. Part of her research involves the transnational Latin American solidarity movements that supported the Nationalist Party.

"Professor Margaret Power has been a leading figure in the study of gender and human rights in Latin America," says Jaime M. Pensado, associate professor of history at the University of Notre Dame. "Her latest project on the Puerto Rican Nationalist Party will force us to rethink the decade of the 1950s, not only as a crucial chapter of the Cold War period, but also as a key transnational moment of both leftist solidarity and reactionary politics."

This will be Power's sixth book. Her most recent book, *Hope in Hard Times: Norvelt and the Struggle for Community During the Great Depression,* takes an intimate look at a New Deal community in southwest Pennsylvania named for Eleanor Roosevelt. ■

#### MORE ONLINE

Norvelt Historical Society: www.norvelt.org Puerto Rican Cultural Center: www.prcc-chgo.org







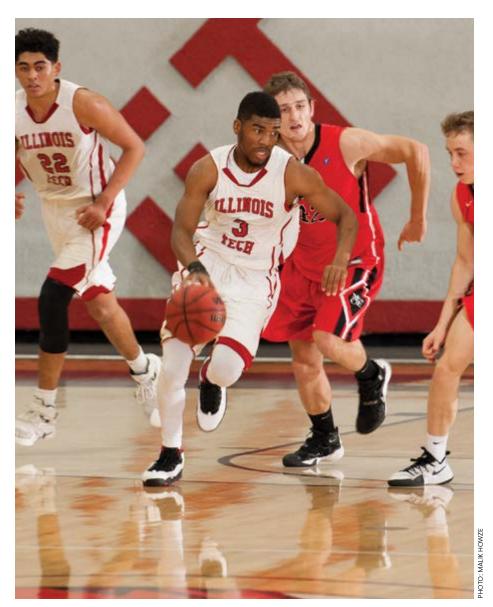
**ITH 14 SECONDS LEFT** in the game, fans in the courtside crowd at Penn State Fayette's Bryce Jordan Center were on their feet as opposing teams of student-athletes strategically positioned themselves on the polished basketball court in the March 4 event. During second 14, Illinois Tech guard #12, Quentin Forberg, leapt high to make his only basket of the game, one that he will likely never forget. His three-point shot will be remembered as the final points scored in an historic game for the Scarlet Hawksthe team's first United States Collegiate Athletic Association Division I National Basketball Championship qualification. Although Illinois Tech ultimately lost to the Concordia College Alabama Hornets, the true glory lies in the Hawks' journey and their supportive team-behind-the-team composed of a dedicated coach, loyal fans, family members, and a trio of creative data analysts.

Men's Basketball Head Coach Todd Kelly knew that he faced a challenging situation when he came to Illinois Tech in 2014. Basketball had been reinstated as a varsity sport only two years earlier, and the majority of the 11-man team Kelly inherited had never even played high school basketball. During Kelly's first year, the Hawks won two games. Even with a core of power shooters such as Anders Bybjerg (BA '17), Samuel Rarick (EE/M.S. CE 5th year), and Vignesh Rajagopal (EE '17), Kelly was certain the team's 4–21 finish during the 2015–16 season simply did not reflect the players' full capabilities.

The coach's frustration rose to the surface one day in late February 2016 as he walked through the Keating Sports Center weight room and noticed Rarick and another player studying the pulleys and iron stacks.

"I asked them what they were doing and they told me they were discussing the tension in the system," recalls Kelly. "I immediately told them they should be lifting the weights, not trying to figure out how the machine works."

After going back to his office, Kelly still had the two student-athletes on his mind when an energy-efficient lightbulb went off. For years he had been fascinated by the movie *Moneyball* and the annual MIT Sloan Sports Analytics Conference. Why not see if Illinois Tech's STEM-focused students could calculate some of the



[Photo previous page, left to right] Shlomo Engelson Argamon, Larry Layne, Denis Bajic (AMAT, CS '15), Joe Hakes, Todd Kelly, Vignesh Rajagopal (EE '17), and Anders Bybjerg (BA '17) [Photo above] USCAA All-American Malik Howze (#3) leads a fastbreak during a December 2016 win over the Milwaukee School of Engineering at Illinois Tech's Keating Sports Center.

advanced statistics and player lineups used by the National Basketball Association and Division I teams to help the Hawks fly out of their slump?

Kelly first discussed the idea with his wife, Adrianne, then met with Shlomo Engelson Argamon, professor of computer science and director of Illinois Tech's Master of Data Science program, who recommended his two sports-minded data analytics graduate students for the project: Denis Bajic (AMAT, CS '15), an analytics extrovert, and Larry Layne, his quieter counterpart who earned his first master's degree, in chemistry, from Carnegie Mellon University.

"Data analytics is much more challenging in basketball than in baseball, where it

all started," Argamon explains. "Baseball is a comparatively static, slow-moving game—the effect of an individual player on what's going on in the game is relatively independent of what the other players are doing. In basketball there are multiple players on the court at the same time, the game moves very quickly, and there is a lot of interaction between the players. One player makes the basket, but the other players on the court can all influence the setup for that scoring. Those interactions make it much more complicated and difficult to calculate the kinds of statistics that are going to be helpful to a coach."

Each week during their summer 2016 practicum, Bajic, who graduated from the master's program this May, and Layne met

with Argamon and Kelly to discuss their findings. At the conclusion of the project, the duo provided Kelly not only with all of the statistics that he requested and more, but also the foundation for a creative complement: game simulations. Layne, a video game enthusiast, attempted simulations of future games to extract potentially useful information. He says that he logged so many computer hours analyzing Hawks players that at one point during the academic year he passed another student on Mies Campus who looked familiar, realizing afterward that he was one of the basketball players.

Though the data science graduate students who helped give the student-athletes a game leg up had not met them (before the *IIT Magazine* photo that accompanies this article), their eagerness to become involved is one example of an esprit de corps moment, perhaps more meaningful than even a trophy. Rarick, one of five Hawks honored by the Association of Division III Independents (AD3I) this year, says the combined efforts provided players with a competitive edge.

"I am extremely thankful to those students who helped us out; I believe

that data analytics can be a useful tool in preparing for games and devising strategies in-game," he says. "Players learned one another's tendencies and grew as a cohesive unit. Using both data analytics to prepare and having good team cohesion only increased our chances of winning. I believe those are two integral factors into why we did well this season."

"At Illinois Tech we have tremendous potential to find innovative academic answers to athletics questions. Athletics shouldn't exist in a vacuum where we don't use that potential to figure out how to do things better."

—Joe Hakes, director of athletics

Kelly, named 2017 Coach of the Year by the AD3I, recalls other moments, such as when his wife surprised him with a 1:30 a.m. knock on his hotel door the morning of the championship, having driven eight hours to join him in cheering on the Hawks. Kelly also thinks about the team's most dedicated, fist-pumping fan, basketball letterman John G. Olin (ME '61), Techhawks forward #43.

"When I look back on my own days on the basketball team, I recall the camaraderie and the teamwork. We also learned how to win, how to lose with poise, and how to lead," says Olin. "Our team this year learned all of those things."

Argamon, the basketball novice who admits to never having been a sports fan, describes the overall victory for the university community.

"We've contributed some insight from data analytics; Coach Kelly used that to motivate his players, improve their strategies, and take them to the next level," he says. "There's a message here: Illinois Tech, historically, has emphasized interdisciplinary education and research—it's how we do everything. This is a great success story for that way of approaching the world."

#### **MORE ONLINE**

"Basketball Team Uses Data Analysis to Up Their Game": http://bit.ly/2o0ZUZP MIT Sloan Sports Analytics Conference: www.sloansportsconference.com



Larry Layne [left] and Denis Bajic (AMAT, CS '15)

# Data Detectives

Denis Bajic (AMAT, CS '15) and Larry Layne tackled advanced sports statistics for the Scarlet Hawks, such as individual player efficiency ratings (a number that represents the sum total of a player's contributions to the team's wins) and adjusted plus/minus (a number that represents a player's effect on the game). Argamon says that to ensure the accuracy of their work, they also had to determine league statistics of the opposing teams, and thus spent hours poring over game logs, box scores, and play-by-plays to creatively estimate the necessary numbers. An insight their work yielded early on was that the worst players on the Scarlet Hawks were actually much worse in terms of the overall harm they were causing to the team.

The analytics duo then drilled down to a deeper layer of analysis critical to an interactive sport like basketball—calculating pair-wise synergies, the interactions between players on the court at the same time—with an algorithm Bajic had developed. This would be helpful in determining the best five-man lineups for various situations, such as a three-point shooting lineup or the best defensive lineup.

"One of the formats that we got our data in was very peculiar and difficult to work with; it took a lot of time, patience, and playing around to get it to automate processing of the data," says Layne. "It was definitely one of my top achievements."

"We wanted to uncover things that maybe we weren't so sure of or couldn't see based on the statistics we had to begin with," says Bajic. "I feel that we've done something good for the team."

# Down to the Earth PROGRAM WITH PROGRAM BULLONG CONNECTIVE PROGRAM BULLONG CONNECTIVE PROGRAM PR

IMAGE CREDIT: RON HENDERSON / L+A LANDSCAPE ARCHITECTURE

#### By Chelsea Kalberloh Jackson

hen Ron Henderson left the architecture firm where he was working in the early 1990s to study landscape architecture, he told his boss that he wanted to discover what the dirt told him he should build. "I've always had that instinct that a bounded project, a building, simply could not engage the world at the scale that I wanted a project to engage," he says. Since then he has designed landscapes around the world—China, France, and North America—and is a noted expert on Chinese and Japanese gardens. Henderson's multiple award-winning projects include the gardens of the Chinese Pavilion for the Shanghai Expo 2010, Yinzhou Park (China), Memorial to the Abolition of Slavery (France), Gardens of the Isabella Stewart Gardner Museum in Boston, and, most recently, Providence City Walk in Rhode Island. His firm, L+A Landscape Architecture, is currently working to give new life to the historic town spring in Newport, Rhode Island, a Superfund site that is being returned to public use for the first time in 350 years. Director of Illinois Tech's Landscape Architecture program, Henderson describes some of his favorite landscapes and shares his thoughts on the intersection of humans and the nonhuman world.

"A new paradigm of long and narrow urban landscape projects are finding opportunistic lines through cities. These landscapes often go through many neighborhoods to create a kind of social highway. With Providence City Walk we were looking at a problem that many cities are investigating: the consequences to neighborhoods of road building in the latter half of the twentieth century," says Ron Henderson.

City Walk was recognized with the Honor Award for Planning and Analysis from the American Society of Landscape Architects—Rhode Island and the Preservation Initiative Award from the Providence Preservation Society.

If you ask me which building is my favorite, it's easy: the Pantheon in Rome, a building as an architect I had studied for years. No question. The first time I walked in, there was a light rain falling through the oculus into a puddle of water that captured the reflection of the sky. My knees got weak. It is such a powerful space. With landscapes, I don't know that I could pick just one. Maybe it's sentimental, but I still like the forests where I grew up, in southern Indiana. They weren't natural forests; they were human managed. What's striking to me is that I'm not picking a clearly bounded space—Central Park or the South Garden at the Art Institute, which is spectacular; or Caldwell's Lily Pool in Lincoln Park, which is just a terrific garden; or the Lingering Garden in Suzhou; or Zuisen-ji in Kamakura.

Something we work hard to do in our landscape architecture program is to build an understanding in our students that we are a species, just like everything else. It's not a nature-culture binary; we're actually just part of whatever it is that we are in our existence. There are two terms in Japan—ningen bunka and zhizen bunka—one is the culture of people and one is the culture of nature. They are distinct but they are both cultures. Many cultures and individuals continue to struggle with that sense of integration of the human species into the presence of the other species, when it's really just part of the same thing—not apart. This bias of the human condition has profound impacts on the world.

Many of the twentieth-century landscape architects in the United States grew up in rural areas or on farms, as I did. That has changed in the same way that the demographics of America have changed. Now, our students are predominantly suburban or urban, and I think they're drawn to the profession through the social implications of public space and community building in addition to the environmental and social justice aspects of landscape architecture. I am hopeful to see how the urban environments of our contemporary generation of students will affect their work and advance the authority of landscape architects as the leaders of designing cities in the twenty-first century. ■

# The Practice of Design

By Amanda Cleary Eastep

Moving from the corporate to the public and social sectors is the most recent step in the dynamic career of ID's newly appointed dean, Denis Weil (M.Des. '01). This self-proclaimed "millennial in a boomer body" brings design leadership expertise gained from positions at McDonald's, IDEO, and Procter & Gamble. From the social sector, he brings the practice of collaborating with multiple stakeholders at Year Up, Sanergy, and Mercy Corps, and the belief that design is uniquely positioned to act as catalyst and facilitator for addressing the world's big challenges.

In 2014 you left your role as vice president of concept and design at McDonald's for Kenya to help the social innovation start-up Sanergy scale the delivery of sustainable sanitation to people in the urban slums of Nairobi. Why the career switch? When I decided on my "next chapter," I had the urge to do something different. In 2005 I taught the first service-design class at ID together with Mark Jones from IDEO, and I discovered I like complexity and being on the frontier. The more complex application of service design is design for social innovation because it has multiple stakeholders, so I built credentials in that space. For six months in Kenya, I focused on building a more human-centered design capability for franchised latrines. The Sanergy project was the strongest experience I had of a service improving the quality of people's lives.

You've experienced Illinois Tech as both a graduate student and an adjunct professor. What prompted your decision to move into the dean's role?

I have an incredible passion for design, which is truly at an intersection today. Everybody wants design, particularly design linked to innovation. But because of its success, design, and particularly design thinking, is at risk of becoming a method used by any professional practice. If that happens, then design is not a critical professional practice anymore. We are the leading school for design as a leadership practice, and we have an opportunity to redefine design.

What roles do you see design, especially ID design, playing? Managing complexity—A good example is our Center for Collaborative Healthcare Design. A recent ID project involved redesigning an asthma discharge document that emergency room departments give to caregivers of asthmatic children. The student team reconcepted the discharge process and changed the process from a text handout to a discharge conversation guide and at-home caregiving training tool.

Directing creativity—The role of the designer is shifting from being the magician and the creative person who comes up with the creative solutions in the studio to more of a facilitator. In the health care example, we're ideating with doctors and asking, how can we do this better?

Mobilizing action—Designers need to understand contextually the person they are trying to nudge. What kind of incentive is meaningful to that person? How do you drive behavior change? Design must and can play a major role in that.

"I've always
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improve manmade things
and processes.
As a kid I
redesigned my
bedroom using
plan views
when I was
bored in school."
—Denis Weil

What were the early signs of your interest in design? I've always loved to improve man-made things and processes. As a kid I redesigned my bedroom using plan views when I was bored in school. Every three months I rearranged my room. Living environment was very important to me, the aesthetic aspect but also the functional aspect, such as having the minimum number of steps from my desk to my bed. Today this interest has become my passion—to increase the quotient of beauty and human dignity in everyday life. And this is what we also plan to do at ID: to expand the change we help drive in health care today to the other critical social domains of cities and food. ■

#### **CLASS NOTES**

#### 1940s

#### Warren Spitz

(ARCH '42, M.S. CRP '68), Northbrook Ill would like to meet with other alumni in the field of architecture and from the Class of 1942.

#### 1950s

#### **Myron Petrakis**

(ME '51), Hoffman Estates, Ill., received the Points of Light President's Volunteer Service Award for helping to create a memorial for veterans of the Vietnam War. In addition, he served for 51 years as a village historian and secretary of the Board of Fire and Police Commissioners for the Village of Norridge.

#### **Donald Heppner**

(EE '56, M.B.A. '70), Rapid River, Mich., is a retired electrical engineer and a great-grandfather. He discovered Waterdust. which is an application for cleaner water.

#### June Leaf

(DSGN '56), New York, N.Y., has been creating mixed-media paintings, drawings, and sculptures for 70 years. Leaf's solo exhibition, Thought Is Infinite, was displayed last year at the Whitney Museum of American Art in New York.

#### 1960s

#### Walter Goldstein

(CHE '61), Las Vegas, published his third book, The Science of Ethanol. He is involved in the universal blood (Type O negative) project, developing a universal blood from stem cells using bioreactors, thus avoiding donor blood.

#### Norbert "Pete" Pointner

(ARCH '61, M.S. CRP '62). Wheaton, Ill., completed the fifth edition of Readings in Urban Planning and Design. The free e-book is a compendium of 60 papers and more than 250 images.

#### Francis Kulacki

(ME '63, M.S. GE '66), Wayzata, Minn., professor of mechanical engineering at the University of Minnesota, Twin Cities, received the 2017 American Society of Mechanical Engineers Edwin F Church Medal for his outstanding and continuous contributions to mechanical engineering education, research, and service. His work has impacted all facets of mechanical engineering education, including thermal engineering, the engineering curriculum, and design modalities. Through innovative initiatives, Kulacki was a pioneer in establishing and embedding computeraided design and education in mechanical engineering at three universities

#### Fred Weil

(PS '64), San Francisco, is in his 49th year practicing tax and corporate law. He recently retired as an elected board member of the Moraga-Orinda Fire District after more than 13 years in office. When added to his previous 21 years as an elected member of two local school districts, Weil has served his community for more than 34 years.

#### **Gerald Bepko**

(LAW '65), Indianapolis, recently chaired the Uniform Law Commission Drafting Committee to revise the Model Tribal Secured Transactions Act, which is now available for adoption by Native American Tribes.

#### Carmen Difiglio

(BE '66), Arlington, Va., retired from the United States Department of Energy, where he was the deputy assistant secretary for policy analysis. He was appointed co-director of the Istanbul International Center for Energy and Climate at Sabanci University. He received his Ph.D. from the University of Pennsylvania.

#### Bahne Cornilsen

(CHEM '68), Houghton, Mich., retired as professor of chemistry from Michigan Technological University after more than 37 years of teaching and research. He is known for applying Raman spectroscopy to study nonstoichiometry in solids such as nickel oxyhydroxide, the active material in nickel battery electrodes. He continues to stav active in research.

#### **Richard Laurent**

(DSGN '69), Chicago, co-presented "Using Art to Affect Social Change" at the College Art Association National Conference in New York.

#### 1970s

#### **Eugene Polley**

(ES '70), San Diego, sold his accounting practice and is now managing apartment real estate on a full-time basis.

(BIOL '73, M.S. ENVE '74). Philadelphia, was honored with a Distinguished Achievement Award from the Society for Risk Analysis for his development of the field of quantitative microbial risk assessment.

#### William Wilson

(FPSE '73) Gallatin Tenn is founder of InsuranceCommentary.com, where he blogs on critical issues in the property and casualty insurance industry. He has two books scheduled for publication in 2017 and four others planned over the next two years. In his spare time Wilson boats, reads, and rehearses with his classic rock and blues band, The Old Dogs.



#### Manu Vora

(M.S. CHE '70, Ph.D. '75), Naperville, III., [to left of award] received a Lifetime Achievement Award on behalf of the Blind Foundation of India from the Association of Indian Institute of Technology Banaras Hindu University Alumni. The foundation's work was also recognized in the magazine DesiLife and Times.

His son Aaron is a freshman pitcher on the Westmont College NAIA baseball team.

#### Martin Hudik

(MAE '71), Pingree Grove, Ill., and his wife. Eileen, have retired. They relocated to be near their daughter so they can watch their grandchildren grow up.

#### Gordon Ramsey

(M.S. PHYS '72, Ph.D. '82). Frankfort, Ill., assumed the role of president-elect of the American Association of Physics Teachers. He is the program chair for the AAPT meeting to be held in July in Cincinnati. Ramsev has been a professor of physics at Loyola University Chicago for 35 years. He is married and has a son and three grandchildren.

#### **Charles Haas**

#### Scott Cooper

(PS '75, LAW '78), Madison, Wis., retired from his partnership with global immigration firm Fragomen after a nearly 30-year career with its Chicago, Michigan, and Dubai offices. He remains senior counsel to the firm. Cooper has since established Immigration Compliance Associates, which focuses on employer immigration compliance, and international student and exchange visitor program auditing and representation. He also serves on the board of the nonprofit Madison International Partners, an exchange student and scholar hosting organization.

#### Daniel Sansone

(M.B.A. '75), Vestavia, Ala., retired from Vulcan Materials Company, where he served as executive vice president and chief financial officer He currently serves on the boards of directors of Ingevity Corporation and AdvanSix Inc.

#### Tyler Patak

(ARCH '77), North Fort Myers, Fla., is a practicing architect and partner with Parker/ Mudgett/Smith Architects, He is the state representative and past president of the Florida Southwest Chapter of the American Institute of Architects, as well as Region 4 director of the Florida Design Out Crime Association, Patak also serves on several local advisory committees, including Florida SouthWestern State College and Fort Myers Technical College. He earned an M.B.A. and doctorate in business administration from California Coast University.



#### Robert Johnson

(CE '69, M.S. '71), Buffalo Grove, Ill., was interviewed for the 105.5 FM Tech Scene Chicago radio program, where he discussed engineering and the Illinois Tech DuPage Area STEM Expo. He has participated in the expo since 1990 and hosted the structural engineering exhibit this year.



#### **Patrick Dowd**

(CE '81, LAW '95), Palatine, III., [/eft] is general counsel for fitMS NeuroBalance Center, a nonprofit providing services to people with multiple sclerosis, Parkinson's disease, and other chronic, progressively disabling conditions. The organization is raising funds for a new building in Barrington, Illinois.

Patak and his wife, Denise, have been Florida residents since 1977.

#### Joan Lebow (née Engeman)

(LAW '78), Chicago, joined the Chicago office of Quintairos, Prieto, Wood & Boyer as Healthcare Regulatory and Technology Practice chair.

#### Nancy Hablutzel (née Zimmerman)

(LAW '79), Durham, N.C., along with her husband, Professor Emeritus Philip Hablutzel, continue to enjoy North Carolina Philip continues as director and chair of the Institute of Illinois Business Law at Chicago-Kent College of Law. Nancy is finishing her last few cases as Guardian ad litem in Adoption Court. She was honored with a proclamation at the National Adoption Day celebration last year. The couple continues to be active with the North Carolina Opera.

#### 1980s

#### **Godfrey Ofem**

(IE '80), Chicago, recently published his first novel, We Don't Own Our Memories Anymore, about the implications to individuals and businesses of how they choose to use technology.

#### Robert Sullivan

(M.A.S. CRP '80), Orland Park, Ill., was inducted into the College of Fellows of the American Institute of Certified Planners

#### Peter Birnbaum

(LAW '83), Chicago, is celebrating 25 years as president and chief executive officer of Attorneys' Title Guaranty Fund.

#### Andrea Berry (née Jenkins)

(CS '84), Tarzana, Calif., was inducted into the Sports Broadcasting Hall of Fame in December 2016 She is chief executive officer of her consulting firm, the G.A.P. Media Group, as well as a life coach and wealth-management professional. Berry worked for 20 years at FOX Broadcasting Company in various positions, most recently as senior vice president for Broadcast Media Services. Berry is on the Illinois Tech Board of Trustees and is chair of the Alumni Association Board of Directors

#### **Christopher Nemeth**

(M.S. DSGN '84), Evanston, Ill., was elected vice president of planning and organization for the IEEE Systems, Man, and Cybernetics Society (SMCS) after serving for four years as SMCS vice president for Human-Machine Systems. As a principal scientist, he leads the Cognitive Solutions Group at Applied Research Associates, an 1.100-member science and engineering consulting firm working primarily in the high-risk and high-hazard sectors.

#### Yannick Assouad (née Pasquier)

(Ph.D. ME '85), Toulouse, France, was named director of Arkema's board of directors in February. She was named chief executive officer of the aviation company Groupe Latécoère in 2016.

#### Christopher Underwood

(EE '85), Schaumburg, Ill., recently completed a three-month job assignment in São Jose dos Campos in São Paulo, Brazil, in support of new aerospace development and flight testing.

#### Andrea Buford (née Robinson)

(LAW '86), Chicago, was installed as chair of the Illinois Judicial Council.

#### John Walden

(LAW '86), Big Sky, Mont., was appointed president, chief executive officer, and member of the board of directors of FTD Companies in March. He has been at the forefront of multichannel consumer-driven retailing for more than 20 vears. Walden served as chief executive officer of Home Retail Group, the United Kingdom's leading home and general merchandise retailer. He was also managing director and chief executive officer of Home Retail's principal division, Argos.

#### Anurang Revri

(M.S. CS '87), San Francisco, is vice president of applications development and architecture at Pan-American Life Insurance Group.

#### Michael Kalweit

(M.S. BIOL '88), Scottsdale, Ariz., was appointed chief financial officer of Toggle, a startup that joins cognitive neuroscience and the Internet to accurately predict both positive and negative subconscious or latent preferences.

#### John Hershey

(ARCH '89), Chagrin Falls, Ohio, president of J. Hershey Architecture opened two new offices in Philadelphia and Orlando, Florida, in April 2017 for a total of four offices, including the Chicago and Cleveland locations. William Levernier (ARCH '76) and Robert Utyro (ARCH '92) are members of the professional staff. The firm's focus is to use the technical problem-solving skills as taught at Illinois Tech to assist residential community associations such as those for suburban townhomes and urban high-rise condominiums with capital-improvement needs.

#### **Patty Meggs**

(EE '89), Flossmoor, Ill., senior manager of sales operations at AT&T, received a Special Recognition Black Engineer of the Year STEM Award in 2017.

#### 1990s

#### Stephen Lesavich

(Ph.D. CS '91), Kenosha, Wis., was named an Attorney of the Year for 2017 in Illinois by *Corporate Vision* magazine.

#### **Brent Lipschultz**

(LAW '91), Rye Brook, NY., joined PricewaterhouseCoopers LLP as a tax partner in the Personal Financial Services Practice of the firm's New York office, where he provides comprehensive tax and financial planning services. He was also re-elected to the executive board of the Society of Trust and Estate Practitioners.

#### **Gregory Kruczek**

(EE '92), Saratoga, Calif., was a speaker at the Parks Associates 21st annual CONNECTIONS: The Premier Connected Home Conference in May. The executive conference focuses on ways to engage consumers and grow revenues in the converging IoT industries, including smart home, connected entertainment, and mobile ecosystems.

#### Albert Manshum

(ARCH '93), Grayslake, Ill., is senior vice president of operations, integration, and optimization for Advocate Health Care, the largest health system in Illinois, including 12 hospitals with more than 3,300 beds. Under his direction Manshum has centralized facilities, which has saved 27 percent in annual operating costs and decreased energy consumption by 20 percent.

#### Junjian Tang

(M.A.S. ARCH '93), Lisle, Ill., federal program principal for HDR, Inc.'s Chicago office, has been named a fellow of both the Society of Military Engineers and the American Institute of Architects.

#### Jennifer Welch

(LAW '94), Chicago, is the new chief executive officer and president of Planned Parenthood of Illinois.

#### Jason Howard

(CS '97), Keller, Texas, is working with an international team of volunteers to analyze and automatically index large collections of ancient Korean genealogical records.

#### **Andrew Bleiman**

(LAW '98), Northbrook, Ill., is managing attorney for the Illinois offices of Marks & Klein, LLP, representing, counseling, and advising clients across numerous industries on general business, transactional, and litigation matters. Bleiman was recognized as a Legal Eagle, one of the nation's leading franchise attorneys, in the April 2017 Franchise Times.

#### **Robert Brevelle**

(CS '98, M.S. '98), Rowlett, Texas, was made a partner at Tech Wildcatters, an accelerator and seed-venture capital company. He was also appointed to the board of directors of SD3D, an automations technology company specializing in 3-D printing solutions.



#### Anat Mor-Avi

(M.A.R. ARCH '98), Chicago, after 30 years of practicing architecture, has returned to Illinois Tech to pursue her Ph D

#### Adam Weiss

(LAW '98), Glencoe, Ill., was voted a shareholder of Polsinelli and named chair of the Trademark, Copyright, and Branding Group.

# College Sweethearts Leave a Legacy for Tomorrow's Thinkers

"Our education at Illinois Tech brought us a good livelihood. We received graduate assistantships, but I remember some students struggling financially. We wanted to help a little bit—to help graduate students and keep new technologies going. We also wanted to set an example for our loved ones by taking advantage of charitable giving strategies that benefit Illinois Tech now, and in the future, through our estate."



Ron Eshleman (Ph.D. MAE '67) and his wife, Judith Nagle-Eshleman (M.S. PHGY '63, Ph.D. '68), met in junior college in Hershey, Pennsylvania. Ron co-founded the Vibration Institute, a small business that helps companies analyze machine performance, and Judith became an editor for Encyclopædia Britannica. The couple recently made an IRA rollover gift to support Illinois Tech graduate student fellowships, and they will meet their first student in the 2017-18 academic year.

They have also included Illinois Tech in their will, which has made them members of the Gunsaulus Society. Named in honor of the university's founding president, the Gunsaulus Society recognizes those who have arranged foran estate commitment to the university.

#### Benefits of a Real Estate Gift in Your Will or Trust:

- Help ensure Illinois Tech's future.
- · Leave a legacy of giving back.
- Give without affecting your current cash flow.
- Reduce any potential estate tax.
- Retain control of your assets during your lifetime by directing your gift to a particular purpose.\*

If you have named Illinois Tech as a beneficiary in your estate plan through your will, trust, IRA, or retirement plan, please let us know so that we may acknowledge your generosity and include you in the Gunsaulus Society.

Visit iit.edu/giftplanning to learn how you can benefit from these giving methods and more. Contact Dean Regenovich, Office of Gift Planning, at dregenovich@iit.edu or 312.567.5018.

Gunsaulus | SOCIETY



President Alan W. Cramb [top row, third from left] joined alumni and new graduates at an event in Mumbai, India.



CME Group Foundation members dedicate a classroom on the Downtown Campus as students, faculty, and staff participate. Photo: Michael Goss

#### Santosh Vijay

(M.A.S. TSEC '99), Brea, Calif., recently relocated from Bangalore, India.

#### 2000s

#### Jennifer Bertoglio (née Ferry)

(LAW '00), Scottsdale, Ariz., is chief executive officer and president of Premier Resources Group, Inc. and contributes two decades of experience in staffing, outsourcing, and contingent work-delivery models. In 2005 Bertoglio founded LawyerLink to address the many challenges facing the temporary legal workforce. She also innovated managed-service models and leveraged technology to support litigations for several Fortune 100 companies.

#### **David Brown**

(LAW '00), Chicago, was named managing partner of the Chicago office of Nixon Peabody. He will continue his corporate and securities law practice while leading the firm's efforts to expand in Chicago.

#### Renee Czeryba (née Maciasz)

(M.S. PHRD '00), Arlington Heights, Ill., has been employed at the Walgreens corporate headquarters for nearly six years and received a 2016 Champion of Champions Engagement Award.

#### Brent Gustafson

(LAW '00), Chicago, is chief information

officer and co-owner of SIEMLY, a cybersecurity services management firm. He also serves as vice president of consulting and business development at the e-discovery consultancy, BlueStar Case Solutions, and sits on the Technology Sub-Committee of the Seventh Circuit eDiscovery Pilot Program, Gustafson is an avid outdoorsman and is active in his community of Hinsdale, Illinois, where he resides with his wife, Heather, and two children, Brady and Annie.

#### **Christian Voigt**

(LL.M. MAL '02), Boston, Mass., is vice president of marketing development at IOC Television & Marketing Services SA, the commercial arm of the International Olympic Committee, in Lausanne, Switzerland, He is responsible for the strategic development of the worldwide Olympic partnership program, negotiating deals for sponsorships with companies such as Coca Cola, VISA, and Toyota.

#### **Daniel Anders**

(LAW '03), Waukegan, Ill., is chief compliance officer at Tower MSA Partners.

#### Benjamin Hunter

(ME 03, AE 03), Rockford, Ill., is director of operations for actuators and specialty valves within the Aircraft Turbine Systems Division at Woodward. A Licensed Professional Engineer in Illinois, Hunter is currently enrolled in the M.B.A. program at the University of Wisconsin.

#### Fawzia Mirza

(LAW '03), Chicago, actor and film producer, served as the emcee for the 2017 Women's March on Chicago. Her feature film Signature Move had its world premiere at the 2017 South By Southwest Film Festival. Mirza was named a 2016 White House Champion of Change for Asian American and Pacific Islander Art and Storytelling.



Sarah Nashold

(M.Des. '03), Las Vegas, gave birth to her first child, Nicolas, in March.

#### Sameer Verma

(CPE '03), Bangalore, India, joined the board of directors of Unacademy, India's largest free onlinelearning platform.

#### Vivek Jain

(M.S. EE '04) Haryana, India, is chief product and technology officer of Housing.com. Jain focuses on strengthening the product and engineering aspects of the business to help



**Lewis College of Human Sciences** Dean Christine Himes [third from left] attended an alumni gathering in Washington, D.C., with the Honorable James G. Roche (ENGL '60) [left]. Faculty member Libby Hemphill [second from left] spoke about how social media can be leveraged for good.



Industry Associate Professor Jeremy Hajek demonstrated virtual reality technology to alumni and families at the annual DuPage Area STEM Expo at Illinois Tech's Rice Campus. *Photo: Bonnie Robinson* 

#### SPOTLIGHT



PHOTO: SCOTT BENBROOK

### Carlos A. Roa Jr. (ARCH '16), Chicago Immigration Activist

Venezuelan-born Carlos Roa Jr. became an activist in 2007 to share his immigration story. After three years spent connecting with other young undocumented individuals and likeminded supporters in the United States, Roa, along with three other activists, embarked on a 1,500-mile trek from Miami to Washington, D.C., meeting with representatives and legislators at the local, state, and federal levels. In 2012 then President Barack Obama issued an executive order granting certain undocumented youth administrative relief under the Deferred Action for Childhood Arrivals (DACA) program. (Read more about Roa's walk experience at magazine.iit.edu.)

#### Why did your parents emigrate from Venezuela?

My grandfather, a U.S. citizen for more than 30 years, got sick in 1989 and my father came to the States to take care of him. My father petitioned to become a U.S. permanent resident but only three months into the process, my grandfather passed away. My dad decided afterward to bring my mother, my sister, and me from Caracas to New York so that we could establish ourselves in the U.S. My parents couldn't foresee that in their lifetime unfortunate circumstances would combine to deny my family's ability to adjust to our immigration status. My parents could've gone back after the first few difficult years, but they decided to make all of the sacrifices necessary so that my sisters and I could get educated here.

#### Your personal connection aside, why are you an activist?

For a long time now, I have had a deep understanding of the importance of civic engagement, especially that of the civil rights movement in the U.S. There are so many important issues pertaining to our humanity and our well-being in general that if I can do my part by making our lives and society better, then why not participate? The difference you can make is incredible if you truly dedicate yourself to a cause or interest. I view it as my social responsibility for having the capacity that I have.

#### How are you advocating for immigration issues today?

These days I'm involved in different ways than when I was a college student. I am occasionally asked to write opinion pieces by outlets such as *The Guardian* or I'm interviewed—most notably by the *New York Times* this past November after the election on being a DACA recipient and what it would mean if the Trump Administration would get rid of DACA. —*Marcia Faye* 

steer the company toward its goal of becoming a full-service transaction player. He has more than 14 years of experience in the technology and digital domains in India and the U.S.

#### Jacqueline Anderson (née Sokolowski)

(PSYC '05, M.B.A. '14), Chicago, Illinois Tech manager of process improvement and chair of the Staff Advisory Council, was quoted in the Huffington Post about money questions that international students should ask themselves before traveling abroad to attend a U.S. university.

#### Yared Akalou

(M.Des. '06), Houston, launched the new venture Alcove, a sleek laptop case that transforms into a mobile workstation.

#### **Dhairya Mehta**

(M.A.S. MAE '06), Boston, spoke at the SMi Pre-Filled Syringes East Coast conference and exhibition in April.

#### **Brantley Shumaker**

(LAW '06), Louisville, Ky, is a director and member of the Intellectual Property Practice Group at Middleton Reutlinger, which focuses on patent prosecution, particularly in the areas of software, medical devices, medical technology, and robotics. Shumaker's wife practices veterinary medicine. The couple have a boy and a girl.

Floriann Stankovich (BME '06) and George Skountrianos (AMAT '07), Chicago, welcomed their first child, Alethea, in September 2016.

#### Kai-Wei Tang

(M.B.A. '06, M.D.M. '14), Chicago, is co-founder of Light Phone, a credit-cardsized mobile phone that is meant to be an extension of a smart phone.

#### David Baker

(EE '07), Oak Park, Ill., completed the first phase of HDTV control-room design for a 24/7-programmed TV channel in Addison, Illinois, and has migrated the web stream of the channel to HD.

#### Paul Haidle

(LAW '07), Albuquerque, N.M., joined the staff of the American Civil Liberties Union of New Mexico as an attorney and criminal justice advocate.

#### George Schoenbeck

(LAW '07), La Grange Park, Ill., is chair of the Illinois State Bar Association's Young Lawyers Division.

#### **Brian Emfinger**

(LAW '09) and Julia D. Riedel Emfinger (LAW '10), Chicago, welcomed their first daughter, Abigail, in January. Brian is now principal shareholder in Banner & Witcoff's Chicago office; he joined the firm in 2012. He concentrates his practice on preparing and procuring patents in the computer, mechanical, and electromechanical fields with particular emphasis in computer- and software-implemented inventions. He also has experience providing legal and technical support during

patent enforcement, various phases of patent litigation, and IPR proceedings.

#### **David Gosse**

(LAW '09), Naperville, Ill., was promoted to partner at Fitch, Even, Tabin & Flannery, where he has worked since graduating from Chicago-Kent College of Law. His oldest daughter started kindergarten.

#### Avelo Roy

(CPE '09), West Bengal, India, founder of Kolkata Ventures, promotes, incubates, and funds innovative entrepreneurs. Roy holds three technology-related patents, and was invited to speak on entrepreneurship education at the White House after receiving honors from the California State Senate. He has set up several businesses in the United States and abroad, including Pongworks and Acumen Dynamics.

#### Namrata Yadav

(M.S. PHRD '09), Chicago, senior vice president and head of diversity and inclusion learning for Bank of America, is one of the Top 15 Business Women in Illinois as recognized at the 2017 Illinois Women's Conference.

#### 2010s

#### Romel Aganon

(NST '10, M.A.S. ITM '12), Elgin, Ill., joined Mondelez International in 2012 and is currently senior manager for forensic technology and e-discovery. Mondelez International is a global confectionery, food, and beverage company.

#### Michael Borella

(LAW '11), Naperville, Ill., was appointed co-chair of the Software and Business Methods Practice Group at McDonnell Boehnen Hulbert & Berghoff, where he has been an attorney since graduating from Chicago-Kent College of Law.

#### Alexis Douglas (née Crawford)

(LAW '11) and her husband,
Matthew C. Douglas (LAW
'11), Chicago, welcomed their
daughter, Marina Zoe, in
March. Two days after the
baby's birth, Matthew
second-chaired a seven-day
employment discrimination
trial in the Northern
District of Illinois and
won a six-figure verdict in
favor of his client. Alexis
is an associate at K&L Gates, a
practice that focuses on
trademark and copyright law.

#### Sylvia St. Clair

(LAW '13), Chicago, an associate with Faegre Baker Daniels, received the Award for Outstanding Pitch from the Chicago Committee. St. Clair won for her formal business pitch in response to a mock request for qualifications to real in-house attorneys.

#### Melissa Hoelting

(ARCH '15), Dallas, is research coordinator and information designer at HKS.

#### **Andrew Sharp**

(LAW '16), Chicago, married Lydia Ness (LAW '16). Andrew is content manager at Illinois Legal Aid Online, and Lydia is an Equal Justice Works Fellow at Equip for Equality, focusing on human trafficking of people with disabilities.

#### Maged Zagow

(Ph.D. ARCH '16), Chicago, is a licensed architect in Illinois through the National Council of Architectural Registration Boards.



**Alumni gathered in Seattle** to network and learn about STEM education fields at Illinois Tech.



**Dirk Lohan** delivers his annual toast to his grandfather, Ludwig Mies van der Rohe, at the Mies Birthday Party reception. *Photo: Bonnie Robinson* 

#### **ALUMNI EVENTS**

For information about the upcoming events listed below and other alumni activities, please visit **alumni.iit.edu/events** or contact the Office of Alumni Relations at **alumni@iit.edu** or 312.567.5040.

#### **ILLINOIS TECH IS COMING YOUR WAY**

The Illinois Tech Alumni Association is a community of thought leaders, designers, engineers, scientists, architects, and so much more. The association exists in Chicago and around the globe. We need your help to keep the community thriving outside of our historic campus. If you want to learn more about how you can help the Illinois Tech Alumni Association continue to connect alumni, students, and friends of the university, please join us for an alumni planning meeting and social in your city. Visit alumni.iit.edu/events for an up-to-date listing of events in your area. In the coming months, we will visit:

Atlanta Minneapolis
Bay Area New York City
Boston Phoenix
Chicago San Diego
Detroit/Ann Arbor Seattle

Houston Washington, D.C.

Los Angeles Area

Don't see your city listed? Contact Zach Rus, associate director of regional and reunion programs, at **zrus@iit.edu** to learn more.

#### Illinois Tech Homecoming and Reunion Weekend September 15–16, 2017

Mark your calendar and plan to come back to campus for Homecoming Weekend! With special events for reunion classes (50th, 25th, 10th, and 1st) and other affinity groups—along with athletics events and the Homecoming Carnival—there is sure to be something for everyone.

#### **Global Spirit Day**

September 16, 2017

Can't make it to campus for Homecoming this year? Don't worry—Global Spirit Day is coming to you! Illinois Tech's third annual Global Spirit Day will take place on Saturday, September 16. Alumni chapters will host local alumni gatherings throughout the country and around the world. Don't miss out!



#### CONNECT TODAY

Are you connected to the Alumni Association? When you update your mailing address, phone number, and email, you ensure that you receive up-to-date information from your alma mater, including event invitations, networking opportunities,

and university news. Visit **alumni.iit.edu/information-update** to update your contact information today.

Members of the alumni online community enjoy extra perks such as access to the alumni directory—perfect for networking!

Visit alumni.iit.edu/sign-up to join today.



John Genovese (ARCH '83) opened his home in Los Angeles for an alumni gathering featuring Professor of Biomedical Engineering Philip Troyk.



Students take the time to write their thanks on the windows of The McCormick Tribune Campus Center at the TAG (Thank A Giver) Day event.



**Associate Professor of Psychology** Arlen Moller spoke to alumni in New York about how to avoid burnout at work, at home, and at play.

# Visit bit.ly/alumni-event-photos to see more event photos from the Alumni Association. PHOTOS: COURTESY OF THE OFFICE OF INSTITUTIONAL ADVANCEMENT

#### **CHAPTER NEWS**



## **Illinois Tech Legacy Families:**Generations of Scarlet Hawks

Scott Ternovits (DSGN '92) spent his adolescent years dead set against going to Illinois Institute of Technology. Both of his parents, Ernest (ARCH '61) and Marilyn (ARCH '67), attended Illinois Tech, and as they tried to point him in what they thought was the right direction, he played the part of the brooding teenager looking to rebel.

Finally he agreed to take a tour of campus just to appease them, and as he was moping in the back of the tour group,

a current student called him out on his behavior. "This student from the Institute of Design was sitting on the Crown Hall steps, and she asked me why I was looking like a sullen two-year-old," he said. "I told her I was only there because of my parents, and she told me about an audio lab she was setting up in the basement of Crown, where they were recording sounds in the city and analyzing them in the lab to see if they could elicit human behavior based on the sounds. I said, "This is a class?!' It was the coolest thing I had ever seen."

And so one chance conversation resulted in another generation of the Ternovits family finding a home at Illinois Tech. And a few short years later, yet another member of the family would join the Scarlet Hawk ranks, when Scott's younger brother, Craig (ME '95), moved in.

This year, Scott is celebrating the 25th anniversary of his graduation from Illinois Tech, and he's teamed up with several of his classmates to plan their reunion during **Homecoming Weekend on September 15–16.** So far, planned activities include a special reunion luncheon, alumni "back to class" opportunities, workshops, showcases, and the annual carnival, but Scott promises some informal catch-up time throughout the weekend, as well. "I can't wait to see everyone and learn what they've accomplished in 25 years. I'm continually surprised by my peers and what they've done, where they're at now," he says. "It's easy to get lost in your day-to-day life, but I think it's really a privilege when you can reconnect like this. We'll have some formal reunion events, but we'll also have time to meet up with friends and just hang out and catch up."

Sharing Illinois Tech with his family has been incredibly special for Scott, but 2017 is especially meaningful—as he celebrates his 25th reunion, his mom celebrates her 50th and is also serving on her reunion planning committee. "This is just another thing that we get to experience together as Scarlet Hawks," Scott says.

Do you have a milestone reunion approaching? Interested in planning an activity at Homecoming for your affinity group? Contact Zach Rus, associate director of regional and reunion programs, at zrus@iit.edu to see how you can get involved.

Are you part of a legacy family? Let us know! Visit alumni.iit.edu/class-notes and complete the form to share information about your family's Illinois Tech legacy.

# 2017



Alumni Medal recipient Adrian Nemcek (EE '70) looks on with his wife, Lorna, as awards are presented. Photo: Bonnie Robinson



Alireza Khaligh (Ph.D. EE '06) receives the Outstanding Young Alumnus Award from Illinois Tech President Alan W. Cramb and Alumni Awards Committee Chair Dawn Schuette (ARCH, CRP '92, M.A.S. CRP '93). Photo: Bonnie Robinson



Trustee and Chair of the Stuart School of Business Board of Advisors Rosemarie Mitchell shares her reflections on receiving the Galvin Award. Photo: Bonnie Robinson



The Alumni Association honored 13 alumni and friends at the annual Alumni Awards luncheon and presentation on Friday, April 21. Photo: Bonnie Robinson



Illinois Tech President Alan W. Cramb [seated, fourth from left] joins in a photo with the 2017 Alumni Awards recipients. Photo: Bonnie Robinson

#### **2017 ALUMNI AWARDS WINNERS**

#### Alumni Medal

Adrian R. Nemcek (EE '70)

Alumni Service Award Jeffrey A. Karp (LAW '79)

**Collens Merit Award** 

Arthur W. Hill (CS '71)

**Galvin Award** 

Rosemarie A. Mitchell

International Award of Merit

Robin R. Chaurasiya (PPPS, PSYC '06)

John J. Schommer Honor I Award Brad C. Krygier (MGT '80)

#### **Lifetime Achievement Award**

Robert L. Growney (ME '74, M.B.A. '82)

Gertrude Lempp Kerbis (M.S. ARCH '54)

**Outstanding Young Alumnus/** Alumna Award

Alireza Khaligh (Ph.D. EE '06) Wesley B. Leggette (CS '12)

**Professional Achievement Award** 

Judson B. Althoff (ME '95) Sherrie B. Littlejohn (M.S. CS '82)

Michael V. Romalis (PHYS '93)

#### **PASSINGS**

#### **ALUMNI**

#### **Gerald Carne**

M.S. UNK '41 Wickenburg, Ariz.

#### Roy Bellio

ME '43 Willowbrook, Ill.

#### Frederick Beyer

ME '43 Evergreen Park, Ill.

#### **Edward W. Ross**

(ME '43), Chicago, in 1960 co-founded Jupiter Industries, Inc., a conglomerate with holdings in real estate, construction, transportation, and other areas. Some 36 years later he and his business partners purchased the Jupiter Realty subsidiary and devoted their time to that interest. In 2007 Ross stepped down as vice chairman of Jupiter Realty Corporation to join his son-in-law in a new Ross family enterprise, J. L. Woode, a real estate investment firm, Ross and his late wife. Renee. were two of Illinois Tech's most devoted donors and Philip Danforth Armour Society members, contributing millions of dollars to scholarship funds, research funds, and the Mies van der Rohe Society. Ross was honored with the 2007 Illinois Tech Alumni Merit Award.

#### **Harold Patzelt**

CHE '44 Oak Lawn, Ill.

#### **Arnold Borenstein**

EE '46 Chicago

#### Arthur Strong

ME '46 Frankfort, Mich.

#### Joseph Loch

ME '47 Lake Oswego, Ore.

#### Leonard Reiffel

(EE '47, M.S. '48, Ph.D. '53), Chicago, member of Illinois Tech's Hall of Fame, may be best known for his invention of the

Telestrator, the "television illustrator" widely used by sportscasters to sketch out plays and explanations of games, especially popularized in football. Reiffel also served as group vice president of IIT Research Institute and led the team that developed the world's first nuclear reactor for industrial research. In the late 1960s Reiffel was deputy director for sciences at NASA Headquarters' Apollo Program Office.

#### Carter H. Manny Jr.

(ARCH '48), San Rafael, Calif., was an influential architect who began his career at the former Naess & Murphy firm (today, JAHN), where his projects included roles in the design of O'Hare International Airport, the First National Bank of Chicago, and the J. Edgar Hoover Building. Manny was also active in the Graham Foundation for Advanced Studies in the Fine Arts, joining as a trustee when the foundation was established in 1956, then advancing to director in 1971, and director emeritus in 1993. He oversaw some \$10 million in funding awarded to more than 1,200 projects.

#### Charles Berman

IE '49 New York

#### Herbert S. Levinson

(CE'49), Wallingford, Conn., had a nearly 50year career that included employment with the Chicago Park District, Wilbur Smith and Associates, the University of Connecticut, and Yale University. He was also a transportation consultant through his own practice. A member of the National Academy of Engineering, Levinson served on the academy's Transportation Research Board from 2003 to 2006 as well as on various standing committees. A 1994 recipient of the Presidential Design Award for Excellence, Levinson received an honorary doctorate from Illinois Tech in 2013. He was a member of the Armour College of Engineering Board of Advisors.

#### Glen Robertson

EE '49 Fountain Hills, Ariz.

#### P. Quinn Waterloo

IE '49 Hinsdale, Ill.

#### James Biagi

IE '50 Algonquin, Ill.

#### Ramon Martello

ME '51 Bloomington, Ill.

#### **Robert Mohler**

EE '51 Sun City West, Ariz.

#### Paul Bauer

ME '52 Algonquin, Ill.

#### B. James Bergmann

ME '52 Trumbull. Conn.

#### **Theodore Cable**

PSYC '52 Lansing, Ill.

#### William Moore

LAW '52 Chicago

#### James Tomashek

EE '52 Eau Claire, Wis.

#### Otto Harling

PHYS '53 Hingham, Mass.

#### **James Price**

CE '53 Orland Park, Ill.

#### Robert Field

M.S. DSGN '54 Los Angeles

#### George Traverso

ME '54 Palos Heights, Ill.

#### Richard Bremigan

EE '55 Bloomington, Ind.

#### **Charles Daley**

CE '55 Winthrop, Maine

#### William McFadden

M.S. ME '55 Grass Valley, Calif.

#### **Edward Orth**

ME '55 Peoria, Ill.

#### David Odom

FPE '56 Iacksonville, N.C.

#### **Charles Smoots**

EE '56, M.S. '59 Oak Lawn, Ill.

#### Harry T. Westhaus

FPE '56 Livonia, Mich.

#### Sidney Gordon

CHEM '57 Boca Raton, Fla.

#### **David Larson**

ME '57, M.S. '60 Country Club Hills, Ill.

#### **Thomas Rago**

DSGN '57 Trenton, N.J.

#### Francis Sims

ME '57 Crown Point, Ind.

#### **Edmond Squifflet**

CE '57 Issaguah, Wash.

#### William Barnett

EE '58 Tinton Falls, N.J.

#### Basil Kokoletsos

EE '58 Barton, Vt.

#### Paul Priestley

DSGN '58 Aptos, Calif.

#### William Yates

PS '58 Chicago

#### Albert Kartman

ME '59 South Bend. Ind.

#### Fred Marcon

(BE '59), Lantana, Fla., retired in 2002 from his roles as chairman and chief executive officer of Insurance Services Office (ISO), where he worked for more than four decades. Earlier in his career with ISO, he was a regional vice president and before that held positions with other

organizations, including the Illinois Inspection and Rating Bureau. After his retirement Marcon continued to serve on the ISO Board of Trustees and became chair of the Underwriters Laboratories. Board of Trustees. He was given an Award of Merit from the Alumni Association in 1975.

#### Norman Gruczelak

ME '60 Ben Lomond, Calif.

#### Kazys Janulis

M.S. ARCH '60 West Palm Beach, Fla.

#### Robert Piercy

CHE '60 Joliet, Ill.

#### Jack Chapman

PHYS '61 Arlington, Va.

#### **Burton Cohen**

BE '61 Highland Park, Ill.

#### Hermann Kage

IE '61, M.S. BEA '64, M.S. IE '67 Willard, Ohio

#### Lester Peach

Ph.D. EE '61 Manitowoc, Wis.

#### John Bagley

EE '62, M.S. '67 Phoenix

#### Richard Bettenhausen

BIOL '62 Fort Lauderdale, Fla.

#### Roy C. Palmer

(LAW '62), Franklin, N.C., began his career at the Federal Trade Commission, then transitioned into the private sector, opening his own practice and helping such clients as the Visiting Nurses Association and the Illinois State Savings and Loan Association. He was a pioneer in the Native American gaming industry and made notable contributions toward helping the St. Croix Chippewa Indians of Wisconsin gain gaming rights. At Chicago-Kent College of Law, Palmer

and his wife, Susan, established and endowed the Roy C. Palmer Civil Liberties Prize, now in its 11th year, and made additional significant contributions. Palmer was also a member of the college's board of advisors and served on the boards of Goodwill Industries, Mote Marine Laboratory & Aquarium, and others.

#### **Robert Webler**

M.S. EE '63 Springfield, Mass.

#### Jerry Holwerda

ME '64

Jackson, Mich.

#### Prasanna Kadaba

Ph.D. ME '64 Smyrna, Ga.

#### Fern Krauss

PS '65

Potomac, Md.

#### **Thomas Lothian**

M.S. CHEM '65 Williams Bay, Wis.

#### **Robert Nielsen**

FPE '65

Oak Forest, Ill.

#### Stephen Sweig

ME '65, M.B.A. '67 Phoenix

#### **George Tamney**

ME '65 Bacliff, Texas

#### Joseph Vojta

CE '65

Homer Glen, Ill.

#### George Alexopoulos

M.S. PHYS '66 Glenview, Ill.

#### Faigie Tanner

M.S. DSGN '67 Evanston, Ill.

#### Leonard Mazurkiewicz

MAE '69 Algoma, Wis.

#### James Samuels

MAE '69, EE '74 Chicago

#### Francis Smith

LAW '69 Phoenix

#### Clifton Walbridge

CE'69

Santa Fe, N.M.

#### **Thomas Nettles**

LAW '70 Freeport, Ill.

#### W. Michael Diekman

M.B.A. '71 Elgin, Ill.

#### Paul Blum

Ph.D. PSYC '72 Oak Park, Ill.

#### Audrey Meara

M.S. REHB '72 North Palm Beach, Fla.

#### Richard Becker

M.S. CS '75 Antioch, Ill.

#### **Kendall Fleming**

ARCH '75 Miami Lakes, Fla.

#### **Robert Lima**

ARCH '75, M.A.S. CRP '77 Barnstable, Mass.

#### **Richard Merrick**

EE '75

Inverness, Fla.

#### Lynn Cowan (née Reno)

M.S. REHB '76, Ph.D. PSYC '88 Bingham Farms, Mich.

#### Richard Vawter

LAW '83 Crown Point. Ind.

#### John Van Norman

ME '84 Chicago

#### **Thomas Trimble**

LL.M. '87 Raleigh, N.C.

#### Michael Asher

Ph.D. PSYC '89 Piscataway, N.J.

#### Robert Becker

M.B.A. '90 Batavia, Ill.

#### William Thomas

LL.M. '96 River Forest, Ill.

#### Michael McCullar

ME'00 Houston

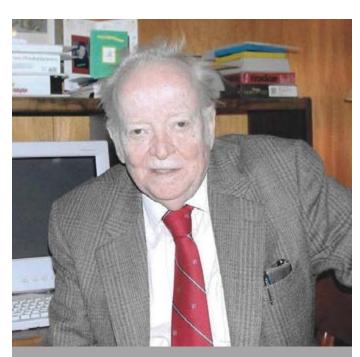
#### Cameron Finnegan

CPE '15 Skokie, Ill.

#### **EMERITUS FACULTY**

#### Harris Berenbaum

(M.S. PSYC'64, Ph.D.'68), Highland Park, Ill., was a professor of psychology as well as director



#### Hans Lennart "Len" Pearson

(Ph.D. MATH '57), Northbrook, Ill., Illinois Tech College of Science emeritus associate professor of mathematics, spent his entire academic career at the university before retiring in 1994. Additionally, he was acting dean of the Graduate School from 1975 to 1977 and dean of graduate studies from 1988 to 1994. Pearson's students selected him for the Excellence in Teaching Award in both 1969 and 1986, making him the first double-recipient of this honor. From 1969 to 1973 he also served on the Northbrook School District 27 Board of Education.

of the former Counseling Center and director of the doctoral program in clinical psychology at Illinois Tech. For many years Berenbaum also served as a board member, chair of the Progression Committee, and director of training for the Chicago Center for Psychoanalysis. At the Chicago Medical School he served as a psychologist and lecturer. A researcher in psychodiagnostics and psychotherapy, Berenbaum maintained a private practice for more than three decades.

#### TRUSTEE

#### Calvin A. "Tink" Campbell Jr.

St. Helena Island, S.C., had a lifelong career in manufacturing management that began at the Enjay Chemical Company (through mergers, now Exxon-Mobil) in 1961. Ten years later he acquired the Goodman Chemical Corporation, ultimately serving as chairman, president, and chief executive officer. Campbell was

a director at many companies, including the Cyprus Amax Minerals Company, Eastman Chemical Company, and Mine Safety Appliance. He was also chair of the Illinois Manufacturers Association and the first small-company CEO to be elected chair of the National Association of Manufacturers. He was elected to the Illinois Tech Board of Trustees in 1986, served as a life trustee from 1996 to 2007, and became trustee emeritus in 2008; he also was a member of the boards of advisors of Armour College of Engineering, the Institute of Design, and Lewis College of Human Sciences. A loyal donor, he funded the Calvin A. Campbell Jr. Heald Scholarship.



Jun Fujita photograph of diver with diving bell leaping into the water outside of the USS Eastland crash site in Chicago on July 24, 1915.

# Through a Lens, Historically

Il that exists of the fertile life of Junnosuke "Jun" Fujita (1888–1963) in the Illinois Tech University Archives is a small, typed grade card indicating his address on Grand Boulevard in Chicago and a record of straight A's achieved in algebra, geometry, and calculus courses taken at Armour Institute from 1915 to 1918. Nearly a century later Fujita's talents as a poet and photographer of local historic events such as the USS Eastland Chicago River disaster, the race riots of 1919, and the St. Valentine's Day Massacre site were rediscovered and introduced to a wide group of admirers. Fujita is credited as being the first Japanese-American photojournalist.

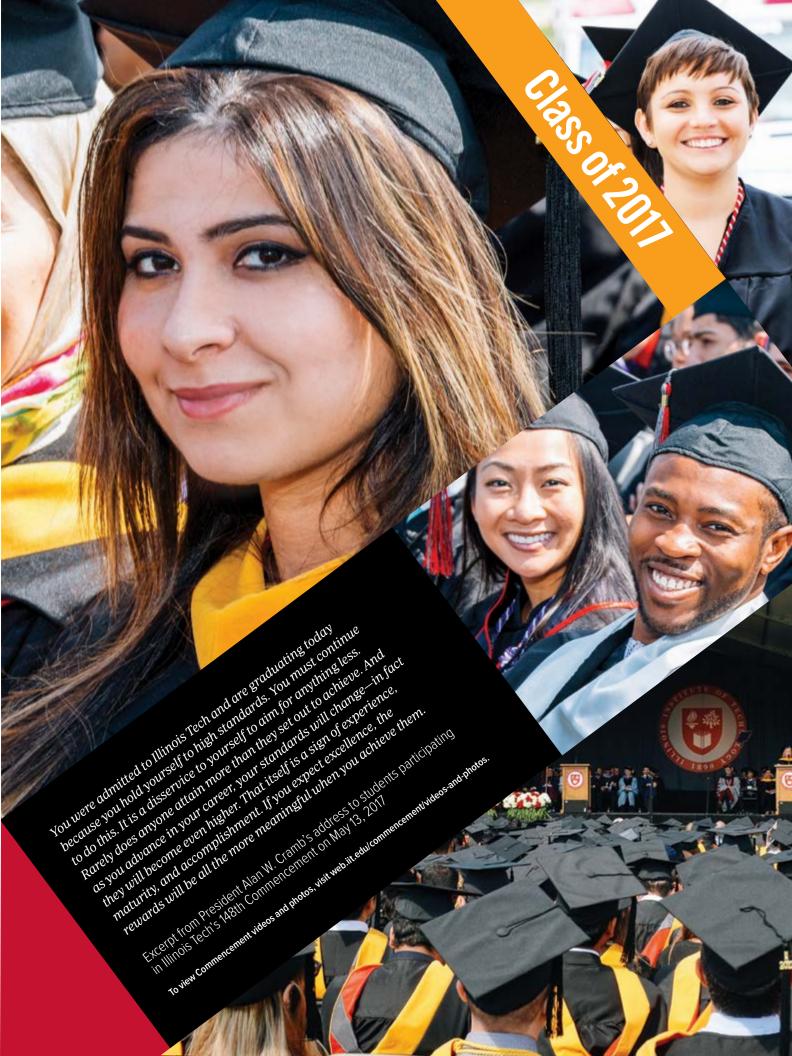
According to an article that appeared earlier this year in the *Chicago Tribune*, Fujita was born in Japan, immigrated to Canada, and then came to Chicago, enrolling at Armour to study mathematics. After he took a job as a newspaper photographer to help pay his tuition, Fujita did not return to school but instead chose to further develop his creative

side, which included writing poems, many of which appeared in *Poetry* magazine in the 1920s. This year the Poetry Foundation's Katharine Litwin, library director, and Fred Sasaki, art director for *Poetry*, co-curated the exhibit *Jun Fujita: Oblivion*, featuring a substantial collection of the artist's poetry and photographs. *Oblivion* ran from January 12 to May 26 at the Chicago-based foundation.

"We think poets can do anything, but Jun Fujita could do everything," says Sasaki. "He had a natural facility with language and a canny eye; he knew how to cook and race speedboats; and he had the will to survive the wilderness as well as twentieth-century U.S.A." —Marcia Faye

#### MORE ONLINE

"Almost Forgotten St. Valentine's Day Massacre Photographer Now Remembered as Poet": http://trib.in/2k47zVb "Remembering a Forgotten Photographer of Chicago History": http://bit.ly/2krQjwt





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