ILLINOIS INSTITUTE OF TECHNOLOGY **SUMMER 2015 IITAT125** PEOPLE PLACES THINGS

# **Stories Behind** the Places

A Glimpse Into the Then and Now

Keating Sports Center Bronzeville IIT's Wind Tunnels S. R. Crown Hall

# etter from the IIT Alumni Association President



Let me state the obvious. I am not John Anderson, president of Illinois Institute of Technology. When you open *IIT Magazine*, you expect to see a letter from him on this page—and so do I. For the eight years that John has led our university, his letters have told us how IIT is doing, what challenges it is facing, and what's new and noteworthy.

John has always stressed the importance of *CONNECTION*—keeping in touch, whether you are an IIT graduate or a friend of the university. One of his wishes is that every alumnus and alumna will someday come back to see how IIT has changed. And it's about taking a look beyond Main Campus. John wants IIT alumni to visit the new South Side—to see how the university has connected with the surrounding area, including Bronzeville, too.

In this issue of *IIT Magazine*, you will read about the history of IIT's Bronzeville neighborhood and how it flourished in the early twentieth century. During these formative years Bronzeville made significant

social and cultural advances in African-American history. At the same time, IIT was a growing university already contributing to advances in innovation and technology. Independently, both IIT and Bronzeville were history makers in their own right!

As a South Side kid, although I did not live in Bronzeville, I was very familiar with IIT and its neighborhood. In the late 1950s, before I was born, my parents were students at IIT and lived in apartment 711 in Bailey Hall. They told me how very proud they were of IIT as an educational institution and how much they enjoyed sharing their lives with fellow students from around the world and with their colleagues from Bronzeville. Little did they know that two of their children would one day be products of IIT's pre-collegiate Early Identification Program, which attracted many African-American students to the university.

A lot has changed since I graduated in 1984. Back then some of us felt that there was no real connection between our campus and Bronzeville. And, for some of us who had an "urban tale" to tell, the campus served as the neighborhood oasis for students.

Today, you can feel the passion for IIT to have a connection. When I returned to the university to serve on the alumni board, I was astounded by the transformation. Now, we relate the Starbucks on the corner of 35th and State and residents jogging in the park as clear signs of urban renewal. There is a new Metra stop by campus, the old Comiskey Park is now US Cellular Field, the MTCC student center is a campus gathering place, and Bronzeville continues to experience its own renaissance—with IIT as a partner in its progress. These things make our neighborhood one of the most beautiful areas on the South Side.

Although a lot has changed at IIT, much of what makes IIT special hasn't changed at all. We still continue to attract the best and brightest students from this country and all over the world, and our faculty and alumni remain global innovators, making significant contributions worldwide.

During this 125th anniversary year, I hope you will return to campus to see what's different. Check out some of the great places highlighted in this issue of *IIT Magazine*. Take a look around the Bronzeville, Bridgeport, and nearby Pilsen communities. It's time to welcome you back!

John, from all of us at the IIT Alumni Association, thank you for helping to keep us *CONNECTED* to this great place and for building connections in our community. Best wishes to you and your wife, Pat, as you begin this next chapter of your lives!

Andrea Berry (CS '84)

IIT Alumni Association President

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### SEND ALUMNI NEWS TO alumni@iit.edu

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.

### IIT 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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Summer 2015



### **IIT AT 125**

Look at a map and you'll see a collection of places. Look beyond the physical—go to and inside those places—and you'll find the stories. In this second issue of a three-part series we focus on the university's places—and the distinctive story that each tells.

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### IIT Magazine Online-Only Content!

Read extended coverage of stories featured in the print edition as well as special online-only content at iit.edu/magazine





Rowine Hayes Brown Truitt (LAW '61)

### **Fond Remembrance**

I thoroughly enjoyed your article about Rowine Hayes Brown Truitt on

page 17 of the spring 2015 issue of *IIT Magazine*. Beyond being an amazingly accomplished professional, she was blessed with charm and wit, hinted at by the twinkle in her eye in the photo. Thank you for the article and for producing a consistently interesting and enjoyable magazine.

Craig C. Truitt LAW '92

<u>Editor's Note:</u> Attorney Craig C. Truitt is the grandson of Rowine Hayes Brown Truitt (LAW '61).

### **Engineer as the Mikado**

The letter on page 2 [of the spring 2015 issue of *IIT Magazine*], "Carr Chapel Memory," is interesting.

That was not a high school across the street—it was VanderCook College of Music. The choir director and head of VanderCook was H. E. Nutt, who was very involved with IIT. When I decided to go to graduate school in September 1963, Nutt saw me walking in Hermann Hall and roped me into singing the part of the Mikado in a presentation of *The Mikado* that he was directing. Fortunately, the title role was not the premier role, so I managed.

Richard A. "Dick" Gregory EE '61, M.S. '64

### **WRITE BACK!**

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

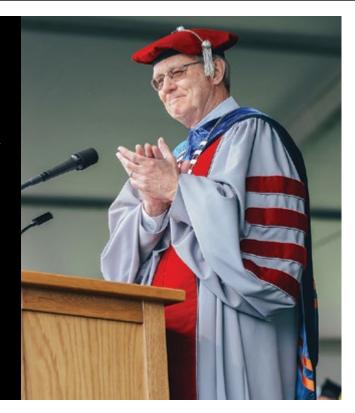
IIT Magazine c/o Letters 10 West 35th Street, Suite 4D7-1 Chicago, IL 60616 Email: iitmagazine@iit.edu

**news**briefs

### Commencement 2014-15

President John L. Anderson applauded members of the Class of 2014–15 at the Illinois Institute of Technology 146th Commencement Exercise, held on May 16. Nearly 2,600 students graduated from the university in a ceremony that was viewed via live stream in 34 countries. Commencement speaker Madame Christine Lagarde, managing director of the International Monetary Fund, spoke of change and how graduates can shape their own journeys. Lagarde's son Thomas graduated from the College of Architecture. Anderson, who welcomed students, families, and guests for the last time as IIT president, spoke about his tenure as well as the future paths of both Illinois Tech and its graduates.

web.iit.edu/commencement



# fuelinginnovation



A rendering of the planned multipurpose space in the Kaplan Institute

### One of a Kind

In this city of many architectural gems, the Ed Kaplan Family Institute for Innovation and Tech Entrepreneurship truly will be one of a kind—in both design and its ability to bring together programs and people at IIT.

Design architect John Ronan and his team have drawn plans for this new building, a 92,000-square-foot, three-level facility that respects IIT's architectural heritage while allowing for spaces and concepts that will define the university's future.

In what will be a first in Chicago, the exterior window system of the upper level of the Kaplan Institute will be made of ethylene tetrafluoroethylene (ETFE) film. This low-maintenance, highly durable, energy-efficient material is translucent, allowing natural light to enter the building and giving the building a glow at night. Solar energy entering the building can be controlled through sophisticated pneumatics. Some notable examples of the use of ETFE include the "Water

Cube" swimming pool complex in Beijing, Allianz Arena in Munich, and the Eden Project in Cornwall, United Kingdom.

Plans for the Kaplan Institute include numerous outdoor elements woven into the interior, including two open courtyards and terraces. These spaces will become alternative study, classroom, and collaboration areas, giving the building a much larger impact. Flexibility will be key. Adaptable studio and classroom spaces will allow users to create a variety of learning environments on demand via deployable walls and furniture. These variable spaces, changeable classrooms, and technological advances allow for a constant evolution of the educational environment.

The Kaplan Institute will bring together much of IIT's signature programming under one roof, including IIT Institute of Design, the Idea Shop™, the Interprofessional Projects (IPRO) Program, Jules F. Knapp Entrepreneurship Center, M. A. Self Leadership Academy, and the Entrepreneurship Academy. With every undergraduate attending at least two classes within it, the Kaplan Institute will become the focal point for innovation and entrepreneurship at IIT.

Visit fuelinginnovation.iit.edu to learn more about the Kaplan Institute and how the campaign is transforming IIT. Be sure to check out the many innovative alumni, students, and faculty featured on the site.

### Campaign Progress Through May 31, 2015

\$208,141,728 Raised

- 15 Endowed Chairs
- Capital Projects:
  - Ed Kaplan Family Institute for Innovation and Tech Entrepreneurship: \$32.6 million (includes \$10 million challenge gift from the Kaplans)
  - > Robert A. Pritzker Research Center: more than \$6.5 million
  - > John T. Rettaliata Engineering Center: more than \$10.3 million
- More than \$33 million raised for scholarships
- Six families have made gifts of \$10 million or more

fuelinginnovation.iit.edu



"My favorite moment was the first day we used the new space. That raw space inspired me beyond belief," says high school junior Ryan Sander, referring to a new Evanston, Ill., facility where kids can learn—and in the process learn more about who they really are. "I was able to explore a certain level of creativity that I had never accessed before."

A former warehouse-turned-furniture showroom before its latest incarnation as Hackstudio, the building, at 16,000 square feet, gave Sander, who choreographed a hiphop dance, plenty of room to flex his muscles, especially his creative one. In May, he and 18 other youngsters, ages 8–18, completed a four-month beta program at the studio co-founded by Michael "Mike" Meiners (M.Arch. '00).

"Hackstudio is a place for kids to learn how to succeed by being who they are," says the enthusiastic Meiners, who recalls that as a kid he always had his own ideas about what he wanted to do. "The program is made to draw out the things that matter deeply to each child. We move the kids into projects of their own design that they define clearly with the help of mentors and peers. The program is also designed to move kids into moments of struggle, but in that process they build their identity."

Four years ago Meiners, father to two sons, established a 45-minute

"Hackstudio is a place for kids to learn how to succeed by being who they are."

"project time" session one evening each week at home with his children. He says that the sessions have grown into Hackstudio, where his sons, 11 and 12, now work on their projects.

"School is necessary; school is valuable," Meiners explains.
"But kids need the opportunity to explore the things that have deep meaning. The realities of sched-

uling and responsibilities make it difficult to carve out time to do this. Hackstudio is a way for kids to have that exploration time."

Along with business partners Randy Blaugh and Katy Bradford, Meiners will open Hackstudio to the public in September. Kids will attend a weekly two-hour session over a quarter term and after choosing their projects will work with peers and mentors to get them done. Mentors, however, will only step in when kids face a moment of real struggle. That key policy proved to be especially valuable to at least one beta participant.

"At Hackstudio I learned life skills that will be applicable in everything I do in the future," says Sander, "such as having the ability to persevere until something is absolutely finished and seeing things through to the end."

MORE ONLINE >

Hackstudio: www.hackstudio.com

# Hitting the Bull's Eye



PHOTO: COURTESY OF HACKSTUDIO

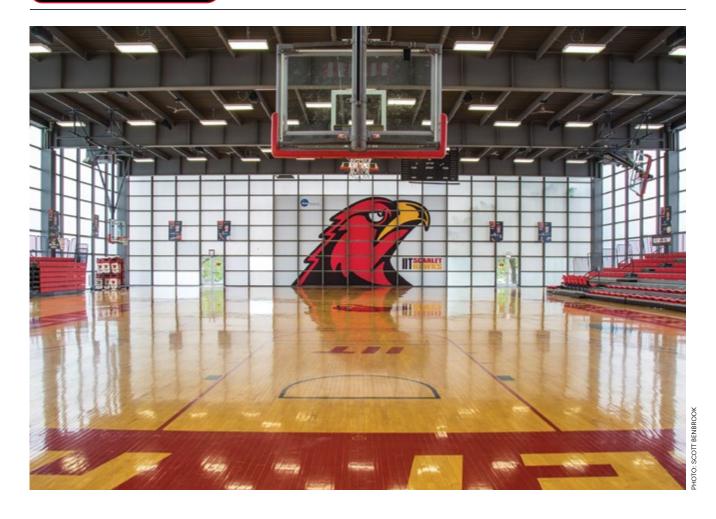
Beta program participant Michelle Kokes found her creative space at Hackstudio as both a bowyer and a fletcher—a maker of a bow and an arrow—who even cut down her own tree. Kokes began her project before coming to Hackstudio but was able to finish it with the help of Hackstudio's supportive community:

"For about six months I searched high and low for the right sapling and during this time broke four almost-complete bows. My passion for success came with each failure I had to overcome; on my last bow I could sense it was the one. When my arrow was finally launched by my bow, it was as if the whole Hackstudio group had just succeeded.

"I learned about myself as a person, understanding the meaning of support and failure, and how setbacks come before growth. I also learned about the value of sharing knowledge I've acquired with others. That's one of the great things about the sense of togetherness at Hack—it allows you to help others and to be helped, and always connect with people, no matter how different the projects may be."

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### If You See the Hawk, You Know It's Home

here's just no missing the screaming red and gold hawk's head window decal, with a beak raised skyward as if urging on its namesake IIT Scarlet Hawk basketball players to make just one more slam dunk. At a size on par with the replica skull of Sue the *Tyrannosaurus rex* at Chicago's Field Museum, the Keating Sports Center's courtside window treatment is perhaps the most distinctively visual enhancement of many completed at the center this academic year. Athletic Director Joe Hakes sees these improvements as bringing the center into the twentyfirst century.

"Keating was built in the late 1960s when there were no female sports at

IIT; athletic programs have changed much over the years," he points out. "The average lifespan of a college gymnasium is just about 25 years; our building is about 50. We're trying to grow into it by retrofitting and redecorating as much as we can. Many students today expect that college gyms will have more of a health-club feel. I believe that no student makes a decision about where to go to school based totally on the facilities, but it can be an eliminating factor."

Simple but noticeable changes utilizing IIT's hawk mascot appear throughout Keating Center, from Ecko Pool to a Scarlet Hawk-camouflaged storage closet converted from an old trophy case. This summer a newly

designed floor is being installed on the basketball/volleyball court. Also, in a project with IIT's Robert W. Galvin Center for Electricity Innovation, plans are underway to install LED lighting throughout the center powered by solar panels erected on Keating's roof last fall.

"I see what we're doing at Keating as being an investment in a student-athlete's college experience," says Hakes. "When the center was built—and designed by a student of [Ludwig] Mies van der Rohe—a lot of small college gyms didn't have this much space. What we're doing now is better defining the space; it's our interesting blank canvas. We want our teams to feel at home playing here." —Marcia Faye

# **IITAT 125**

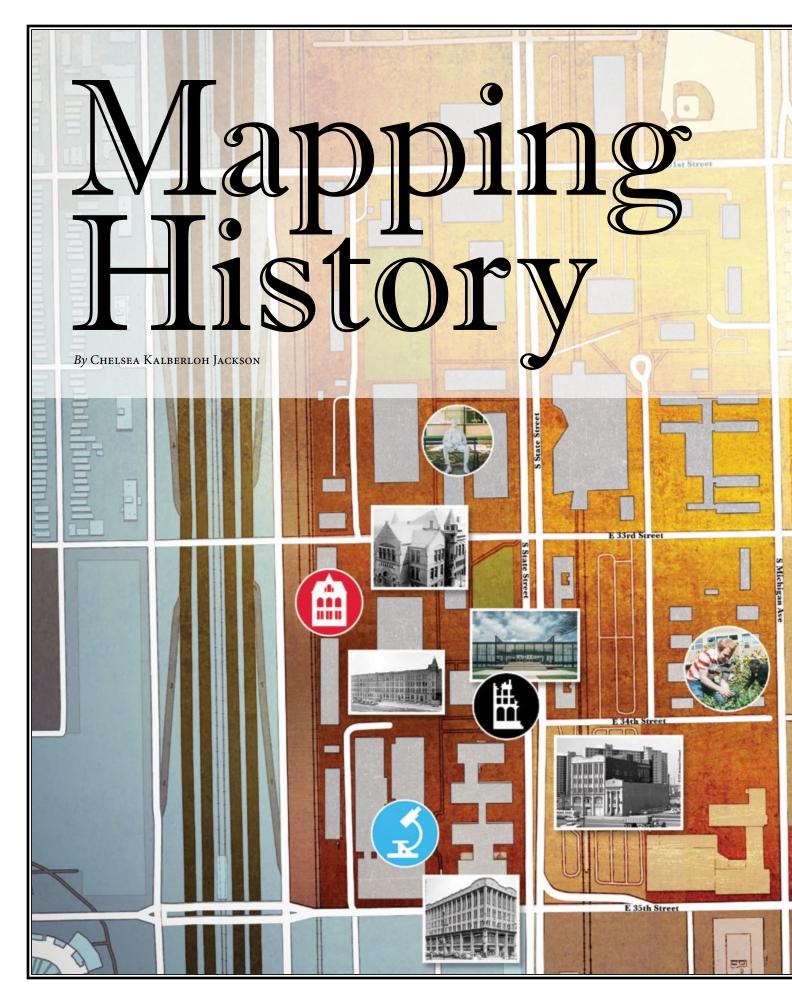
PAST, PRESENT, AND FUTURE

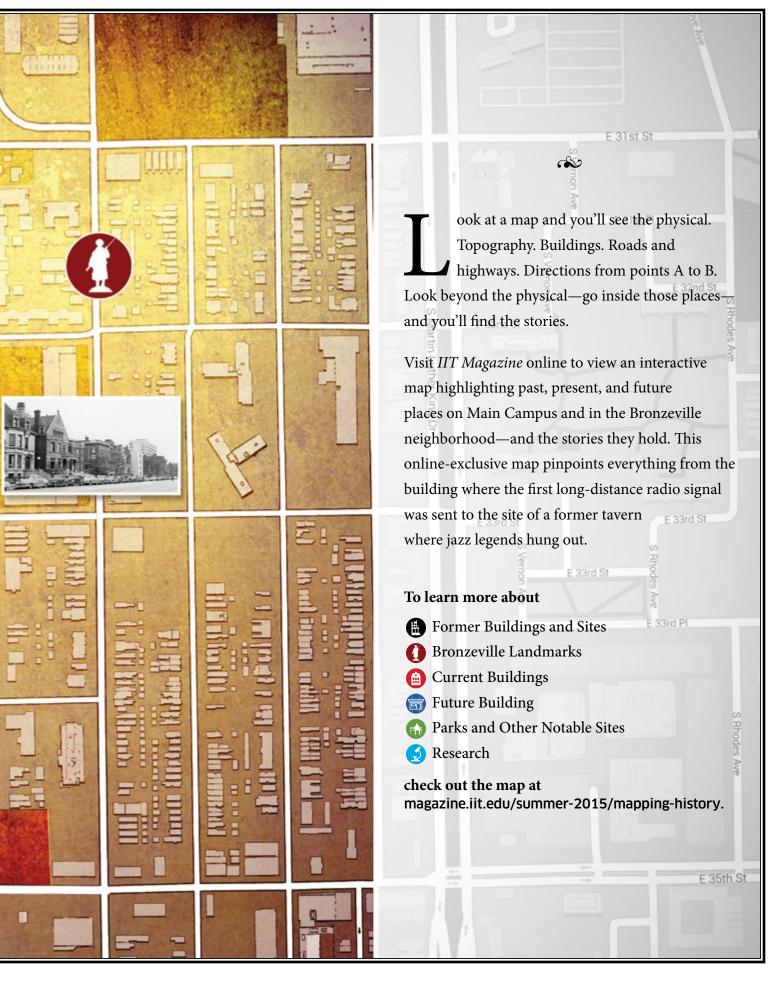
### **PLACES**

IIT is internationally recognized for its historic Main Campus—but the university is about much more than a collection of architecturally significant buildings. It's about the innovative research that happens within them. Creative students who study there. The faculty who educate and mentor inside their walls. The legacy of the surrounding neighborhood. The story behind the story.

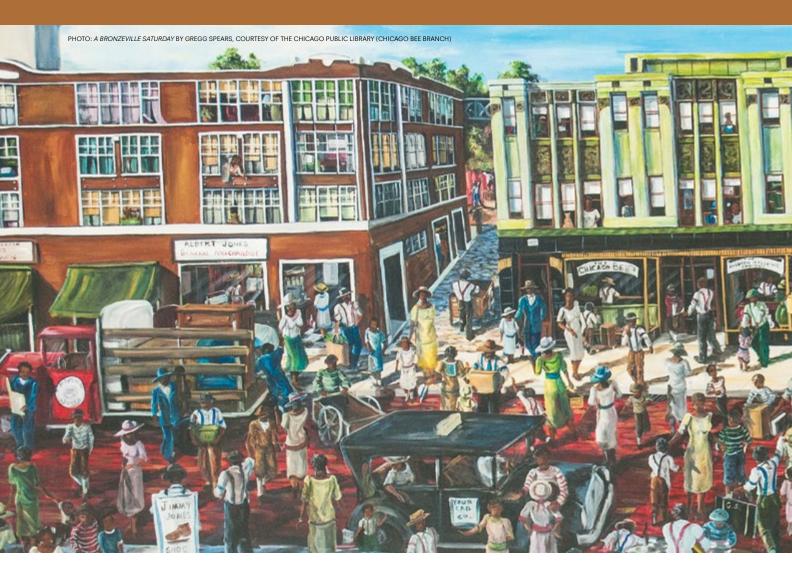
In this second issue of a three-part series chronicling the history of IIT in its 125th year, *IIT Magazine* focuses on the university's places—those that were here, those that define campus today, and the distinctive story that each tells.

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# Bronzeville and Illinois Tech:



n the early twentieth century, a four-block stretch of Chicago's State Street from 31st to 35th streets was the place to be and to be seen. It was the heart of "The Stroll," a vibrant cultural center of African-American nightlife that for a time reigned as America's jazz capital. During the day, the larger neighborhood comprising "The Stroll"—Bronzeville—was a thriving and largely self-sufficient community anchored by churches and successful businesses such as Binga Bank, the city's first African-American-owned bank, which was known as the "Wall Street" of the South Side.

Just to the west of 33rd and State, a forerunner of a different sort was quietly rising: Armour Institute of Technology, created in 1890 out of the Armour Mission by the Reverend Frank Gunsaulus, a man of faith, and Philip Danforth Armour Sr., a giant of industry. When Bronzeville was laying roots as a new Chicago community, Armour Institute had already graduated its first African-American chemical engineer and by all accounts, the first

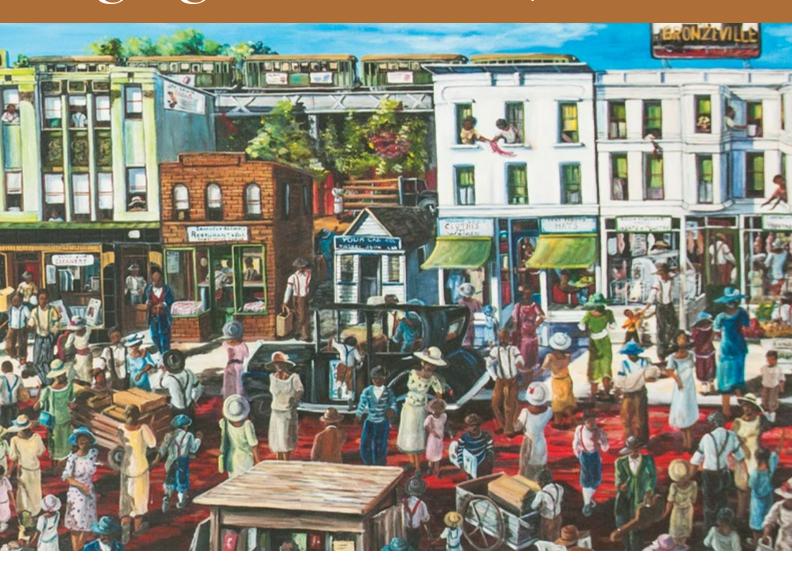
African-American in the country to receive a chemical engineering degree, Charles W. Pierce, who left his home in Texas to seek new opportunities in Chicago. How would this progressive school continue to form partnerships with residents of the new Bronzeville community?

### A City in Flux

Bridge building projects across the Chicago River as well as increased use of the automobile opened up new areas on the city's West Side and North Side, where people could now live and raise their families. The nineteenth-century wood-framed houses that dotted the South Side were in poor condition, and the big Victorian mansions that once were the homes to wealthy industrialists were now either abandoned or divided into apartments.

During World War I, fewer laborers came to the United States from Europe, and for this reason industrialists looked to the South for workers; at the same time, African Americans were leaving the South to seek opportunities in

# Forging a Community By Jeanne Hartig, with Marcia Faye



other regions of the country. Good rail connections between the Mississippi Delta communities and Chicago—the nation's transportation hub—helped to create what came to be known as the Great Migration. According to the City of Chicago, the city's African-American population grew nearly 150 percent from 1910 to 1920, reaching a population of 110,000 by 1920. The early 1920s marked a peak period in the history of Bronzeville, with community members making strides not only in music but also in the areas of politics, entrepreneurship, and business.

The trajectories of Bronzeville and its neighboring urban institution of higher education, however, soon changed sharply; the former began to spiral downward as the latter continued to expand and move forward.

### **Changes in Public Policy**

Beginning in the 1940s, the Chicago Housing Authority (CHA) had begun erecting "residential towers" in primarily African-American neighborhoods throughout the city. This was a public-policy extension of racially restrictive covenants, which were in place from 1927 to 1948, and continued to limit African Americans in moving into other neighborhoods. Additionally, the police were participating in selective enforcement of illicit activities and this, combined with

economic segregation, further contributed to a living environment in Bronzeville in which both crime and poverty flourished.

Changes in such public policy fostered disenfranchisement and isolation among African Americans on the South Side. One notable example of this decline in Bronzeville housing was the once-vibrant Mecca Flats, which stood on the site of S. R. Crown Hall. Built in 1891, the Mecca was considered the epitome of a great apartment residence and attracted residents who reveled in its luxurious touches. By the 1920s it was a dilapidated tenement, its residents unable to move in part due to restrictive covenants and the economic devastation of the Great Depression.



Leroy Kennedy

Beginning in the late 1940s, Armour Institute, incorporated as Illinois Institute of Technology, razed buildings that were once the home to Bronzeville residents and businesses to expand the campus per Ludwig Mies van der Rohe's master plan. Mecca Flats, one of the last to fall, was razed in 1952. Why didn't Bronzeville's residents turn against IIT when the university purchased large parcels of land in the community?

### **Expanding Campus Presence**

University Archivist Ralph Pugh, who also teaches courses in Chicago history at IIT, says that there are several reasons why the university and Bronzeville survived this seminal period.

"Historic preservation was not foremost in the community's mind," he explains. "The African-American middle class and civic leaders left the area as soon as they could. Getting out of sub-standard housing was the goal of those who were left behind in these tenements. The center of Bronzeville had also moved away from IIT—slid past it from 35th and State to 47th Street. So in a sense, IIT was razing buildings and developing land no one in the community felt passionately about claiming."

The period from the mid-1940s through the 1950s marked a golden age of growth and expansion for Main Campus from seven acres to 110 acres in part through the efforts of the South Side Planning Board, whose objective was to help revitalize and stabilize a seven-square-mile area

that included Bronzeville. Board members included IIT and Michael Reese Hospital. Also, enforcing the power of eminent domain, the City of Chicago razed hundreds of buildings to construct the Dan Ryan Expressway. This latest effort at urban renewal and public works construction was a difficult time for many Bronzeville residents, however, who were relocated to Stateway Gardens and then to Robert Taylor Homes, the then-new CHA residential towers.

In the late 1960s, after the death of Martin Luther King Jr., many universities located in or close to predominantly African-American communities started looking for ways to strengthen relationships with area residents and businesses with the goal of providing better campus environments for their students. Illinois Tech began to expand educational opportunities for underrepresented students across the city with novel initiatives such as the Early Identification Program and the Chicago Area Health and Medical Careers Program (CAHMCP, known as "Champs.")

"IIT benefited greatly during this time from the efforts of Nate Thomas, John Bradley, and Dr. Regnal 'Reggie' Jones," says Leroy Kennedy, vice president of IIT's Office of Community Affairs and Outreach Programs. "Thomas was instrumental in recruiting African Americans from across the country who wanted to earn engineering degrees to enroll in IIT. In the 1980s, Jones and Bradley, through Champs, which was housed at IIT, encouraged and mentored qualified African-American students to study pre-med in college and then apply for admission to medical school."

A native South Sider and long-time community activist, Kennedy joined IIT in 1989. As one of his first outreach efforts he helped to organize the Mid-South Planning Group, a community initiative composed of foundation, corporate, civic, and government partners. The group developed the "Mid-South Strategic Development Plan: Restoring Bronzeville," a blueprint for land use in Bronzeville for the next 20 years. As a result, the Mid-South Planning and Development Commission was formed to help implement the plan's recommendations—a key one being a "better integration of IIT into the neighborhood."

### A Community's Continued Renewal

IIT took other lead roles in creating new coalitions designed to strengthen a sense of community. Kennedy became involved in the South Side Partnership, for example, helping to strengthen and unify community and institutional interests. The group worked to support local educational improvements and was instrumental in connecting South Side communities to the resources of the partner organizations that were interested in serving the area, which included IIT, the Chicago Urban League, Centers for New Horizons, and others.

During the 1990s and 2000s, changes took place to help rebuild Bronzeville. The university worked with the Home Builders Association of Greater Chicago to sponsor the

country's first urban Parade of Homes, proving that market-rate housing was viable and profitable in Bronzeville.

The collaborative Black Metropolis Historic District initiative focused on the historic preservation of remaining Bronzeville structures and heritage tourism to drive economic development, a strategy that complemented IIT's intentions to upgrade campus buildings and their landscape. The initiative was a public-private partnership whose membership included local civic and government leaders as well as university representatives. Kennedy has also worked to have a large span of area including Bronzeville designated as a National Heritage Area and is in the final stage of talks with the National Park Service on this potential designation.

By 2000 construction was completed on the new headquarters of the Chicago Police Department—the most technologically advanced police facility in the country—now located at the corner of 35th and Michigan Avenue. During this same period, the CHA's Stateway Gardens public housing high-rises located at 35th and State were being demolished; by 2007 they were replaced with Park Boulevard, a mixed-income housing and business development, complete with a Starbucks coffee shop. IIT worked with the City of Chicago and the CHA in the early stages of the Plan for Transformation, an initiative to redevelop the city's public housing beginning in 2000.

IIT also partnered with Perspectives Charter Schools to open Perspectives/IIT Math & Science Academy, a STEM-focused middle school and high school, at 36th and Wabash in 2008. The newest community outreach program is Parent University [see sidebar], which is designed to guide parents and guardians of middle and high school students through the college preparatory and admission process.

### **Partnering for the Future**

IIT continues to seek ways to provide educational opportunities for residents of Bronzeville and the greater South Side community, but collaborative work still needs to be done in other areas as well, such as finding ways to reduce crime, further revitalize commercial development, and create more jobs for locally, minority-, and womenowned businesses.

"The attitudes and actions that can limit progress and destroy these hard-won gains or weaken our sense of shared community are retrenchment, isolation, an attitude that all is well, and lack of engagement—economic, academic, social, and cultural as well as philosophical," says Kennedy. "An active citizenry creates a balanced growth environment and is accountable. The environment is not defined or based on race, economics, political partisanship, or cultural identity, but on a shared sense of community based on enlightened self-interest. That is the path IIT and Bronzeville need to keep walking—and we need to keep walking it together." •

# Higher Ed 101 for Bronzeville Parents

Even parents with the best intentions who dream of sending their daughter or son to college may be naive when it comes to understanding how the admission process works or what resources are available to finance their child's education. Deborah Young, director of new enrollment partnerships in the IIT Office of Student Access, Success, and Diversity Initiatives, says that growing up she was one of seven siblings and "found her way" to college on her own. Spurred on by that memory as well as discussions she had with staff from the Chicago Housing Authority and the Bronzeville Community Action Council, Young established Parent University.

"We weren't aware of an offering like this for parents in Chicago," says Young, who is focusing her initial efforts on the Bronzeville and greater South Side communities. "After attending Parent University, parents will be equipped with the tools, knowledge, and resources they need to assist and support their children in achieving academic success."

The inaugural Parent U was held on March 28 at IIT with presentations by various internal and external organizations, including the Illinois Student Assistance Commission and the IIT Office of Undergraduate Admission. The presentation on the IIT Computer Discovery Camp for Middle School Girls already proved to be valuable to Parent U participant Sally Wall. Her granddaughter, Cassidy, was accepted into the camp being held on Main Campus this summer.

"The information that I received at Parent University was very inspiring. I learned how to navigate between the different programs and how to apply for financial aid. I also found out about the summer camp at IIT," says Wall. "When Cassidy found out that it was a technology camp she told me, 'Grandma, I'm going to love that!"

Young introduced a new dimension to Parent U, to be held four times a year, at the June 20 session. Parents were welcome to bring along young children to participate in Kids' Corner, where graduate students introduced the kids to STEM (science, technology, engineering, and mathematics) concepts via fun activities using LEGOs, robotics, and more. With children of various ages benefiting from Parent U, Young hopes to bring the program full circle by one day providing parents with their own opportunity to complete a college education that they may have put on hold, perhaps to raise a family. —*Marcia Faye* 

# Reaping the ByKoren Wetmore Research Wilner

ith a moniker like "Windy City," Chicago seems a natural choice for airflow studies. Yet Illinois Institute of Technology's renown for aerodynamics research resulted not from its geographic location but rather the dedication of its faculty, students, and supporters.

Pioneering work done in the 1960s by engineering professors Mark V. Morkovin and Andrew Fejer contributed significantly to the field. Morkovin furthered the understanding of instability, transition, and turbulence, and the relevance of fluid dynamics to the aerospace industry. Two key projects to which he contributed—the first transonic and supersonic airplane (the *Bell X-1*) and the first maneuverable re-entry vehicle—are displayed at the Smithsonian National Air and Space Museum.

Fejer's achievements in wind tunnel design and research helped to advance jet engine propulsion, helicopter flight, and wind engineering.

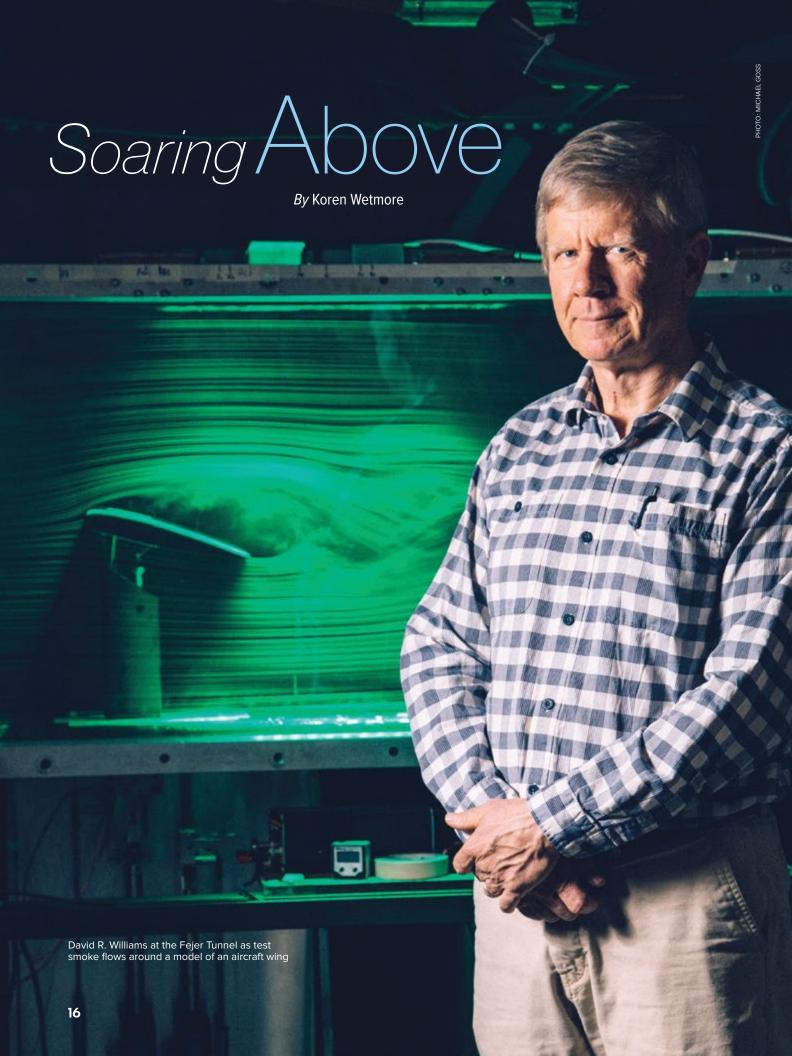
In 1985 Illinois Tech established the Fluid Dynamics Research Center (FDRC) to forward the work begun by Morkovin and Fejer. Hassan M. Nagib (MAE '68, M.S. '69, Ph.D. '72), John T. Rettaliata Endowed Professor of Mechanical and Aerospace Engineering, served as the center's founding director and also helped to design and secure funding for the National Diagnostic Facility, one of the nation's largest academic wind tunnels.

Under Nagib's leadership, the FDRC was chosen as one of three National Centers of Excellence by the United States Air Force Office of Scientific Research.

Today the FDRC houses several water channels and wind tunnels, including the Mark V. Morkovin Wind Tunnel, the Andrew Fejer Unsteady Wind Tunnel, and the National Diagnostic Facility (not currently in use). Illinois Tech faculty and students from around the globe conduct research at the FDRC for projects ranging from efforts to reduce drag on commercial planes to developing airflow controls for combat aircraft.

Through their work, the university's contributions to defense and civil technologies tap into a variety of applications. Read on for a glimpse of some of the latest research being done on campus.





ecall the aerial dogfights of World War II—where the best pilots and planes won battles—and then consider the modern need for a well-maneuvered fighter jet.

Now imagine what happens when technology exceeds the limits of the human body and pilots can no longer endure the rigors of strategic aerial moves. The choice to remove that person from the cockpit seems inevitable.

"I firmly believe that the days of manned combat aircraft are numbered," says Professor of Mechanical and Aerospace Engineering David R. Williams, director of the IIT Fluid Dynamics Research Center. "If you remove the pilot, then that airplane becomes less expensive and much more maneuverable. And the plane that can outmaneuver an opponent in a combat situation wins."

For example, F-16 pilots can withstand a 6 gravitational-force turn for short bursts with the help of special equipment that keeps them from losing consciousness. Pitted against an unmanned craft that can pull off a 9 g-force turn, however, they will be outmaneuvered and likely lose an aerial fight.

Leading United States defense contractors such as Northrop Grumman, Lockheed Martin, and Boeing are already building unmanned combat aircraft on a large scale, and BAE Systems (United Kingdom) and Dassault Aviation (France) boast similar projects. Without a human onboard, these aircraft require no cockpits or environmental controls for pressure or oxygen. Instead they can be designed so that their "pilots" remain on the ground and operate them from a remote terminal.

Williams and students working in IIT's Andrew Fejer Unsteady Wind Tunnel and Supersonic Wind Tunnel are exploring how to build these aircraft so that they have the desired extra maneuverability.

"If you're going to do these very rapid and extreme maneuvers, you've

got to be able to predict the aerodynamic forces accurately—and you need to be able to control them," says Williams.

The Fejer Tunnel has the ability to simulate unsteady aerodynamics—namely the gusts and drops in wind—that affect flight. By placing model aircraft wings in the tunnel's test section, students can apply different airflow conditions, collect vital data on the variables, and then study how to adjust the airflow over the wing to maintain control of the plane.

In the Supersonic Tunnel, they are studying what happens to airflow over the wing during high angles (up to 20 degrees) of attack. "Control surfaces such as the elevators and ailerons don't work well at high angles of attack, so we're using the tunnel to research other ways to exert control. There are different techniques, but right now we're using small slots where jets of air come out of the wing at critical locations and change the flow pattern over the wing to adjust the lift or drag forces on it."

Sponsored by the U.S. Air Force Office of Scientific Research, the work supports a NATO Applied Vehicle Technology group, and serves as preliminary research for a larger-scale project to be conducted this summer at the U.S. Air Force Academy.

Williams's aerodynamics research and the lure of working in the Fejer and Supersonic tunnels have drawn students from around the globe. "We have a student from Berlin working here on his master's thesis and several IIT undergrads, along with graduate students from Princeton, who are using the tunnels to support their Ph.D. work," Williams says. "We also have a collaboration with Cal Tech and UCLA, and each summer we get at least one intern from the University of Poitiers in France. So there are many connections occurring with these projects."

Thanks to technology, we can remove people from the cockpit while still valuing the benefits of them working together on the ground. ●

### MORE ONLINE >

U.S. Air Force Academy: www.usafa.af.mil
U.S. Air Force Office of Scientific Research: www.wpafb.af.mil/afrl/afosr

### **Sailing Science**

A firm grasp of aerodynamics allows you to understand what's happening when wind passes over and around a boat's sail, yet provides little strategic edge in a yacht race. The real advantage comes through teamwork, an understanding of the weather, and a little luck, says Professor of Mechanical and Aerospace Engineering David R. Williams, an avid sailboat competitor.

"In sailing, the difference between winning and losing is much smaller than the accuracy of our predictions, so it really comes down to trial and error and experience," he says. "When you reach a mark rounding and have three people who know each other so well that they do what needs to be done without any discussion, everything just flows. It takes years to get to that level of teamwork."

Williams built his first sailboat at age 15 and purchased his first racing craft a year later. He's raced in three Olympic sailing trials, and in 2008 his team qualified for the Etchells World Championship in Chicago. The team finished in 35th place out of 83 boats.

Williams continues to race competitively for the pure joy of sailing with his friends. He will set sail again this summer in a 31-foot-long Etchells 22 for the Chicago Yacht Club's Racing Yacht Fleet series. —Koren Wetmore

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hances are you've ordered something online recently and your purchase arrived via truck to your post office, home, or workplace. Now online retailers want to deliver your packages using drones.

Sounds simple enough, especially if the lightweight, unmanned vehicles have to zip over rural areas only. Yet once they hit a city like Chicago, turbulent wind forces could deplete their power supplies and send them spiraling off course.

That's why drone designers look to researchers such as Candace Wark (Ph.D. MAE '88), IIT professor of mechanical and aerospace engineering, whose fundamental airflow research can inform ways to program drones to better navigate urban environments.

"We know quite a bit about atmospheric flow in general, so we have an idea of what to expect in terms of the wind gust levels above Iowa farmland. But when that airflow makes its way into a city, the interaction between the wind and the buildings creates a very complicated flow problem," Wark says.

Walk downtown in any major city and you'll experience the familiar gusts that travel down the sides of tall buildings and through the intersections. For the past 25 years—including her early days as a Ph.D. candidate—Wark has worked in the Mark V. Morkovin Wind Tunnel studying the unique dynamics of these urban airflow patterns. Her research has revealed some surprising results that highlight their complexity.

"In looking at a city like Chicago, if the wind flow is coming directly out of the west and then shifts to the north or the south by just five degrees, that can drastically change the flow patterns throughout the downtown area," she says. "I didn't

expect it to be that large of a change for that small of an angle."

Understanding and building models to predict these complex airflow patterns could allow drone designers to develop navigational systems that map the best routes through a city given the variables of a particular day. Other applications include charting the dispersion of air pollution or the potential flow of contaminants introduced accidentally, or intentionally, into the air above or around an urban environment.

So how do you study something invisible, such as wind? For starters, you contain it in a tunnel where you can manipulate, measure, and map its currents.

Wark and her students set up models—such as rows of Plexiglas blocks—in the Morkovin tunnel's test section to simulate an urban environment, and then use lasers and cameras to capture the movement of aerosol particles at various wind speeds through the mock urban array. Airflow patterns can also be visualized by introducing smoke into the tunnel via a technique that involves sending an electric current through an oil-slicked wire. The latter method is one Wark uses to create artistic images of flow patterns [see sidebar], which recently were featured in an exhibit at Willis Tower in Chicago.

Data collected from Wark's wind tunnel experiments flows to Dietmar Rempfer, IIT professor of applied mathematics/ mechanical and aerospace engineering, who uses it to build predictive models that one day may help drones navigate the windiest of cities. •

### MORE ONLINE >

IIT Fluid Dynamics Research Center: fdrc.iit.edu

### Airflow Art

At first glance, most viewers assume the fluid-like images originated from a computer. So when Professor of Mechanical and Aerospace Engineering Candace Wark and her art colleague Shirley Nannini explain how they produce their photographs using a wind tunnel, the typical reaction is pure amazement.

"People are usually surprised and very impressed," says Wark. "They say something like, 'Wow! What a creative process."

Blending science and art, the images reveal the beauty of airflow patterns captured using smoke, light, and colored filters. To visualize the movement of invisible air, Wark and Nannini introduce smoke into the wind tunnel by coating a wire with oil and running an electric current through it. As the oil burns, the smoke gets carried by the air flowing through the tunnel. It passes around and over objects placed in the tunnel, such as tennis balls or flat plates, and then the women photograph the patterns produced downstream. The images' brilliant colors arise from filters placed over the lights used to illuminate the smoke.

"We work with the lighting, the speed, and various conditions in the wind tunnel until we get these images that people really respond to. For 25 years I've been doing scientific photography of flow patterns and they've always looked beautiful to me, but until Shirley, I had never thought of them as art."

The two women met on a tennis court in 2003 and later explored airflow art in 2012 as part of a project for one of Nannini's photography classes.

"I still have the first image we took and it's so crude, yet in it I could see the beginning of something that could be very exciting," says Nannini, who trained in photography after retiring from a 30-year teaching career. "Candace brought a wealth of knowledge from her scientific background and research, but she had never applied it to an artistic venue. So it was a learning process for us both. We explored every idea we had to see where it took us."

Captivated by their early results, the two continued to experiment until they had captured images that they considered art worthy. Next, they applied to local art exhibits.

The duo's first airflow art exhibit went on display in 2012 at the 737 North Michigan building in Chicago. Since then, their work has appeared in more than 25 exhibits, including a recent exhibition at Willis Tower in downtown Chicago.

Their work and upcoming exhibit schedule can be viewed at www.windflowphotography.com.—*Koren Wetmore* 









# MONAMUM Machine-Age Master Master Machine-Age Mach

he metal monster, olive-drab to gunmetal in color, is longer and wider than a hearse and weighs somewhere between 4,000 and 6,000 pounds. Festooned with alloy shavings and outfitted with a series of hydraulic levers and hand-cranks, the 1939 Monarch lathe—"the first contour cutting machine in the world" according to the Monarch Machine Tool Company—might intimidate most individuals, but not metal master Craig Johnson, head of the Armour College of Engineering Machine Shop and coordinator of the Student Fabrication and Design Studio. In fact, you could say that the lathe is his pride and jov.

"It came from the Navy and somehow helped to fight World War II," Johnson explains, acknowledging the years that IIT was involved in the V-12 Navy College Training Program. "The lathe is still sought after today. The bearings alone would sell for \$18,000 each; the machine has appreciated over time. It's hard to find decent manual machine tools nowadays. They really have no place in a production shop anymore; you would lose money by the buckets if you tried to make parts with it in quantity. But for prototyping shops or machine repair shops, something like this lathe is invaluable."

The Monarch is just one of the many tools in Johnson's kingdom of clink and clank. For nearly 26 years, IIT internal and external clients have tapped his artistic acumen to design and craft parts. These include everything from tiny titanium neurotransmitters for IIT Biomedical Engineering Professor Philip Troyk's intracortical visual prosthesis project to metal connectors used in the ill-fated globe-circling balloon flight attempted by Kevin Uliassi (ARCH '90) in 2000.

"Some of our parts flew to Burma and are now in the National Air and Space Museum," says Johnson with a bemused smile, as he picks up a lightweight silver-colored object that looks like a miniature playground slide. "I don't know a lot about drag racing, but apparently John Force is a name to be reckoned with and came to the shop a number of years ago because he wanted some work done on a car. This is a scale model of the wing that was on the back of his dragster; he wanted to optimize the performance of that. This was then mounted in one of IIT's wind tunnels. Air was blown across it; we could change the angles of attack so that when it came to running the wing on the real car, it simplified and shortened the time needed to get the car running the way Force's team wanted it to run."

When Johnson and three other machinists staffed Armour's Professional Shop, it was known as the go-to place for developing models, with various external clients including other academic institutions across the country and companies such as Boeing. Johnson now devotes his time fully to IIT and helping to keep the university's wind tunnels in business.

"It is indispensable to have someone with his experience," says David R. Williams, wind tunnel researcher and professor of mechanical and aerospace engineering, who served as the shop's faculty supervisor from 2000–2010. "Craig almost always has a way of making the original idea better by taking a different approach, whether by simplifying the manufacturing process or utilizing a completely different idea. If we didn't have that shop my research would easily be cut in half. I propose to do things knowing that I have this type of backup. Indirectly, he makes it possible for us to bring in our research grants and be competitive with other universities."

Hailing from a long line of carpenters, machinists, and jewelers, Johnson had his own watch repair business before coming to IIT and began to develop his artisanship in the sixth grade, when his father bought him a home metal lathe. One of his first projects for Armour was helping to complete the construction of the National Diagnostic Facility wind tunnel. He is now looking forward to working more with Armour students as plans unfold to expand the Professional Shop's offerings in the John T. Rettaliata Engineering Center (formerly Engineering 1).

Currently, Armour students can make objects in three different places within the facility: the Student Fabrication and Design Studio, a new open laboratory outfitted with rapid-prototyping machines, laser printers, small hand tools, and plenty of white board space for work on simple class projects; the Student Shop headed by Oscar "Stan" Johnson (no relation to Craig Johnson), where they learn safety basics and fabricate simple metalworking projects; and the Professional Shop, where students now have access to only one precision-cutting machine. The college is planning to open a wider area of the shop to students, who will receive further instruction from Johnson on completing advanced projects.

Johnson says that collaborating with students and faculty ranks right up there with coaxing precisely crafted pieces from his computer numerical control machines and old-school lathes.

"I very much enjoy looking at an idea or a sketch from students or faculty, working with them to create a final CAD [computer-aided design] model, and then going from that to a physical thing that becomes a useful piece of equipment that could help make a new contribution to science," he says. •

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# Crown Hall







# After Dark



In Mies van der Rohe: A Critical Biography, author Franz Schulze observes Mies' intentions regarding the purpose of S. R. Crown Hall: "The 'chaos of directions' of the modern world in which [Mies] lamented," writes Schulze, "might here be put to order by the formative, clarifying mind communally and impersonally striving to elevate fact into truth."

For some architecture students, the notion of a clear mind may at times seemingly want to fly right out one of Crown Hall's roughly 10x13-foot upper windows during finals week. But since the "one room schoolhouse" opened in 1956, students have delivered on Mies' purpose, finding their own—often creative—ways to corral the chaos of year-end design projects. Some students have even gone so far as to camp out deskside overnight in order to ready their work for grading or exhibition.

Over time, all-nighters in Crown Hall have become something of a tradition—and a rite of passage for IIT architecture students. In this photo essay, members of the student photography group iitExposure captured life at Crown Hall preceding finals.

—Chelsea Kalberloh Jackson







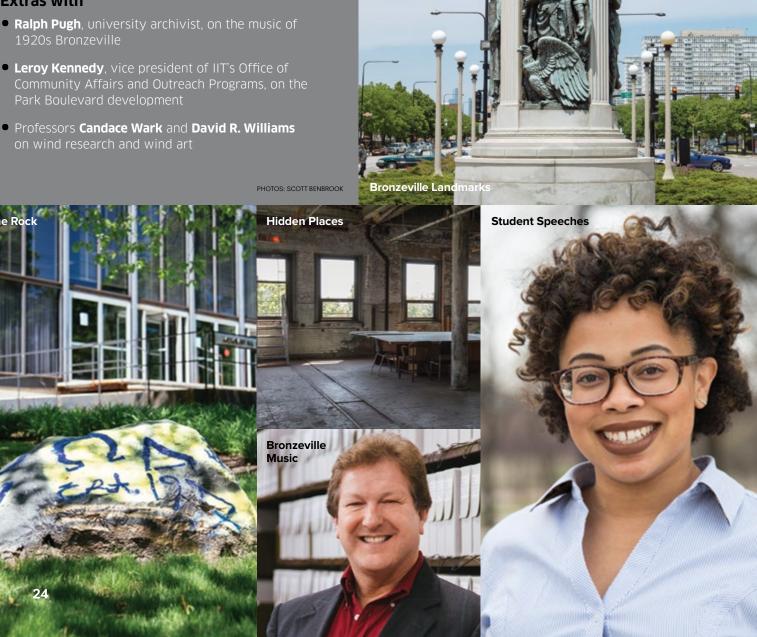
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- 1920s Bronzeville
- Leroy Kennedy, vice president of IIT's Office of Community Affairs and Outreach Programs, on the Park Boulevard development
- Professors Candace Wark and David R. Williams



### 1940s

### Warren Spitz

(ARCH '42, M.S. CRP '68), Northbrook, Ill., at 93-plus years old, is the oldest licensed architect in the state of Illinois.

### 1950s

### Melvin Friedlander

(ME '50), Sun City, Calif., is attending Cal State University, San Bernardino, going for a master's degree in education. He is nearly 92 years old and may be the oldest graduate of that university.

### Ted Erikson

(CHE '52, M.S. CHEM '59), Chicago, who graduated from Chicago's South Shore High School, attended, having been a "one semester" pupil, his 70th Big Sandy High School reunion in Big Sandy, Mont., (population, approximately 500) in June.

Roy Grundy (IE '52), Naperville, Ill., is enjoying his life in the western suburb of Chicago, where he has resided for 53 years. Grundy went on to earn a doctorate, and taught management and marketing at the College of DuPage for 23 years before retiring. Drawing on his IIT ROTC experience and his three-year tour of duty on the USS Baltimore heavy cruiser, Grundy led his ship's reunion in May in Washington, D.C.

### 1960s

### John LaPlante

(CE '61), Chicago, works part time, mostly leading workshops on pedestrian and bicycle safety, and Complete Streets design.

Karl Klessig (PHYS '63), Westlake Village, Calif., recently moved full-time to Santa Fe, N.M., which has been his second home. He is the retired chairman of the New West Symphony of southern California. He was named a Paul Harris Fellow by Rotary International for service to the community.

### **David Rogers**

(M.S. EE '64), Fargo, N.D., taught in Brazil until 1980 and then relocated to North Dakota, where he is still a professor. He and his wife, Darlene, have been married for 50 years. She is an active volunteer, and the couple is very involved in their church. They have one son, Steve.

### Fred Weil

(PS '64), San Francisco, is in his 47th year of practicing law. His primary areas of practice are taxation and corporate matters. He is serving his 12th year as an elected member of the Moraga-Orinda Fire District Board of Directors and his 33rd year overall in elected local public offices. He has three children and five grandchildren.

Barbara Crane (M.S. DSGN '66), Chicago, was presented the second annual Silver Camera Award by the Museum of Contemporary Photography. The Silver Camera Award honors those who have made significant contributions to the medium of photography.

### Kathleen Thorne-Thomsen

(DSGN '67), Santa Fe, N.M., children's author, was interviewed on NPR's "Take Two" in Los Angeles in February.

### **Richard Oracheff**

(EE '68), Glendale, Ariz., started working with Paragon Transportation, in Phoenix, as an engineer.

### Thomas Vaughan

(MATH '69), Shelby Charter Township, Mich., retired from Blue Cross Blue Shield and worked for Compuware until he fully retired in 2009. He and his wife have two children and three granddaughters.

### **Daniel Weeks**

(DSGN '69), Perrysburg, Ohio, received a Lifetime Achievement Award from the American Advertising Federation, Toledo, Ohio chapter. The award is given once yearly to a member who has proven a high level of creativity, contributed to the advertising and design community, and been active in civic, religious, or other groups dedicated to human or social welfare.

### 1970s

### **Clark Kimberling**

(Ph.D. MATH '70), Evansville, Ind., and his wife, Margaret, have lived in Evansville since 1970. Kimberling still teaches and does some research, working primarily on the Encyclopedia of Triangle Centers, now in its 17th year. He and his wife have three children and four grandchildren.

**Manu Vora** (M.S. CHE '70, Ph.D. '75), Naperville, Ill., was honored by the American Society for Quality



### **Edward Resner**

(CE '71), Spring Grove, III., entered the creative writing profession after retirement. He has two books on Amazon and the Barnes & Noble websites. His novel is Three Eddies, and he also wrote the short storybook Remembrances.

with the 2015 Ishikawa Medal for his "extraordinary commitment to teams in corporate, academic, professional, and philanthropic domains." Vora received the award on May 3 at the World Conference on Quality and Improvement in Nashville, Tenn.

### Alexander Kovnat

(MAE '71), West Bloomfield Township, Mich., still works at the U.S. Army Tank-Automotive Command. He and his wife, Diana, have been married since 1981; they have two sons and one grandson. Kovnat's father (IIT class of 1948) is now 93 and lives in Northbrook, Ill.

Robert Close (CE '72, M.B.A '76), El Toro, Calif., joined CDM Smith as client service leader for transportation clients in California and Arizona. In his new role, he will provide leadership for CDM Smith services to clients within these markets and support the firm's overall transportation growth initiatives.

**Steve Bellinger** (PSYC '73), Chicago, wrote the sci-fi time-travel novel The Chronocar. Most of the action takes place in Bronzeville in 2015 and 1919. The main character of the story is an IIT student, and there is a brief scene that takes place in front of Armour Institute in 1919. The book was released in May 2015.

(M.S. CST '73), Pittsburgh, Pa., moved to Pittsburgh after IIT with his wife, Ida. Both taught at the University of Pittsburgh. Ida passed away in 2004.

### John Meinke

(M.S. CS '75), Walton, N.Y., retired from the University of Maryland University College Europe (Germany) in September 2014. He splits his time between Walton, N.Y., and Oftersheim, Germany.

### Federico Vidargas

(M.A.S. ARCH '76), Evanston, Ill., is currently vice president and director of design at Beame Architectural Partnership in Miami. He is a former IIT trustee, IIT Alumni Association president, and recipient of the 2008 IIT Global Service Award.

### William Schmalz

(ARCH '77), West Hollywood, Calif., was elevated to the College of Fellows of the American Institute of Architects in January 2015.

### **Richard Shreve**

(Ph.D. BE '78), Boynton Beach, Fla., has been named Chemistry Cluster Chair for the next academic year at Palm Beach State College.

Amy Segami (ME '79, M.S. '82), Chicago, had her art exhibited at the Evanston Public Library. The exhibit, Frozen Dreams: Contemporary Suminagashi Paintings by Amy Lee Segami, took place from February through March 2015.

### 1980s

### **Rudolf Balciunas**

(MAE '80), Houston, is with NASA Johnson Space Center, serving in technical management for the Engineering Directorate.

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alumninews **CLASSNOTES** 



### **Edward Monser**

(EE '81), St. Louis, an IIT trustee and president of Emerson, yielded the hammer at the closing bell of the NYSE on February 19, 2015 in celebration of the 125th anniversary of the founding of Emerson.

He and his wife, Rita, have been married for 30 years. They have six children and two grandchildren.

### Krandel Newton

(ME '81), Cedar Hill, Texas, appeared on "Jimmy Kimmel Live" recently. "The Original Butt Sketch Artist," Newton had been invited to set up his easel outside the Los Angeles TV studio, draw the derrieres of passers-by on the Hollywood Walk of Fame, and chat a couple of times with the late-night host.

Max Willig (ARCH '81), Buffalo, N.Y., celebrates 27 years in private practice, having established Max Willig Architect in 1988. He recently completed an eight-year term as an officer and member of the board of directors of the Grant-Amherst Business Association, spearheading the rejuvenation of historic Black Rock, one of Buffalo's oldest neighborhoods. He is the co-chair of the Community Advisory Group, providing community input into the planning, reuse, and restoration of the Richardson Olmsted Complex, a National Historic Landmark.

**Judy Langston** 

(M.S. PHOT '82), Park Ridge, Ill., recently had her work published in the book Carte Postale: The Postcard Art of PACE by the Curt Teich Postcard Archives, part of the Lake County Discovery Museum.

**Sherrie Littlejohn** (M.S. CS '82), San Francisco, an IIT trustee and IIT Alumni Association Board member, has been named the head of technology strategy and innovation at Wells Fargo Bank. In this role, she will be responsible for leading enterprise-level

technology planning, strategy development and innovation, and transition services.

### **Kurt Hoigard**

(CE '84, M.S. '85), La Grange, Ill., was named president of Raths, Raths & Johnson, Inc., a national engineering, architecture, and forensics consulting firm. For the prior 29 years he served as an engineer and principal of the firm.

### **Richard Peterson**

(M.S. CHEM '84), Naperville, Ill., is a senior marketing manager at Nalco, an Ecolab Company.

### George Phillips-Sorich

(ARCH '86), Kenilworth, Ill., joined NORR in its Chicago office as principal to further develop the firm's growing portfolio of regional and national clients.

### **Victor Guarino**

(ME '87, M.S. '88, M.A.S. STE '10), Oak Park, Ill., is the treasurer of the Park District of Oak Park.

### Joseph Koblich

(BA '88), Downers Grove, Ill., served on the organizing committee for the first IEEE Hack Chicago Challenge in fall 2014, for which the first-place finishers for both the collegiate and professional categories were affiliated with IIT.

### **Robert Parks**

(EE '88), Wood Dale, Ill., was elected as an associate member of the American Society of Enology and Viticulture in September 2012. He earned a graduate certificate in enology and viticulture from the University of California, Davis Extension in December 2013.

### Debra Grymkoski

(M.S. BIOL '89), Beulah, Colo., is an adjunct professor at Pueblo Community College and Adams State University, teaching microbiology, anatomy and physiology, and epidemiology. She was nominated for part-time instructor of the year for the third consecutive year.

### Torrance Ly

(EE '89), Forest Park, Ill., is owner of the restaurant LC Pho in the Lincoln Square neighborhood of Chicago, as well as Lee Concessions.

Sagar Patel (EE '89), Katy, Texas, joined Merichem Company as sales director for the Merichem Gas Technologies business unit. His responsibilities include the global leadership for all sales and business development activities in support of the LO-CAT hydrogen sulfide removal technology.

Sudesh Saraf (M.S. ME '89), Aurora, Ill., was promoted to vice president at Wight & Company and will continue to serve as director of MEP Engineering, a position he has held for five years.

### 1990s

### Anita Burke

(ME '90), West Bloomfield, Mich., chief engineer for GM, was featured in an interview in Truck Trend in January 2015.

### Frank Naeymi-Rad

(Ph.D. CS '90), Libertyville, Ill., is chairman of the board and chief executive officer of Intelligent Medical Objects, which was cited by Chicago *Tribune* as one of the best small companies to work for. In addition, he was profiled on the website of the American Medical Informatics Association.

Mohan Srinivasan (M.A.S. ARCH '90), Wilmette, Ill., was promoted to principal at NORR. Srinivasan currently manages numerous hospitality and multifamily residential projects in the U.S.

### Scott Conwell

(ARCH '91), Naperville, Ill., was elected to the American Institute of Architects College of Fellows. As director of industry development with International Masonry Institute, Conwell has equipped thousands of architects with the knowledge and tools to design high-performing buildings in brick, tile, and stone.

### **Ronald Nordmeyer**

(CE '91), Brookfield, Ill., was named as a new Clark Dietz shareholder.

**Jeffrey S. Graves** (ME '92), Chicago, is partner and principal, along with Paulo Hernandez (EE '02, M.B.A. '06), in the engineering firm MEP Infrastructure Solutions, Inc., which was established in 2010 and works primarily in the health care and higher education markets.

Marjorie Pries (ACCT '92), Chicago, was a volunteer for the Jesus "Chuy" Garcia campaign for Chicago mayor.

### Mia Snyder

(BA '92), Washington, D.C., was selected for membership in Stanford Who's Who in 2012.

### Muzaffer Aydemir

(M.B.A. OM '96), Bilecik, Turkey, is a full-time professor at Yildiz Technical University in Istanbul.

### Rishi Bharadwaj

(EE '96, M.A.S. ECE '99, CER WIRE '99), Schaumburg, Ill., was promoted to vice president and general manager of connected solutions at PCTEL, Inc.

### Mohammad-Reza Mostofi-Ashtiani

(M.A.S. CHE '98, Ph.D. '02), Naperville, Ill., is serving as the AIChE Particle Technology Forum chair. He will chair the Societal Impact Operating Council from 2016.

### **Christiana Lawson**

(M.S. EM '99), Naperville, Ill., just returned to the United States after 10 years abroad in Singapore and China, where she worked on sustainability education and policy at Beijing Normal University.

### 2000s

### **Heather Weaver**

(PPPS '00), Lansdale, Pa., completed her first year in a new job at Philadelphia University as associate director of student engagement for first-year programs. She also will be completing a three-year assignment as the director of cadet programs for the Pennsylvania Wing Civil Air Patrol in September 2015 and moving on to Group Command.

### Akram Abouzied

(Ph.D. BIOL '02), Jersey City, N.J., coauthered a published paper in the International Journal



of Stem Cells called "Biochemical and Parasitological Studies on the Effect of hUCB-Selected CD34+ Progenitor/Stem Cells in Mice Infected with Schistosoma mansoni."

### Paulo Hernandez

(EE '02, M.B.A. '06), Chicago, is partner and principal, along with Jeffrey S. Graves (ME '92), in the engineering firm MEP Infrastructure Solutions, Inc., which was established in 2010 and works primarily in the health care and higher education markets.

### Harish Kumar

(M.S. CPE '02), Chennai, India, has worked at reputed IT companies in India.

### **Matthew Munson**

(AE '02), Aberdeen Proving Ground, M.D., was assigned as the Fluid Dynamics Program manager at the U.S. Army Research Office. He will manage funds to support extramural basic research aligned with U.S. Army science and technology development efforts. He and his wife, Rebecca (ARCH '06), and their two children will be located in Durham, N.C.

### Natalie Gandhi

(M.S. FM '04), Montville, N.J., spoke at the XVII North American Zoroastrian Congress last December in Los Angeles.

### Kamran Jawaid

(M.A.S. CS '05), Murphy, Texas, is a product manager of marketing at Cisco Systems.

### Yared Akalou

(MDS DSGN '06), Houston, co-founded Opening.Co, a service that helps companies evaluate candidates to make more informed hiring decisions.

### **Colleen Platt**

(M.A.S. BIOL '06, LAW '06), Carson City, Nev., works at the Nevada Attorney General's Office representing numerous state agencies and state licensing boards. She has four children.

Floriann Stankovich (BME '06) and George Skountrianos (AMAT '07), Chicago, were married in Chicago in September 2014.

### **Daniel Geers**

(M.A.S. STE '08), Powell, Ohio, was named as the new president of Jezerinac Geers & Associates in early January, 34 years after his father co-founded the firm.



**Steven Nargang** (ME '96), Oak Brook, Ill., president of the IIT Chicagoland Alumni Chapter, recently took eight Armour College of Engineering students for individual flights in a two-seater aircraft. Nargang rented the plane and donated his time. He plans to take a few more students flying this summer.

**Divya Kasuladev** (M.A.S. ITM '11), Lincolnshire, Ill., [back, left to right] and fellow W. W. Grainger, Inc. employees Lama Abu-Amara (CPE '14), Chicago, and Neelansha Singh (M.S. CS '14), Lake Forest, III., visited the IIT Department of Computer Science on May 1 and met with Eunice Santos, Ron Hochsprung Endowed Chair in Computer Science [front].



### Kristine Angell

(M.S.D.M. DSGN '09, M.B.A. '13), San Diego, was awarded a contract with the City of San Diego to do community engagement for the redesign of sandiego.gov. The new website will be launched spring 2016. She started Hopscotch Labs in 2014 to help companies innovate through consumer engagement.

### 2010s

### Elisa Rodriguez

(LAW '09, M.P.A. '10), Chicago, is a partner at Rodriguez & Flores-Szeto LLC.

Jill Haagenson (M.S.D.M. DSGN '10), Chicago, started her own branding business, QITE Design, which specializes in startups and entrepreneurs.

### Matthew Aquino

(CER CMGT '11), Chicago, was promoted to vice president at Wight & Company. Aquino has served as director of structural engineering for Wight & Company since 2010 and will continue in that role.

### Joshua Bradley

(CE '11, M.A.S. CM '13), Chicago, is a superintendent at Turner Construction Company.

### **Elizabeth Miller-Lisy**

(MCH ACHM '11), Hilliard, Ohio, married Tim Patrick in December 2014.

### Ashwitha Krishna Kumar

(M.S. EE '12), Houston, is a hardware engineer at IBM. Kumar was one of the authors for a patent filed by the IBM team.

### Rachel Brady

(LAW '13), Chicago, is the recipient of a 2015 Skadden Fellowship. Established in 1988 by the law firm Skadden, Arps, Slate, Meagher & Flom, the

prestigious two-year fellowship supports graduating law students and judicial clerks who wish to pursue public interest work.

### **Anne Brask**

(ARCH '13), San Francisco, works as a city planner/urban designer at the San Francisco Planning Department.

### Zändra Chisolm-El

(M.A.S. CHEM '13), Chicago, is a nuclear chemist at Siemens, in Des Plaines.

### Renee Kuruc

(M.S. EMS '13), Overland Park, Kan., recently joined the Environmental Services and Permitting Group of Burns & McDonnell as a project manager, focusing on environmental documentation for transportation projects.

**Kelly Lohr** (MSE '13), Providence, R.I., is admissions assistant at Rhode Island School of Design.

### Nikita Troufanov

(ARCH '13), Palos Verdes Estates, Calif., is a computational designer for Nike's Innovation Team.

### Sultan Felemban

(M.B.A. BASX '14), Riyadh, Saudi Arabia, works at a bank affiliated with Credit Agricole CIB.

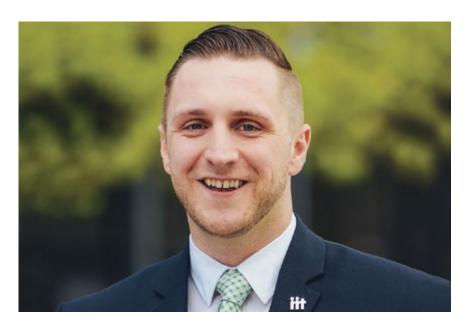
### Marriyam Qureshi

(EE '14), Chicago, started an entrepreneurial, e-commerce-based project while living in MSV at IIT and now runs this enterprise in six different countries. Now known as MQ Enterprises, the company runs on a partnership model with Apple, Microsoft, Best Buy, Gap, Forever 21, Macy's, and more.

Maya Embar (ITM '15, M.A.S. 15) and Bill Wesselman (ITM '15, MAS CYF '15), Wheaton, Ill., are engaged.

**alumni**news CHAPTERNOTES

# IIT Worldwide Alumni Chapters, Clubs, and Networks



### Connect to Illinois Tech with Zach Rus

Meet Zach Rus, associate director of regional and reunion programs. Rus came to IIT in 2014 from the University of Chicago, where he served as associate director of alumni relations and development. Before that he was a fundraising consultant at Pennington & Company and director of education programs at Sigma Alpha Epsilon.

In his role at Illinois Tech, Rus hopes to show alumni the importance of keeping connected to their alma mater.

"I want alumni to know they can come back to the university for anything," he says. "If they move, they can reach out to local volunteer leaders with questions about the area. If they're looking for a job, they should think of the Alumni Association as the first place to go for support. If they're simply looking to have fun and connect with other alumni, they can host a chapter event."

Rus also hopes to build bridges between alumni and students.

"Current students should look to alumni for advice, and I can help connect alumni to those students. Ultimately, I want all alumni and students—who are future alumni—to know that their connection to IIT doesn't end after they cross the stage during Commencement," he says.

At his own alma mater, Simpson College, in Iowa, Rus sets the bar for involved alumni.

"I attend all their Chicago events and keep in contact with their alumni relations and development offices," he says. "I follow their athletic teams and find myself getting too worked up over a loss to one of our rivals!"

When he's not traveling or attending alumni events, Rus enjoys spending time with friends and family. He's a volunteer at Vital Bridges, a leader in services for people living with HIV/ AIDS, where he's been part of the junior networking committee for the past four years, serving as chair for two.

To get involved with your local IIT alumni chapter, contact Zach Rus at zrus@iit.edu or 800.IIT.ALUM (800.448.2586).

### **IIT Chicagoland Alumni Chapter**

### **Chapter Officers**

Chair: Steve Nargang (ME '96) snargang@hawk.iit.edu Vice Chair: Robert Meder (M.Arch. '10) Chapter Secretary: Natalie Hammer (EE '09, M.A.S. PWR '14)

### City of Chicago Branch

Branch Director: **Charles Horn** (MGT '82)—chorn@hawk.iit.edu Assistant Director: **Wendy Wu** (M.B.A.'09)

### North Suburban Branch

Branch Director: **Ann Trandai** (EE '89, M.S. '93)—trandairealty@gmail.com Assistant Director: **Brett Champlin** (M.B.A. '90)

### Northwest Suburban Branch

Branch Director: **Bruce Meier** (MATH '76)—brucemeier5540@gmail.com Assistant Director: **Dave Kamath** (M.S. IE '73) Assistant Director: **Luke Dykstra** (CPE '00, M.S. CS '01)

### West Suburban Branch

Branch Director: **Bill Lam** (ME '82, M.B.A. '88)—wlam@hawk.iit.edu Assistant Director: **Joe Koblich** (BA '88)

### South Suburban Branch

Branch Director: **Jerry Wilks** (MET '72, M.A.S. MET '82, M.A.S. CHE '05)— gwilks@citgo.com
Assistant Director: **Marlene Lojas** (CHE '91)

### U.S. Chapters

Volunteers who enjoy connecting IIT graduates to their alma mater manage each IIT chapter. Domestic chapters and their leaders are:

Bay Area: **Heidi Rank** (ARCH '81) heidirank@sbcglobal.net

Southern California: **Benny Jones** (MATH '94) bennyjones.iit@gmail.com

New York City: **Hector Guillen** (M.Arch. '91) hguillen@jankorasic.com

Phoenix: **Peter Koliopoulos** (ARCH '86) peter@circlewest.net

San Diego: **Crystal Sargent** (M.S. MCOM '02) csargent@torreypinesbank.com

Seattle: **Mike Wayte** (ME '61) mikejwsr@hotmail.com

Washington, D.C.: **Randy Sullivan** (ES '74) R.sullivan@rlsullivan.us

Alumni networks and activities are underway in Austin, Texas, headed by Arun Prakash (AE '99, prakaru@gmail.com) and in Minneapolis by Harley Feldman (CHEM '69, harleyfeldman@gmail.com).

The IIT alumni community is expanding to include chapters in Houston and Dallas, and is coordinating annual activities in Atlanta, Boston, and Denver. If you live in any of these areas and want to get involved, contact the chapter chair or email the Office of Alumni Relations at alumni@iit.edu.

### **Global Chapters**

China: General Secretary **Jennifer Meng Xia** (M.P.A. '07) gyxiameng@hotmail.com

Hong Kong: **Victor Lo** (DSGN '73) victor\_lo@goldpeak.com

India: **Thiruvengadam Ashok** (M.S. CS '01) ash@stagsoftware.com

Japan: **Tetsuyuki Hirano** (ARCH '79) tetsu-hirano@hd-group.co.jp

Korea: **Jongsub Moon** (Ph.D. CS '91) jsmoon@korea.ac.kr

Taiwan: **Steve Chun Pan** (M.S. IE '77, Ph.D. MSC '88) chun@uch.edu.tw

Thailand: **Paiboon Pongchairerks** (M.S. IE '75) paiboopo@gmail.com



my monthly donations."

-Brian Kibbe (ME '11)

# Are You a Loyal Hawk?

Loyal Hawks is IIT's monthly giving program. Monthly giving makes supporting IIT easy and affordable for our most loyal alumni and friends.

Whether you support scholarships, the Strategic Initiatives Fund, or your college annual fund, your monthly gift will go to work immediately to support IIT students and improve their IIT experience.

IIT owes its very existence to the generosity of alumni and friends—and your monthly gifts. Whether \$5, \$50, or \$500, your gifts add up and have a lasting impact.

Show your Hawk pride! Make a gift at give.iit.edu/loyal and become a Loyal Hawk today!

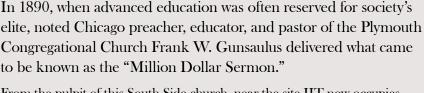
# 2-FOR-200—A SPECIAL OFFER FOR IIT CLASSES OF 2004 AND LATER

JAY FISHER (CHE '63) wants to encourage young alumni from the past 10 years to give back to Illinois Tech. If you are among the first 200 alumni to sign up, he will generously match your first year as a Loyal Hawk \$2 to your \$1. Make your gift at give.iit.edu/2-for-200 and triple the impact of your donation.



# Two Men, a Mission, and a Million Dollars





From the pulpit of this South Side church, near the site IIT now occupies, Gunsaulus said that with a million dollars he could build a school where students of all backgrounds could prepare for meaningful roles in a changing industrial society.

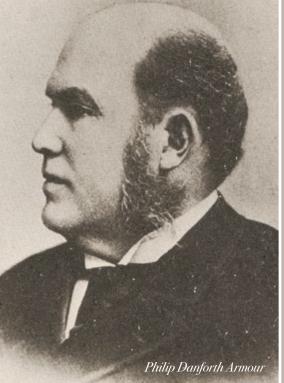
Philip Danforth Armour Sr. responded to this call to action with a \$1 million gift to create Armour Institute, which later merged with Lewis Institute to form IIT.

IIT's Gunsaulus Society celebrates this extraordinary legacy of philanthropy—and honors those visionary donors who have invested in IIT by making a planned gift commitment to the university.

### **Create YOUR Legacy**

Your planned gift will make a lasting difference in the lives of generations of students, preparing them for meaningful roles in today's society—just as the Gunsaulus vision and Armour gift did 125 years ago. Planned gifts provide critical support to the university, funding scholarships, endowments, classroom and laboratory renovations, and so much more.

And such gifts are truly a win-win. With some careful planning, you can ensure that you and your family are provided for while supporting your alma mater at the same time. You can give without affecting your current cash flow and retain control of your assets during your lifetime.



## Some popular planned gift strategies are:

- Gifts from your will or trust
- Income for life gifts—charitable gift annuities and remainder trusts
- Retirement account gifts
- Life insurance gifts

### Create a legacy that transforms lives.





Ellen Jordan Reidy (PSYC '79, M.B.A. '81)

•••••

### **Alumni Service Award**

David L. Crowell (B.ARCH '79)

### **Collens Merit Award**

Madhavan K. Nayar (M.S. IE '68)

### **Galvin Award**

Thomas E. Lanctot David J. Vitale

### **International Award of Merit**

Jong Soung Kimm (ARCH '61, M.S. '64)

### John J. Schommer Honor I Award

Thomas A. Roszak (ARCH '89)

### Lifetime Achievement Award

Lois Graham (M.S. ME '49, Ph.D. '59) Jacob R. Matijevic (MATH '69)

### Outstanding Young Alumnus/ Alumna Award

Jason K. Resch (CS '06) Michael J. Sekerak (ME '99)

### **Professional Achievement Award**

Abdur R. Chowdhury (Ph.D. CS '01) Andrew M. Hascall (ME '92) Cheryl L. Hyman (CS '96) Bhakta B. Rath (Ph.D. MET '63)









### 1. Alumni Medal

IIT Life Trustee Ellen Jordan Reidy (PSYC '79, M.B.A. '81) accepts the Alumni Medal Award from IIT President John Anderson. This is the highest honor bestowed by the IIT Alumni Association. *Photo: Bonnie Robinson* 

### 2. Galvin Award Winners

Michael P. Galvin (LAW '78) [center] presents the Galvin Award to IIT Life Trustee Thomas E. Lanctot [left] and IIT Board of Trustees Vice Chair David J. Vitale [right]. The Galvin Award was established to honor non-IIT alumni for their leadership and dedication to the university. Photo: Bonnie Robinson

### 3. 2015 Alumni Award Winners

The 2015 Alumni Award winners pose for a group shot before the ceremony and luncheon: [bottom, left to right] IIT Board of Trustees Vice Chair David J. Vitale, Abdur R. Chowdhury (Ph.D. CS '01), IIT Life Trustee Ellen Jordan Reidy (PSYC '79, M.B.A. '81), David L. Crowell (B.ARCH '79), IIT Life Trustee Thomas E. Lanctot, Thomas A. Roszak (ARCH '89), [back, left to right] Jason K. Resch (CS '06), Andrew M. Hascall (ME '92), Jong Soung Kimm (ARCH '61, M.S. '64), Michael J. Sekerak (ME '99), Maryhelen and Paul Matijevic [in honor of Jacob R. Matijevic (MATH '69)], and IIT Trustee Madhavan K. Nayar (M.S. IE '68). Photo: Bonnie Robinson

### 4. Professional Achievement Awardee and Company

Fellow Pi Kappa Phi Fraternity members and classmates cheer on Andrew M. Hascall, winner of a Professional Achievement Award: [*left to right*] Tom Evanoff (MAE '87), Brian Ippolito (AE '92), Chuck Bruen (ACCT '92), Warren Caswell (ME '90), George Schutter (ACCT '92), Michael Barr (EE '87), Joe Arden (EE '86), Steve Tokofsky (CHE '87), Matt Fernandez (ME '89), Andrew Hascall (ME '92), Barry Elk (AE '90), Greg Pleszkun (ME '88), Thomas McGowan (EE '88), Gus Lawson (AE '94), Jeff Goodmanson (BA '89), Scott Ternovits (DSGN '92), and Gregory Parkins (AE '92). *Photo: Matt Fernandez* 

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- 1. HOCHSPRUNG INVESTITURE Benefactors Ron Hochsprung (CS '72) and his wife, Lynda Bowlin, with Eunice E. Santos [front], recipient of the first endowed chair in the IIT Department of Computer Science. Photo: Michael Goss
- 2. LOS ANGELES ALUMNI GATHERING This April, Los Angeles-area alumni enjoyed beautiful weather and celebrated IIT's 125th anniversary at a gathering at the Jamaica Bay Inn.
- 3. HOUSTON ALUMNI GATHERING A group of young alumni shared drinks together before hearing IIT President John Anderson and Carl and Paul Bodine Endowed Chair Mohammad Shahidehpour speak at a gathering in Houston on March 18.
- **4. SAN DIEGO ALUMNI GATHERING** Carlo Segre, Duchossois Leadership Professor [*left*], mingled with alumni before presenting "Nanoelectrofuel Flow Batteries: Changing the Electric Vehicle Landscape" on April 16 in La Jolla, Calif.
- **5. GUNSAULUS SOCIETY LUNCHEON** IIT President John Anderson [back, center] joined attendees at the Gunsaulus Society Luncheon in Naples, Fla., this spring. *Photo: Wilkinson Photography*
- **6. TAG DAY** Students took time to sign a banner thanking IIT donors in The McCormick Tribune Campus Center. *Photo: Bonnie Robinson*
- **7. SOUTH SIDE BASEBALL CLASSIC** Alumni tailgated on campus before the 2015 South Side Classic at U.S. Cellular Field on May 1. The Scarlet Hawks beat the Maranatha Baptist University Sabercats for a score of 8-2.
- **8. NEW YORK ALUMNI GATHERING** IIT Board of Trustees Chair Alan "Bud" Wendorf (ME '71) [*left*] chatted with alumni at Delmonico's in New York City on February 4.
- **9. PRITZKER INVESTITURE** Many of IIT's endowed chairs surrounded John G. Georgiadis, Robert A. Pritzker Endowed Chair, immediately following his investiture. *Photo: Michael Goss*
- 10. McGRAW INVESTITURE Qing-Chang Zhong, Max McGraw Endowed Chair Professor of Energy and Power Engineering and Management [seated], is surrounded by [back, left to right] IIT Board of Trustees Chair Alan "Bud" Wendorf (ME '71); IIT President-Elect Alan Cramb; Gordon LaBounty, executive director of the McGraw Foundation; Armour College of Engineering Dean Natacha DePaola; and guest speaker Fred Lee. Photo: Michael Goss
- **11. BURKS SHOW ROOM** Designer Stephen Burks (DSGN '92) [*left*] and IIT Trustee Dirk Lohan, the grandson of Ludwig Mies van der Rohe, shared a moment in the Burks "show room" at the Mies van der Rohe Society's annual Mies Birthday Party event in S. R. Crown Hall. Four of the five featured designers were IIT alumni.
- **12. BAY AREA ALUMNI GATHERING** Alumni enjoyed a beer tasting and private tour of Gordon Biersch Brewing Company in Palo Alto, Calif., on April 14.
- 13. CHICAGO ALUMNI GATHERING Alumni and guests attended an exclusive sneak peek of the Ed Kaplan Family Institute for Innovation and Tech Entrepreneurship on May 7 in Chicago given by [right] John Ronan, design architect and IIT professor. [left] Ryan A. Monteleagre (M.S. ARC1'13) and interior designer Rob Kleinschmidt attended the event. Photo: Bonnie Robinson











Visit bit.ly/alumni-event-photos to see more event photos from the IIT Alumni Association.

# **ALUMNI EVENTS**

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

### **Connect Today!**

Are you connected to the IIT
Alumni Association? When you
update your mailing address,
phone number, and email you
ensure that you receive up-todate 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.



### Remember, Celebrate, Dream.

This year IIT is celebrating its 125th anniversary and welcoming its new president, Alan W. Cramb. The Office of Alumni Relations is taking the celebration on the road starting this fall and is planning to be in the following cities and regions:

Bay Area Chicago Houston New York Phoenix San Diego Seattle Southern California Washington, D.C.

Visit alumni.iit.edu/events for dates—and be sure to mark your calendar!

### **Block City**

**Saturday, July 18, 2015** S. R. Crown Hall, IIT Main Campus Chicago

Families are invited to create structures of their own imaginations from LEGOs! This event is free of charge but advance registration is REQUIRED at alumni.iit.edu/block-city.

Alumni are welcome to join us for breakfast and early LEGO building beginning at 8 a.m.



### INMEMORIAM

Earl Van Alsburg John Earhart Andrew Clark Stig Rossby Catherine Hartnett ME '39 FPE '49 ME '52, EE '61 PHYS'59 M.S. SOCT '70 La Grange Park, III. Pfafftown, N.C. Bristol, Wis. Schenectady, N.Y. Deltona, Fla. Lawrence Wooding Robert Engdahl Earl Johnson Isaac Green Glenn Bowen ARCH '52 MAE '70 EE '39 CHE '49 EE '60 Peoria, III. Elmhurst, III. Washington, D.C. Eden Prairie, Minn. Portland, Ore. George Kleinman Shigeo Okamoto Theodore Johnson Jacob Cohen William Ellgen FF '40 CHE '49 ARCH '52 PHYS'60 PHYS '70 Skokie, III. North Fort Myers, Fla. Arlington Heights, III. Knoxville, Tenn. Davis, Calif. Carol Malloy M.S. MT '70 **Edmund Francone** Walter Holle Anthony Verzosa Michael Galasso ME '50 ME '40 IE '52 LL.B. LAW '61 Grosse Pointe, Mich. Orland Park, III. Chicago Wheaton, III. Wilmington, N.C. Evelyn Kaplan ARSC '40 Washington, D.C. George Hottinger Harold Watters Charles Christiansen Wayne Jarvis CHE '52 LAW '73 EE '50 M.S. ARCH '62 Bellevue, Wash. Seattle Georgetown, Colo. Chicago Abe Kogan ARSC '43 John Mannion Norman Kramer Richard Bonaguro Gale Hruska PHYS '62 EE '50 ME '53 LAW '74 Lincolnshire, III. Addison, III. Shakopee, Minn. La Grange Park, III. Oak Lawn, III. Joseph Robin William Galliani Martin Leis Michael Pancost Thomas Murphy ME '43 EE '50 ARCH '74 LAW '53 CE '62 Lincolnwood, III. Hinsdale, III. El Paso, Texas Burbank, Calif. Glenview, III. Paul Terrill Robert Skorheim Oscar Hillig Arthur McKeown Ning Lee ARSC '43 EE '50 PHYS'54 ARCH '75, M.B.A. '78 EE '63 Coatesville, Ind. Thousand Oaks, Calif. Palos Heights, III. Redwood City, Calif. Bailey, Colo. William Warner Robert Eimerman Lawrence Press Sarunas Uzgiris Robert Kula M.S. ME '63, Ph.D. MAE '66 CE '44 CHEM '50 ARCH '54 CS '77 Elmhurst, III. Highland Park, III. El Dorado Hills, Calif. Peoria, Ariz. Washington, D.C. Walter Fagan Herbert Martin Eugene Wojtczak Jerome Hall Alfred Yue CHE '44, M.S. '45, Ph.D. '49 M.S. MET '50 PSYC'55 EE '65 FPSE '81 Beverly Hills, Fla. Cupertino, Calif. Hernando, Miss. Rochester, Minn. Anthem, Ariz. Wayne Barker CHE '51 Carrie Butler UNK '46 Thomas Novotny Dennis Hays Sherwood Zwirn LAW '65 LAW '81 EE '56 Johnson City, Tenn. Munster, Ind. San Antonio, Texas Glencoe, III. Chicago Homer Livingston LL.B. LAW '66 Michael Duggan Helen Chikow Victor Mesco Robert Healy Ph.D. CHEM '56 ME '47 BIOL'51 LAW '82 Lafayette, Colo. Chicago Lemont, III. Northbrook, III. Chicago Howard Hoffmann Warren Fabisch Paul Geiger Robert Giffrow Michael Levickas ME '48 BE '58 LAW '68 M.S. FMT '96 FF '51 Lake Zurich, III. Tinley Park, III. Chicago Sherman Oaks, Calif. Chicago Morris Feller Polly Hammond Lawrence Mulholland Ely Kaplan James Wiedner M.S. CHEM '48 M.S. PSYC '51 M.S. SOCT '68 LAW '04 CHE '58 Huntington, N.Y. Elk Grove Village, III. Oxford, Ala. Western Springs, III. Phoenix **Howard Wolfberg** Boleslaus Przybycin Nickolaus Holleck Don Cunningham Lewis Boyd ME '59 CE '69 Ph.D. TECH '05 ME '48 ME '51 Skokie, III. Radford, Va. Los Angeles Westville, Ind. Paris, Texas Robert Benyas Lawrence Shapiro Frederick Karimoto Dennis Waller Alan Crane UNK '49 MAE '69, M.B.A. '70 Attendee MET '51 EE '59 West Bloomfield, Mich. Urbandale, Iowa Geneva, III. Honolulu Chicago Rudolph Guzik Joseph Chernof Merritt Armatrout Salvatore Lo Galbo EE '49 CE '52 ARCH '59 LA '70 Malibu, Calif. Virginia Beach, Va. Florence, Ala. Frankfort, III.



# Turn-of-the-Century Progressive Education By Marcia Faye

hen Lewis Institute—one of IIT's predecessor schools—was incorporated in 1895, it asserted itself as a modern education leader on several levels. Guided by terms stipulated in the will of benefactor Allen Cleveland Lewis, trustees tapped several prominent education visionaries to lead the institute, including William Rainey Harper and George Noble Carman, both on staff at the University of Chicago. By offering evening courses for the working class, Lewis Institute is considered to be the forerunner of adult education in the United States; its two-year Associate in Arts degree also makes it the first junior college. And Lewis's wishes to include a "school for respectable females" within the institute resulted in a bachelor's degree in domestic economy, with specialized coursework in the arts, sciences, and design to not only improve homemaking skills but also to form a foundation for a career in teaching.

One such course, Household Management, determined by the Bureau of Education in Washington, D.C., to be the first of its kind in the country, was representative of the familylife education movement. Established at the turn of the twentieth century, this educational specialty arose in response to changing social conditions across the U.S. One of the movement's leaders, Lemo Dennis Rockwood, taught courses in child development and the economic problems of the family at Lewis, and supervised a Household-Management practice house—complete with an infant from the Chicago Foundlings' Home, the first infant rescue institution in the Midwest. "Baby George" was loaned to the practice house for one year, during which groups of two to three young women took turns living in the house and learning how to care for a baby, maintain a home, and thrive as students.

Dennis Rockwood and her students apparently excelled as practice-house foster mothers, according to an account written by Lewis Institute Professor Grace Gordon Hood in the 1926 Lewis yearbook: "Under their care George has improved both physically and mentally, and has become the best-loved person in the department of home economics." After George, archival records indicate that there were Baby Lucille, Baby Billy, Baby Rosita, and Baby Bertram to round out the historic practice-house program. In 1959 IIT announced that the home economics program would be discontinued after its current students had completed their course of study.

More than a century after its founding, Lewis College of Human Sciences continues to provide programs in emerging areas that reflect culture and society. The program in digital humanities, for example, even examines the role of gender in technology and video gaming. ●



# The Ed Kaplan Family Institute for Innovation and Tech Entrepreneurship will redefine Main Campus.

As the first new academic building on campus in more than four decades, this new facility is designed to meet the instructional needs of today and the demands of tomorrow. \*

The Kaplan Institute is the capstone project of the \$250 million Fueling Innovation campaign—a campaign that is allowing transformative changes to take place at IIT.

\*See page 3 for more on the concept and design of the Kaplan Institute and for the programs the facility will bring together.







10 West 35th Street, Suite 4D7-1 Chicago, IL 60616

# CEREMONIES AND CELEBRATIONS! September 18–19, 2015!

### Join us for a weekend of celebrations on Main Campus!

### Friday, September 18

**Inauguration:** The inauguration of Alan W. Cramb—IIT's ninth president—will be marked by a series of events. This momentous occasion is an opportunity to celebrate the start of a new era for the university! Visit **web.iit.edu/inauguration** to learn more.

**IIT Spirit Day:** Show your school pride! Participate in our first-ever IIT Global Spirit Day. Alumni from all around the world will be celebrating on campus and in their communities!

