

# LAS

# NEWS

COLLEGE OF LIBERAL ARTS & SCIENCES | SPRING 2016

## Outreach at Illinois

Page 8



**1 Profiles of Excellence**

The 2015 LAS alumni award winners.

**2 A Wow Moment**

On a quest for a translation machine.

**4 There is Something to Fear**

Fear is effective at influencing people.

**5 A Burning Problem**

Study finds Alaskan boreal forest fires release more carbon than the trees can absorb.

**6 Images of LAS**

**8 Good Neighbors**

LAS in the community.

**10 Flying in the Face of Tradition**

LAS alumna is one of small percentage of female commercial pilots.

**12 Settling the Primary Dilemma**

Researchers conclude that the current system for U.S. presidential primaries is best.

**13 Mentors of Success**

A growing alumni mentoring program in MCB is helping students map their careers.

**14 A New Way to Learn the Past**

Part history, part acting: the department of history is a leader in “reacting to the past.”

**16 Around the College**

A selection of recent news and happenings from faculty, staff, and students.

**17 Friends, Romans, Illini...**

Award-winning professor brings Rome to life.

**18 American (and French, and Greek, and Chadian...) Dreamers**

A summer institute creates a ripple effect of friendship and education around the world.

**20 Generations of Friendship**

LAS alumni reunite in Korea – during a new chapter in their lives.



**Greetings from the College of Liberal Arts & Sciences!**

These are eventful days at the University of Illinois and nowhere more so than in LAS, where the business of preparing students for the future continues in earnest. Thanks to the devoted efforts of faculty, students, staff, alumni and friends, our academic mission is as clear and attainable as ever.

As you may know, since last August I have been called to serve as interim chancellor for our campus, and I have balanced those duties with my ongoing position as Harry E. Preble Dean of LAS. I felt comfortable doing that because I have full faith in the people of this great college to excel even when my attention is elsewhere. I’m grateful to Brian Ross, who is serving as executive associate dean, and to many others who have picked up added duties.

Our cover story focuses on outreach efforts within the college, which is a leader at engaging our neighbors outside this university. Elsewhere in the magazine you’ll find stories on faculty research, such as “machine” translation, fear-based appeals and a study suggesting that the current U.S. presidential primary system is in fact the best option to select candidates. Don’t miss our alumni news, either, with stories about our LAS Alumni Award winners and an interesting piece about one of our alums who is one of the few female commercial airline pilots in the industry.

We’re sharing several stories about teaching, including a new and growing instructional technique involving role-play, a faculty profile about a distinct and award-winning classics professor, an influential teaching institute and a successful, alumni-driven mentoring program for students in the School of Molecular and Cellular Biology.

Finally, you’ll find plenty of news briefs and photos, including additional images from a group of psychology alumni in Korea who took pictures with their children dressed in Illini apparel. Indeed, the College of LAS is where the future is happening, and I’m happy and proud to be part of it.

Best Regards,

Barbara J. Wilson, Interim Chancellor and Harry E. Preble Dean of the College of Liberal Arts & Sciences

**LAS News** Spring 2016

<b>Editor</b> Dave Evensen	<b>Contributing Writers</b> Dave Evensen Doug Peterson	<b>Editorial Board</b> Brian Ross, executive associate dean of social and behavioral sciences Feng Sheng Hu, associate dean for life and physical sciences Martin Camargo, associate dean for humanities and interdisciplinary programs Karen Carney, associate dean for curriculum Joan Volkmann, associate dean for advancement Barbara Hancin-Bhatt, associate dean for student academic affairs Paula Hays, assistant to the dean Derek Fultz, director of facilities Dave Evensen, communications specialist Heather Gillett, communications specialist Brad Petersen, director of communications and marketing	<b>LAS Alumni Association Board</b> John Coody, president G. Tim Bachman, vice president Patricia H. Schwarzenraub, treasurer  <b>Members</b> Jonathan Camp, James R. Dolan, Alice O. Faron, Kristine L. Ford, Jerry W. Hester II, Kevin W. McFall, Peggy J. Ruff, Allen M. Schwab, Michael T. Taylor, Brittany J. Cline, student representative
-------------------------------	--------------------------------------------------------------	-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

LAS News is published for alumni and friends of the College of Liberal Arts & Sciences, at the University of Illinois at Urbana-Champaign, by the Office of Communications and Marketing, 2040 Lincoln Hall, 702 S. Wright St., Urbana, IL 61801, (217) 333-1350. The college also publishes a monthly email newsletter, LAS News Online. Please direct all inquiries about either publication to the editor at laseditor@illinois.edu or at the above address.

Copyright © 2016 Board of Trustees of the University of Illinois.

**On the cover:** Illinois students help girls during an outreach event organized by the campus chapter of the Association for Women in Mathematics (image courtesy of Michelle Delcourt).

# PROFILES OF EXCELLENCE

The 2015 LAS alumni award winners come from many backgrounds, but all are leaving a deep impact on the world. *By Doug Peterson*

**Editor’s Note:** The following LAS alumni were honored for their accomplishments during 2015 Homecoming celebrations at the University of Illinois. To read their full profiles, please visit [go.las.illinois.edu/alumniawards15](http://go.las.illinois.edu/alumniawards15).

**David Kranz, PhD ‘82, Microbiology**  
LAS Alumni Achievement Award



David Kranz developed a love for biology as a child outdoors during family vacations in Wisconsin. Today the Illinois professor of biochemistry still fishes in Wisconsin, but he also co-created a technology that makes it possible to fish through millions of mutant molecules to find one that can combat disease.

He has also found ways to mobilize the body’s immune system to battle cancer.

Kranz focuses on therapies that use the body’s T cell receptors—critical to the immune system’s response to foreign invaders. His lab was the first to engineer T cell receptors with a therapeutic potential, and two highly successful start-up companies resulted from this and other work.

**Christina Brodbeck, BA ‘01, History**  
LAS Outstanding Young Alumni Award



As a girl growing up near Chicago, Christina Brodbeck was business-savvy before she even knew what the word “entrepreneur” meant. But she never predicted she would be one of the earliest team members of a small startup company called YouTube.

After all, she had graduated from Illinois with a bachelor’s degree in history, specializing in Russian and Eastern European history. But she said the flexibility and freedom of an LAS degree, coupled with connections developed during her undergraduate years, changed her life completely.

She now pursues her life’s passion, which is designing and investing in startup companies in the San Francisco Bay area.

**Ted Brown, Professor Emeritus, Chemistry**  
**Audrey Brown, BA ‘89, Religious Studies**  
LAS Quadrangle Award



Ted Brown remembers one day in the late 1980s when the Beckman Institute for Advanced Science and Technology at Illinois was under construction. Brown went into the large atrium space with Arnold and Mabel Beckman, the couple that had donated \$40 million for the institute.

Mabel Beckman looked around and exclaimed, in stunned delight, “Oh Arnie, what are we doing?” “They were both so full of enthusiasm,” said Brown, who served as the Beckman Institute’s first director. The Beckmans inspired Brown and his wife Audrey to also become donors. The Browns established two endowments—one to support undergraduates from all LAS departments and the other to help chemistry undergrads.

**Tom Cycyota, BS ‘80, Biology**  
LAS Alumni Humanitarian Award



A teenage girl named Kacey nearly lost her right arm at the Columbine High School shooting in 1999, but because of donated human tissue that came from AlloSource in Centennial, Colo., this woman—now 35—tells people she has two arms to hug her four children.

“That’s the power of what AlloSource is all about,” said Thomas Cycyota, president and CEO of the company. AlloSource is one of the largest tissue banks in the country, using human tissue from generous donors to create approximately 250,000 transplantable allografts (human-to-human transplants) each year. “We deal with a sacred gift because the donor is somebody’s loved one,” Cycyota said.

**Guy Padbury, MS ‘85, PhD ‘88, Biochemistry**  
LAS Alumni Achievement Award



Guy Padbury’s work for the Upjohn pharmaceutical company hit close to home when his father was diagnosed with Type 2 diabetes.

Padbury’s team with Upjohn did the metabolism research on a molecule that went on to become the drug Actof, which helped to control his father’s diabetes, along with changes in diet and exercise.

This experience made Padbury see how the drugs he worked on “were actually touching people first hand. And that perspective really enriches your motivation.”

Padbury has played a leading role in getting to market a host of therapeutic drugs that treat everything from bacterial infections, HIV and heart disease to Parkinson’s, osteoporosis and diabetes.

**Darsh Wasan, BS ‘60, Chemical Engineering**  
LAS Alumni Achievement Award



In 1947, a Muslim friend warned Darsh Wasan, then 8, and his parents to escape their village because, as part of a Hindu minority in what’s now Pakistan, they were targeted to be killed. Wasan vividly remembers seeing dead bodies on train platforms as they escaped to India.

In India, Wasan’s house had no electricity, so he would study under the streetlights. This passion for learning brought him to Illinois, where he earned his bachelor’s degree in chemical engineering and then blossomed as a researcher and administrator at the Illinois Institute of Technology in Chicago. He is vice president of international affairs at IIT and the distinguished Motorola professor of chemical engineering. ■

(All photos by Thompson-McClellan Photography)

# A Wow Moment

By Doug Peterson

## LAS Professor is on a Quest for a Translation Machine

Microsoft employees were setting up a demonstration of their new Skype Translator system at a conference in Vancouver at the same time that some Spanish-speaking hotel employees were in the room putting up tables. Suddenly, the Spanish workers looked up in surprise. The computer system began audibly translating from English to Spanish and back again, allowing two people on Skype to communicate across the language barrier.



Linguistics professor Lane Schwartz is a leader in machine translation.

“It was a wow moment for them,” said **Lane Schwartz**, an LAS linguistics professor who attended that Vancouver conference of the American Machine Translation Association in late 2014. Schwartz is a leader in machine translation, which seeks ways to use machines to automatically translate languages.

“I think people are going to look at this new technology and think this is ‘Star Trek’ come to life,” Schwartz added, referring to the “Star Trek” staple, the “universal translator,” a science fiction device that automatically translated alien languages.

Machine translation systems have a long way to go before they reach the Trekkies’ dream, but Skype Translator, which is now being tested with thousands of users, does a good job translating for simple communication purposes, said Schwartz.

He said machine translation works well for “assimilation,” in which you need only a rough idea of what is being said. Google Translator, which automatically translates text online, is a good example of this. But “dissemination” calls for precise translation, he said, and for this human translators remain critical. Examples of dissemination are translating European Union Parliament proceedings into many languages, or translating product manuals.

In these cases, he said, “You really want your translation quality to be top notch because your reputation is on the line.”

Schwartz has been with the University of Illinois for a year and a half now, coming to campus from the Air Force Research Lab in Dayton, Ohio, where he worked on machine translation systems that focused heavily on the English/Arabic language pair. His

research looks at the most efficient ways that humans and machine translation systems can work together. For instance, how efficient is a system in which machines do the initial translation and then humans step in and do the post-editing corrections?

“I’m very interested in the partnership between humans and machines,” he said.

Schwartz also organized the United States’ first machine translation marathon, held last year at Illinois. In this marathon session, researchers from around the world sat down together in groups to work out problems for open-source machine translation tools—tools that are openly available to the public.

Machine translation marathons have rotated annually among European cities since 2007, but the Illinois translation marathon was the first of a series that will rotate in the Americas. It included some of the biggest names in machine translation, including Philipp Koehn, who wrote the definitive textbook on the subject.

Schwartz’s fascination with language goes back to his childhood growing up in Alaska. When he was 4, his parents moved from Iowa to St. Lawrence Island, which is about 36 miles from the Alaskan mainland, not far from Russia.

“On a clear day, I could actually see Russia from my house,” he said.

When Schwartz first arrived at kindergarten, many of his classmates were more fluent in Yupik, their native language, than they were in English.

“As I got older and looked back, I think that’s really where the seeds were sown for my interest in languages,” he said. Even today, the bookshelf in his office at the Foreign Language Building includes copies of Eskimo folk tales, with side-by-side English and Yupik text.

According to Schwartz, “machine translation is arguably the oldest discipline within computer science, with intellectual roots extending back to the 17th century.” In the 1600s, he said, philosophers hoped to recreate the universal language that they believed existed before the Tower of Babel, where, according to the Old Testament, God confused the languages of the people.

During the 20th century, prior to computers, inventors tried

to create mechanical translation systems, such as the “mechanical brain,” patented in 1933 in France. But the quest for machine translation really heated up during the Cold War. American mathematician Warren Weaver speculated that we might be able to adapt cryptography techniques, used to break Nazi ciphers, to translate languages.

“They wondered, could we view Russian as a ciphered form of English?” Schwartz said. Weaver’s notes became the driving force behind the first wave of research in machine translation.

“In the early 1950s, you had a lot of enthusiasm in machine translation, and people thought the solution was just around the corner,” Schwartz added. One reason for the optimism is that people assumed if humans could do a certain task easily, then it would be even easier for computers. They reasoned that people are generally good at learning how to translate, so computers should be even better.

As researchers discovered, however, the opposite is often the case. Difficult tasks for humans are simple for computers, and simple tasks for humans can stymie a computer.

“A computer can calculate the product of two 18-digit numbers in milliseconds,” Schwartz said. “But at the same time, a 4 year-old can do language tasks that are extremely difficult for a computer.”

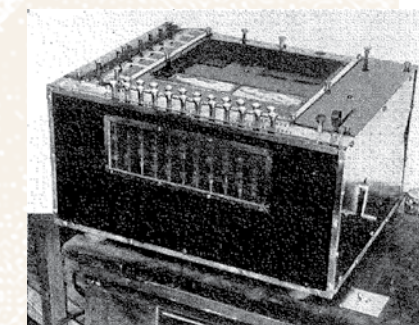
As reality set in, machine translation research aimed for baby steps, and during the 1980s and ’90s, systems became more data-driven. Side-by-side texts in different languages were input into computer programs, becoming the data that improved the translation systems. This ultimately paved the way for systems like Google Translator and the new Skype Translator, which one reviewer called “the most futuristic thing I have ever used.”

Despite the wow moments that these new systems bring, Schwartz said computer programs have a long way to go to match human translation. That’s why his work focuses on the partnership between machines and humans.

As he put it, “I don’t think machines will eliminate the need for human translators any time soon.” ■



(Above) Machine translation is arguably the oldest discipline within computer science, with intellectual roots stretching back to at least the 1600s, when philosophers hoped to recreate the universal language they believed existed before the Tower of Babel. (“The Tower of Babel,” by Pieter Brueghel the Elder, courtesy of Wikimedia Commons.)



(Left) During the early 20th century, inventors tried to create mechanical translation systems, such as this “mechanical brain,” patented in 1933 in France. (Image courtesy of Lane Schwartz.)

# There is Something to Fear



Fear-based appeals are effective ways of influencing attitudes and behaviors, according to research at Illinois.

## Fear is Effective at Influencing People, Researcher Finds



Dolores Albarracín

Smoking will kill you. Candidate X will destroy the economy. Someone will steal your car if you don't lock the door. Does that grab your attention? According to a study by a psychology professor at Illinois, fear-based appeals such as these are effective ways of influencing attitudes and behaviors.

"There are very few circumstances under which (fear-based appeals) are not effective and there are no identifiable circumstances under which they backfire and lead to undesirable outcomes," said **Dolores**

**Albarracín**, who authored a study in the journal *Psychological Bulletin* after conducting a comprehensive review of over 50 years of research on the topic.

Researchers have long debated the effectiveness of using fear to influence opinions. To help settle the debate, Albarracín and her colleagues looked at 127 research articles representing 248 independent samples and over 27,000 individuals from experiments conducted between 1962 and 2014. They believe it is the most comprehensive meta-analysis on the topic to date.

They found fear appeals to be effective, especially when they contained recommendations for one-time only (versus repeated) behaviors and if the targeted audience included a larger percentage of women. They also confirmed prior findings that fear appeals are

effective when they describe how to avoid the threat (e.g., get the vaccine, use a condom).

More important, said Albarracín, there was no evidence in the meta-analysis that fear appeals backfired to produce a worse outcome relative to a control group.

"Fear produces a significant though small amount of change across the board. Presenting a fear appeal more than doubles the probability of change relative to not presenting anything or presenting a low-fear appeal," said Albarracín. "However, fear appeals should not be seen as a panacea because the effect is still small. Still, there is no data indicating that audiences will be worse off from receiving fear appeals in any condition."

She noted that the studies analyzed did not necessarily compare people who were afraid to people who were unafraid, but instead compared groups that were exposed to more or less fear-inducing content. Albarracín also recommended against using only fear-based appeals.

"More elaborate strategies, such as training people on the skills they will need to succeed in changing behavior, will likely be more effective in most contexts. It is very important not to lose sight of this," she said. ■

*This story is a modified version of a release from American Psychological Association.*

# A BURNING PROBLEM



Illinois professor Feng Sheng Hu led a study of carbon cycling and forest fires in the boreal forests of the Yukon Flats in Alaska. (photo by L. Brian Stauffer)

## Study: Alaskan Boreal Forest Fires Release More Carbon than the Trees can Absorb

By Diana Yates, Illinois News Bureau

The forests in Alaska's Yukon Flats are burning at a higher rate than any time in the last 10,000 years. A new analysis by researchers at Illinois finds that so many forest fires are occurring there that the area has become a net exporter of carbon to the atmosphere.

This is worrisome, because arctic and subarctic boreal forests like those of the Yukon Flats contain roughly one-third of the Earth's terrestrial carbon stores. As climate warming increases forest fires, the researchers say, the conflagrations could release more carbon to the atmosphere and enhance warming.

"Boreal forests contain vast carbon stocks that make them inherently big players in the global carbon cycle," said **Ryan Kelly**, a postdoctoral researcher at Illinois who conducted the study with **Feng Sheng Hu**, professor of plant biology and of geology. "And the main way that this stored carbon is eventually released is through fire."

Alaska fire records go back only to 1939, and scientists often assume that present-day fire activity mirrors that of the ancient past. The researchers on the new study instead used actual fire data from a previous study in which they analyzed charcoal fragments preserved in lake sediments in the Yukon Flats. In that study, they found that fire frequency in a 2,000-kilometer swath of the Yukon Flats is higher today than at any time in the last 10,000 years.

"Our model confirms our hypothesis that the recent increase in fire frequency in our study region has caused massive carbon losses to the atmosphere. About 12 percent of the total stored carbon has been lost in the last half century," said Kelly, who now is a data scientist and modeler for Neptune and Company, Inc.

"Most studies of carbon cycling in boreal forests have been motivated by the fact that there's just an enormous amount of carbon in these high-latitude ecosystems," Hu said. "Up to 30 percent of the earth's terrestrial carbon is in that system. And, simultaneously, this region is warming up faster than any other parts of the world."

Increasing numbers of fires are unbalancing the cycle of carbon capture and release, the researchers report. More carbon dioxide in the atmosphere could enhance plant growth, but it also contributes to further climate warming in the higher latitudes, Kelly said.

"Such warming would likely be attended by increased wildfire activity, which would more than cancel out plants' carbon uptake and lead to a net increase in atmospheric carbon dioxide," he said.

The new findings challenge studies that assume that recent fire activity reflects the norm over thousands of years. Those assumptions would lead scientists to conclude that the region has been a net carbon sink in recent decades, the researchers said.

Replacing that assumption with actual fire data from the past millennium offers a starkly different picture of the carbon cycle in the Yukon Flats, they said.

"The effects of forest fires on the carbon cycle are very dramatic. Fires explain about 80 percent of the change in carbon storage over the past millennium, and a

large amount of carbon has been lost from this ecosystem because of increasing forest fires," Hu said. "This area has burned more than any other place in the boreal forests of North America. We chose the area for this study because we thought it could be an early indicator of the future." ■



Researchers studied fire activity in a 2,000-square kilometer region of the Yukon Flats in Alaska. The study area lies within the white rectangle on the map. Zones burned in Alaska since 1950 are in red. Graphic by Diana Yates (Alaska Fire Service data).



**Lieutenant Governor:** LAS Leaders (left to right) Cassidy Burke, Anushree Dighe, and Brittany Cline posed with Illinois Lt. Gov. Evelyn Sanguinetti at Quad Day. (Photo courtesy of LAS Leaders.)



**Nice day** (if you major in atmospheric sciences): This image was provided early last semester on Instagram by @70\_dbz, who wrote "Stormy morning on the #quad, perfect for atmospheric sciences majors."

**Chinese Journals:** This painting, Peach Blossom Cove (Taohua Wu) by artist Lu Zhi (1496-1576) appeared in the inaugural issue of a new Chinese journal at Illinois. Zong-qi Cai, professor of Chinese and comparative literature, says the journals will bring together Chinese and Western scholars. (Image courtesy of Lihong Liu.)



**Undeterred:** A century ago there were concerns on campus that blockades during World War I would delay an addition to the Chemistry Building, which needed laboratory equipment from Germany. Under the supervision of professor W.A. Noyes, however, pictured here, construction proceeded and the addition opened less than a year later. The building was later named Noyes Laboratory in his honor. (Photo courtesy of University of Illinois Archives.)

# IMAGES OF LAS

Here are some popular images that showed up on social media, newsletters, and other spots around LAS during the past few months.



**Enlightenment:** The sun cast a distinct light inside the English Building shortly before classes began in the fall.

**Note:** Want more photos? Check out the 'Generations of Friendship' photo feature on P. 20!

**Family Friendly:** From left, Corrie, Lucas, Mike, and Jake Taylor posed for a photo with Stephanie, Sawyer, Quinn, and Donnie Nommensen during the College of LAS Night at the Museum alumni event at the Peoria (Ill.) Riverfront Museum.



**Annex for an Annex:** An expansion on the southeast side of Chemistry Annex is part of a roughly \$25 million renovation of the building, built in 1930. The work is scheduled to be complete this year.



**Songs for Homecoming:** Part of the LAS Homecoming celebrations included a visit by the capella group No Comment, founded at Illinois in 2004. They are pictured here with Harry S. Preble Dean of LAS Barbara Wilson, also serving as interim chancellor of Illinois.



**Enthusiastic Welcome:** The College of LAS Class of 2019 showed up in force at the Krannert Center for the Arts for this year's Freshman Welcome, which featured speakers, entertainment, and a chance to meet other students from various majors.



# Good Neighbors

## The College of LAS Reaches Beyond the Classroom

By Dave Evensen

**M**ichelle Delcourt has an unusual source of inspiration—but one you might expect for a doctoral student in mathematics: a quote from the late Indian mathematician Bharati Krishna Tirthaji. “Is this mathematics or magic?” He once asked. “And we invariably answer and say: ‘It is both. It is magic until you understand it; and it is mathematics thereafter.’”

To Delcourt, the quote signifies how mathematics can be transformed from something intangible and even mysterious to a topic everyone can understand. Indeed, that’s the goal of outreach programs for children that she coordinates at Illinois.

In addition to her studies, Delcourt is outreach manager for Illinois Geometry Lab and outreach director for the Association for Women in Mathematics. She is principal investigator on two public engagement grants from the Illinois Office of Public Engagement and has helped organize, plan, and fund several math workshops for high school (Sonia Math Day) and middle school (Girls Engaged in Math and Science Workshops) girls.

“Tirthaji’s quote to me captures the spirit of what we are trying to do,” said Delcourt. “For instance, one year for Sonia Math Day we focused on Number Theory, one of the oldest branches of pure mathematics,” she said. “We brought the subject alive by teaching the mathematical principles behind various card tricks. We try to balance incorporating higher level mathematics with fun activities.”

In fact, numerous outreach programs in the College of LAS are devoted to transforming “magic” into the seeds of understanding. There are virtually too many outreach programs within LAS to list, but suffice it to say they number in the hundreds per year, encompassing topics ranging from animal biology to social justice and geared for everyone from children to adults.

“The College of Liberal Arts & Sciences has a long standing reputation of focusing on collaborative partnerships between the University of Illinois and its external constituents – partnerships forged for mutual benefit and learning, with an emphasis on research and outreach,” said **Sarah Zehr**, director of operations for the Illinois Office of Public Engagement, which has highlighted and issued several public engagement

grants to LAS outreach programs.

“The breadth and depth of the College of Liberal Arts & Sciences provide a wide array of opportunities to reach out to people of all ages and show them diverse projects, inspirational programs and engaging activities,” she said.

Most outreach programs are centered on education and awareness. For example, the Department of Religion’s World Religions and Social Justice Day Camp was one of several LAS outreach programs highlighted during the Office of Public Engagement’s 2015 Public Engagement Symposium. The day camp is designed to help high schoolers develop religious literacy and examine religious perspectives on social justice.

The symposium also highlighted NetMath, an online distance learning program housed in the Department of Mathematics, and the St. Elmo Brady STEM Academy, named after the Illinois alumnus who was the first African-American in the nation to earn a doctoral degree in chemistry (in 1916).

The academy was co-founded by lecturer **Jerrold Henderson** and laboratory assistant **Ricky Greer** in the Department of Chemical and Biomolecular Engineering. It’s oriented toward underrepresented elementary school boys, whom the founders feel are falling behind in science, technology, engineering and mathematics. The academy teaches the boys in these subjects by using an innovative, hands-on approach that includes engaging the boys’ fathers. Henderson received the 2014-15 Campus Award for Excellence in Public Engagement for this and other activities.

Similarly, the Illinois chapter of the Society for the Advancement of Hispanics/Chicanos and Native Americans in Science (SACNAS) received the prestigious SACNAS 2014 Outstanding Partnerships/Collaborations/Networks Award. In 2015, it was named Graduate Chapter of the Year out of 115 chapters nationwide, in large part for its efforts to engage with local elementary school students.

“Seeing kids enjoy science as much as we do and become interested in experiments gives us hope that in the future there will be more minorities in science,” said club secretary and microbiology doctoral student **Madeline M. Lopez Muñoz**.

Some outreach programs have strong service components. For

example, **Ann Abbott**, director of undergraduate studies at the Department of Spanish and Portuguese, has encouraged foreign language community service through her courses, Spanish 232 and 332. In them, students offer assistance to Spanish-speakers in the community as part of the curriculum (her courses were recognized at the Office of Public Engagement’s 2015 Public Engagement Symposium).

The Psychological Services Center (PSC), operated by the Psychology Department, has educational aspects to its outreach but many programs are designed to help people deal with mental health concerns. The PSC’s Access Initiative helped Champaign County obtain a \$9 million federal contract to create a system of care for youth and families with serious mental health concerns, and other PSC programs offer services to survivors of domestic violence, conflict resolution workshops, and mindfulness training.

Few do more outreach than the Department of Entomology. The subject? Insects, of course. Not only does the department accept and reply to insect questions from the public, but it partners with people in the community through programs such as BeeSpotter, to help advance scientific knowledge of pollinators.

The department also created the U of I Pollinarium, the first free-standing science center in the nation devoted to flowering plants and their pollinators. It was the brainchild of entomologists **Gene Robinson** and **May Berenbaum**, the popular faces of many outreach efforts on campus. In February, the department hosted the 33rd annual Insect Fear Film Festival—an event that has been featured in news reports across the nation.

“As long as (Hollywood producers) keep disseminating disinformation about the most misunderstood taxon on the planet, we have an obligation to counter with the truth about insects,” Berenbaum, who organized the festival as part of a larger education outreach effort, wrote on the festival’s history web page.

Numerous other outreach programs exist, from a school tour and artifact loan program at Spurlock Museum to wide ranging participation by LAS educators in the Education Justice Project, which involves teaching inmates at Danville (Ill.) Correctional Center. The Department of Chemistry’s Holiday Magic Show has become a sellout event, and the European Union Center hosts

### LAS PUBLIC ENGAGEMENT

#### By the Numbers

From Observatory open houses to book fairs, youth camps, concert series, visits by members of the U.S. Congress, lectures, holiday chemistry shows, poetry readings and more, departments and units within the College of LAS have hosted literally thousands of outreach programs.

**2,200:** Rough estimate of the number of outreach programs hosted within the College of LAS since 2010, according to the Illinois Office of Public Engagement. The number is likely low since programs are self-reported, the office said.

**\$80,000:** The total value in Illinois Office of Public Engagement grants awarded to 28 programs within LAS since 2011. Grant-winning projects include a World Religions Summer Camp, the 2015 Latino Youth Conference, Geometry Lab and others.

curriculum development workshops for K-12 educators. The Summer Internship for Native Americans in Genomics (SING), organized by the Department of Anthropology, has been growing.

These are just a few examples of outreach in the college, according to **Barbara Wilson**, interim chancellor and Harry E. Preble Dean of the College of LAS, who said such initiatives are integral to the educational mission of the college.

“As much as we focus on students and advancing knowledge through teaching and research, we realize that we are an enormous presence in the community,” Wilson said. “We have many people at all levels in the college who regard outreach to our neighbors as not only an obligation but an exciting and fulfilling endeavor.” ■

*Above photos 1, 3 and 5 courtesy of Michelle Delcourt, and photos 2 and 4 courtesy of the School of Molecular and Cellular Biology.*



# FLYING IN THE FACE OF TRADITION

## LAS Alumna is Among a Small Percentage of Female Commercial Pilots

By Doug Peterson



**Jann Lumbrazo** (BA, '96, speech communication) was eight years old when she took her first airplane flight, as her family headed to Los Angeles. Thrilled by it all, she says she could not believe the flight crew actually got paid to travel all over the world. But her greatest surprise came when she pulled out the airline magazine from the backseat pocket and stumbled across an article about the first female pilot for TWA.

"I didn't know girls could fly planes," she told her mom. "Girls can do whatever they want to," her mother said. By the time they arrived back home in Paris, Ill., young Lumbrazo had made up her mind. She announced that she wanted to become a pilot, and she never strayed from the decision.

However, because she came from a driving-vacation family, she said she didn't step onto another plane until she attended Illinois. Only this time she was the plane's pilot—at least for a few minutes. She had enrolled in the Illinois Institute of Aviation, and her instructor allowed her to briefly take the controls on her first flight.

Today, Lumbrazo flies Boeing 737s for United Airlines and is based out of Chicago. Last year, she even served as first officer on United's first all-female flight crew to deliver a new

737 from Seattle to Chicago. As one person Tweeted, it was an "unmanned flight."

Aviation is not a major at Illinois, but Lumbrazo wanted badly to go to the university, where her brother, sister, and mother had also attended. So, while she attended the Institute of Aviation, she also majored in speech communication—a versatile LAS degree that has given her the skills to share her passion and inspire girls to follow her flight path.

She graduated in 1996 and has been flying for a living since. Even today, she remains one of the few female pilots, as only about 6.4 percent of commercial pilots are women, according to the Federal Aviation Administration.

Lumbrazo said that almost every day someone mistakes her for a flight attendant. But she takes the gaffes good naturedly, even when a captain recently assumed she was a flight attendant. It was the first time a captain had ever made the mistake.

According to Lumbrazo, "I was walking out of the cockpit, going out to do a preflight on the airplane, and he said, 'Are you going with us?' I said, 'Yes, I'm Jann.'"

Normally there are four flight attendants on the plane, so the captain then said, "So we have five of you?"

"I don't think so," Lumbrazo answered. "There's only four."

The captain, still thinking she was a flight attendant, was perplexed. "Are you deadheading or are you working this flight?" ("Deadheading" is when a crewmember is on the plane but not officially working.)

Lumbrazo wasn't going to make it easy for him. "No, I'm working." "So there are five of you," he insisted.

"I looked at him with this blank look on my face," she recalled, and then I said, 'No, I'm your first officer.'" As it finally dawned on the captain, Lumbrazo broke into a big grin.

Female pilots remain a rarity, she said, because although more and more women train in aviation, many leave when they get married or have children.

Lumbrazo married a fellow pilot last April, but she said that with her seniority, the schedule is not as difficult on relationships as you might imagine. She and her husband each average about 14 to 15 days off each month, and she is away from home about two nights each week.

"One of the nice things about the job is that you don't bring work home with you," she said. "You walk off and you're done."

Lumbrazo started her career as a flight instructor for the Illinois Institute of Aviation, and after she received her airline transport pilot rating, she began flying DC-3s for a cargo company out of Indiana.

"When I walked into that first airplane and checked its registration, I saw that it had been made in 1940," she said. After a little digging, she also learned that the plane had even been flown into Normandy during the D-Day invasion in 1944.

"You could see behind the instrument panel and it looked like a bunch of bungee cords," she says.

"The plane was old, but it was still flying, so I figured it must be a quality plane."

The contrast with technology in the planes she flies today is dramatic. The new 737s have two GPS units and two inertial reference systems, and the planes have the ability to land automatically. However, Lumbrazo said they only rely on the

auto-landing feature in extreme circumstances in poor weather; she has been with Continental (which merged with United) for 10 years, and she has done around 15 auto-lands during the entire time.

Landing the plane with minimal bumps is one of her greatest thrills, and she still recalls the excitement of her first landing with paid passengers in Appleton, Wis., when she was flying a small commuter plane for Mesaba.

Lumbrazo worked her way up to captain for Mesaba, but when she switched to Continental in 2006, she lost her seniority, as is always the case when you switch airlines. She is a first officer and hopes to eventually work her way back to captain.

Although she still loves flying as much as she did at age eight and has no plans to ever leave it, she said she still benefits from the writing and speaking skills that come with a communication degree. For instance, as one of a

small number of female pilots, she is called upon to do speaking engagements, so her communication skills help her to reach out and encourage other budding pilots, including young girls.

"I am glad that I had a degree in addition to aviation," she said. "Professors such as Bob Husband were phenomenal, and I can't say enough about the program.

"Besides," she added, "I give really nice PA announcements." ■



Jann Lumbrazo didn't know women could fly planes the first time she rode in an airplane at age 8. Now she flies for United Airlines. (Images courtesy of Jann Lumbrazo.)

# Settling the Primary Dilemma

By Phil Ciciora, Illinois News Bureau

## Researchers Conclude that the Current System for U.S. Presidential Primaries is the Best Option

Every four years the presidential nomination process in the United States comes under a great deal of scrutiny, with critics claiming that the drawn-out primary cycle, which began in February and lasts until June, affords too much influence to a small number of voters in early primary states.

But according to new research from a team of Illinois economists, the sequential election format of the primaries is the best mechanism to select the “Condorcet winner”—that is, the candidate who would prevail in a head-to-head election against any one of the other candidates (named for 18th century French political scientist Marquis de Condorcet, who championed election methods that would grant victory to such a candidate).

“In principle, presidential primaries do not have to be organized as a sequence of state-by-state elections,” said **Mattias Polborn**, a professor of economics and political science at Illinois. “There have been calls by some pundits to replace the system with a one-day national primary, and there is also a plan by the National Association of Secretaries of State that proposes to hold four regional primaries, one month apart from each other. We wanted to know how these proposed systems would perform in terms of candidate selection.”

In the paper, Mattias and co-author **George Deltas**, professor of economics, studied the trade-offs between voter coordination and candidate quality under different primary election systems. Using data obtained from Democratic and Republican presidential primaries from 2000-12, Deltas and Polborn ran experiments such as replacing the current primary system with a simultaneous system in which all 50 states voted at once, individually or as blocs.

The findings show that the current sequential election system results in the “highest probability that the Condorcet winner is elected and the highest expected quality of the nominee,” according to the paper.

That’s not to say the current primary system is flawless. It raises two distinct problems for voters, Polborn said.

“First, many candidates are largely unknown to a national audience, so voters still need to learn by observing the candidates’ performance on the campaign trail and their performance in national debates, both of which often play a major role in influencing voters,” he said.

“Second, different groups of voters—socially conservative Republicans, for example—have several candidates to choose from that are ideologically aligned with them. And they will be more successful if they manage to coordinate on one candidate rather than splitting their votes among all of them.”



But which candidate primary voters coordinate on is a difficult issue to decide, Polborn said.

“Rushed voter coordination might eliminate a candidate who otherwise would have been a legitimate contender if he or she were seriously considered,” he said. “In other words, learning about candidate quality takes time.”

Sequential primaries have likely facilitated the victory of candidates who were not the frontrunner at the beginning of the primary season. Polborn cites Barack Obama in 2008 as one such example.

“In a simultaneous election with a large set of candidates, the candidate who would come out on top is often not the best one,” Polborn said. “By contrast, sequential elections allow voters to narrow down the field of contenders as a way of avoiding vote-splitting among several similar candidates.”

Winning, especially in early primaries, helps a candidate because “it conveys positive information about him to voters in later states,” he said.

“To use this ‘momentum effect,’ candidates will spend a lot of time in the coming months trying to persuade voters in Iowa and New Hampshire, even though the number of delegates distributed in these contests is actually very small.”

Although sequential elections allow voters to coordinate and thus avoid a situation where a candidate wins just because his ideological opponents split the votes of their supporters among each other, their disadvantage is that, once coordination has occurred, there’s very little chance to correct an error made in early elections, as candidate momentum dominates, Polborn said.

“This problem is quite large, as our empirical results show that the probability of the full-information Condorcet winner dropping out after the first few primaries is substantial,” he said. “However, the problem of vote-splitting in a simultaneous primary would be a lot worse than the problem of coordination on the wrong candidate in sequential primaries.”

Polborn points to the 2010 Illinois Republican primary for governor as an example of the problem of vote-splitting in a simultaneous election.

“There were seven candidates, but only [state senator] Bill Brady came from downstate, while the remaining serious candidates all came from the Chicago area,” he said. “Brady received only 21 percent of the statewide vote and most likely was not the strongest candidate that Republicans could have nominated, but won the primary nevertheless because the Chicago-based candidates split the vote there very evenly. Brady then went on to lose what should have been a very winnable general election for the Republicans.”

The paper appeared in the Review of Economic Studies.

Helios Herrera, of HEC Montreal, was a co-author of the paper. ■

# Mentors of Success

By Dave Evensen

## A Growing Alumni Mentoring Program in MCB is Helping Students Map Their Careers

A college education opens many doors—and sometimes, it seems, too many, as **Leah Schmelkin** (BS, '13, molecular and cellular biology; psychology) might have attested to back in 2009, early in her undergraduate studies at Illinois. She didn’t know what she wanted to do.

Then she received notice from the School of Molecular and Cellular Biology about a new opportunity to job-shadow a doctor and alumnus named **Richard Berkowitz** (BS, '79, biology; MD, '83) as he made his rounds as an anesthesiologist at Community Hospital in Munster, Ind.

Schmelkin applied, was accepted, and now, as a medical student at Mayo Medical School in Rochester, Minn., she has the distinction of being one of the first students to go through the MCB’s Pathways to Health Careers Mentorship program. She’s part of a growing group, as within a few short years the program has expanded from one founding mentor—Berkowitz—to dozens of mentors, including doctors, pharmacists, dentists, and other Illinois alumni in the health care industry who are willing to lend their time and knowledge to help undergraduate MCB students map their future.

**Tina Knox**, who coordinates undergraduate instruction and advising for MCB, said that in 2014 the program matched 33 MCB students with alumni mentors. Some 41 students were matched the year before that. There was a dip in applications in 2015, which Knox feels is a matter of timing (the application deadline came during an exam period), but she added that feedback on the program has been “wonderful.”

Any MCB student who seeks the opportunity—a rare one for undergraduates—applies with an essay. Berkowitz goes through the applications, and with Knox’s help he matches students with mentors in their field of interest.

Response has been strong, Knox said, with alumni mentors agreeing to bring the student to work for job shadowing. When they’re not together, mentors are encouraged to keep in touch by phone or email to provide the student with career advice.

“They’re matched for a year,” she said. “But most of the mentors have agreed to see the student through graduation if the student chooses.”

Schmelkin said joining the program was one of the most important career decisions she’s made. During the program, she shadowed Berkowitz several times at Community Hospital as he worked with patients. When she wasn’t at the hospital, she corresponded often with Berkowitz as he offered her career and academic advice.

Berkowitz eventually wrote her a recommendation letter that helped her get into Mayo. Most importantly, Schmelkin added, the program helped her decide that she wanted to go to medical school. She came to that conclusion while trailing Berkowitz about his job.

“His job is very technical, but when he interacts with people he is able to connect with them on a very human level, and that’s not about science. That’s about comforting them in a time when they’re scared before surgery,” Schmelkin said. “And when I saw that really delicate balance between the science and the human side of things, I was really excited to do that myself one day.”

Stories such as Schmelkin’s have made the Pathways program one of the most well-regarded at Illinois. It was recognized as an Outstanding Established Program by the Illinois Academic Advising Committee, and Knox was invited to make a presentation about it at the National Academic Advising Association’s annual conference in October 2014.



Richard Berkowitz, founder of a successful mentoring program, with his mentee, Pha Thaprawat, a student majoring in molecular and cellular biology.

It started when Berkowitz decided he wanted to create a way to help students find their direction during their undergrad years.

Berkowitz knew what it was like to feel like you were on your own in college. He was the first in his family to go to college for a significant amount of time, and he felt that he had nobody to ask for advice about academics or setting a career path.

“I really didn’t have anyone to query to get that information,” Berkowitz recalled. “It worked out for me, but if we can make it easier for these students and teach them what’s expected of them while they’re vetting the process out, it goes such a long way.”

For the first year, Berkowitz was the only mentor in the program, and he mentored three students, including Schmelkin. Then, with help from the School of MCB and College of LAS Office of Advancement, he began building the program. He sent emails to other Illinois alumni in the health care field to enlist their help. Gradually during the next six years about 50 alumni joined the cause.

“We’d like to do a better job adding mentors, because we’re looking at about 1,100 MCB majors, and it would be nice for the ones who do want mentors or guidance to have somebody they can talk to,” Berkowitz said.

“The time commitment itself is really not that great,” he added. “If I were an alumnus, I would think it’s very attractive. It’s a way for me to shape the career of a student and at the same time get re-engaged in the university.”

The program has evolved over its lifespan to include mentors from different aspects of health care, for students who don’t necessarily want to become doctors. **Nicole Raucci** (BS, '12, molecular and cellular biology) applied for the Pathways program as a senior with intentions of going to medical school.

After shadowing Berkowitz, however, she started considering an alternate path, and Berkowitz put her in touch with a nurse practitioner and physician’s assistant at the hospital where he worked. This past August, she began her first job as a registered nurse at Northwestern Memorial Hospital in Chicago. Her science background has helped her as she works the general medicine unit, and she has plans to earn a doctoral degree as a nurse practitioner.

“The networking piece and the job shadowing experience was really so important for me,” Raucci said. “Without having the background and those experiences, I don’t know if I would’ve necessarily been so quick to jump on this pathway.” ■



# A New Way to Learn the Past

By Dave Evensen

## PART HISTORY, PART ACTING: The Department of History is a Leader in “Reacting to the Past”

**L**eslie Reagan is a well-respected professor of history who joined the Illinois faculty in 1992. But this past Oct. 16, she was Leah Schwartz, an outspoken, disaffected factory worker from the year 1913 who makes button holes all day.

She was a lively participant at a boisterous gathering in Greenwich Village, where she struggled to draw attention to the plight of working women even as suffragettes marched for women’s voting rights.

Never mind that this actually took place at a hotel conference center near the Illinois campus, and that in contrast to the flowered hats, long skirts and other early 20th century attire worn by several in the crowd, you could also see the glow of smartphones and tablets. The assembled group was practicing a relatively new and highly effective teaching tool, and staying in character was key to the exercise.

“I have to support the working women, who are being paid pennies,” said Reagan (Schwartz), dressed in a wide velvet hat, white shirtwaist, and tie. “It’s not that I don’t support the vote. I will support the vote, and when I get it, I’m voting.”

“But the law is not relevant for you!” One of the suffragettes—another history professor—yelled.

“But if I have to choose, I support the workers,” Reagan countered. “I encourage you to join and get on the picket line with me, just like you were in 1909 when we were out there striking as seamstresses.”

The scene wasn’t just an exercise in acting (although the performances by some of the participants seemed worthy of the theater). It was a workshop for faculty and students to employ *Reacting to the Past*, an interactive or experiential teaching tool developed during the past few years to bring more depth and interest to the learning of history.

About 50 faculty and students from seven different colleges and universities attended the event, organized by the Department of History at Illinois. **Clare Crowston**, chair of the department, said a few faculty members in history have tried the role-playing tool in their classes, and the reaction from students has been so positive that they decided to help spread the idea through a two-day conference.

“I teach these games, and one of the first things students say to me is, ‘My roommate wants to know when he or she can take the



Illinois history professors Kathryn Oberdeck and Mark Steinberg portray Big Bill Haywood and Elizabeth Gurley Flynn, respectively, founders of *Industrial Workers of the World*, during a “*Reacting to the Past*” teaching conference at Illinois.

game. How can I do this more? How can my friends get involved? We want to increase those offerings, and so that’s why we decided to have the conference,” Crowston said.

Crowston envisions the department becoming a leader in experiential or interactive learning.

“We think it will really work well with all of the campus interest, in transforming undergraduate learning,” she said.

*Reacting to the Past* originated in the late 1990s at Barnard College, and since then faculty at hundreds of universities have adopted it, but not yet on a large scale. It consists of an elaborate “game,” set at some significant moment or event in the past, where students assume the roles of various characters and play out the historical scenario.

It’s part history and part theater, and while participants are expected to be historically accurate, they are permitted to deviate from what actually happened—in other words, they can go off script. One of the discussions during the conference was what happens when, during a scenario based in India, someone decides to try to murder Gandhi—a twist in history that actually could have happened.

During the Greenwich Village game, **Christine Peralta**, a graduate student in history, played the part of Henrietta Rodman (1877-1923), an American educator and feminist who fought for maternity leave, among other things.

“One of my character’s objectives is to shock the audience and show what a Bohemian feminist is capable of,” Peralta said, with a laugh. “And that seems like a really fun thing if you’re an undergrad, but then, in this particular setting with a lot of faculty, and you’re trying to become faculty, it’s an odd thing to do.”

Reagan, who brought along many of the women’s hats that participants—including the men—wore, said she’s never used the



Raquel Escobar, center, with Christine Peralta, right, both graduate students in history at Illinois, portray 1913 feminist activists in Greenwich Village during a “*Reacting to the Past*” teaching conference at Illinois.

tool in class before, but now she looks forward to using it.

“The students will love it,” she said. “We’ll be doing it maybe next year. I can imagine it being a little bit crazy if you’ve never done it before, but it’ll be fun.”

**Raquel Escobar**, a graduate student in history, was one of about 20 graduate students attending the conference. It was her first time participating in *Reacting to the Past*, and with plans to earn her doctoral degree and teach, she found it very worthwhile.

“As an undergraduate, I found U.S. history surveys very boring and dry,” Escobar said. “As a future teacher, I’m really interested in thinking about different ways to engage students and get them really immersed in the moment.”

She said it teaches students to think on their feet and act outside of themselves.

“You really have to get comfortable with being a little bit of a weirdo, and putting yourself out there,” Escobar said. “It’s definitely not going to hurt public speaking skills. So it’s a really interesting teaching method that touches on things that are going to be very valuable outside the classroom.”

**Melissa Schoepfle**, career development specialist with the College of LAS who attended the event, agreed with Escobar’s assessment.

“On top of allowing students to dive deep into a historical era, this innovative curriculum allows students to develop in-demand skills such as persuasion, problem-solving, critical thinking, and intellectual curiosity,” she said. ■



Photo by Darrell Hoemann, courtesy of Illinois Program for Research in the Humanities

## High Profile Visit for the Humanities

There's good reason to be optimistic about the future of the humanities, but a sustained and innovative commitment at educational institutions such as Illinois is required to maintain them in their role as an essential part of American democracy, the chairman of the

National Endowment for the Humanities said during a visit to campus in October.

**William Adams** spent two nights on campus as part of the 50th anniversary of the creation of the NEH, which was formed in 1965 when U.S. President Lyndon Johnson signed the National Foundation on the Arts and the Humanities Act into law. Since then, the agency has awarded more than \$28 million to hundreds of projects—mostly research and education programs—at Illinois. ■



John Wilkin, Allen Renear, and Ronald Bailey

## Bridging the Digital Divide

A four-year, \$1 million grant from The Andrew W. Mellon Foundation will help Illinois humanities scholars identify digital publishing options and produce new publications that will best disseminate their research.

The collaborative project involves the Illinois Program for Research in the Humanities, the Department of African American studies, the University Library and the Graduate School of Library and Information Science.

The grant aims to help scholars understand the digital publishing options available to them and identify those that will best meet their publication goals. One focus will be on projects funded through Humanities Without Walls, a Mellon-funded consortium managed by IPRH that links research centers at 15 universities, including Illinois. ■



Antoinette Burton  
Above photos by L. Brian Stauffer



Photo by Thompson-McClellan

## Leaders in Conservation

High praise from campus went to the occupants and those managing conservation at **Lincoln Hall** and **Davenport Hall**, which were the first two buildings on the Main Quad to receive the campus Energy Conservation Incentive Program award for energy

advancement. Lincoln Hall reduced energy usage by 32 percent over FY2014 (second best on campus); Davenport Hall reduced usage by 19.6 percent (fourth).

Another LAS building, however, David Kinley Hall, stole the spotlight by reducing energy usage by 39.9 percent. It was the best on campus. Facilities & Services awarded David Kinley Hall, Lincoln Hall, and Davenport Hall \$33,701, \$15, 961, and \$10,000 respectively for their accomplishments (based on the amount of energy they saved). ■



## Lincoln Hall Earns Frank Lloyd Wright Award in Architecture

Most people on campus who knew Lincoln Hall before its renovation appreciate its vast improvement since it reopened in 2012. It turns out that people

off campus are impressed, too.

Lincoln Hall has been awarded a **2015 Citation of Merit** in American Institute of Architects Illinois' Honor Awards program, in the Frank Lloyd Wright category. The prestigious award came in part because of how designers were able to preserve historical aspects of the building while suiting it for 21st century higher education.

AIA Illinois also noted that the restored building achieved Leadership in Energy and Environmental Design (LEED) Platinum certification by the U.S. Green Building Council for incorporating sustainable elements throughout the 114-year-old building. Platinum is the highest LEED certification awarded. ■

## Milestones in Excellence

The American Society for Microbiology, the largest and oldest life science society in the world, named Illinois one of its Milestones in Microbiology sites for its "rich history of major microbiological achievements" last fall. The society stated that the university has been "home to many

outstanding microbiologists who have made seminal discoveries that significantly increased biological understanding and advanced the field of microbiology."

Included on a plaque were the images of eight "giants" whose work at Illinois during the past nearly 150 years played a major role in bringing the department the status it enjoys today. They included **Thomas Burrill**, **Carl Woese**, **Abigail Salyers**, **Ralph Wolfe**, and Nobel laureate **Salvador Luria**. ■



Photo by Joseph Storch

## Prestigious Honor for Scholars

Four professors in the College of LAS have been named University Scholars for outstanding contributions to their fields. They were among 14 faculty selected for the honor in 2015 across the three campuses of the University of Illinois.

**Carla Eva Cáceres**, of the Department of Animal Biology, **Clare Haru Crowston**, of the Department of History, **Leanne K. Knobloch**, of the Department of Communication, and **Emad Tajkhorshid**, professor of biochemistry, biophysics, computational biology, and pharmacology were selected for the award. They were each nominated for consideration for the prestigious award, with winners announced this fall. ■



Emad Tajkhorshid  
Courtesy of the School of Molecular and Cellular Biology

## Barbara Wilson Named Interim Chancellor

**Barbara J. Wilson**, the Harry E. Preble Dean of the College of Liberal Arts & Sciences, was appointed interim chancellor of the Urbana-Champaign campus while Illinois conducts a nationwide search to replace former Chancellor Phyllis M. Wise.

Wilson's appointment as acting chancellor was made official in August 2015. While she maintains her position as dean, she appointed Brian Ross to serve as executive associate dean for the college to help manage operations during her year-long term as interim chancellor.

"As an educator first and foremost, (Wilson) understands the intersections among the disciplines and can fully represent a comprehensive, magnificent campus," said President Timothy L. Killeen. He said he selected Wilson after considering "a huge number of nominees" from campus. ■



Photo by Thompson-McClellan

# Friends, Romans, Illini...

## Award-Winning Professor Brings Rome to Life

By Doug Peterson

You know it's been a tough decade when a volcano, Mt. Vesuvius, obliterates an entire region, Roman troops sack Jerusalem, fire and plague sweep through the city of Rome and four emperors in a single year are placed on the throne. This was just some of what happened during the first 10 years of the Flavian dynasty, which ruled Rome from 69 to 96 A.D.

It wasn't an easy time for the Roman Empire, but it was a great time for Latin literature, which is why **Antony Augoustakis** chose this period to study. But in addition to becoming a respected authority on Flavian literature, he has emerged as one of the most popular—and demanding—professors in the Department of the Classics. In recognition of this, the Society for Classical Studies recently gave him the Award for Excellence in the Teaching of Classics at the College Level—an honor that goes to only one college teacher nationwide each year.

Rome wasn't built in a day, but the transformation of the Department of the Classics has been quite rapid over the past five years, thanks in part to Augoustakis.

"Antony's tenure at Illinois has been marked by a dramatic increase in new courses, new topics, new programs, and new opportunities for students at every level," said **Ariana Traill**, head of the Department of the Classics. "His impact on graduate education in classics at Illinois has been transformational."

Augoustakis arrived at Illinois in 2009, during a tough time for the department, which like the rest of the university, was hit hard by the recession of 2008, and there was a mass exodus as many in the aging department retired. Suddenly, the department went from 12 full-time professors to only 4.5 full-time staff. This was tough to swallow for a department that goes back to 1905 and has had a reputation that is well known across the U.S. and Europe.

At this time, Augoustakis was teaching at Baylor University in Texas. Illinois lured him to Urbana-Champaign, and Augoustakis came on staff with the mission of revitalizing the graduate program. Almost immediately, things began to improve, and today the number of full-time staff is back up to 10.

Augoustakis was born in Greece, on the island of Crete. He grew up thinking he might become a doctor, but he also loved the humanities and language (he is fluent in Latin, English, French, German, Italian, Sanskrit and both modern and ancient Greek), so in the 10th grade he decided he would study classical literature.



Antony Augoustakis has taught many people about the Romans. Here he is lecturing at a necropolis, an ancient cemetery, under the Vatican. (Image courtesy of Antony Augoustakis.)

He eventually came to the United States for his graduate work, receiving his PhD in classics from Brown University in 2000.

Augoustakis teaches intensive, small seminar classes with graduate students, as well as the mega-popular undergraduate classical civilization classes that draw thousands of students from across the campus. Even during the department's difficult years, the undergraduate classes in mythology and Greek and Roman civilization remained some of the most popular general education courses on campus.

These classes have a long and storied tradition. Many alumni still recall the mythology lectures of the late **Richard T. Scanlan** from 1967 to 1998—lectures that reached a peak of about 1,200 students. Scanlan would dress in a toga as Apollo and predict the outcomes of Illini games, and he would even dress up as Jason of the Golden Fleece, Hercules, or Odysseus.

Augoustakis doesn't dress in a toga, but he does bring in a full set of Roman armor for students to try on. He also continues the tradition of giving his class a touch of the Roman spectacle. He drives home his points by using numerous clips from contemporary films and television shows, such as the acclaimed "Rome" series and the recent "Spartacus" series from the Starz channel. He also references older TV shows, such as "I, Claudius," and he uses music and architecture around campus to talk about the classical influences.

Meanwhile, on the graduate level, Augoustakis pushes his students to publish and present papers, and he has produced results.

"In just the last three years alone, our graduate students (about 16 at any given time) have presented 35 conference papers and published nine articles and book chapters," Traill says. "Antony is such an effective mentor that he once encouraged a prospective student to submit a paper during her campus visit."

The student did so, and was awarded a three-year fellowship.

His graduate classes are challenging, but the students eat it up. "How Antony can sound so encouraging when he makes criticism is still something of a mystery to me," said **Clayton Schroer**, a PhD student in classics. "I suspect that it has something to do with the fact that the criticism is made by someone who holds himself, just like his students, to consistently high standards."

"His relaxed, welcoming teaching manner and contagious enthusiasm for classics were instantly noticeable," added **Audrey Majors** (BA, '15, English and classics), a former student.

The ancient model of learning is to teach by example, and evidently, Augoustakis has tapped into this classical skill. According to Traill, "He makes his students want to outdo themselves, leading by example."

"It's daunting," PhD candidate **Stephen Froedge** said about the work in his classes, "but not in a way that makes you want to give up." ■

Background: photo of the Pompeii Forum, taken by Antony Augoustakis during a trip to Italy.



Richard T. Scanlan  
(Image courtesy of U of I Archives.)

**AHMED BORGOTO**, a young African translator, stood in the midst of a crowded refugee camp in the country of Chad, with makeshift structures all around him and the brown desert stretching to the horizon. He was doing translation work for Americans shooting a documentary about the plight of refugees fleeing the brutal violence in Darfur, a region in neighboring Sudan.

“What do you want us to do for you?” the American filmmaker asked a young refugee boy, speaking through Borgoto.

“We want education, we want books,” the boy said.

These words struck a chord with Borgoto, who had heard many horrifying stories from refugees, such as a man whose pregnant wife was slain before his eyes. But even in the midst of the horror, people such as this boy still craved education. Borgoto says the words helped to inspire him to become a teacher.

“That was one of the things that really pushed me,” said Borgoto, who now teaches history, writes curricula, and trains teachers in Chad. He was also one of 17 secondary teachers who came to



*Ahmed Borgoto, a teacher and participant at Illinois' Global Institute for Secondary Educators, speaks in Chad about his experience at Illinois.*

friends through the Illinois program.

During the summer phase of the program, teachers attended daily workshops and talks, and they traveled to Boston, Washington, D.C., Chicago, St. Louis and San Francisco. They also spent time with American teachers, as well host families in the Champaign-Urbana area, going to Fourth of July fireworks, visiting local houses of worship and taking in all types of cultural experiences.

“One of the things we’re trying to get across is the diversity of American culture,” said **Jeremie Smith**, outreach coordinator at the Center for Global Studies.

For **Ari Hoyssa**, a high school history teacher from Finland, this lesson came through loud and clear. “I found that America has even more variety than I thought,” said Hoyssa, who also writes textbooks in Finland. In one day, for instance, he said the group took in a rodeo at Monticello, a town near the Illinois campus, followed by a blues festival in Champaign during the evening.

though people in the United States have very different ideas of what it means.”

For some, he said, the American dream means individuality and freedom; for others, it is material wealth, or it might be equality.

Lykou, who teaches English language to high school students on the Greek island of Evia, said many people associate the American dream with owning a private home—something that is increasingly difficult in Greece, where the economic crisis makes it hard to get a loan.

Legsir, an English teacher from France, said that “for French people the American dream means that anybody can succeed with hard work.” This stands in contrast to her world in southwestern France, where she says social determinism reigns in Fumel, a village of about 5,000.

“My students come from a very isolated place, and some of them believe that because they are from a poor area, they will remain poor.” In reality, she added, “they have lots of opportunities, and part of my job is to help them be conscious of all of these opportunities. That’s why I am trying hard to open up the horizons.”

Building on their experience at Illinois, Legsir and Lykou have

Hoyssa said he came away from the institute with plenty of new material, including access to primary sources that he can use in developing textbooks in Finland. While in Boston, they studied the Boston Massacre using documents from multiple viewpoints—an approach he hopes to use in his history lessons back home. For instance, he might tackle the Soviet Union’s invasion of Finland in 1939 by examining documents from many different viewpoints.

Borgoto, meanwhile, said it’s almost as if the program was designed just for him.

“I wanted three things—to know more about America’s political system, about the history of America and about methods of teaching in the classroom,” he said. “Every single thing I was dreaming to learn was in the program. I just smiled and said God answered my prayers.”



*Students and teachers at a high school in Fumel, France, pose for a photo with musicians from Mississippi, as part of a new curriculum about African American equality developed by a pair of participants at Illinois' Global Institute for Secondary Educators.*

# AMERICAN (AND FRENCH, AND GREEK, AND CHADIAN...) DREAMERS

*By Doug Peterson*

**A Summer Institute at Illinois Creates a Ripple Effect of Friendship and Education around the World**

Illinois for six weeks last summer to attend the Global Institute for Secondary Educators.

The topic: the American Dream.

The U.S. Department of State’s Bureau of Educational and Cultural Affairs sponsors the global institute, which has been around for close to 30 years, said **Jeffrey Friedman**, academic director of the institute at Illinois, and program manager at the Center for African Studies. Illinois was one of three institutions nationwide selected to run the program in 2015, and it has done so for the past three years, through Illinois Center for Global Studies. Last summer, secondary teachers came to campus from 16 different countries, including Greece, France, Malawi, Chad, Finland and India.

While the international teachers were on campus, they worked with Friedman to outline their own curricula dealing with some aspect of American culture connected to the program. But the impact of the institute did not end there. This past fall, many teachers continued to develop their curricula through a follow-up online course with Friedman. Some even collaborated together, such as **Jamila Legsir** from France and **Eleni Lykou** from Greece, who became good

*Ahmed Borgoto (wearing the Illinois shirt), a teacher and participant at the Illinois' Global Institute for Secondary Educators, gathers with a group in Chad where he spoke about what he learned during his trip to Illinois.*

“America has all kinds of cultures and subcultures and ways of thinking, and they sometimes clash,” Hoyssa said. “But mostly Americans live side by side with very different worldviews and ideas.”

He said this is dramatically different from Finland, which is more homogenous.

“In Finland, people try to find consensus,” he noted. “But here, with such variety, you might think you can’t find common ground on anything. Perhaps that’s why the idea of the American dream is so important. The American dream is an important unifying idea, even



been developing a curriculum that focuses on the quest of African Americans for equality in the United States, from slavery to current day. They are doing it through the lens of music, particularly the Blues.

Through this curriculum, “students will look for the roots of the struggle for equality in parallel with the roots of Blues music,” Legsir said.

Lykou traveled from Greece to France this past fall to present parts of their new curriculum to the French students at Legsir’s high school. Lykou talked to the students about how African Americans have used media and protest songs in their push for civil rights.

To introduce the students to Blues music, they brought in the blues artist Jarekus Singleton from Mississippi to perform and talk to the classes. Singleton is a popular performer in Jackson, Mississippi, winning the Jackson Music Award for Blues Artist of the Year in 2012 and Local Entertainer of the Year in 2013.

The cross-country curriculum effort between Legsir and Lykou is a direct byproduct from last year’s summer institute. As Legsir explained, “Not only have I met a colleague who has helped me to go further in my teaching practice, but I have also made a great friend.”

Meanwhile, for Borgoto and Hoyssa, the impact of the institute has been equally powerful.

In Chad, Borgoto said, being able to travel out of the country also went a long way to giving him credibility back home. In fact, he said you can be a genius, but if you have not traveled out of the country, “some people in Chad are not going to accept what you say.”

Therefore, seeing places such as the Lincoln Memorial in Washington, D.C., and John Adams’ house in Boston were of paramount importance.

“My students studied the Boston Tea Party, but now I was going to the place where everything started,” he said. “This will be more than just teaching them from a book. My students will say, ‘Yes, he was there.’”

Chad has experienced spells of peace in recent years, but the country is still surrounded by violence—Libya to the north, Sudan to the east and Nigeria to the west. Just last year, Borgoto’s school had to close for a month because people feared attacks by Boko Haram, a terrorist group from Nigeria that is active in Chad.

But Chadians have dreams of their own, he said. Although many want to leave the country, Borgoto seeks to inspire hope in his students and passion in the teachers he trains, and he believes the institute equipped him for this job.

“I want people to feel there is a chance to do something great,” he said. ■

# Generations of Friendship

LAS alumnae who helped each other adjust to life at Illinois reunite in Korea – during a new chapter in their lives.



By Dave Evensen

**Picture Perfect:** From left, Hye Yoon Choi with her daughter, Haihm Park; Hyemin Lee with her daughter, Sarang Park; So Jung Lee with her son, Eden Chung; and Yoojin Park with her daughter, Chloe Chung.

**W**e know friendships formed at college can last a lifetime. Sometimes they even cross generations, as proven by a group of psychology alumnae from South Korea who recently gathered to take photos together with their children dressed in Illinois apparel.

Yoojin Park, Hye Yoon Choi, So Jung Lee and Hyemin Lee all met each other in 2004 when they were freshmen at Illinois. They went through some trying times together as they adjusted to life some 6,500 miles from home, but they each graduated with a bachelor's degree in 2008. Now back in their home country, they now remain close friends as they each begin to raise families of their own.

"Spending almost four years together (at Illinois) was very special to all of us. Not only just building college friendships, but we also went through our early 20's together," said Park. "We were like sisters, best friends and mentors to each other... We still meet each other every other month in Seoul and talk about our memories at Illinois and laugh together!"

After Illinois, Park went to Harvard, where she earned a master's degree in education. She is currently enrolled in the Korea University School of Medicine with plans to become a child psychiatrist. Choi is working for the TOMS shoe company in Seoul. Hyemin Lee is pursuing a master's degree in education from Seoul National University, and Sojung Lee is currently a stay home mom with plans to return to school soon.

In honor of where they met, the friends dressed their children in orange and blue for a photo shoot. You may recognize one from the LAS Facebook page, but they sent several—here are a couple we haven't shown you yet. ■



**Just the Moms:** Top From left: Hye Yoon Choi, Hyemin Lee, So Jung Park and Yoojin Park have remained friends since earning bachelor's degrees in psychology together at Illinois in 2008 and moving back to Korea.

**The Next Generation:** Bottom From left: Haihm Park, Chloe Chung, Eden Chung and Sarang Park display the many emotions that come with an extended photo shoot, even if it involves some pretty cool clothes.

## LAS Alumni Association Events

Our 2016 events are designed for College of LAS alumni to experience fun, culture, and friendship. More importantly, the events provide opportunities to learn about the LAS initiatives that strengthen academic excellence and receive the latest news about achievements that continue to make the college a national leader in the academic world.

We invite you to stay connected with our alma mater by attending alumni events that offer you a variety of experiences from science to history to sports to fine dining. For event and registration information, please visit [las.illinois.edu/alumni](http://las.illinois.edu/alumni) or contact us at [las-alum@illinois.edu](mailto:las-alum@illinois.edu) or (217) 333-7108.

### A Day in Chicago's Chinatown

Saturday, April 30 • 11:30 a.m. - 3:30 p.m.

A traditional Chinese lunch followed by Chinese medicine or walking tour. Featuring the Department of East Asian Languages and Cultures.

### Exploring Spurlock Museum, Illinois' Gem

Saturday, May 7 • 4-7 p.m.

Tour the Illinois "gem of a museum." With Director Wayne Pitard followed by a reception.

### Meeting Mr. Lincoln at the David Davis Mansion

Saturday, June 11 • 5:30-8:30 p.m.

Tour the David Davis Mansion in Bloomington, Ill. Featuring a dinner and program by Lincoln historian Guy Fraker (BA, '60, science and letters; JD, '62).

### Windy City Showdown White Sox vs. Cubs

Monday, July 25 • 5:45 p.m., first pitch at 7:10 p.m.

Join us for the cross-town rivalry at Cellular Field. Includes ticket, food, beverages, program and prizes!

### Dine with Chef Tony Mantuano at River Roast

Saturday, September 24 • 6-10 p.m.

Dinner and interactive cooking with award winning chef Tony Mantuano. Join us at his newest restaurant, River Roast in Chicago.

### Homecoming 2016

Friday and Saturday, Oct. 28 and 29

Honor accomplished alumni at the LAS Alumni Awards Ceremony on Friday, Oct. 28. Celebrate with alumni at the LAS Homecoming pre-game event on Saturday, Oct. 29.

For more information or to register for an open event visit: [las.illinois.edu/alumni/events](http://las.illinois.edu/alumni/events).

## Let us know what you think!

We're continually looking for ways to improve this magazine and would appreciate your feedback. Please visit [go.las.illinois.edu/magsurvey](http://go.las.illinois.edu/magsurvey) to complete our brief survey. Participants responding by May 1, 2016, will be entered in a drawing to win a free LAS t-shirt.

## SUBSCRIBE to LAS' Monthly E-Newsletter



Get more news, more alumni profiles, more notices of upcoming events.

Visit [go.las.illinois.edu/contactform](http://go.las.illinois.edu/contactform) or send an email to [las-news@illinois.edu](mailto:las-news@illinois.edu).

## GET CONNECTED WITH LAS!

The College of LAS is social and we would love to be friends with you! Check out our pages and get the latest news and events from around the college.

-  [facebook.com/lasillinois](https://facebook.com/lasillinois)
-  [instagram.com/lasillinois](https://instagram.com/lasillinois)
-  [twitter.com/lasillinois](https://twitter.com/lasillinois)
-  [pinterest.com/lasillinois](https://pinterest.com/lasillinois)
-  [youtube.com/CollegeOfLAS](https://youtube.com/CollegeOfLAS)



University of Illinois at Urbana-Champaign  
**College of Liberal Arts & Sciences**  
 2040 Lincoln Hall, 702 S. Wright Street  
 Urbana, IL 61801

Nonprofit  
 Organization  
 U.S. Postage  
 PAID  
 Permit No. 75  
 Champaign, IL

College of  
**Liberal Arts & Sciences**  
 AT ILLINOIS

LINCOLN SCHOLARS

**The Lincoln Scholars Initiative**  
 allowed me to come to Illinois to  
 pursue my dream.

— *Finey Ruan, Class of 2016, double-majoring  
 in Integrative Biology Honors and Chemistry*



**THE LINCOLN SCHOLARS INITIATIVE** launched with the renovation of Lincoln Hall, with the first batch of scholarships going to incoming students in Fall 2012. This May, Finey Ruan and seven others will become the first class of Lincoln Scholars to graduate because of alumni and friends who gave generously to this initiative and enabled these bright students to experience an Illinois education.

With your help, they'll be followed by countless more deserving Lincoln Scholars. Make an investment today and open a world of opportunities for the next generation of LAS students.

To make a gift or for more information visit [go.las.illinois.edu/LS](http://go.las.illinois.edu/LS).