The lessons of the Windy City
The College of LAS improves lives and understanding through its work in Chicago
News from LAS

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LAS@Work
LAS alumnus Devin Chhakt replaces his job as a meteorologist for the National Weather Service.

Looking up and looking forward
Atmospheric scientist Atul Jain is recognized for key insights into the climate.

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The social side of intelligence
LaTasha Holden expands definitions of cognitive ability.

Research in LAS
Research images and news from faculty, staff, students, and alumni.

Counting the impact
Inaugural College of LAS Days of Service leads to connection.

A minute with the Dean
Venetria K. Patton talks about efforts to make college a more fulfilling experience.

A safer place for scholars
The Illinois Scholars at Risk Program assists faculty members fleeing danger at home.

Where are they now?
LAS faculty, staff, students, and alumni.

Warm welcome
First-year students join the LAS community at LAS Liftoff at State Farm Center.

LAS in History
Early astronomers kept campus on schedule and proposed a timesaver for the ages.

LAS by the numbers
Measuring student success initiatives.

NEWS FROM LAS

LAS funds projects to advance student success
The College of Liberal Arts & Sciences has awarded funding to six teams of faculty and staff to advance innovative ideas that aim to improve student experiences, from incorporating one-on-one mentorship to offering Illinois undergrads and incarcerated individuals the opportunity to learn together. Funding was granted for ideas that will lead to innovative and inclusive curricula and/or pedagogy, take advantage of new technologies to enhance ways of learning, and meet other criteria.

Improving the transition from across borders to the U of I
The LAS International Student Advisory Board (ISAB), formed by associate director of intercultural and global learning Nikia Brown, was created to improve the experience of international students at Illinois. The board includes students who consult directly with college administrators. “ISAB serves as a consultative body and ongoing focus group that addresses issues pertaining to international student life in and outside the classroom,” Brown said.

Conversations that make college feel like home
In spring 2023, Darrell Hunter II, first year experience director in the College of LAS, organized the We Got Each Other program at U of I to give underrepresented male students a space to meet and talk. The successful program was followed by My Auntie’s House, which offers community-building opportunities to underrepresented female students.

The Quadrangle / 1
Professor featured in a new Ken Burns documentary

Rosalyn LaPier, professor of history, is featured in Ken Burns’ new “The American Buffalo” documentary to discuss bison and their connections to Native American heritage. LaPier is an enrolled member of the Blackfeet Tribe of Montana and Métis. Her research and teaching concentrate on environmental issues within Indigenous communities. The documentary was released October 16 on PBS.

go.las.illinois.edu/bison-S24

Alumna creates fellowship to support social sciences

Julia Tai (PhD, '63, chemistry) has created a fellowship in honor of her late husband Paul Tai (PhD, '61, political science). The Hung-Chao and Julia Tai Family Fellowship in the Social Sciences was created to help students from China or Taiwan pursue graduate degrees at Illinois. Julia wanted to address difficulties faced by students in the social sciences.

go.las.illinois.edu/Tai-S24

Ten LAS students and recent graduates accept Fulbright awards

Ten students and recent graduates from the College of LAS, received Fulbright grants this year. The Fulbright program provides grants to pursue international education, research, and teaching. David Schug, director of the National and International Scholarships Program at Illinois, said that it was one of U of I’s most successful years for the program, with Fulbright awardees on five different continents.

go.las.illinois.edu/Fulbright-S24

First-year chemistry students learn data analytics in new curriculum

A team of scientists at the University of Illinois Urbana-Champaign, Rice University, and Danville Area Community College has created an affordable laboratory curriculum for teaching advanced data analysis techniques and instrument building to first-year general chemistry students. “Physical chemistry is not something that’s usually introduced in community college settings,” said Allison Wallum, a graduate student at the U of I, and the primary designer of the curriculum.

go.las.illinois.edu/DataAnalytics-S24

College of LAS student receives Obama-Chesky Scholarship for Public Service

Christiana Lewis, a junior in psychology, has been awarded the Obama-Chesky Scholarship for Public Service to provide children in underserved communities with counseling access. She works as a tutor for America Reads/America Counts, is a member of Child Life Association at Illinois, and has worked with coordinators on a Chicago Housing Authority and YMCA Metropolitan Chicago youth employment program. The award provides $50,000 toward education expenses and $10,000 for summer work-travel experience.

go.las.illinois.edu/Lewis-S24

Professors honored with named positions

Several faculty members were recognized recently with named positions. Investiture ceremonies were held for English professor Tim Dean, named James M. Benson Professor; Prashant Jain, named G.L. Clark Professor in Chemistry; African American studies and sociology professor Ruby Mendenhall, named the Kathryn Lee Baynes Dallenbach Professor in Liberal Arts & Sciences; English professor Robert Dale Parker, named Frank Hodgins Chair in American History; and chemical and biomolecular engineering professor Christopher Rao, named Ray and Beverly Mentzer Professor.
Illinois researchers, Native American tribes work to curate, increase access to oral histories

Illinois researchers are collaborating with Native American tribes to digitize ethnographic materials and oral histories of tribal members and make them available online. This is part of the multi-university Doris Duke Native Oral History Revitalization Project, which is also meant to strengthen relations between universities and Native American communities.

go.las.illinois.edu/histories-S24

New faculty join the College of LAS

The College of LAS welcomed 53 new tenure-track professors for the 2023-24 academic year. The new positions range from assistant to full professors in almost 24 academic units, ranging from Asian American studies to religion, sociology, statistics, atmospheric sciences, and several others. Most of the faculty members started at the beginning of the fall semester, but some arrived later or started in January.

go.las.illinois.edu/NewFaculty-S24

Alumnae establish eco-cultural tour

Cyndee Weber (BA, ’23, history), with help from Elle Sawyer (MS, ’23, evolution, ecology, and conservation biology), designed a campus tour for incoming students to appreciate nature and the influence of Indigenous communities. Weber is a descendent of the Cherokee Nation and Pemunkey tribes. Her project was supported by the Aspen Institute’s Center for Native American Youth, which named her a Brave Heart Fellow by the Aspen Institute’s Center for Native American Youth her senior year. The tour is offered at the Native American House’s new student orientation.

go.las.illinois.edu/tour-S24

LAS@Work with Devin Chehak

Protecting life and property

As spring storms roll through your region, have you wondered who is behind the science of a weather warning?

In west Texas and portions of southeast New Mexico, College of LAS alumnus Devin Chehak (BS, ’18; MS, ’20; atmospheric sciences) is part of the team that creates the watches and warnings that have the potential to save lives. He is a general forecaster and meteorologist for the National Weather Service.

What is an example of the most interesting aspect of your job?

The most interesting aspect of my job would definitely be severe weather operations. During severe weather we are tasked with constant monitoring of thunderstorms using radar and satellite data. If a storm becomes strong to severe, we issue products that you may see on the local news, your cell phone, or various other places, like a severe thunderstorm warning or a tornado warning. We also continually notify local responders and partners of impending hazards. We collect thunderstorm reports and update our warnings based on ground truth. Severe operations are very hectic and very taxing but extremely rewarding as it is the most direct way of fulfilling our mission of protecting life and property.

In hindsight, what about college best prepared you for your life and career?

The numerous opportunities outside of normal classwork gave me the additional skills and knowledge to prepare for life and my career. I participated in the local chapters of the American Meteorological Society. I did undergraduate and graduate level research projects and presentations at various conferences. I also took an internship at the Illinois State Water Survey helping to update and understand changing climate and severe weather and excessive heat. All these activities gave me valuable skills to make me a more rounded person in my life and my career.

What is your proudest achievement?

From helping to try to understand the forecast models and making an accurate forecast, to communicating to partners and the public the expected impacts. I am proud to serve those in my community and work towards the goal of the National Weather Service, protecting life and property.

By Kayleigh Rahn

To read more alumni profiles or to suggest someone for an LAS@Work feature, visit go.las.illinois.edu/AtWork-F24

For more about these LAS news stories and others please visit las.illinois.edu/news
Atmospheric scientist Atul Jain is recognized for vital insights into the future of our climate

Of the nearly 30 years that Atul Jain has worked as an atmospheric sciences researcher and professor at the University of Illinois, the last one was a standout. In 2023, Jain was named for the third consecutive year to the annual Clarivate Analytics Highly Cited Researchers list, for individuals whose research has been exceptionally influential. In 2022, he was elected as a fellow of the American Association for the Advancement of Science. He was awarded in 2023.

In 2023, he was also named a fellow of the American Geophysical Union (AGU) for innovative accomplishments within the scientific community. Fewer than 0.1 percent of AGU members are named fellows. In naming him a fellow, the AGU cited Jain’s "seminal improvements to the understanding of land-climate interactions and the accurate representation of biogeophysical, biogeochemical, ecological, and land use/land cover change processes in Earth system models."

Jain is a world-renowned expert in global climate change studies, having established a record of leading, innovative, and multi-disciplinary research into how changes in greenhouse gases, biogeochemical cycles, and land cover will affect climate by examining impacts on both human society and the natural environment. He and his research team have developed an integrated science assessment model (ISAM) and a state-of-the-art land surface modeling (LSM) framework that is the most advanced among a new generation of LSMS representing biogeochemical and biophysical processes and human activities affecting the climate system.

He is widely recognized for his contributions and leadership to international assessments of climate change. Jain is one of a selected group of scientists from around the world chosen to author major climate assessment reports for the UN Intergovernmental Panel on Climate Change, the National Academy of Science, and the Global Carbon Project.

Originally from India, Jain is the first scientist in his family and has spent his life moving around the world to follow his passion for climate research. He is drawn to this field because of its interdisciplinary nature.

"The interdisciplinary nature of climate change research in the U.S. allowed me to incorporate perspectives from various scientific disciplines and policy considerations," said Jain. After graduating from the Indian Institute of Technology in Delhi with a PhD in atmospheric sciences, he worked as a research scientist at the University of Münster in Germany and at Lawrence Livermore National Laboratory in California before arriving at the University of Illinois in 1995.

Along the way, he said, he experienced personal and professional growth. He found that teaching methods, research expectations, and emphasis on interdisciplinary collaboration differed before moving to the U.S.

“Without a doubt, (arriving in the U.S.) was a chapter in my life that shaped my career and enriched my understanding of the interconnectedness of environmental issues on a global scale,” said Jain.

Aside from his research, Jain also teaches many climate change courses and works as an affiliate of the Program in Ecology and Evolutionary Biology, the School of Information Sciences, the Discovery Partners Institute, the Center for Global Studies, and the Center for South Asian & Middle East Studies.

Jain believes that focusing on one’s successes instead of dwelling on setbacks leads to a happier and more productive life.

"Every day is not a successful day,” Jain said. “When achievements occur, they not only bring a sense of fulfillment but also teach valuable lessons during challenges and failures. It is these learning curves that are indispensable for progress in the future.”

He encourages his students to pursue the same mindset, and the successes achieved by Jain and researchers in his lab—many of them graduate students who now work as professors and researchers elsewhere—have become increasingly relevant as climate change has become more pronounced and observed.

"Climate change is emerging as a crucial widely discussed topic," Jain explained. "I would say that climate research is becoming one of the more challenging research areas because it’s no longer solely about understanding and advancing the scientific understanding of climate change, but we must also address how we can mitigate and adapt to its profound impacts.”

"I’m looking forward to the rest of my career years,” Jain said. "I continue to work on novel and exciting research avenues related to climate change, aiming to advance our understanding of human impacts on the Earth’s climate system.”

By Ella Dame

Looking up and looking forward

The Quadrangle / 7
The lessons of the Windy City

By John Turner

The College of LAS improves lives and understanding through its work in Chicago

From deep-dish pizza to towering skyscrapers, Chicago is a city like no other. Nearly 3 million people call it home, making it a hub of economic development, culture, and groundbreaking research. And for decades, the College of Liberal Arts & Sciences has played a meaningful role there.

Here’s a snapshot of some of the LAS research and engagement initiatives currently unfolding in the City of Big Shoulders, ranging from atmospheric research on urban climate change to exciting programs that prepare young people for successful tech careers. Whether it’s fighting disease, studying the impact of green shipping, or efforts to celebrate the city’s rich history and ethnic culture, it all reflects a vision of service in Chicago that began long ago.

“There’s a lot of opportunities for LAS students to engage with the city through different courses and programs,” said Matthew Fienup, assistant dean for engagement in LAS. “We want to ensure that students are connecting to the community and learning about the challenges and opportunities that exist here.”

One of the most exciting initiatives in LAS is the Chan Zuckerberg Biohub, which began operations in Chicago last year. The Biohub is a $2.5 billion research center that brings together scientists from across the city to tackle some of the biggest challenges facing humanity.

“Chicago is a city with a lot of history and culture,” said Jonathan Sweedler, director of the Biohub. “It’s a perfect place to bring together experts from different fields to work on big problems.”

Fighting disease through the Chan Zuckerberg Biohub Network

Last fall, Illinois Gov. J.B. Pritzker and leaders from the Chan Zuckerberg Initiative launched the latest center in a growing network of biohubs designed to understand the underlying mechanisms of disease. Research in Chicago will use embedded sensor technology to monitor disruptions to molecular and cellular signals to better understand and treat a wide range of diseases, including cancer, heart disease, Alzheimer’s, and severe infectious diseases such as COVID.

The project includes a $250 million investment from the Chan Zuckerberg Initiative and a $25 million capital commitment from the state.

Several people from LAS and elsewhere on campus have significant roles with the Biohub. Susan Martinis, vice chancellor for research and innovation and Stephen G. Silgar, professor of Molecular and Cellular Biology, played a leadership role in developing the Biohub proposal. Gene Robinson, director of the Carl R. Woese Institute for Genomic Biology and Swanlund Chair in Entomology will have a leadership role in the project.

Jonathan Sweedler, acting head of the Department of Chemistry, said the Biohub will complement work he does in the study of brain chemistry. He said U of I’s expertise in a wide range of subjects helped seal the deal, which also includes the University of Chicago and Northwestern University.

“It’s inherently designed to cross disciplines and be broad,” he said. “It needed chemistry. It needed engineering. It needed biology. It would not have succeeded with just one area.”

Creating community healthcare workers

“We have a long history of taking the knowledge of our faculty into the field,” said Ruby Mendenhall, professor of sociology and African American studies and associate dean for diversity and democratization of health innovation at the Carle Illinois College of Medicine. “But I argue that one of the 21st century missions of the land grant is to go into communities that were traditionally underserved — Black and Brown communities — and bring them in.”

That’s exactly what Mendenhall is doing in Chicago through a new initiative, funded by a MacArthur grant. The program is designed to reduce disparities in healthcare by creating a culture of innovation centered around the health and wellness of high school students and young adults living in neighborhoods with low-incomes and a high incidence of gun violence.

The program has many facets, from the creation of a stress-free “wellness space” at Wendell Phillips High School to community health worker training for high school students who create wellness tools, including music/art and phone apps, that foster healing from racial trauma and gun violence.

The program is interdisciplinary, connecting students to different healing modalities. For example, the trained youth community health workers are working with the Superhero project to create a comic book based on characters experiencing mental and physical health challenges due to disease, community violence, etc. This includes characters such as Athanti, a Black female superhero who fights for justice and an end to violence through peace and love.

Mendenhall hopes this work will lead to the creation of dual-credit courses at the U of I and provide a pathway for students to pursue careers in mental health, social work, and medicine.

Examining how we move freight

How will moving away from diesel-powered trucking impact urban communities? That’s the question at the heart of a study to explore the implications of new technology and electrified freight vehicles.

Using surveys, citizen scientists, and a network of sensors, the EPA-funded study will develop various adoption scenarios and project their potential impact on the community. Research will focus on Chicago’s Little Village neighborhood and include members of the Little Village Environmental Organization.

“Projects like these are vital to understanding how initiatives like this impact particular communities and how those effects can be mitigated,” said Julie Cidell, professor and head of the Department of Geography & Geographic Information Science. “We need science to do that, and we need community expertise to bring that down to the ground and improve conditions for those whose air is polluted and whose neighborhood streets are full of trucks.”

Better preparation for tech careers

The summer Digital Scholars program allows Chicago high-schoolers and incoming college freshmen to take college-level courses in computing and data science. Run by the U of I System’s Discovery Partners Institute (DPI), in partnership with the College of LAS, U of C, and Grainger College of Engineering, Digital Scholars helps provide women and minorities with better access to tech pathways and careers, thanks to funding from companies like Apple and Amazon.

Karle Flanagan, a teaching associate professor and director of inclusive data science education in the Department of Statistics, adapted U of I’s Stats 107 course for the summer program. The class is
taught by statistics graduate students and undergraduate teaching assistants.

“Data science is the future,” Flanagan said, “and providing students with a meaningful experience in data science education is something I believe is incredibly important.” More than 300 students have accessed the program, with 75 percent of those being Black or Latinx and almost 40 percent female. This year Digital Scholar students received a micro-credential badge for their participation, which was developed by Flanagan and Grainger faculty member Wade Fagen-Ulmschneider.

“The involvement of LAS and the data science course has been a tremendous addition to the program, which has allowed students to gain skills and awareness in data science and to U of I’s interdisciplinary programs of study in that field,” said DPI Pritzker Tech Labs director Mark Harris.

Understanding Puerto Rican Chicago

Sometimes we make history. And sometimes our role is to offer insights on the moments that shape it. In her book, “Puerto Rican Chicago: Schooling the City 1940-1977,” Mirelis Velázquez explores the educational system in Chicago and its impact on one community forging its identity.

“Puerto Ricans are often pushed to the footnotes of history or written about from an outsider perspective,” said the professor of Latin American and Puerto Rican studies and Puerto Rican immigrant. “My aim was to tell a community history that centered on hope.”

For Velázquez, that hope is exemplified by the strong women who helped shape the Puerto Rican community in Chicago, using their education to challenge a system they believed was harming their children — and build something better.

“What makes Chicago an amazing city is its people,” said Velázquez. “My hope is that when folks read the book, they see how important our community is to the telling of that story.”

A celebration of Andean culture

Chicago is home to a vibrant Andean community, with individuals from Peru, Bolivia, and Ecuador, bound by their Quechua heritage. In February 2023, Mirena Velázquez (University of Illinois Press), participants at an Andean Carnival Tinkuy festival, held at Loyola University Chicago. The full-day event featured traditional food, dance showcases, attire, exhibitions, Quechua language workshops, and discussions on Andean spirituality. Around 300 attended the event, which included an Andean Market activity organized by local fifth graders.

“Empowering Indigenous communities to preserve their culture in urban settings like Chicago is crucial,” said Gisela Sin, professor of political science and CLACS director. “The collaboration with academic institutions reassures these communities of support and amplifies the value of their language and culture beyond rural traditions, encouraging pride and reaching new generations.”

Community research on climate and urban science

Extreme weather can be devastating for large cities. To help understand and prepare for those events, the U.S. Department of Energy recently awarded a $25 million grant to the Argonne National Laboratory and a team of academic and community leaders including LAS scientists to study climate in Chicago.

The goal of the Community Research on Climate and Urban Science initiative is to improve the resilience of urban communities facing extreme heat, poor air quality, and flooding accelerated by climate change. Using a network of sensors, the team will monitor climate variability and help researchers understand how weather impacts the city and how design choices such as green roofs impact climate.

Steve Nesbitt, head of the Department of Atmospheric Sciences, leads the project along with atmospheric sciences professors Deanna Henze and Karen Kosiba and civil and environmental engineering professor Marcelo García. He said the sensors will allow researchers to analyze climate data in detail, down to the city block.

Like others who do scholarship and research in Chicago, Nesbitt sees a greater calling in his work.

“The University of Illinois Urbana-Champaign is Illinois’ flagship university campus and serves a land-grant mission to provide scientific and technical education to the people of Illinois,” he said. “We have a duty to help improve the lives of people across the state and around the world.”

Lab results of the Smart Building Lab, an initiative to improve the resilience of urban communities facing extreme heat, poor air quality, and flooding accelerated by climate change. Using a network of sensors, the team will monitor climate variability and help researchers understand how weather impacts the city and how design choices such as green roofs impact climate.

Steve Nesbitt, head of the Department of Atmospheric Sciences, leads the project along with atmospheric sciences professors Deanna Henze and Karen Kosiba and civil and environmental engineering professor Marcelo García. He said the sensors will allow researchers to analyze climate data in detail, down to the city block.

Like others who do scholarship and research in Chicago, Nesbitt sees a greater calling in his work.

“You can’t imagine how bad it is to wait in a line and have the heat so high you can’t find relief,” he said. “For people who are living in those conditions, the impact is dire. That’s why we’re doing this work.”

Nesbitt’s work is part of a broader effort to protect vulnerable populations from extreme weather events. In Chicago and other cities, heat waves and high humidity can be particularly dangerous for people who are homeless or have limited access to air conditioning.

In my opinion, the second definition I provided is more appropriate. The key thing to remember is that intelligence in terms of a scientific construct has been defined and studied largely from a certain cultural perspective, which impacts how it was viewed historically and how it is viewed today. In any case, the notion of intelligence has a challenging history filled with forms of bias and injustice.

One possible route is to use common assessments of intelligence to get an initial sense of different students’ broad and narrow abilities. Once we’ve identified the areas where students are quite strong or may benefit from additional help, we can tailor an education strategy to fit their specific needs.

By Melvin Lai, Beckman Institute

Editor’s note: Holden’s full profile and other LAS Experts profiles can be found at las.illinois.edu/research/expertise
Team finds reliable predictor of plant species persistence, coexistence

In a new study reported in the journal Nature, professor of plant biology James O’Dwyer and graduate student Kenneth Jops report the development of a method for determining whether pairs or groups of plant species are likely to coexist over time. Using data from published studies, their approach reliably predicts the complementary life histories of pairs of plants that manage to thrive in a shared habitat. go.las.illinois.edu/plants-F24

Study: Brain circuits for locomotion evolved long before appendages and skeletons

A study by molecular and integrative physiology professor Rhanor Gillette found parallels between the brain architecture that drives locomotion in sea slugs and that of more complex segmented creatures with jointed skeletons and appendages. The study offers the first evidence that the circuits driving locomotion in animals with complex bodies and behaviors “have close functional analogies in the simpler gastropod mollusks and may share a common inheritance,” Gillette said. go.las.illinois.edu/slugs-F24

Cave excavation pushes back the clock on early human migration

Cave excavations findings in Laos have led to the discovery of early human occupation at the Tam Pa Ling cave. The discovery of a human tibia and analysis of the dirt around it revealed that humans have lived in that area for at least 70,000 years and likely more. Anthropology professor Laura Shackelford led this research with Fabrice Demeter, professor of anthropology at the University of Copenhagen. go.las.illinois.edu/cave-F24

Geologists challenge conventional view of Earth’s continental history

The seemingly stable regions of the Earth’s continental plates have suffered repetitive deformation below their crust since their formation in the remote past, according to new research from geology professor Lijun Liu. This hypothesis defies decades of conventional plate tectonics theory and begs to answer why most continental plates have remained structurally stable while their underbellies have experienced significant change. go.las.illinois.edu/earth-F24

Webb Space Telescope detects universe’s most distant complex organic molecules

Researchers have detected complex organic molecules in a galaxy more than 12 billion light-years away—the most distant galaxy in which these molecules are now known to exist. Thanks to the James Webb Space Telescope and careful analyses from the research team, including astronomy and physics professor Joaquin Vieira and his students, scientists differentiated between some of the more massive and larger dust grains in the galaxy and those of the newly observed hydrocarbon molecules. go.las.illinois.edu/webb-space-F24

Books in LAS

“Rendered Obsolete: The afterlife of whaling in the petroleum age,” by Jamie Jones, professor of English, examines the influence of a dying industry during the massive energy transition from the organic fuel sources of the 19th century, including whale oil and wood, to the extraction of fossil fuels. (University of North Carolina Press)

“Nobody’s fool,” by Daniel Simons, professor of psychology, and Christopher Chabris, looks at how fraudsters tend to exploit the common habits of thought and decision-making that make us susceptible to their fabrications. (Basic Books)

“Food Power Politics, The Food Story of the Mississippi Civil Rights Movement,” by Bobby J. Smith II, professor of African American studies, explores how one of life’s basic necessities—food—was manipulated to maintain power structures—and how African American communities responded. (University of North Carolina Press)

“Demystifying the Academic Research Enterprise: Becoming a Successful Scholar in a Complex and Competitive Environment,” by Kelvin Droegemeier, professor of atmospheric sciences, informs scholars on how to achieve early career productivity and contribute to the development of the academic research enterprise. (The MIT Press)

“Neobugarrón: Heteroflexibility, Neoliberalism, and Latin/o American Sexual Practice,” by Ramón Soto-Crespo, professor of English, chronicles the cultural modifications of bugarrón, a distinct male-male sexual practice in Latin/o America and the Caribbean, during the 20th and 21st centuries. (The Ohio State University Press)
**RESEARCH IN LAS**

**CONTINUED**

**Space invaders and the modern age**

Professor of French Julie Gaillard has been tracking and examining the work of an anonymous world-wide artist. Her recent article, “Returning ‘Home’? Or Dwelling in the Pixel Age: On Invader’s Intermedial Space Invasion,” examines the work of this French artist who combines mosaics with pixel art from the 1970s video game Space Invaders. Since 1996 he has placed 4,100 works of art over five continents. [go.las.illinois.edu/invaders-F24](go.las.illinois.edu/invaders-F24)

**Recycling study demonstrates new possibilities for a plastics economy powered by renewable energy**

A group of chemistry researchers demonstrated a way to use the renewable source of electricity to recycle a form of plastic that’s growing in use but more challenging to recycle than other popular forms of plastic. In their study recently published in Nature Communications, Yuting Zhou, postdoctoral associate, and chemistry professors Jeffery Moore and Joaquin Rodriguez-Lopez display an innovative process that may harness renewable energy sources in the shift toward a circular plastics economy. [go.las.illinois.edu/recycling-F24](go.las.illinois.edu/recycling-F24)

**Air pollution via wildfire smoke takes toll on labor markets**

A team of U of I researchers have been analyzing the impact of wildfire smoke on the U.S. labor market even before last summer’s particularly bad year. Economics professor Mark Borgschulte and finance professor David Molitor examined the effect of Canadian wildfire smoke from 2007-2019. Their analysis found that higher smoke exposure can decrease labor income, employment and labor force participation rates across a wide variety of sectors in the U.S. [go.las.illinois.edu/pollution-F24](go.las.illinois.edu/pollution-F24)

**Do artificial roosts help bats?**

Artificial roosts for bats come in many forms — bat and cinder block structures, to name a couple — but a new conservation practice and policy article from researchers at the U of I, including doctoral student Reed Crawford in the Program in Ecology, Evolution, and Conservation Biology, suggests the structures haven’t been studied rigorously enough and may harm bats in some scenarios. The article, published in Conservation Biology, encourages more research on the popular conservation practice. [go.las.illinois.edu/bats-F24](go.las.illinois.edu/bats-F24)

**Study finds people expect others to mirror their own selfishness or generosity**

A person’s own behavior is the primary driver of how they treat others during brief, zero-sum-game competitions, according to research by Psychology professors Sanda Dolcos and Florin Dolcos. The study found that generous people tend to reward generous behavior and selfish individuals often punish generosity and reward selfishness — even when it costs them personally. [go.las.illinois.edu/selfishness-F24](go.las.illinois.edu/selfishness-F24)

**Books in LAS**

“Medina by the Bay: Scenes of Muslim Study and Survival” by Maryam Kashani, professor of gender and women’s studies and Asian American studies, examines how multiracial Muslim communities in the San Francisco Bay area forge alternate ways of surviving and flourishing in the face of colonial racial capitalism. [Duke University Press](Duke University Press)


“Rooting for Plants: The Unstoppable Charles S. Parker, Black Botanist and Collector” by Janice Harrington, professor of English, details the life of pioneering Black botanist Charles S. Parker in the form of a children’s biography. [Calkins Creek](Calkins Creek)

“Dynamics Of Marginality: Liminal Characters and Marginal Groups in Neronian and Flavian Literature” edited by Antony Augustakis, professor of classics, Konstantinos Arampapasalis (MA, 14; PhD, ’19, classics), Stephen Froedge, and Clayton Schrör investigates marginalized groups experience in the Neronian and Flavian periods looking at history and literature. [De Gruyter](De Gruyter)
Most days are easy to quantify. Eight-hour workday. Twenty-minute commute. Three meals. 10,000 steps.

However, during the inaugural College of LAS Days of Service, the impact is tougher to tally.

Of course, it’s easy to count the more than 50 volunteers providing more than 100 hours of service in three cities. And at the Greater Chicago Food Depository, 7,410 pounds of apples were separated into individual bags for families, then in Champaign, 900 meals were packed for individuals. While in San Antonio, alumni and their families provided a combined 16 hours of community service for a local event at Olmos Basin Park.

However, numbers really cannot tell the full story, because community service tends to have a ripple effect. A single idea put into motion creates an impact reaching beyond the initial point of contact, even for the volunteers.

When Meg Edwards, director of corporate and foundation relations for College of LAS Office of Advancement, reached out to alumna Susan Morisato (BS, ’75; MS, ’77, mathematics) to share her idea of inviting alumni to volunteer in their hometowns, Morisato agreed to help without hesitation. After all, Morisato has seen the far-reaching impact of service, and she maintains strong bonds with her alma mater.

Her family includes six Illinois alumni, so when it came time to select where she would study for her undergraduate degree, U of I was an easy decision. Deciding what she would study was a bit more challenging. After considering a variety of paths, Morisato chose actuarial science in the Department of Mathematics just as the major was launching.

“I was interested in taking the math courses for fun, which I’m guessing would puzzle some people, and it turned out to be a phenomenal career choice for myself,” she said.

“I really loved the idea of using mathematics within the business world.”

While on campus, Morisato was a member of the women’s bowling team, which allowed her to travel around the Midwest and visit the Big 10 schools to compete.

“I loved campus, and there was a lot of Illini pride knowing that I was getting a great education,” she said. Morisato now lives in Chicago, and since graduation she has served as a founding member of the Department of Mathematics Development Advisory Board and is a current member of the College of LAS Alumni Council.

However, it was during the last 15 years of her career while working for United Health Group, a partner of AARP, when Morisato saw the ripple effect community service can create.

“AARP, as we know, is one of the largest senior oriented member organizations,” she said. “When we were developing the contract between (United Health Group and AARP), one of the things AARP pushed for was this notion of corporate social responsibility. I think 30 years ago it was more lip service than real for many organizations, but United Health Group really embraced that concept.”

Through her professional role, she took advantage of the opportunities to volunteer throughout her community. From food packs to toy builds, Morisato was able to see first-hand the benefits of service.

“It turns out there were studies done around volunteering,” she explained. “What researchers found, at first anecdotally, was that volunteers felt better mentally and physically after providing service. When studies were eventually complete, volunteering absolutely does have three huge benefits for individuals beyond the organizations they are helping.

“Service can provide a sense of purpose when you are doing this work within your community,” Morisato added. “It also develops new skills. And it’s just a way to nurture relationships. You meet new people; you reinforce existing relationships.”

And Morisato is correct, according to the National Institutes of Health, which advocates volunteering as part of a healthy lifestyle. Mental and physical health, life satisfaction, and social well-being were significantly and positively correlated with volunteerism, their study found.

Continued on next page...
“Volunteering is a way for individuals to get physically and mentally active, to feel good about what they are doing,” Morisato added. “When (Edwards) said she was thinking about creating Days of Service, I did not hesitate, because I could see all of the benefits. These can be seen happening within the alumni community as well. This is a way to stretch and strengthen our network of alumni.”

In Champaign, Illinois junior Leah Ju, a bioengineering student, is the president of Illini Fighting Hunger, which provides opportunities for volunteers to give back on campus.

“The big issue right now is there are willing volunteers but not enough places for them to give that energy. So, Illini Fighting Hunger is trying to close that gap between people who are willing to volunteer and the ingredients that are ready to be packed to feed those in need.”

On campus during Homecoming Week 2023, College of LAS leadership joined with alumni, students, faculty, and staff to pack meals for a Day of Service with Illini Fighting Hunger for the Wesley Food Pantry on Green Street.

In Chicago, LAS alumna Mallory Weber (BS, ’06, psychology) spent her LAS Day of Service inspecting apples.

“This was a very memorable experience since I was able to meet other alumni who live in the area. I even exchanged numbers with a new volunteer friend, and we plan to volunteer here together in the future.”

“We wanted to create opportunities for alumni to get to know one another in their geographic area and provide an opportunity to simultaneously contribute locally,” Edwards said. “The power of LAS alumni is impressive, and we look forward to expanding this program and growing our impact.”

The College of LAS Days of Service was created to engage LAS alumni across the U.S. in their hometowns, Edwards explained.

“Volunteering is a way for individuals to get physically and mentally active, to feel good about what they are doing,” Ju explained.

“Meal pack is the core of what Illini Fighting Hunger does,” Ju explained.

“The big issue right now is there are willing volunteers but not enough places for them to give that energy. So, Illini Fighting Hunger is trying to close that gap between people who are willing to volunteer and the ingredients that are ready to be packed to feed those in need.”

Future LAS Days of Service events will be announced later this year.

By Kayleigh Rahn

The University of Illinois Urbana-Champaign welcomed the largest ever freshman class last fall. What did the entering class look like for the College of LAS?

The Class of 2027 comes from all over Illinois and the world. Of the 8,325 new freshmen on campus last fall, more than 1,900 enrolled in the College of LAS. They were joined by 565 students who transferred to LAS from another university. Almost 570 of the new freshmen in LAS came from underrepresented groups, and more than 600 are first-generation students.

How does the College of LAS support that many students?

Creating a clear path to success for our students is a priority. We do that in many ways, from offering top-notch academic programming to initiatives designed to make college more welcoming and inclusive. We have programs for first year students and international students to help them adjust to college life. Our Access and Achievement Program helps students from underrepresented groups realize their academic goals. The LAS Student Success Initiative funds various ideas to improve the educational experience, from creating better textbooks to a new speakers workshop. Programs such as We Got Each Other and My Auntie’s House offer students a relaxed, supportive environment to connect with others. The Paul M. Lisnek Hub in Lincoln Hall offers peer mentoring and advising to help students prepare for the life beyond graduation.

Are there similar programs for faculty members?

We maintain many initiatives to support faculty members. For example, we will be hiring new faculty members through a strategic “cluster hire” program to increase faculty diversity and collaboration, enhance student offerings, and strengthen research and scholarship. New hires related to our Climate Impacts, Risk, and Inequality Cluster will be encouraged to participate in programming designed to enhance interdisciplinary collaborations. We also offer professional development opportunities such as the Academic Leadership and Management Institute and Collaborative Mentoring Network. People are our greatest asset! We invest in their careers to ensure that higher education remains the most reliable path to success in our society.

Venetria K. Patton, the Harry E. Preble Dean of the College of LAS (at center), talks about efforts to make college a more fulfilling experience.
A safer place for scholars

Many within the College of LAS join the Illinois Scholars at Risk Program to assist faculty members fleeing danger at home.

Pavlo Dziuba had a long career in Ukraine before everything changed in 2022. For 20 years he worked as a professor of international finance at Taras Shevchenko National University of Kyiv and lived with his family in a small town of Irpin 16 miles outside of Kyiv. They stayed there even after Russia invaded—until one day their house was hit by a bomb.

“Our house was substantially damaged,” said Pavlo. “We actually lost all the windows, all the glass available, and the heating room of the house was completely destroyed.”

With the house uninhabitable, he and his family were forced to leave. Pavlo had heard about the Scholars at Risk program, an international network of academic institutions that offers assistance to scholars who face danger at home. Pavlo had heard about the Scholars at Risk program, and said that U of I joined the Scholars at Risk network in 2022.

“He’s one of several scholars from around the world who have come to U of I after receiving visiting faculty positions through the program. Colleen Murphy, Roger and Stephany Joslin Professor of Law and professor of philosophy and political science, and director of the Women & Gender in Global Perspectives Program, chairs the program and said that U of I joined the Scholars at Risk network in 2022.

Elena Koptieva was the first scholar to join the program at Illinois. For almost 10 years before Russia invaded Ukraine, she was a professor at Dnipro National University in Dnipro, Ukraine. She lived with her family across the river from a large airport that was bombed at the start of the invasion.

“Starting at 4 a.m. in the morning and we woke up from the sounds of explosions,” said Elena. “There was a panic of course, many people were trying to leave central and eastern parts to migrate to the west of Ukraine, which was considered the safest place.”

When her home became too dangerous, Elena moved to the Czech Republic. Traveling there was difficult because of the panic of many people trying to leave Ukraine.

“While staying in the Czech Republic, I had received mail from the head of the physics department of the University of Illinois, where they announced a program for support for Ukrainian physicists,” recalled Elena.

She applied and came to U of I through the Scholars at Risk program in fall 2022 to begin work as a faculty member in the Department of Physics. Now she lives in Champaign with her two children while her husband remains in Ukraine fighting in the war.

Elena said that she has inexpressible gratitude toward the program and everyone she has met at U of I. She strives to be a valuable part of the academic community by continuing to conduct research and teaching courses. Last fall she taught PHYS 225 Relativity & Math Applications.

“I’m just grateful to the whole community, to my colleagues,” said Elena. “I feel that I am not alone.”

Pavlo has lived in Urbana for several months. His son attends a local elementary school. Pavlo is grateful for the Illinois Scholars at Risk Program and added that it’s given him an opportunity to continue teaching and research during a trying time for his family and career. He is conducting research on how the Ukrainian economy will develop during wartime and restoration. This spring he is teaching ECON 420 International Economics and ECON 469 Economics of Risk.

“This initiative is worth further development,” said Pavlo, of the program. “I hope it will be able to host more scholars, particularly from Ukraine.”

By Maggie Knutte
Softball sensation Danielle Zymkowitz continues a Hall of Fame career

When Danielle Zymkowitz (BS, ’11, communication) was playing on a travel softball team in California during high school, she and several of her teammates were aggressively recruited by Ohio State. But then Illinois coach Terri Sullivan suddenly showed up close to midnight following a grueling late-night loss.

“I was so tired, but Coach Sullivan was energetic and perky and saying how much she liked watching me play,” recalled Zymkowitz. “I said to my dad, ‘What just happened?’”

Zymkowitz was so impressed by Coach Sullivan’s passion and energy that she chose to play at Illinois, despite an all-out campaign by her California teammates to draw her to Ohio State.

“They put my last name on Ohio State jerseys and put up Buckeye posters,” Zymkowitz said. “But I wanted to step outside my comfort zone and put up Buckeye posters, “ Zymkowitz said.

However, Zymkowitz stuck with it.

Zymkowitz was drawn to softball. When her father first took her to a 12-and-under softball tryout, she said, “I left crying.”

As a child Zymkowitz never saw this career coming, given her initial reaction to softball. When her father first took her to a 12-and-under softball tryout, she said, “I left crying.”

However, Zymkowitz stuck with it.

“I started getting a little better and then I started falling in love with getting better, and then I started falling in love with the team,” she said.

The next thing she knew, she was practicing from 9 a.m. to 5 p.m. every Saturday and Sunday. “Then we started doing family vacations with the same people I play travel ball with. Then I’m on the same high school team as these girls. And now they’re family.”

Zymkowitz was so impressed by Coach Sullivan’s passion and energy that she chose to play at Illinois, despite an all-out campaign by her California teammates to draw her to Ohio State.

“I loved Coach Sullivan, and I loved my time at Illinois. I put blood, sweat, and tears into the orange and blue for four years.”

Being small and fast, Zymkowitz was initially drawn to soccer. But she used that speed on the bas epaths, as her stolen-base stats make clear. It also enabled her to perform a rare feat in college softball—an in-the-park home run. An Iowa outfielder tried to make a diving catch on her line drive but missed. By the time the Hawkeye player retrieved the ball at the fence, Zymkowitz was rounding third and heading for home.

After graduating from Illinois, Zymkowitz played seven years of professional softball with the Chicago Bandits and fulfilled her dream of appearing on ESPN’s “Web Gem” feature, which highlights spectacular fielding plays. She would play for the Bandits during the summer, while finishing her final semester at Illinois and then getting her master’s degree at Farleigh Dickinson University.

During that final, extra semester at Illinois, she was a student assistant coach, a stint that gave her the coaching bug. Zymkowitz went on to coach at Farleigh Dickinson, which played her younger sister Madison’s team—Long Island University Brooklyn. She also was assistant coach at the University of Toledo, and currently is associate head coach at the University of Wisconsin.

Zymkowitz said she not only chose Illinois for the softball, but for the academics. In high school, she was a scholar athlete three times, so learning has been a priority. She said she put her lessons in speech and conflict-management classes at U of I to good use in her current career as a coach.

To this day, some of her old travel-team friends still say, “I can’t believe you didn’t come to Ohio State. We would’ve gone to the College World Series.”

But Zymkowitz has no regrets.

“I loved Coach Sullivan, and I loved my time at Illinois. I put blood, sweat, and tears into the orange and blue for four years.”

By Doug Peterson

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WARM WELCOME FOR A RECORD CLASS

The University of Illinois Urbana-Champaign enrolled a record-breaking freshman class for the 2023-24 academic year, including more than 1,900 new freshmen in the College of LAS. For the first time, the college’s annual welcome event, LAS Liftoff, was held at State Farm Center. (Photo by Carly Conway.)
THE EYES ON THE TIME

Early astronomers kept campus on schedule and proposed a timekeeper for the ages

A student of astronomy might identify Joel Stebbins as the father of photoelectric photometry, a star gazing technique so important that his workplace, the University of Illinois Observatory, was eventually named a National Historic Landmark. Not as many remember Stebbins for being the campus timekeeper and for being an influential advocate for the installation of chimes in Altgeld Hall.

Around the turn of the 20th century, timekeeping was no simple task. The proper local time, in fact, was commonly provided by astronomers who did calculations by observing the positions of the stars.

“In the 19th century, it was common that local observatories provided or sold time to the communities,” said Michael Svec, president of the Friends of the University of Illinois Observatory.

“Those who have lived near a set of good chimes agree that the music adds immensely to the spirit of the place, and people become very strongly attached to the bells,” Stebbins wrote, in early 1905.

In February 1905, after a couple of years of wrangling with the clocks, he wrote an exasperated letter to President Edmund James.

“At present I am trying to keep four clocks correct within a few seconds, while there are 20 other clocks on this campus, some of which are often five to 10 minutes wrong,” he said. “I say with confidence that every clock on the campus is regarded with distrust. A student may set his watch by one of the university clocks and then, in the same building find another clock 10 or possibly 20 minutes different. I hold that a clock which is wrong is worse than no clock at all.”

The very best timekeeping device for campus, Stebbins added, would be a tower clock with a bell or bells, and his proposed location was a new building that had been constructed just a few years earlier: Altgeld Hall. Stebbins wasn’t the first to propose chimes in the building—the Class of 1904 had considered the idea as a senior gift before ruling it out as too expensive—but the young astronomy professor generated serious discussions that eventually led to the chimes.

As for campus timekeeping, the president moved the master clock out of the U of I Observatory in fall 1905, much to the relief of Stebbins, who said that maintenance of the clocks would best be handled by a mechanic. He offered to provide time readings for campus, but the university clocks were soon coordinated instead by time signals from the U.S. Naval Observatory. Stebbins used his time for other things; by then he was well on his way to becoming one of the most renowned astronomers in history.

By Dave Evansen
LAS BY THE NUMBERS

Success in student support
The College of LAS supports students on their unique paths to success. Here’s a quick look at just a few of the programs that provide undergraduate students academic, career, and social support.

CAREER FAIRS
2,770
LAS students attended college-supported career fairs in the past year

LAS ACCESS AND ACHIEVEMENT PROGRAM
2,027
Number of students who are part of the program this year to provide a supportive learning environment
55% are first generation students and 86% are underrepresented minorities

MATHEMATICS & STATISTICS SUPPORT CENTER
1,050
students visited the center during the first 13 weeks of the Fall 2023 semester
Most popular courses: Math 220 (Calculus), Math 115 (Precalculus), and Math 241 (Calculus III).

PAUL M. LISNEK LAS HUB
10 students
visit every day to speak with peer mentors and professionals about experiential learning opportunities (internships, research experiences, service learning, etc.)
85% of LAS graduates participated in experiential learning during their undergraduate studies.

STAY IN TOUCH!
There’s a lot going on in the College of LAS – and The Quadrangle is just one way we share the news. Update your contact info for the latest news and opportunities to engage with your alma mater!
go.las.illinois.edu/contact-S24

Sources: Steven Cox, assistant director for student engagement; Kristy Valentin, senior director of Access and Achievement Program; and Shelby Koehne, communication coordinator for the Department of Mathematics.
THE COLLEGE OF LAS is constructing learning and research spaces that will empower students and faculty members for the 21st century. Learn more and support these critical renovation and new building projects at las.illinois.edu/giving/facilities