

LAS

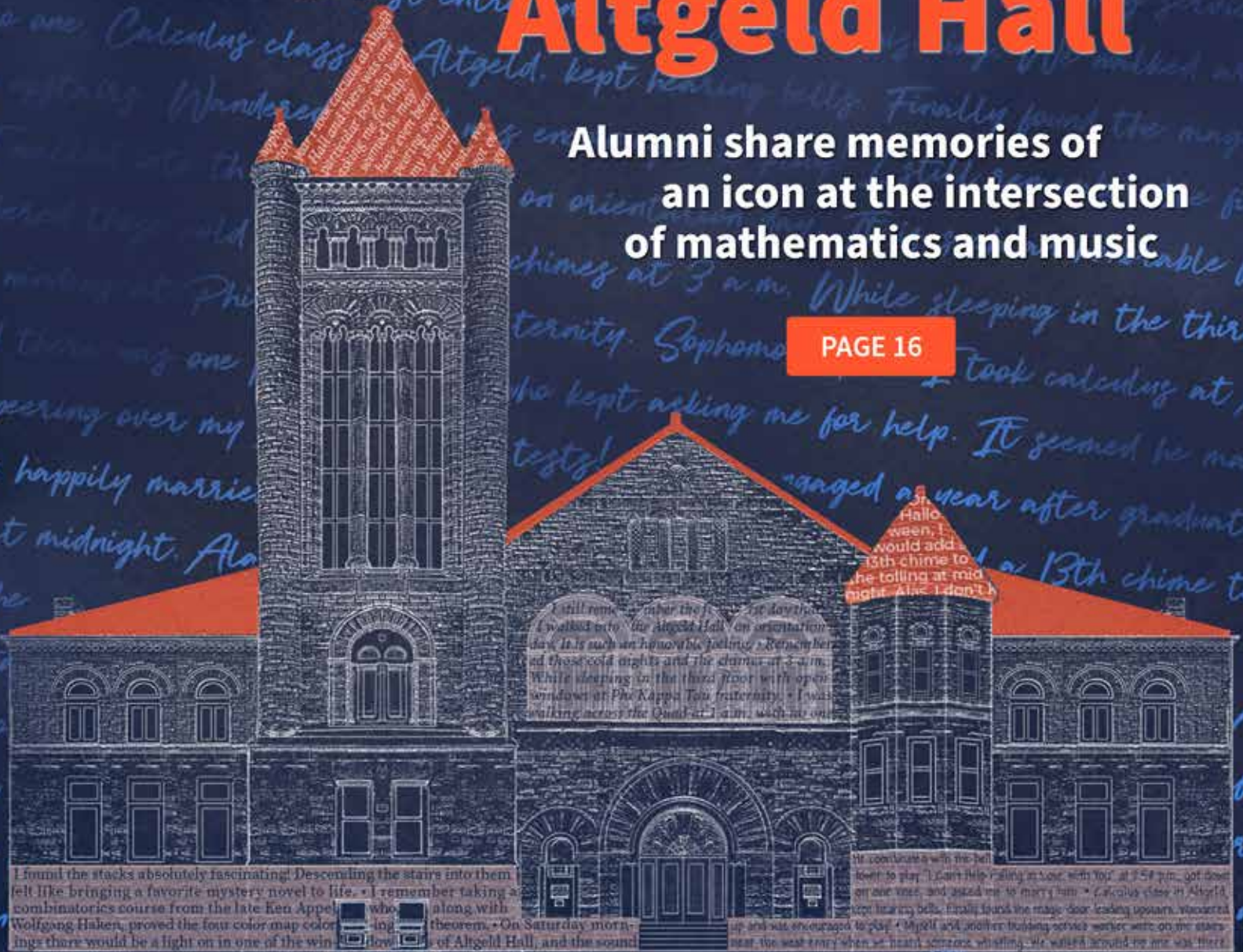
NEWS

COLLEGE OF LIBERAL ARTS & SCIENCES | FALL 2021

The stories of Altgeld Hall

Alumni share memories of an icon at the intersection of mathematics and music

PAGE 16



FALL 2021

2 Around the College

Recent images and news from faculty, staff, students, and alumni.

8 Burn zone

LAS student Andy Sima's award-winning essay on the devastation of wildfires.

11 Books from LAS

Land struggles, presidential photographs, and Gettysburg-inspired poetry were the subjects of books published recently by faculty members.

12 LAS@Work

Alumna takes on leadership role with Girl Scouts.

13 Sweet news for the brain

Cocoa flavanols boost brain oxygenation, cognition in healthy adults.

14 Effort to curb COVID-19 leads to a deeper understanding of communities and the disease

Professors collaborate to help and learn from a town struck by the pandemic.

15 Studying the geographies of death from COVID-19

Pamela Martinez examines health disparities during the pandemic in Chile.

16 The stories of Altgeld Hall

Alumni share memories of an icon at the intersection of mathematics and music.

19 When danger becomes the norm

Ghassan Moussawi studies the effects of fear and uncertainty.

20 New vaccines, old fears

The race against COVID-19 and resistance to vaccines.

22 Charting a brighter future during COVID-19

Life + Career Design in a Pandemic program helps students work together to explore interests and career paths.

23 Sanctuary for the written word

Online services and a devoted staff keep the Writers Workshop running strong through the pandemic.

24 Images of research

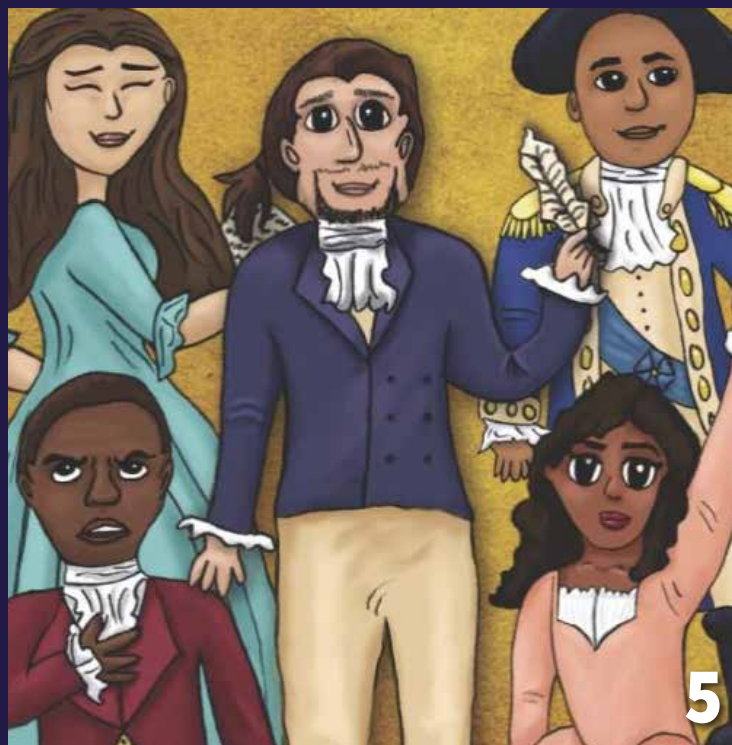
Award-winning illustrations and photos from the College of LAS.

26 The power of a name

The debate over how to name the University of Illinois Urbana-Champaign was long, contentious, and went to the soul of campus.

28 LAS by the numbers

Results of the latest Illini Success survey revealed some promising career tracks.



The cover image is an adaptation of a print of Altgeld Hall by Ballpark Blueprints, shown here. The Ballpark Blueprints image is available for purchase as a print, blanket, or mug at ballparkblueprints.com.



GREETINGS FROM THE College of Liberal Arts & Sciences

Greetings LAS alumni and friends!

It is my great honor to introduce myself as the Harry E. Preble Dean of the College of Liberal Arts & Sciences. I began my new role on August 2 after serving for 18 years as a professor and administrator at Purdue University. I look forward to leading this great college during this exciting and important era for the liberal arts and sciences.

First, a bit more about myself: I earned my PhD in English from the University of California, Riverside, and joined the University of Nebraska as a faculty member in 1996. In 1998, I was named coordinator of the African American & African Studies Program, and in 2003 I joined Purdue as a professor and director of the African American Studies & Research Center. From 2016 until this year I served as head of the School of Interdisciplinary Studies in the College of Liberal Arts.

As an interdisciplinary literary scholar, I am thrilled to have this opportunity to work alongside people from all of the many disciplines in LAS. Whether our topic of study is literature or mathematics, biochemistry, astronomy, political science, psychology, entomology, philosophy, foreign languages, geology, chemical and biomolecular engineering, or any one of the many other fields in LAS, we all have common ground and purpose, which is to prepare well-rounded and effective leaders for the 21st century.

My first step as dean will be something I've strived to do my entire life: to learn. I'm going to be doing everything I can over the next weeks and months to better understand this big and wonderful college. In the future, I anticipate that I will be sharing many new ideas and initiatives that LAS is engaging in to meet our mission of empowering individuals to understand and change the world.

Finally, I would like to express deep gratitude to my predecessor, Gene Robinson, who served as interim dean during the most challenging period for higher education in our lifetimes. Gene will be returning to his role as director of the Carl R. Woese Institute for Genomic Biology, but he will take with him the profound appreciation and respect of all of LAS for his tireless efforts to lead the college during the COVID-19 pandemic. We were fortunate to have him at the helm.

With best wishes,

Venetria K. Patton

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LAS senior receives Lincoln Academy Student Laureate Award



success she's been able to achieve at the university. (Photo submitted.)

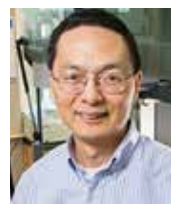
Issy Marquez, a triple major in English, political science, and Latina/Latino studies, received the Lincoln Academy Student Laureate Award for her public service in college, including lobbying legislators on behalf of the National Humanities Alliance. The award is given to one senior per year at the University of Illinois through the Chancellor's Honors Program. Marquez said the award is an acknowledgment of the



Strong stats in statistics

Support for students and growing interest in the field of statistics have turned the Department of Statistics into one of the largest in the country. In 2019 the University of Illinois produced more graduates with bachelor's degrees in statistics—315—than any other university in the nation, according to a November 2020 report by the American Statistical Association. This pushed them past other universities such as UC-Berkeley, Purdue, UC-Davis, UCLA, and other top statistics schools. (Stock image.)

\$87M grant will help advance bioindustrial manufacturing



An \$87 million grant from the U.S. Department of Defense, matched by more than \$187 million in non-federal cost-share, will fund collaborative efforts to advance sustainable and reliable bioindustrial manufacturing technologies. The money is being awarded to the BioIndustrial Manufacturing and Design Ecosystem (BioMADE) at the University of Minnesota in St. Paul. The University of Illinois is a governing member of BioMADE and a preferred research site for the organization, said Huimin Zhao, Steven L. Miller Chair in Chemical and Biomolecular Engineering.

Faculty honors

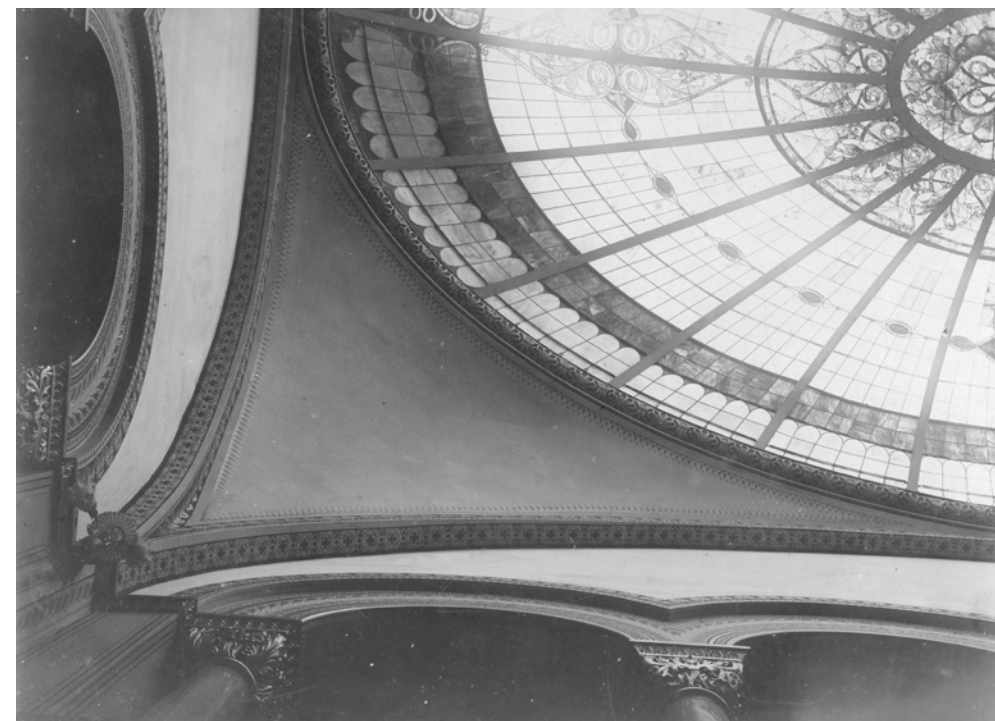
A partial list of faculty honors this past winter and spring include:

- **Carnegie Fellowship:**
Gillen D'Arcy Wood, English.
- **American Academy of Arts and Sciences:**
Nancy Makri and Kenneth Schweizer, both of chemistry.
- **American Philosophical Society:**
Gene Robinson, entomology.
- **Distinguished Senior Research Scientist of the Year by the Agricultural Research Service:**
Lisa Ainsworth, plant biology.
- **Guggenheim Foundation Fellowship:**
Kevin Mumford, history.
- **Outstanding Reviewer for the Journal of Educational and Behavioral Statistics:**
Susu Zhang, psychology.
- **Teaching Sustainability Fellows:**
Ripam Malhi, anthropology; Eman Saadah, linguistics; Chadly Stern, psychology; and Roderick Wilson, history and East Asian languages and cultures.
- **Co-editors for the Luso-Brazilian Review:**
Jerry Dávila and Marc Hertzman, both of history.
- **American Academy of Microbiology:**
Cari Vanderpool, microbiology.
- **American Anthropological Association Star:**
Krystal Smalls, anthropology and linguistics.
- **Clarivate Analytics Highly Cited Researchers:**
Stephen Long and Donald Ort, plant biology.

See a complete list of faculty honors at go.las.illinois.edu/honorsF21mag.

Professor: COVID-19 restrictions led to record drop in emissions

The annual Carbon Budget Project report found that among other trends, the global COVID-19 pandemic restrictions caused a record drop in CO2 emissions for 2020, said Illinois atmospheric sciences professor and report co-author **Atul Jain**. "The 2020 report shows that CO2 emissions—the main contributor to global warming—are set to drop by 2.4 billion tons of CO2, or 7 percent, in 2020, caused by worldwide COVID-19 restrictions. Such a drastic decline has never been seen before," Jain said. (Photo by L. Brian Stauffer.)



Piecing together a colorful mystery

During construction in 1896, a glass dome was installed in Altgeld Hall that provided natural light in the library. Then, with little fanfare in the 1940s, the dome was removed. Few photos of the dome have ever been found, except for this one. An architecture team is using several methods to recreate the masterpiece, however, as part of the \$192 million Altgeld and Illini Hall Project.

(Image from University of Illinois Archives.)

Study: Negative impact of lockdowns spike, then fade



Negative mental health effects of shelter-in-place orders and lockdowns are temporary and gradually decrease over time as people adjust to their "new normal," according to research by **Dolores Albarracín**, former U of I psychology professor and business administration, and **Bitá Fayaz Farkhad**, economist and post-doctoral researcher in psychology. The researchers found that social distancing policies correlated with immediate increases in interest in obtaining information about "isolation" and "worry" – but those effects tapered off two to four weeks after their respective peaks.

Bitá Fayaz Farkhad. (Photo by L. Brian Stauffer.)

New model shows how to make smart homes more frugal



Richard Sowers, professor of mathematics and industrial and enterprise systems engineering, developed a smart home model that uses dynamic, real-time energy pricing data to operate household appliances cost-effectively. The model relies upon real-time energy pricing, with Sowers and his colleagues building a system that crunches a combination of hourly market prices, spot prices, and day-ahead prices to predict the cheapest time to schedule residential loads such as running the dishwasher.

(Photo by Nicholas Georgiadis.)

Economist: The path to recovery must include child care



Economic recovery from COVID-19 will require not only restoring jobs and income, according to a professor at Illinois, but revitalizing a key industry that affects millions of families: child care. “If we can’t go back to a situation where we no longer have all these (COVID-19) mitigation strategies then you’ll see permanent impact on the business model of child care with basically all these mitigation costs being passed on to parents,” said economics professor **Elizabeth Powers**. ■

(Photo courtesy of Institute of Government & Public Affairs.)

LAS faculty named University Scholars



Three LAS professors at the Urbana-Champaign campus have been named University Scholars in recognition of their excellence in teaching, scholarship and service.

Christopher Freeburg, English; **Ned O’Gorman**, communication; and **Rachel Whitaker**, microbiology, will receive \$15,000 for each of the next three years for travel, equipment, research assistants, books, or other academic purposes. ■

From left: Christopher Freeburg, Ned O’Gorman, and Rachel Whitaker. (Photo illustration by L. Brian Stauffer.)

LAS Emergency Fund helps students during hard times

The COVID-19 pandemic brought a variety of personal and financial hardships to students, with some struggling to stay in school. The **LAS Emergency Fund** was established prior to the pandemic to help students facing loss of housing or income, food insecurity, medical expenses, and other urgent situations. In the past year alone, with help from donors, the college has disbursed more than \$32,000 to students facing some of their toughest challenges. ■



Hats off to the grads

After a challenging end to their college careers, U of I students found reason to celebrate in May when campus hosted **individualized stage ceremonies** for thousands of graduating seniors. Graduates from 2020, whose ceremonies were canceled, were also invited to attend. ■

(Photo by Fred Zwicky.)

College of LAS names new LEAP Scholars



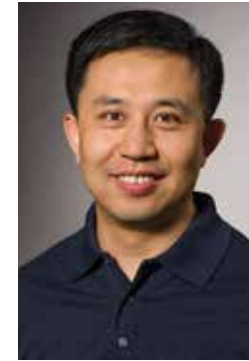
Four professors have been recognized as Lincoln Excellence for Assistant Professors (LEAP) Scholars for their contributions and potential in research and teaching. The awardees are **Carolyn Fornoff**, Spanish and Portuguese; **John Paul Meyers**, African American studies; **Lisa Olshansky**, chemistry; and **Diwakar Shukla**, chemical and biomolecular engineering. ■

Two LAS professors elected to National Academy of Sciences



Two professors in the College of LAS have been elected to the National Academy of Sciences, one of the highest professional honors a scientist can receive. Chemistry professors **Ralph Nuzzo** and **Wilfred van der Donk** are among 120 newly elected U.S. members and 30 international members recognized for their distinguished and continuing achievements in original research. ■ *Ralph Nuzzo (left) and Wilfred van der Donk.*

Mapping the fight against COVID-19



The COVID-19 pandemic has greatly affected vulnerable communities that lack the proper healthcare resources to combat the disease, but a recent study at the University of Illinois is helping policymakers better identify Illinois communities that are in need. The paper, published by a team led by **Shaowen Wang**, head of the Department of Geography & Geographic Information Science, demonstrates how to identify which geographic areas in the state are in need of additional COVID-19 healthcare resources. ■

‘Hunker down’ stress genes boosted in women who live in violent neighborhoods

The chronic stress of living in neighborhoods with high rates of violence and poverty alters gene activity in immune cells, according to a new study of low-income single Black mothers in Chicago. The changes reflect the body’s “hunker down” response to long-term threat, a physiological strategy for lying low and considering new action. Researchers included **Sandra Rodriguez-Zas**, animal sciences; **Andrew Greenlee**, urban and regional planning; **Gene Robinson**, entomology; and **Ruby Mendenhall**, sociology and African American studies. ■

Pictured, from left: Sandra Rodriguez-Zas, Andrew Greenlee, Gene Robinson, and Ruby Mendenhall. (Photo by L. Brian Stauffer.)



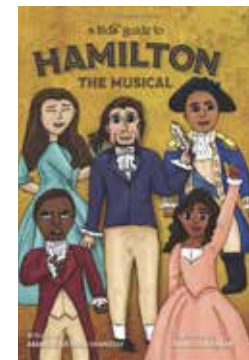
Keeping the right flavor for words



Eda Derhemi, a teaching professor in the Department of French & Italian, enlisted the help of **Francesco Ferrari**, a PhD candidate in the department, to translate the linguistically complex Albanian novel “Miele sul Coltello” into Italian. After the pair translated the novel they were named winners of the competition for the Fund of the Translation from Albanian to a Foreign Language. The translated novel was recently published in Italy, to critical acclaim. ■

Eda Derhemi (left) and Francesco Ferrari. (Photos provided.)

Alumna writes children’s guide to Hamilton



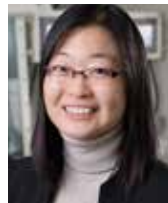
Amanda Bjerkan Hennessy (BA, ’99, English; MA, ’01, communication) immediately fell in love with the Broadway musical “Hamilton: an American Musical,” but the LAS alumna noticed that there were no children’s guides available to help interpret certain mature themes. This inspired her to self-publish “A Kids’ Guide to Hamilton the Musical,” which for weeks ranked as the top seller on Amazon in the children’s rap and hip-hop books category, and second in children’s dramas and plays, behind only “Harry Potter and the Cursed Child.” ■



Study tracks 16th century elephant tusks

In 1533, the Bom Jesus sank off the coast of Africa. Scientists at the University of Illinois have determined the source of elephant tusks recovered from the ship. “By comparing the shipwrecked ivory mitochondrial DNA with that from elephants with known origins across Africa, we were able to pinpoint specific regions and species of elephants whose tusks were found in the shipwreck,” said **Alida de Flamingh**, a postdoctoral researcher who led the study with animal sciences professor **Alfred Roca** and anthropology professor **Ripan Malhi**. ■

Professor receives NASA Early Career Faculty Award to help astronauts grow vegetables



Ying Diao, professor of chemical and biomolecular engineering, was recently awarded the NASA Early Career Faculty Award for her proposal: Remote Autonomous Plant Sensing for Space Exploration Enabled by Wearable Printed Electronics. “We’re helping the astronauts to be more healthy during space missions, by improving the health of the plants they grow,” Diao said. “So the bigger impact could also be that it helps future human colonization on Mars or on other possible habitats.” ■

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Associate director honored for advancing diversity in chemical sciences



The American Chemical Society Committee on Minority Affairs has selected **Lloyd Munjanja**, former associate director of graduate diversity and program climate in the Department of Chemistry, to receive the Stanley C. Israel Regional Award for Advancing Diversity in the Chemical Sciences. The award recognizes individuals who have significantly stimulated or fostered activities that promote inclusiveness within the region. Munjanja recently was named assistant dean for diversity and inclusion in the College of Liberal Arts & Sciences. ■

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New equipment transforms atmospheric research and hands-on learning at U of I



The Department of Atmospheric Sciences has acquired a multi-million dollar “Doppler on Wheels” mobile radar and instrumentation facility that is expected to transform capabilities for research, offer hands-on field training for students, and expand outreach efforts to demonstrate scientific observation of the atmosphere. “At no other university do students and faculty have access to cutting-edge meteorological resources of this scope,” said **Jeff Trapp**, department head. ■

(Photo courtesy of the Department of Atmospheric Sciences.)

Octopus inspired design advances wound healing and regeneration



Thin tissue grafts and flexible electronics have a host of applications for wound healing, regenerative medicine, and biosensing. A new device inspired by the animal kingdom rapidly and safely transfers delicate tissue or electronic sheets to the patient, according to **Hyunjoon Kong**, a professor of chemical and biomolecular engineering, and postdoctoral researcher **Byoungsoo Kim**. Their design mimics how an octopus can pick up objects of all shapes with small pressure changes in their muscle-powered suction cups. ■

Byoungsoo Kim (left) and Hyunjoon Kong. (Photo by L. Brian Stauffer.)



Professor awarded for public engagement

Entomology and African American studies professor **Esther Ngumbi** has received the Mani L. Bhaumik Award for Public Engagement with Science from the American Association for the Advancement of Science. Ngumbi founded Oyeska Greens, a startup in Kenya that teaches sustainable and profitable agriculture. She regularly speaks to minority and other underrepresented communities to inspire careers in science, and with her parents she founded the Dr. Ndumi Faulu Academy, a school that serves children in Kenya. ■

(Photo by Fred Zwicky.)

Professors recognized for leadership and research



Four professors in the College of LAS have been named Richard and Margaret Romano Professorial Scholars for their leadership and research. Richard Romano (BS, '54, chemical engineering) and his wife, Margaret, established the program, which provides faculty members with \$25,000 per year for their work. This year’s scholars include: **Alison Bell**, (pictured), evolution, ecology, and behavior; **Alexandra Harmon-Threatt**, entomology; **Bo Li**, statistics; and **Zhuo Wang**, atmospheric sciences. ■

LAS professors awarded NEH Fellowships



Two University of Illinois Urbana-Champaign professors—**Eduardo Ledesma** and **Bobby Smith II**—have been awarded National Endowment for the Humanities Fellowships. Ledesma is a professor of Spanish and Portuguese and Smith is a professor of African American studies. The NEH awarded \$32.8 million in grants for 213 humanities projects across the nation. The fellowship program supports advanced research in the humanities, and the recipients produce articles, books, digital materials, or other scholarly resources. ■

Eduardo Ledesma (left) and Bobby Smith II. (Photos provided.)

New study ranks LAS professors high in research influence

According to datasets published in PLOS Biology, 125 LAS professors rank among the top 100,000 most-cited researchers in the world since the mid-1990s. The dataset includes about 8 million researchers worldwide—active, retired, or deceased—who published at least five papers in their career. The late **Carl Woese**, names sake of the Carl R. Woese Institute for Genomic Biology, is the most-cited in LAS. ■



Burn Zone

STUDENT ESSAY

Editor's note: Andy Sima (BS, '21, Earth, society, and environment; BA, '21, creative writing) received the grand prize in the 2020 Janelle Joseph Environmental Writing Contest for this essay, originally published in Q Magazine. It has been edited slightly for length.

Life abounds on Earth, from the boiling acid pools of Yellowstone to the pressure-cooked fish of the deep-sea Mariana Trench. But in my experience, there's one type of place devoid of all life, one that humanity creates. Burn zones. Flowers still grow in Chernobyl. But in a burn zone, everything is gone. These zones are spreading as the planet heats up and humanity's influence spreads, tendrils-like, deeper into the wilderness. In the summer of 2019, I worked in New Mexico at a Boy Scout camp, Philmont Scout Ranch, in a place called Hunting Lodge, nestled in the pines near a manmade reservoir and about halfway up a river valley. On one side was a steep rockface leading up to a ridge, and on the other were more water-hewn gaps in the mountains. But just over the ridge behind my campsite was a burn zone: shell-shocked land left over from an out-of-control wildfire the previous summer. Years of fire suppression had built up a residual carpet of fallen wood and organic matter that fuels the worst sorts of blazes. An electrical box had shorted and sparks turned into flames that



exploded into a raging wildfire. It lit up the night sky for a week across thousands of acres, almost all of it owned by Philmont. According to eyewitnesses, the fire was hot enough to cause trees 20 feet from the flames to spontaneously combust. It scorched a space right through the middle of my summer camp and left nothing behind. Even the dirt turned sterile. We arrived at an eerie scene. Thousands of acres of land hung just north of us, out of sight behind the ridge. A corpse of earth, left behind by the fire, lay just on the other side of the cliff that had stopped the fire from reaching Hunting Lodge. The stone was too steep for the heat to consume its way across. That thin strip of projected rock marked a weird border: on one side stood a standard Southwestern alpine forest, tall trees and scrubby grasses; the other looked like death incarnate. Officially, Philmont staff and campers were never allowed to go into the burn zone. Any trespassing by unauthorized persons over that very clear line was grounds for expulsion. There were good reasons for this. Once the plant roots have been burned, the soil is loose, and every hill is only a rainstorm away from sliding away. Without tree cover, the sun beats down like a hammer on an anvil and a heat stroke becomes an ever more serious risk. The burned, blackened husks of trees can

"In a burn zone, nothing lives. The surrounding wilderness slowly creeps back into place, skin covering the wound, but healing takes years, even decades," writes Sima. (Photo courtesy of Storied).

fall at the slightest wind, as their supports are no more than char. And stepping on the fragile ground diminishes the already slow process of natural remediation.

This is what the western American wilderness will increasingly come to resemble after 2020, a year of pandemic, racial reckonings, hurricanes, and out-of-control blazes. While I have not experienced all-consuming fire like that near Philmont firsthand, the aftermath was more than enough to make me stop in horror at the spectacle of unforgiving destruction. If one fire in a relatively out-of-the-way area could do so much damage, who can fathom the destruction caused by *hundreds* of these fires year after year across the West?

At Philmont, my coworkers, now my friends, and I walked into the burn zone in defiance of the rules. We had to see what it was like, how dangerous it was. We hiked up over the ridge to see the specter that had haunted us all summer, and we stood on the cusp between life and death. The burn was a sandy beige and not much else. Gnarled stumps of trees, blackened to a crisp, dotted the landscape. Everything else had been blown away in the wind.

And it was the wind that I remember hearing most clearly. On our hike up to the ridge, we had been greeted by the odd bird call from the brush and an incessant thrum of insects, but on reaching the burn, it all stopped. Not a single whistle. Just the wind, sighing ghost-like through the dead trees. Behind us, in the transition between trees and burn, the underlying drone was of the hardier bugs that could survive between worlds. But the burn zone had an empty, melancholy feeling. I'd never heard the wind so clearly.

We walked a little bit farther into the burn, testing our luck. The once much-traveled path was now indistinguishable from the miles of rocky emptiness between us and the horizon. The edges of the trail crumbled away beneath our feet, falling down the gentle slope into the valley below. The larger rocks thumped against the tree husks as they fell. Everything was dead.

It was easy to imagine that it went on forever, that just over the next hill was more burned forest, that my friends and I had stepped back in time 2 billion years, before there was anything but rock and fire.

But a more apt analogy might be that I had stepped forward in time, if current trends continue. Millions of acres burned, burning, and destined to burn. Fire is natural, yes, and part of the reason things are so bad is because for generations the consensus among forest managers had been to suppress fire. But it's more than that. It's our planet's rising heat; incessant, unending, increasing heat. Maybe climate change will cause other places to become colder or wetter, but out west, it is

going to get much hotter. We've been smoking in a house without windows for 300 years.

My friends and I sat for an hour or so on that New Mexican ridge, talking of what our workload might look like for the next day, discussing our performance review, wondering when the next shipment of chocolate chip cookies would arrive. And we came up with new answers for when our campers asked about the burn. Usually, we guided them to the nearby forestry program that explained all about fire suppression and the difference between natural disturbance and unnatural extremes. As we talked, the energy of the sun blanketed us. Then the sun dipped behind the stone walls and we were in the cool shadow of the ridge. The burned valley below lay exposed to the wind and the dark.

We left, eventually. I felt much safer among the

green pines, the bark that smelled like butterscotch and vanilla, and the birds that sang as they flitted between the branches. It was a peaceful, lively world on the other side of the ridge compared to that desolate loneliness just above us. And being back in the trees made it easy to practice a type of willful ignorance. To just pretend the burn wasn't there.

More than a year later, in September 2020, I was lucky enough to participate in a prescribed burn for a prairie



Fire is nature's refiner — but has humanity unleashed a force that can't be controlled? Pictured: the Philmont Scout Ranch burn zone. (Photo by Andy Sima, courtesy of Storied).



plot in central Illinois. A friend of mine invited me along, and I was grateful for a different perspective on fire. Here fire was not a tool of destruction but of life, carefully managed to raze just the necessary zone and breathe new vigor into crowded grasses. But even in the context of fire as a useful, cleansing entity, its power was nearly unbearable.

I was given the opportunity to haul one of the water backpacks to keep the backburn under wraps. My responsibility was to stand by the edge of the flames and make sure nothing jumped the boundary. The flames were just a few inches high at a time, crawling along a dried-out, mowed-over road, but they were blindingly hot. I was sweating under my fire-retardant leggings and crying from the ash in my eyes. The smoke caused me to sneeze so many times my cloth virus mask became soggy. It was awful, and that was just the beginning of the burn.

I've heard of prairie flames reaching 30 feet in height, flying across grasses faster than you can run away. But as forceful as these Midwestern flames can be, what happens out to the west is much more intense. Entire trees ablaze, crowns of needles lit up to infinity, waves of heat intense enough to melt plastic and explode brick. The American West's burns are uncontrolled, chaotic, and destructive, the antonym to my controlled burn on the prairie. We're pumping the bellows of climate change ever stronger on these new flames. We're making more burn zones.

In a burn zone, nothing lives. The surrounding wilderness slowly creeps back into place, skin covering the wound, but healing takes years, even decades. The earth mends on a scale of generations, and the scar endures longer than humanity can even know.

At both Philmont and the Illinois prairie, I was grateful that I could leave the burn and go back to the regular world. But I wondered at the random chance of it. It was an accident of geology that had saved my small camp, and it was practical ecology that limited the spread of the prairie fire. I didn't realize it at the time, but Philmont's burn zone had scared me. A burn zone is no natural feature; it is devoid of life and growth, an alien space. Maybe prescribed burns are an antidote to that, a way to clear away the ground cover and channel our human need for control into something that won't blow up in our faces. But our grasp on such things is loose at best. Even prescribed fires are an exercise in limited control; managing fuel and planning for windspeed. Once a critical mass is reached, the fire itself is untouchable.

As the West Coast has gone up in smoke, it has become clear that, despite driving animals to extinction, despite converting the prairie and the tundra to agriculture, despite thinking that we are masters of this planet and everything on it, there are things we will never be able to control. There are things we are only able to try and guide. Do we pay attention to the warning signs? Take climate change as seriously as it needs to be taken? Or do we let it go and see what happens? Light a match and flick it into the grasses. Maybe it won't catch.

Perhaps that's our planet now. A lively space built atop a funeral pyre, waiting for any spark to ignite and devour it until nothing remains but the cold, ashy fingers of trees and shards of stone rising in the distance. Happenstance lights the spark, but humanity fuels the fire. ■

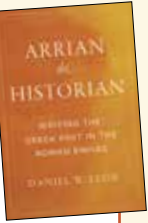


Sima's essay was prompted by a visit to the site of the 2019 Ute Park wildfire in New Mexico. (Photo courtesy of Storied).

Books from LAS

Land struggles, presidential photographs, and Gettysburg-inspired poetry were the subjects of books published recently by faculty members.

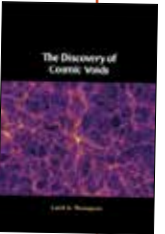
“Arrian the Historian: Writing the Greek Past in the Roman Empire,” by **Daniel Leon**, classics, examines the works of Arrian of Nicomedia to show how Roman Empire-era Greek historians responded to their sophistic peers' claims of authority and played a crucial role in theorizing the past at a time when knowledge of history was central to defining Greek cultural identity. (University of Texas Press)



“For Land and Liberty: Black Struggles in Rural Brazil,” by **Merle Bowen**, African American studies, is a comparative study of the history and contemporary circumstances concerning Brazil's quilombos (African-descent rural communities) and their inhabitants, the quilombolas. The book examines the disposition of quilombola claims to land as a site of contestation over citizenship and its meanings for Afro-descendants, as well as their connections to the broader fight against racism. (Cambridge University Press)



“The Discovery of Cosmic Voids,” by **Laird Thompson**, professor emeritus of astronomy, tells how the first 3D maps of galaxies were created. Using non-mathematical language, Thompson introduces the standard model of cosmology before explaining how and why ideas about cosmic voids evolved, referencing the original maps, reproduced within. (Cambridge University Press)



“Photographic Presidents: Making History from Daguerreotype to Digital,” by **Cara Finnegan**, communication, ventures from a newly discovered daguerreotype of John Quincy Adams to Barack Obama's selfies to tell the stories of how presidents have participated in the medium's transformative moments. As she shows, technological developments not only changed photography but introduced new visual values that influence how we judge an image. (University of Illinois Press)



“Animalia: An Anti-Imperial Bestiary for Our Times,” co-edited by **Antoinette Burton**, history and director of the Humanities Research Institute, analyzes 26 animals—domestic, feral, predatory, and mythical—whose relationship to imperial authorities and settler colonists reveals how the presumed racial supremacy of Europeans underwrote the history of Western imperialism. (Duke University Press)



“What Though the Field Be Lost,” by **Christopher Kempf**, English, uses poetry and the Civil War battlefield at Gettysburg to engage ongoing issues involving race, regional identity, and the ethics of memory. Kempf reveals the overlapping planes of historical past and public present, integrating archival material—language from monuments, soldiers' letters, eyewitness accounts of the battle—with reflection on present-day social and political unrest. (Louisiana State University Press)



“A German Barber-Surgeon in the Atlantic Slave Trade,” co-authored by **Craig Koslofsky**, history, documents the young German barber-surgeon Johann Peter Oettinger's journey across the Atlantic, his work as a surgeon, his role in the purchase and branding of enslaved Africans, and his experiences in France and the Netherlands. (Cambridge University Press)



“Unassailable Ideas: How Unwritten Rules and Social Media Shape Discourse in American Higher Education,” co-authored by **Illana Redstone**, sociology, explores and sheds new light on the interaction of social media with campus climate, offers an extensive set of case studies illustrating the ways in which academic discourse is constrained, and provides a constructive set of recommendations to move us forward and tangible steps for improving the climate for free inquiry at universities. (Oxford University Press)



“Deviant and Useful Citizens,” by **Mariselle Meléndez**, Spanish and Portuguese, explores the conditions of women and perceptions of the female body in the eighteenth century throughout the Viceroyalty of Peru. Meléndez introduces the reader to a female rebel, Micaela Bastidas, whose brutal punishment became a particularly harsh example of state response to women who challenged the system. (Vanderbilt University Press)



Alumna takes on leadership role with Girl Scouts

Karen P. Layng (BA, '84, international economics and French commercial studies) leads her own consulting firm and serves as the national president of the Girl Scouts of the United States of America. Layng says the skills she picked up during her undergraduate studies have helped her find success and pursue her passion.

Occupation: Strategic C-Suite executive, board member, arbitrator, mediator and president of M.A.I.T. Co. I am also an adjunct professor of ethics, alternative dispute resolution, and due diligence at Northwestern University's Engineering Masters in Design and Construction program. I am also the national president of the Girl Scouts of the United States of America.

Describe your career path since college graduation.

I took on every additional responsibility for leadership that the firm would allow: first as the chair of the summer associate program; next as hiring partner; then chair of the litigation department; member of the board of directors; chair of the compensation committee (as the first woman in that role); and served on a myriad of other committees. All the while, I formed and chaired the Construction Law Practice. Outside of the firm, I was very active in legal and other not-for-profit activities, including becoming the first woman president of the 7th Circuit Bar



Association in its 51-year history and being the room mother for each of my kids' classrooms, every year, and one of the Troop leaders for my daughter's Girl Scout Troop for 13 years.

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

Working and going to school, while playing in the university band, being in a sorority, and being an active member of intramural teams, helped me become extremely organized, and my time management skills are now exceptional.

How did your major prepare you for your career?

My majors (and my "cognate" in political science) still provide daily support in my work. I employ the statistical analysis I learned and the analytical thinking on a daily basis and credit my strategic business acumen and success from the exceptional education I received from the U of I.

Your proudest achievement?

Being married to the greatest person I have ever met and my best friend, Patrick Layng, for 31 years this last September and raising three exceptional children (Alex, Shannon, and Kane) together.

To read Karen's full interview and read other LAS@Work profiles, go to go.las.illinois.edu/LASatWork. ■

By Kayleigh Rahn

Sweet news for the BRAIN

Cocoa flavanols boost brain oxygenation, cognition in healthy adults

The brains of healthy adults recovered faster from a mild vascular challenge and performed better on complex tests if the participants consumed cocoa flavanols beforehand, researchers report in the journal *Scientific Reports*.

Previous studies have shown that eating foods rich in flavanols can benefit vascular function, but this is the first to find a positive effect on brain vascular function and cognitive performance in young healthy adults, according to research led by University of Illinois psychology professors **Monica Fabiani** and **Gabriele Gratton** and Catarina Rendeiro, a researcher in nutritional sciences at the University of Birmingham.

Flavanols are small molecules found in many fruits and vegetables—and cocoa—that are known to benefit vascular function. The team recruited 18 adult nonsmokers with no known brain, heart, vascular, or respiratory disease to consume cocoa, reasoning that any effects seen in this population would provide robust evidence that dietary flavanols can improve brain function in healthy people.

Through functional near-infrared spectroscopy, a technique that uses light to capture changes in blood flow to the brain, the team measured oxygenation in the frontal cortex, a brain region that plays a key role in planning,

regulating behavior, and decision-making. Researchers also challenged participants with complex tasks that required them to manage sometimes contradictory or competing demands.

Most of the participants had a stronger and faster brain oxygenation response after exposure to cocoa flavanols than they did at baseline or after consuming cocoa lacking flavanols, the researchers found. Participants also performed better on the most challenging cognitive tests, correctly solving problems 11 percent faster than they did at baseline or when they consumed cocoa with reduced flavanols. There was no measurable difference in performance on the easier tasks, however.

Four of the 18 study subjects had no meaningful differences in brain oxygenation response after consuming flavanols, nor did their performance on the tests improve. Researchers said this may indicate that those who are already quite fit have little room for improvement. Overall, however, the findings suggest that the improvements in vascular activity after exposure to flavanols are connected to the improvement in cognitive function. ■

By Diana Yates, Illinois News Bureau

Effort to curb COVID-19



leads to a deeper understanding of communities and the disease

Workers at the Rantoul Foods pork-processing plant were among the first outbreak clusters when COVID-19 emerged in central Illinois in spring 2020. When researchers from the University of Illinois found no traces of the virus in air and surface samples at the plant, however, it raised questions about how the disease was being spread.

The university began working with clinicians and community researchers to provide pop-up testing clinics in Rantoul. An interdisciplinary team of LAS professors also began investigating the structural, economic, and sociocultural factors that impact transmission and response to the disease among essential agricultural laborers in rural communities.

“We wanted to understand more broadly how interaction in the community works, how people think of the working community, how people think of the virus, and how they think of protecting themselves or what risks they have to take given their need to work in an essential industry,” said **Ellen Moodie**, professor of anthropology who is an expert on Central America, human rights, and ethnographic research.

Rantoul residents, in addition to being tested, were surveyed about behaviors and about living and working conditions associated with higher rates of infectious disease. “The problem is, in this community and others there

are many essential workers but not universal access to COVID-19 testing resources or response,” said **Rachel Whitaker**, professor of microbiology. “There’s generally not a lot of infrastructure for reaching these groups.”

The research may shed light on disparities in COVID-19 infection rates among various demographic groups, said **Jessica Brinkworth**, professor of anthropology. In addition to organizing the testing clinics, Brinkworth is researching the roles of social stress and life experiences on immune function and COVID-19 transmission and severity among Rantoul workers.

Added **Korinta Maldonado**, professor of anthropology and American Indian studies: “These groups deserve not only equal access to testing and health care but also to knowledge about virus transmission. By producing the research knowledge collaboratively and reporting the findings back to these communities, we can find better, smarter mitigation strategies.”

Whitaker called the research project “incredibly complex,” adding that the research has come together in “kind of an amazing and beautiful way.”

“We’re still working to define that and integrate the pieces,” Whitaker said. “Microbiology and ethnography are not usually in the same room.” ■

By Sharita Forrest, Illinois News Bureau, and Kimberly Belser

Professor uses new methods of analyzing COVID-19 death toll in South America

People age 40 and under in economically depressed municipalities in the Greater Santiago, Chile, metropolitan area were three times more likely to die as a result of COVID-19 than their counterparts in wealthier areas, U of I researchers report in the journal *Science*. People ages 41-80 in low socioeconomic-status municipalities also suffered more from the pandemic than their peers in more affluent areas.

The study used new methods to analyze COVID-19 death counts, reporting cases, testing rates, and delays in testing results across location, time, and age group. The results reveal striking disparities between high and low socioeconomic-status municipalities, and also help explain the factors that contribute to differences in COVID-19-related infections and mortality in these regions, said **Pamela Martinez**, professor of microbiology and statistics who led the research with Gonzalo Mena, a postdoctoral fellow at the University of Oxford.

Greater Santiago is composed of 34 municipalities and is home to nearly 7 million people. The researchers used anonymized mobile phone data available through the Facebook Data for Good initiative to assess residents’ mobility during the pandemic.

“People living in municipalities with low socioeconomic status did not reduce their mobility during lockdowns as much as those in more affluent municipalities,” the researchers wrote. “This supports the hypothesis that people in poorer regions cannot afford to stay at home during lockdowns.”

Access to COVID-19 testing and health care services in lower-income communities also appear to have contributed to the observed differences in health outcomes, the researchers report.

In the early weeks of the pandemic, COVID-19 testing was more available

Santiago de Chile, Chile



Pamela Martinez

to people in the affluent parts of the metropolitan area than in the poorer locations, the researchers found. People in less affluent regions also appear to have waited longer for their test results.

“Because public health authorities plan their response based on the number of reported infections in a given area, this led to a poorer health care response in lower income areas than was needed,” Martinez said. “This likely contributed to higher death counts in those areas.” ■

By Diana Yates, Illinois News Bureau

Fire, bravery, and protest

The spring of 1970 was a tumultuous time. With American forces at war in Vietnam, anti-war protests were breaking out on campuses across the nation, including the University of Illinois, where the National Guard was summoned to quell some of the angriest protests campus had ever seen. Several disturbances occurred around—and in—Altgeld Hall.

On the evening of March 1, 1970, Linda Rogers (then Chapek) (BS, '69, mathematics; MLS, '70) was working as a librarian in the Altgeld Library. At around 10 p.m., Frank Povse (BS, '70, electrical engineering and computer science), who just wanted a quiet place to study, approached Rogers to say that there were bottles of gasoline in a nearby classroom. What they did during the next few moments earned Rogers and Povse letters of commendation from the university.

"We found two clear bottles filled with a pink liquid sitting on top of a desk," Rogers recalled. "There were lit cigarettes upright on top of the bottles. Our instincts

blouse and broomstick skirt, began to slowly inch her way toward the exit. Immediately I became aware of confusion in the hallway. The professor continued her lecture, raising her voice to overcome the increasing noise. Suddenly the confusion reached our room. Shadowy figures pushed and shoved our door, attempting to disrupt the class. Our professor stood her ground. With her full weight against the door, she managed to deflect the rioters' intentions."

The professor told the class that universities should be the last places of disruption during turbulent times. For Carter, a first-generation college student, the professor's actions resonated deeply.

"I graduated a few years later with more than a degree in math and computer science. I gained a breadth of experiences that helped me become a better thinker and analyzer of my surroundings," Carter said. "I'm grateful to the wisdom and courage of that professor who loved and appreciated higher learning, and who left an indelible mark on one young student."

Editor's note: See the full account by Rogers and Carter at go.las.illinois.edu/AltgeldProtest

engaged a year after graduation and have been happily married for 34 years."

Lifelong friendships were also born there. Donna Davis (BS, '71, teaching of mathematics), recalls taking Math 370 in the fall of 1970, with instructor Jim Anderson. This was when women were a lot less frequent in the field of mathematics. There was just one other woman in the class that semester—and Donna has been friends with her for the past 50 years.

Finally, love didn't just bloom in Altgeld Hall—it grew. Sarah Allen (BS, '18, statistics) recalled one day when her fiancé, Zack, took her on a special date of their memories

to lay a foundation for their careers. The lessons have lasted for lifetimes.

Steve Erlebacher (BS, '88, mathematics) recalls taking a combinatorics course from the late Ken Appel, who, along with Wolfgang Haken (now a professor emeritus at U of I) proved the four-color theorem, which states that no more than four colors are required to color the regions of the map so that no two adjacent regions have the same color.

"It was a wonderful class, and having it in Altgeld Hall was special as the post office there used a cancellation stamp that read 'Four colors suffice' as an homage to Appel and Haken," Erlebacher recalled.

John Rooney (BS, '53, mathematics) recalled working as a computer programmer at Altgeld Hall, where he helped program the Illinois Automatic Computer (ILLIAC), the first computer built and owned by a U.S. educational institution, and the predecessor of the first supercomputer. He went on to program at Argonne National Laboratory and Illinois Institute of Technology before earning a Harvard law degree in 1958.

Neal R. Wagner (MA, '64; PhD, '70, mathematics)

Memories of Altgeld Hall



What is it about Altgeld Hall that endures so long in the imagination?

We asked, and people who've spent time there replied: Love, friendship, learning, fiery protests, mysterious footsteps, and, of course, the ringing of the chimes. Read on for memories of this iconic intersection of mathematics and music.

made us go in and pull the cigarettes off. Something dropped into one of the bottles and fizzled a bit. We hurried out of there and called the police. Since we had 'disarmed' the Molotov cocktails, nothing exploded. We learned that the pink liquid was ethyl gasoline."

Rogers said that she suffered a bit of anxiety after the incident. She was mostly satisfied, however, to have spared Altgeld Hall from damage.

Sandy Carter (BS, '73, mathematics and computer science) recalled one harrowing day during the same semester. She had class in Altgeld Hall, and she was relieved when she navigated through a crowd of protesters to reach what she assumed was the solace of a classroom. Then protesters entered the building.

"Something odd caught my attention," Carter recalled. "The professor, a larger middle-aged woman in a cotton

Love, friendship, and more love

Altgeld Hall's serious, castle-like appearance and interior were by design. Planners wanted the building to represent solid devotion to education and show that the "spirit of the mighty past was brooding here," according to architect Newton Wells. We don't know if they knew that, with its location and musical inclinations, Altgeld Hall would also become a romantic hotspot.

Caroline Tonkin Zalatoris (BS, '83, finance) recalled that during her sophomore year, in calculus class, one boy kept asking her for help. She even noticed him peering over her shoulder during tests. Despite her outrage, their relationship deepened.

"He started driving me home after class since he had a car—pretty unusual at the time," she recalled. "One thing led to another and we began dating each other. We got

on campus together. They ended at the Alma Mater, where, at 2:53 p.m., the Altgeld Chimes began playing Elvis Presley's "Can't help falling in love."

"He got down on one knee, and asked me to marry him while the Alma cam live-streamed to our parents at home," Allen recalled. "A group of our friends were watching from across the street and ran over to congratulate us."

Want another Altgeld love story? Read "First came calc, then came marriage," about the marriage of Nathan and Betsy Alderman at go.las.illinois.edu/AltgeldLove

Lessons for a lifetime

Altgeld Hall is an academic crossroads, with students from virtually every college on campus taking class there

recalled how, in 1993, he finally returned to campus to present a paper on chaos theory at a conference.

"This was the only time I ever got back to the school. I also got to see my advisor, M.E. Hamstrom," Wagner recalled. "When I walked through the main door into Altgeld Hall, I felt completely at home. After all I may have gone through that door a thousand times."

Some of Altgeld Hall's academic lessons reached deeper than mathematics.

"As an aspiring architectural student in the fall of 1963, I had an advanced math class at Altgeld," recalled Jim Waddell (BA, '76, history). "It was a five credit hour class and helped me understand that I was better suited to major in history."

(continued on page 18)

Mystery and music

When you bring together mathematics, music, and everything else that is Altgeld Hall, sometimes you get a vivid memory that doesn't fit any category. At times it's just about, in the words of Joseph Santangelo (BS, '54, chemical engineering), a beautiful, snowy night.

"I was walking from the chemical engineering building, where I was doing my research, to Newman Hall," he recalled, of that walk home some 60 years ago. "I was walking across the Quad with no one around except the lights, and the Altgeld Chimes began to ring. It was such a beautiful scene that I will never forget."

Ronald Kamp (BS, '56; MS, '59, mechanical engineering) delivered The Daily Illini. He would get to the basement of Illini Hall, where the print presses were located, at about 4:30 a.m. It was dark at that hour, but on Saturday mornings there would be a light in one of the windows of Altgeld Hall, and the sound of bagpipes could be heard. By the time Kamp got on his bike to deliver the papers at 6 a.m., the light was out.

"Altgeld Hall may be known for its chimes, but in the early morning hours of Saturdays in the late 1950s, the music coming from Altgeld Hall was that created by bagpipes," Kamp recalled. "Does anyone know who that bagpipe musician was?"

David Carroll (BS, '96, music education) played the chimes from 1993 to 1996, and on Halloween he would toll the chimes for a 13th time at midnight. "Alas," he recalled, "I don't know if anyone ever noticed."

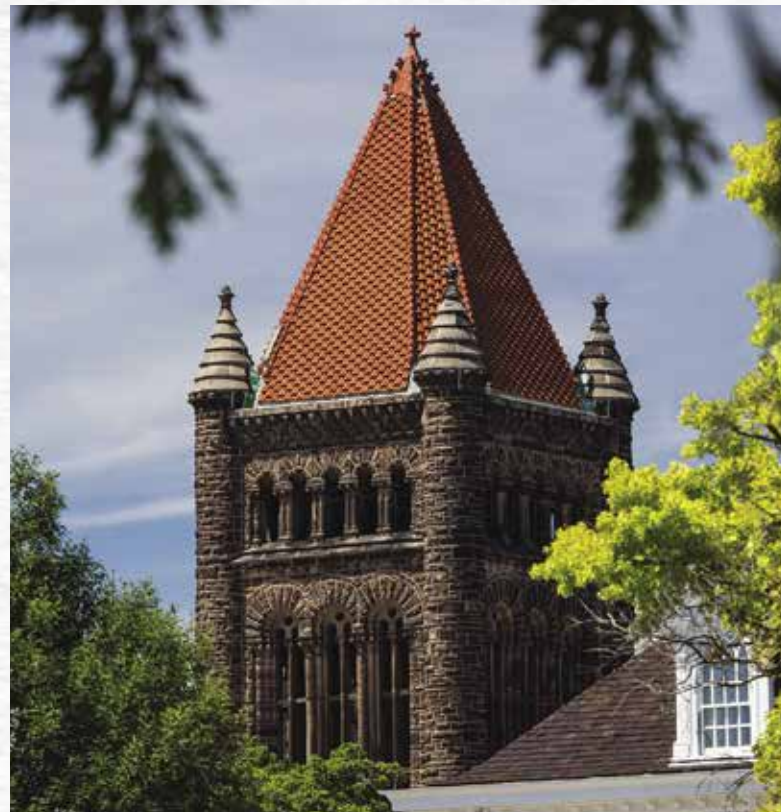
And yes, there are ghost stories. Scott Croft, a building service worker, recounted unexplained incidents during the 11:30 p.m. to 7 a.m. shift in 2012.

"Two nights in a row I heard high heel shoes in the hallway headed into the auditorium," he said. "Myself and another building service worker were on the stairs near the west entry and heard someone whistling. We walked around and saw no one."

We'll leave you with a memory from Sandra Price (BS, '57, teaching of mathematics; MA, '62, mathematics), who was an undergraduate during Altgeld Hall's last significant renovation, in 1956. That was when the Department of Mathematics moved into the building. She recalled one particular class as the head of the department lectured to them above the sound of heavy construction.

They stayed through the noise and took notes diligently. When class was done they went to leave, but they opened the door and the hallway was gone. Instead they walked out to grass and brilliant sunlight. ■

By Dave Evensen



Learn more about the Altgeld and Illini Hall Project

The University of Illinois is in the planning stages of a \$192 million project to improve and modernize spaces in data science and other mathematical sciences. It will include restoring and renovating Altgeld Hall and replacing Illini Hall with a new building. Find out more at the project website.

go.las.illinois.edu/Altgeld-illini

LAS Experts



WHEN DANGER BECOMES THE NORM



GHASSAN MOUSSAWI, professor of sociology and gender and women's studies, has released a new book, "Disruptive Situations: Fractal Orientalism and Queer Strategies in Beirut" (Temple University Press, 2020), which examines the lives of LGBTQ residents in Beirut for whom crisis and

disorder is common. What he's learned, he said, holds true in many communities where fear and uncertainty are normal parts of life.

WHAT IS YOUR AREA OF EXPERTISE?

My research is situated in the fields of transnational gender and sexuality studies, queer theory, queer of color critique, and postcolonial feminisms. I am interested in questions around the experiences of marginalization and inequalities among already marginalized groups. I interrogate categories of normativity and what counts as normative lives, everyday life precarity and violence and how people normalize such experiences. Based on years of ethnographic research, interviews with LGBTQ Beirutis, and discourse analysis, I draw attention to how disruptions and violence become familiar, and call into question what constitutes "ordinary" and "mundane" aspects of queer lives.

WHAT ARE YOU WORKING ON NOW?

I am now moving on to studying affect, particularly

bad feelings and transnational (im)mobility. This project builds on migration studies and scholarship on affect by examining the experiences of LGBTQ asylum seekers from the Arab World to the U.S., both in the process of seeking asylum and resettlement, and their shifting understandings of home, region, temporality, and experiences with LGBTQ and Arab diasporic communities.

WHAT IMPACT WILL YOUR WORK HAVE ON YOUR FIELD AND THE COMMUNITY?

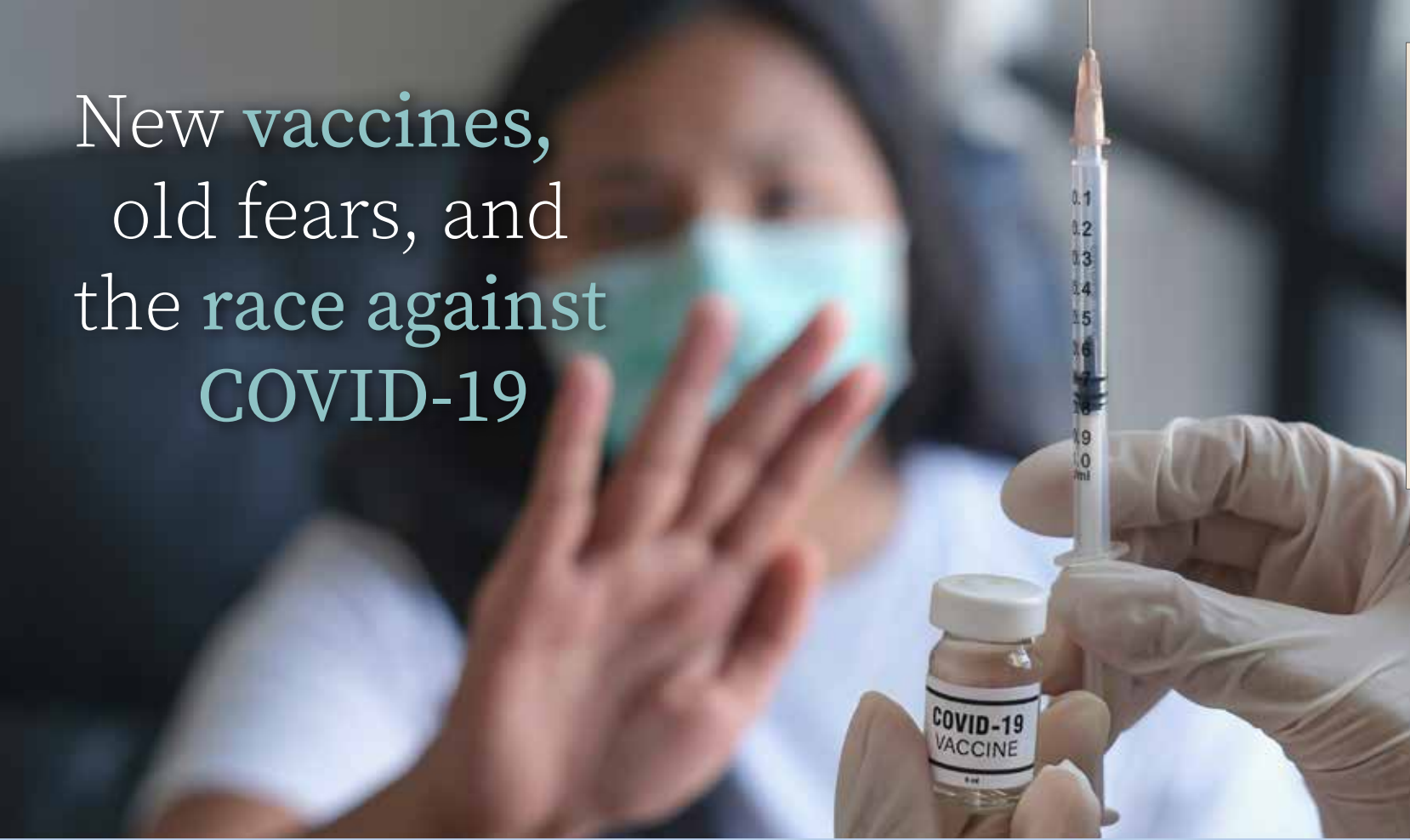
I would hope that my work would have the following impacts: moving away from treating LGBTQ communities as homogenous, thinking of the U.S. as a transnational site, using queer theory beyond studies of gender and sexuality, and rethinking practices of knowledge production, through attention to bad feelings and their productive nature.

WHAT DO YOU ENJOY MOST ABOUT TEACHING?

What brings the most joy is seeing how students become so engaged and how they organically build a feminist and supportive community for collaborative learning. I also find inspiration in seeing how students start thinking of themselves as agents of social change, and how they apply what they learn in classrooms in their everyday lives. ■

By Kimberly Belser

New vaccines, old fears, and the race against COVID-19



(Stock image.)

This past May, Abbigail Bugenske became one of the country's latest million-dollar winners. But she didn't get it from a scratch-off; she got it for taking a gamble on hope. Bugenske was the first winner in Ohio's "Vaxx-a-Million" sweepstakes, a five-week contest designed to get more state residents to take a COVID-19 vaccine shot. From cash lotteries to free beer and amusement park tickets, the unvaccinated have been offered an ever-growing raft of incentives in a national push to reach herd immunity. But the question still remains — will new incentives be enough to overcome resistance that's as old as vaccines themselves?

When British physician Edward Jenner first pioneered a vaccine for smallpox in 1796, there were those who voiced concerns. In a recent guest essay for *The New York Times*, historian David Motadel said clerics argued that Jenner's methods, which used exposure to the much milder cowpox virus to inoculate recipients against smallpox, contaminated the human body with animal matter and were therefore "unchristian." There were also fears that children who received the treatment could develop distinctly bovine features.

Fears aside, the vaccinations worked, leading countries like Great Britain to pass laws making them compulsory for children. That move, however, led to another fear that echoes in today's battle over vaccine passports — that an obtrusive government was overstepping its bounds.

Those who opposed vaccines had reason to be concerned. Vaccinations were much cruder than they

are today and could lead to secondary infections. Some vaccinated children even died of blood poisoning, causing many to argue that compulsory vaccinations were a violation of their basic autonomy.

Protestors marched in the streets, carrying children's coffins and effigies of Jenner. They also organized—creating leagues such as the Anti-Vaccination Society of America that lasted clear into the 1910s. Gradually, however, vaccines gained more acceptance, aided by the success of the polio vaccine, which eliminated a major health threat in the United States.

Then came Andrew Wakefield.

In 1998, the British physician and 12 coauthors published a paper in the *Lancet*, linking the measles-mumps-rubella vaccine with autism and colitis in children. Eventually, the discredited paper was retracted, and its author stripped of his medical license — but the damage was already done. Faith in vaccines was shaken. And the fears surrounding them would eventually move from distinguished medical journals to social media.

With the COVID-19 vaccines, those old fears took on a whole new life. There were stories that Bill Gates was using the shots to microchip vaccine recipients and that the mRNA in the shots could alter human DNA — much like the bovine fears of the past. The fears have been addressed or debunked by experts, but they live on, adapting and mutating much like the virus itself.

In 2020, **Dolores Albarracín**, a former professor of psychology, business, and medicine at U of I, co-authored



Color etching by James Gillray, 1803, depicting Edward Jenner vaccinating patients who subsequently develop features of cows. (Public domain image.)

a study exploring social media's influences on anti-vaccine sentiment during the 2018-2019 flu season. "When we began, there were hints that people who oppose vaccines hang out in certain online groups," said Albarracín. "But the two phenomena of opposing vaccines and certain other activity were observed at the same time, so we didn't know which came first. Do people who oppose vaccines seek groups that oppose vaccination, or do people who join these groups by accident later learn to oppose vaccines?"

The study, which observed the tweets of more than 3,000 Americans, included surveys that questioned participants about their opinion of vaccines, their vaccination history and whether they discussed vaccinations with others. More than 115,000 tweets were also linked to the counties they came from so that researchers could get a better sense of what vaccine conversations were prevalent in the communities where they originated.

The study found that when fraud, "Big Pharma," and children were part of Twitter discussions in November-February, there were fewer vaccinations in February-March and April-May. However, this association was absent when participants discussed vaccines with their family, friends, and physicians, indicating that real-world conversation can offset misinformation disseminated online.

"Most COVID vaccination fears are related to misinformation and conspiracy beliefs," said Albarracín. Of course, they're not all based on urban legend. When six recipients of the Johnson & Johnson vaccine developed a blood clotting disorder in early 2021, the Food and Drug Administration and the Centers for Disease Control and Prevention temporarily halted distribution to investigate. The drug was eventually cleared again for public use, however the mere fact that it had been investigated was enough to raise concerns.



A rally of the Anti-Vaccination League of Canada in 1919. (City of Toronto Archives, Fonds 1244, Item 2517.)

"The companies and the authorities did exactly what they're supposed to do, which is stop the trial and investigate the incidents," said **Jessica Brinkworth**, former biologic drug policy analyst and current professor of anthropology, who studies the evolution of human immune function. But in showing caution, they sowed it, prompting some to consider the drug unsafe.

"Clotting is a really important anti-microbial mechanism, not just because it keeps stuff out, but because it captures stuff in circulation," explained Brinkworth. "If you're infected with anything, you're clotting at some scale, more in severe infections. So severe COVID-19 is associated with widespread clotting. Systemic clotting can be triggered by many other non-infectious conditions. In terms of whether it's associated with the vaccine, so far, all of those investigations have suggested that it's not the vaccine that's in play or has even necessarily triggered it."

Some vaccine fears are rooted less in the shots and more in the systems behind them, added Brinkworth. Women often report incomplete medical exams, and undocumented workers fear that a trip to the clinic could lead to deportation. Studies have shown that in emergency departments and intensive care units African-Americans often receive pain medication and other medical aid later than their white counterparts. "Work in this area suggests a lot of these failures probably stem from unintentional or implicit bias, or misunderstandings about human biology and race," said Brinkworth, "but the interaction with medical institutions regardless is negative and it creates

disparities in patient well-being and survival."

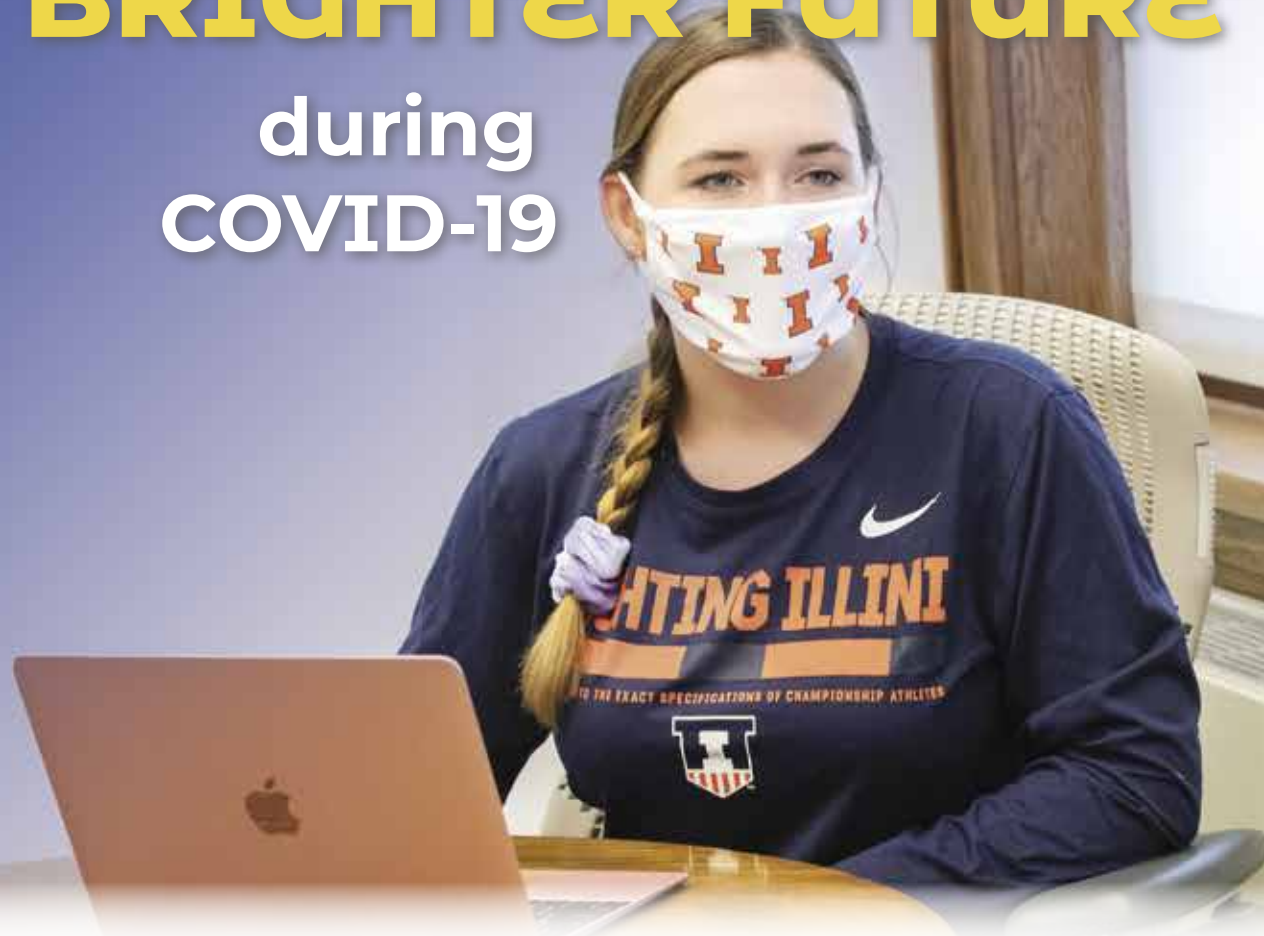
Perhaps the lure of million-dollar jackpots will be enough to convince some to overcome their hesitancy. Ultimately, the real gamble for those yet to get vaccinated is that the virus could continue to mutate, becoming more virulent and developing mechanisms that allow it to escape the vaccine. It's that type of scenario that has led the World Health Organization to declare vaccine hesitancy one of the ten threats to global health.

The best solution, however, could be far less expensive than lotteries and giveaways. "Honestly, my experience with people who question vaccines is that it's a long, on-going conversation," said Brinkworth. "If you're kind and you're understanding, then you stand a chance of helping that person better understand the biological reality, assess that against their own fears, and see if that's the right decision for them." And the biological reality, she added, is that the benefits of the vaccine far outweigh the known risk of a virus that's killed millions around the globe. ■

By John Turner

Charting a **BRIGHTER FUTURE**

during
COVID-19



Academic advisor **Dawn McNulty** knows how exploring interests and potential career paths can be challenging for students even during normal times. During the pandemic, the challenge can loom even larger. That's why she considers the College of Liberal Arts & Sciences' **Life + Career Design in a Pandemic program** to be so important.

This year, the Life + Career Design in a Pandemic program has offered students an opportunity to explore career options with others who have similar goals. Through meetings and other interactions, the students learn and encourage one another while being mentored by an advisor from within the College of LAS.

Plans are in place for the program to grow in the fall, with new experiences in the works and alumni recruited to help with the effort, according to **Barbara Hancin**, associate dean for student academic affairs.

"One of the great things about being at U of I is that you have all the resources of this big research institution, but

it's so easy to get lost—and it's even easier right now in the pandemic to get lost," said McNulty, an advisor in the Department of Sociology who has helped advise students in the program. "And so, by joining one of these groups in LAS and Life + Career Design in a Pandemic, students had a touch point and somebody who could get them those resources."

To join, students filled out an online form that specified their semester goals in terms of coping with challenges posed by the pandemic, exploring interests, or preparing for job search. Then, students were assigned to a Life + Career Design community based on their responses.

According to **Kirstin Wilcox**, a group coach and director of the Humanities Professional Resource Center, about 25 students participated in groups in the fall semester and 20 students participated in the spring semester. ■

By Samantha Boyle

Sanctuary for the written word

The pandemic marked a dramatic slowdown in operations for many organizations, but adaptability and an effective online presence helped the Writers Workshop, which has consulted writers on campus for more than 30 years, continue its services virtually unabated during COVID-19.

Despite the cessation of in-person activities on campus in March 2020, the 2019-2020 academic year was one the busiest for the Writers Workshop, as it tallied up more than 7,600 consultations. For 2020-21, during which its services were entirely online, the Writers Workshop increased consultations by 0.5 percent over 2019-2020.

The Writers Workshop established online consulting services in 2017 to cater toward students, staff, and faculty who may not be physically on campus in the first place. Little did they know in 2017 how important that expansion would be in 2020-21.

"We did a study (before the pandemic) to compare students' experiences online and in-person face-to-face sessions when we first started our online tutoring, which was really useful for pre-COVID-19 because we had a good sense of what students felt worked and was valuable in the online sessions," said director **Carolyn Wisniewski**.

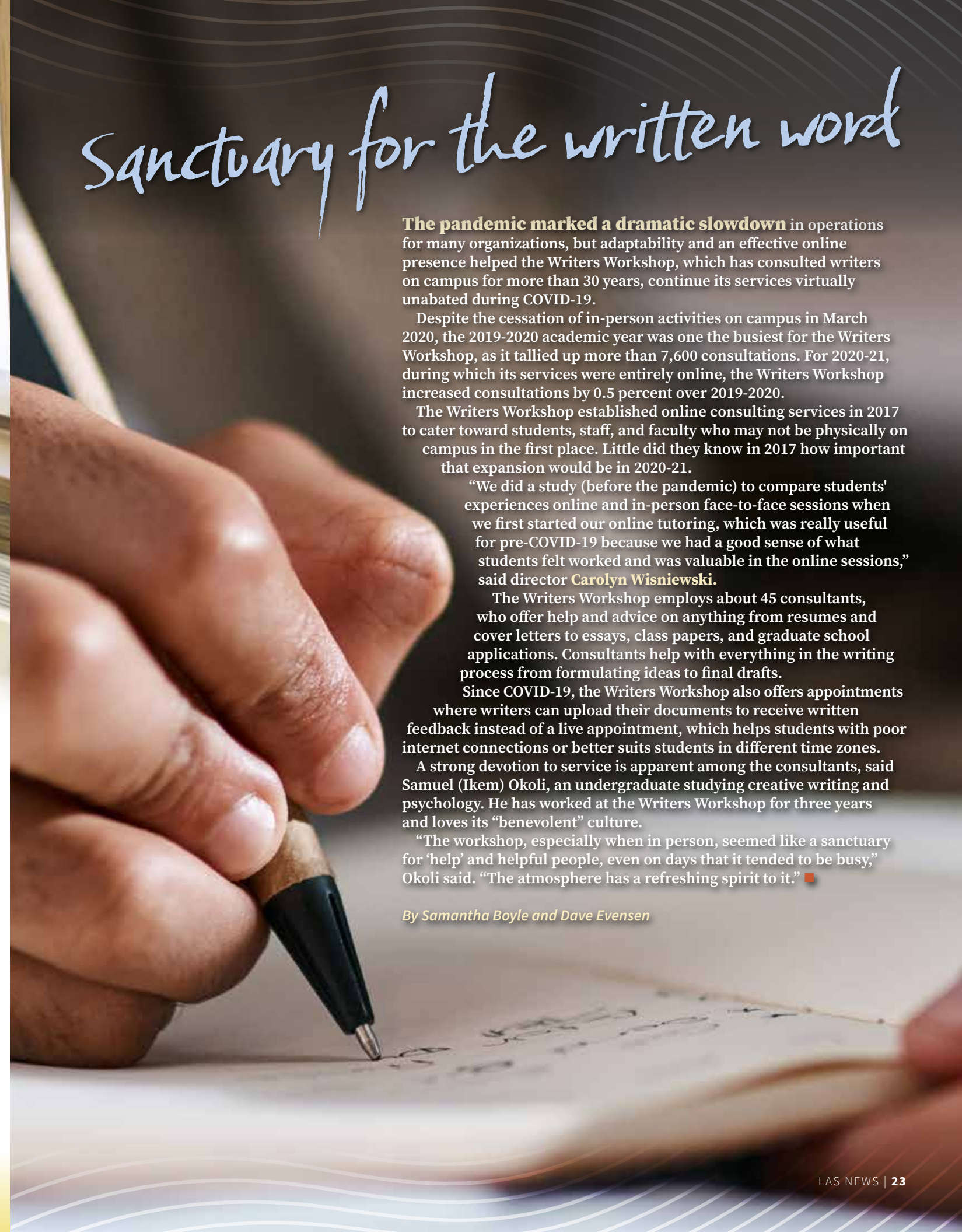
The Writers Workshop employs about 45 consultants, who offer help and advice on anything from resumes and cover letters to essays, class papers, and graduate school applications. Consultants help with everything in the writing process from formulating ideas to final drafts.

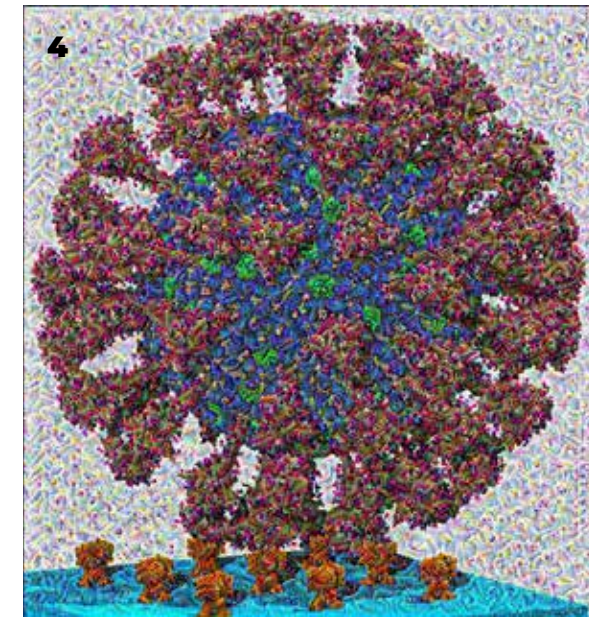
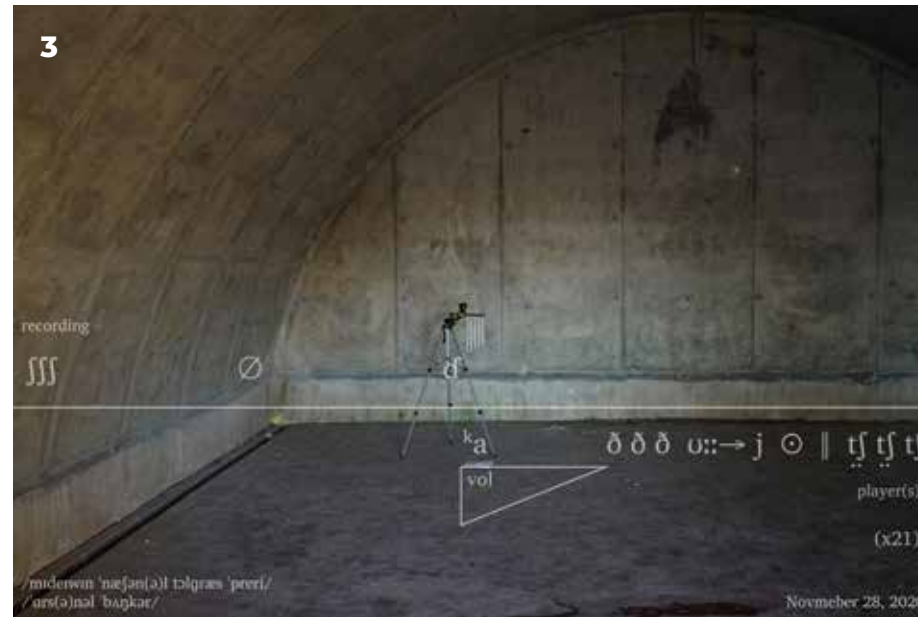
Since COVID-19, the Writers Workshop also offers appointments where writers can upload their documents to receive written feedback instead of a live appointment, which helps students with poor internet connections or better suits students in different time zones.

A strong devotion to service is apparent among the consultants, said Samuel (Ikem) Okoli, an undergraduate studying creative writing and psychology. He has worked at the Writers Workshop for three years and loves its "benevolent" culture.

"The workshop, especially when in person, seemed like a sanctuary for 'help' and helpful people, even on days that it tended to be busy," Okoli said. "The atmosphere has a refreshing spirit to it." ■

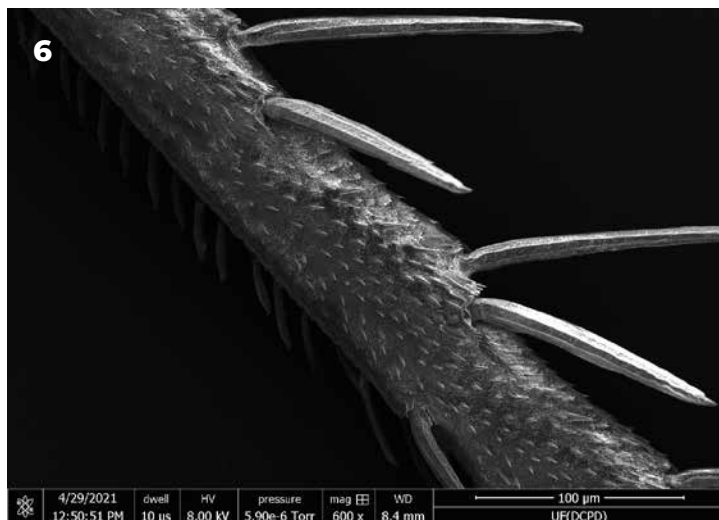
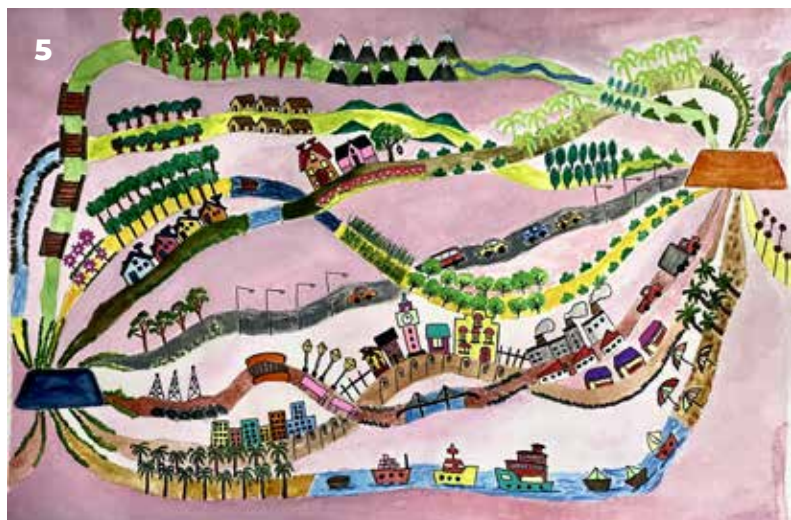
By Samantha Boyle and Dave Evensen





Images of research

Campus research and scholarship can produce some pretty compelling images. Check out some recent award-winners from the College of LAS.



1: **“Fracas at the Nest”**
by Nick Antonson
evolution, ecology,
and behavior

Three prothonotary warblers nestlings and a brown-headed cowbird nestling calling for food in a nest box at one of Nick Antonson’s study sites in southern Illinois. Antonson is researching how brood parasitic young survive when they are raised in highly variable rearing conditions. (First place, Graduate College Image of Research contest.)

2: **“Differences in Perspective”**
by Isabella Rose Raynal
political science

The image relates to Isabella Rose Raynal’s research on the terminology used to describe unauthorized immigrants and the effects of those terms. One of the goals of her research is to help determine the opposing thought processes of political parties through their use of terminology. To reflect different perceptions of the same population, Raynal uses three different filters and edits. The image of a path symbolizes the route to get to the U.S. (Honorable mention, Graduate College Image of Research contest.)

3: **“/mɪdɪwɪnˈnæʃən(ə)l təlgræsˈprɛrɪ/ ˈɑrs(ə)nəl ˈbʌŋkər/”**
(Midewin National Tallgrass Prairie, Arsenal Bunker)
by Adam Farcus
linguistics

Adam Farcus describes this image as a visual documentation of a musical performance of theirs and a colleague’s in a decommissioned U.S. Army arsenal bunker. The photo depicts the mixing of phonetic and musical systems. Listen to a recording at go.las.illinois.edu/farcus (Second place, Graduate College Image of Research contest.)

4: **SARS-CoV-2 virus particle**
by Hyun Park
Center for Biophysics and Quantitative Biology

Hyun Park, part of professor Emad Tajkhorshid’s virus research group, helped assemble a full-atom SARS-CoV-2 virus particle using Visual Molecular Dynamics software. “Just as Argus, Greek mythology’s all-seeing giant, watches vigilantly for enemies, the SARS-CoV-2 virus is a scary entity, endlessly seeking opportunities to attack humans with its many spike proteins that can sense human ACE2 receptors,” Park said. (Winner, special COVID-19 research category, Beckman Institute Research Image Contest.)

5: **“Quantum Dynamics Via Path Integrals: Which Path Will the Molecule Choose?”**
by Reshmi Dani
chemistry

The image combines Reshmi Dani’s passions for painting and quantum mechanics. She studies how quantum systems evolve in time. “It is amusing how science mirrors life, where often we are faced with so many paths to choose from—the difference being that we can only choose one path while the atom chooses all,” Dani said. (Honorable mention, Graduate College Image of Research contest.)

6: **The tibia of the Emocasca leafhopper**
by Shreyas Rajagopalan
integrative biology honors and clinical psychology

This scanning electron microscope image of the tibia of the Emocasca leafhopper allows for a better understanding of its topography. The small spikes may represent sensory receptors that help the leafhopper detect vibrations. (First place, undergraduate student category, Beckman Institute Research Image Contest.)

The power of a name



The debate over how to name the University of Illinois Urbana - Champaign was long, contentious, and went to the soul of campus.

The University of Illinois is currently updating and evaluating its brand identity standards—the colors, logos, words, and other ways that the university presents itself. It's a necessary process to stay in step with evolving times, and never was the subject more contentious than in the late 19th and early 20th centuries when campus debated the most prominent identifier of all: the university name itself.

The University of Illinois was founded in 1867 as Illinois Industrial University, in line with other land grant universities formed by the 1862 Morrill Act. Over the next few years, however, dissatisfaction arose over the word “industrial,” as the term suggested a trade-oriented education, or a reformatory or charitable institution in which compulsory manual labor figured prominently, according to late campus historian Winton Solberg.

Students in 1881 voted 250-20 to switch the name to the University of Illinois. A column in the Feb. 2, 1881, *Daily Illini*, by W.A. Mansfield, who went on to earn a degree in literature and arts (a predecessor to the liberal arts and sciences), said that “industrial” was misleading, with the school regularly receiving applications from people looking for homes for at-risk youth. It cited one such application to the regent’s office that read, in part, “I have two boys, nine and eleven years old, and four girls from two to nine years old. Buried my wife on the 1st of May, last. Health is poor. I have no means of support for them, and I want to get them where they will be cared for together.”

Wrote Mansfield: “I often wonder why the school was not christened as an orphans home in the first place. This is the Industrial University, but it is not an industrial school.”

Thus the university name was changed to the University of Illinois in 1885, but the controversies over the name had only just begun. As more departments and programs emerged, campus began generating more print materials and correspondence than ever before. Urbana was most often listed as the university’s official location, but over time the Champaign Chamber of Commerce and other citizens of Champaign grew more insistent that their city should be included in the official campus address. Their opponents, meanwhile, argued for the address to remain Urbana as most campus buildings were located within Urbana city limits.

According to a research project by the University of Illinois Archives, the issue finally came before the Board of Trustees and President Edmund James in 1906. Notes from that meeting aren’t available, but attendees apparently struck a compromise as official correspondence from the president’s office and trustees reports soon bore the name of both cities. By 1916, “Urbana-Champaign” had become a common way to distinguish the flagship campus from the university’s medical campus in Chicago.

The use of Urbana-Champaign, however, was not formalized for decades. Many official documents from campus, including from units such as the College of Liberal Arts & Sciences, listed only Urbana as the location for the University of Illinois through at least the 1950s. To complicate matters, campus references—official and unofficial—occasionally listed the location as “Champaign-Urbana” instead of “Urbana-Champaign.” For example, the location of the University of Illinois Foundation, formed in 1935, was listed as the “University of Illinois, Champaign-Urbana, Ill.,” in its constitution. The trust agreement and lease for the Illini Union

Building read that the agreement was created “to provide the Illini Union Building for the students of the University on the Champaign-Urbana campus,” according to the archives, and, during the construction of Willard Airport in the 1940s, the Trustees referred to “the University of Illinois Airport at Champaign-Urbana.”

Student references to campus often (not surprisingly) deviated from the official line. Through at least the 1930s, students broadcasting on WILL, the campus radio station, reported their location as the University of Illinois at Champaign-Urbana. The still-lingering campus nickname “Shampoo-Banana,” appearing as early as the 1970s and perhaps sooner than that, spun off the practice of listing Champaign before Urbana. And the debate over which city comes first in the name never really died. As one Reddit post from 2016 read, “It’s Champaign-Urbana to locals.” Retorted another, “Urbana and West Urbana.”

University growth solidified adoption of Urbana-Champaign as the official designation, however. As the University of Illinois’ Chicago campus grew in the 1960s, its official name became the University of Illinois at Chicago Circle. This created more need to distinguish the Urbana-Champaign campus from its northern partner, and in most cases the official name for the flagship campus was listed as the University of Illinois at Urbana-Champaign. In the 1990s, when the University of Illinois System grew to include Sangamon State University (which was renamed University of Illinois at Springfield), the acronyms UIC, UIUC, and UIS grew even more common.

Campus acronyms weren’t even a consideration by W.A. Mansfield, who wrote that influential column in 1881 as one of his last acts as a student before graduation (he went on to

become a doctor). His column still resonates today, however. Dropping the original name for the University of Illinois was more than just alleviating confusion; despite overwhelming student support for a new name, there were many in the state who believed that, true to the word “industrial,” campus should be narrowly focused on the trades. They threatened to withhold their support from the university if it deviated from that role.

The name “University of Illinois” needed a strong defense, and Mansfield—among others—gave it one.

“The work of the university, open to all who are far enough advanced to undertake it, in agriculture, architecture, mechanics, engineering, chemistry, in literature and in science, shows far more plainly than words can show that there is no class distinction here,” Mansfield wrote. “The language of the grant... says, ‘The leading object of such schools shall be to promote the liberal and practical education of industrial classes in the several pursuits and professions of life.’ This is the best statement of the aim of the University today. Its work is what all classes of our people might wish it to be.” ■

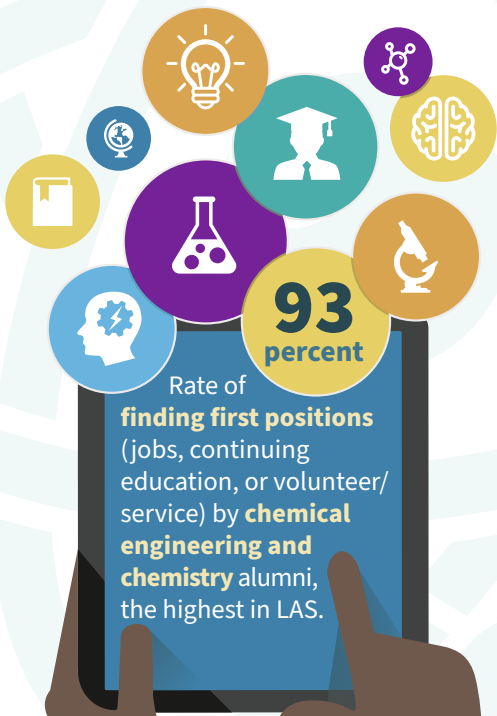
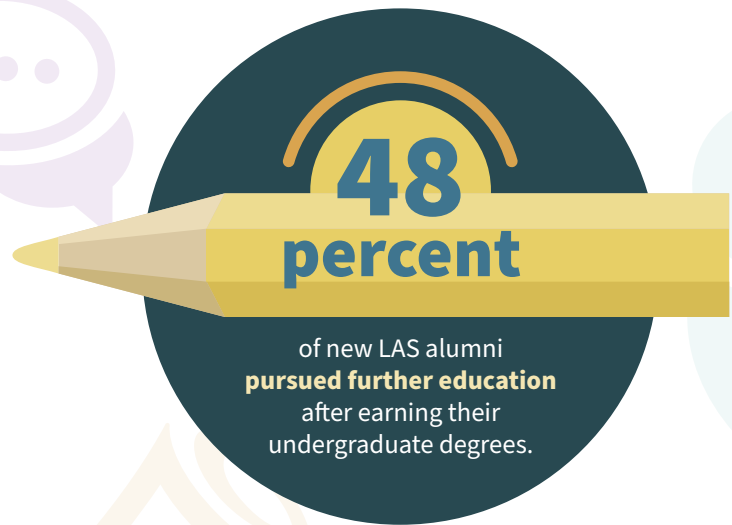
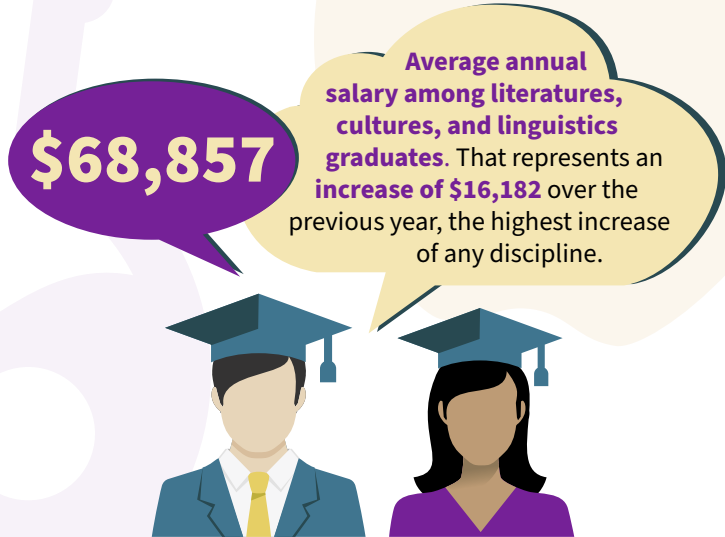
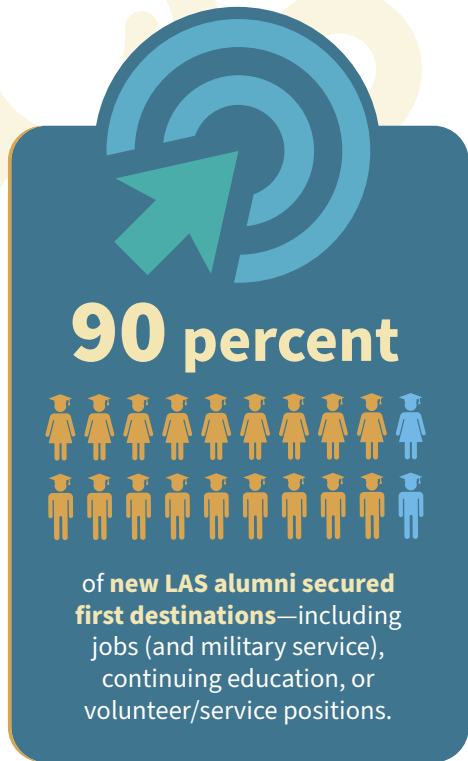
By Dave Evensen and Kimberly Belser

Top left: view of the Old University Building, c. 1870s. Bottom left: three towers from left to right, including the Law Building, now Harker Hall, University Hall, now replaced by the Illini Union, and the carillon tower of the Library Building, now Altgeld Hall, as seen from the Natural History Building, c. 1910. Top right: aerial view of the stadium, Armory, and Champaign, 1941. (Images courtesy of the University of Illinois Archives.)

Background image: Aerial view of the Urbana-Champaign campus looking north. (Photo by U of I Public Affairs: Seay-Knoblauch.)

LAS Success

Results of the latest Illini Success survey revealed some promising career tracks among August 2019, December 2019, and May 2020 graduates (the latest to be surveyed) within six months of earning their bachelor's degrees.



A bike tour of campus.



The Altgeld Chimes 100th anniversary celebration.



A day-in-the-life of a current student.



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