





A drone photo of U-M's Diag and State Street in Ann Arbor on Friday, March 20, 2020, after residents were urged to stay home to slow the spread of COVID-19.

Photo by MLive Media Group.

Dear LSA alumni and friends,

As our campus, country, and world continue to respond to the global COVID-19 crisis, it is hard to know exactly where we will be when this magazine arrives in your mailboxes. No matter what the next few weeks and months hold, it is important to me to speak directly to you about my priorities and our shared focus for the LSA community.

Our first priority has been and will continue to be the safety, health, and well-being of LSA students, faculty, and staff. As you already know, the university moved all classes to remote formats for the second half of the winter semester, canceled campus events, suspended all university international travel, and took many other steps to create the social distancing that is key to slowing the spread of the virus.

Our next priority is the quality and continuity of our teaching, learning, and research. In a matter of days in March, LSA moved more than 4,000 courses – serving over 20,000 students – into remote instruction. We know that the transition to remote teaching – taking place even as many students moved into new living situations – made the second half of Winter 2020 a very challenging time to learn. We are also very aware that not all students have had reliable access to the internet, stable housing, family support, and other key resources.

We took a number of steps to help. We provided many additional students with computers through our Laptop Program. We changed our grading policies to alleviate stress and give students flexibility in how their grades are reported. And through our Emergency Scholarship Fund and other resources, we've been working to ensure students have what they need for full, equitable access to their education.

As I write this, the LSA community is experiencing a broad range of emotions. Students from first-years to seniors have dealt with abrupt, unexpected, and heartbreaking changes, cancelations, and disruptions. Faculty and students have intrepidly transitioned from in-person class meetings to online learning, and staff across the college have worked long hours to support changes that were unforeseen just weeks ago.

I am also acutely aware that you and your family, friends, and co-workers have been impacted by this crisis, and my thoughts are with you as well. LSA is a global community, and wherever you are in the world, I hope you have the support and care you need.

LSA is a strong community. I truly believe that we are ready to rise to this challenge. And I look forward to the day when we can all return to the classrooms and to our commitment to in-person instruction and work connections.

But wherever it happens – on campus or online – the heart of LSA's liberal arts and sciences education remains the same. We explore boldly, we ask hard questions, we examine the workings of the human and natural worlds, we reach across to understand people very different from ourselves, and we test and retest hypotheses to get at facts. I believe these are the very values and approaches the world needs most to overcome this emergency.

A lot will change between when this magazine goes to press and when it lands in your hands. For the latest on the situation at U-M, please visit myumi.ch/lscovidresponse.

Please take good care of yourselves and those around you, and, as always, thank you for your support of LSA.

Sincerely,



Anne Curzan, Dean

CONTENTS



get out of town

[PAGE 46]

find some space

[PAGE 54]

build a bridge

[PAGE 50]

find your people

[PAGE 58]

Climate Control

As U-M celebrates the fiftieth anniversary of Earth Day, LSA looks at the story of students and faculty working together to reach carbon neutrality.

[PAGE 6]



As the spring issue of *LSA Magazine* goes to press, the situation around COVID-19 is evolving rapidly. You can see the latest updates about U-M and LSA's coordinated response at [MYUMI.CH/LSACOVIDRESPONSE](https://myumi.ch/lsacovidresponse).

Raising Their Voices

Communities that were once stuck in the margins of the opera world are taking the stage. LSA Professor Naomi André explores what it means for them to tell their own stories.

[PAGE 16]



(LEFT) Keith Ian Polakoff / Long Beach Opera

get some sun

[PAGE 60]

see it clearly

[PAGE 38]

get the data

[PAGE 36]

remember it all

[PAGE 43]

reach for the stars

[PAGE 64]

put it together

[PAGE 31]

Never Fear

How do you get an interview with a KGB torturer? What's it like conducting investigative journalism in Vladimir Putin's Russia? Ask LSA visiting fellow Yevgenia Albats—she's got the receipts.

[PAGE 24]

опросам, до мая 1992 года
то функции Министерства
независимой России. К ру-
даной пришли либеральные
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Лондонской бир-
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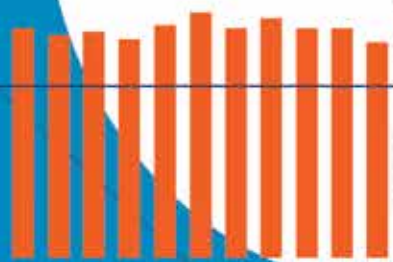
A rock band performs at a kick-off rally at the Crisler Center for a Michigan student group called ENACT: Environmental Action for Survival, ahead of the first Earth Day in 1970. Those initial Earth Day celebrations across America anticipated multiple landmark pieces of legislation including the Clean Air Act of 1970, the Clean Water Act of 1972, and the Endangered Species Act of 1973. The fiftieth anniversary of Earth Day happened on April 22, 2020. Image courtesy of Bentley Historical Library.







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ADAM SIMON

Arthur F. Thurnau Professor of
Earth and Environmental Sciences



CLIMATE TE CONTROL



BY SQUARE FOOTAGE, U-M IS THE BIGGEST RESEARCH UNIVERSITY ON THE PLANET—WHICH IS WHY THE STUDENT GROUP CLEAN WOLVERINES AND THE FACULTY THAT LED THEM THOUGHT COMMITTING TO CARBON NEUTRALITY WAS SO IMPORTANT.

BY SUSAN HUTTON  BECKY SEHENUK WAITE

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YOU'RE LIKE MOST adults in the U.S., there's a 50-50 chance that you're reading these words on a screen rather than on paper. Screens might not

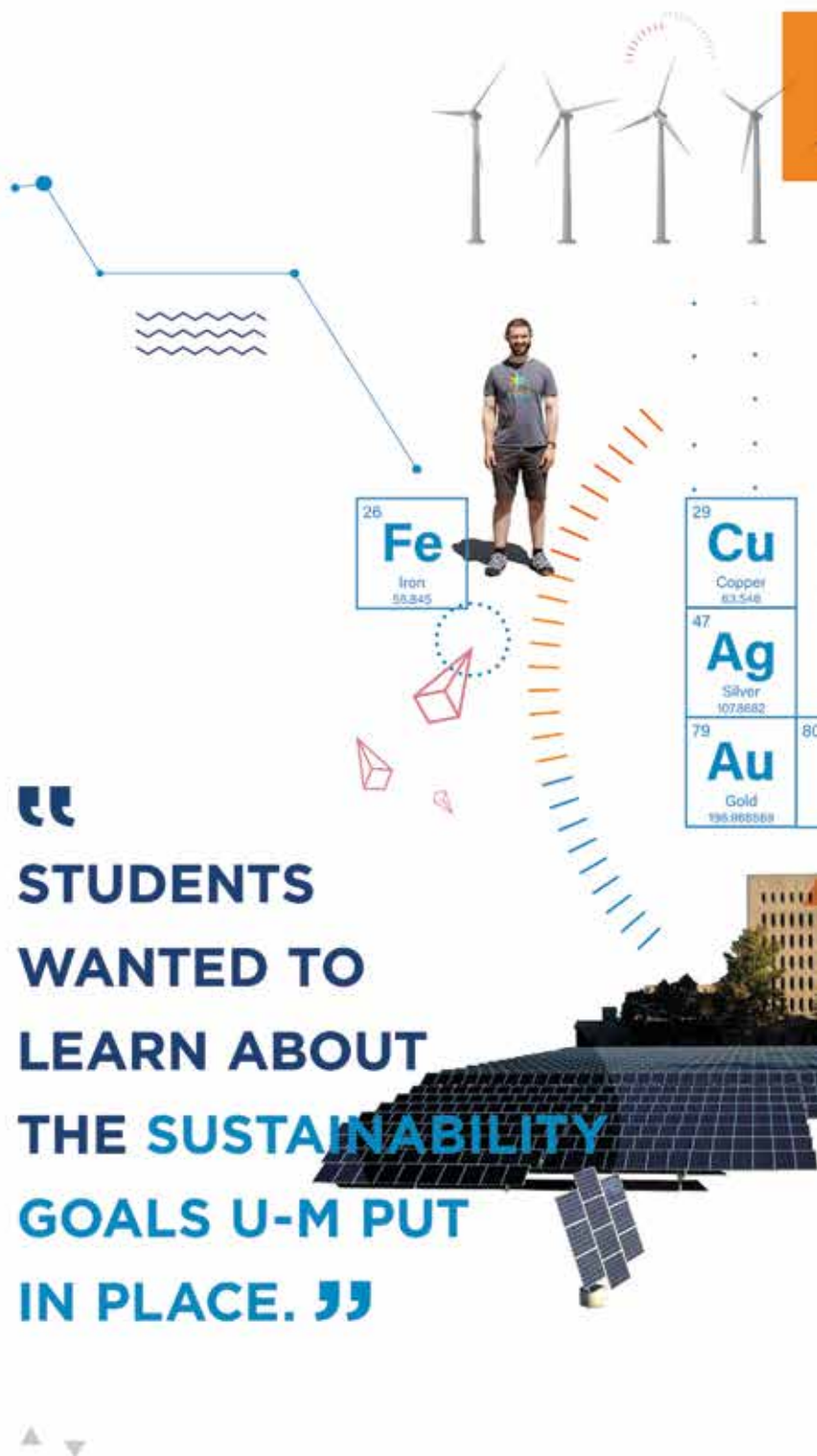
use trees, but they do use almost a third of the elements in the periodic table. Adam Simon, Arthur F. Thurnau Professor of Earth and Environmental Sciences, has focused his research on how these elements form – and where to find them.

"Some rock contains anomalous concentrations of copper or silver or rare earth elements, and we try to figure out why," Simon explains. "If you can understand how the deposits formed, it helps you develop exploration strategies to find new ones." For Simon, the work is about more than just finding new deposits: He's looking for the elements we need to transition to renewable energy.

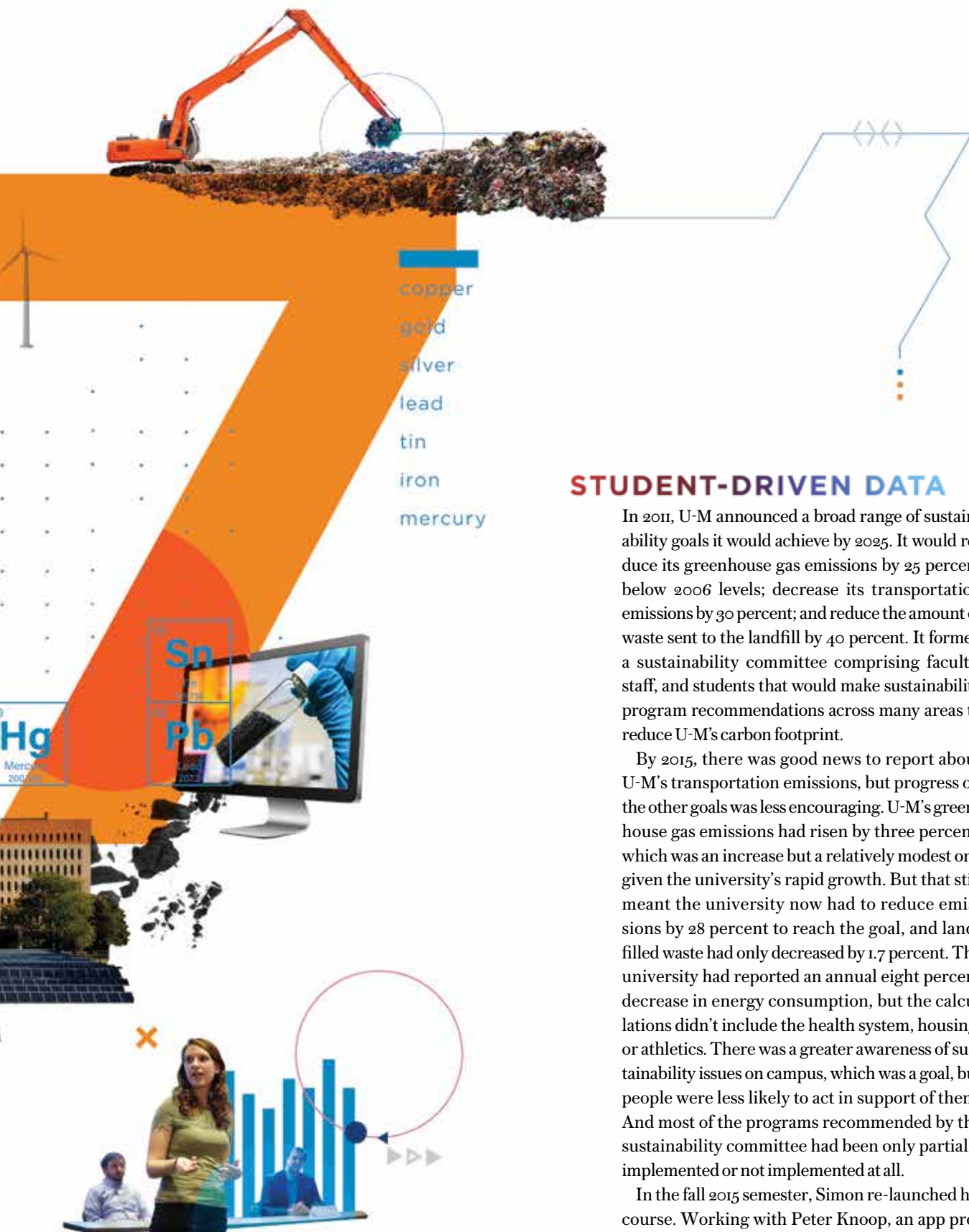
"We've known about copper, gold, silver, lead, tin, iron, and mercury – what we call the seven metals of antiquity – for thousands of years, and used them at a relatively high rate," Simon says. "Then when we rounded out the periodic table, we started to figure out what rare earth and platinum group elements can do for us. In the last ten years, my original passion for mineral deposits has perfectly aligned with our need to find new supplies of them," he continues. "In order to build solar panels, wind turbines, and grid-scale batteries, as well as Teslas and Chevy Bolts, you need these energy-critical metals. If we are going to build the infrastructure that allows us to transition to renewable energy, we need to source them from new deposits."

In a lot of ways, the minerals' critical shift in future energy systems mirrors the shift in the way Simon teaches his students about them. A few years ago, he had been teaching a traditional undergraduate class that fulfilled an upper-level writing requirement, and he wondered if there was more he could do with it. "At the same time, I had a lot of students who wanted to learn about the sustainability goals U-M put in place in 2011," he says.

Simon dug in and got to work.



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STUDENT-DRIVEN DATA

In 2011, U-M announced a broad range of sustainability goals it would achieve by 2025. It would reduce its greenhouse gas emissions by 25 percent below 2006 levels; decrease its transportation emissions by 30 percent; and reduce the amount of waste sent to the landfill by 40 percent. It formed a sustainability committee comprising faculty, staff, and students that would make sustainability program recommendations across many areas to reduce U-M's carbon footprint.

By 2015, there was good news to report about U-M's transportation emissions, but progress on the other goals was less encouraging. U-M's greenhouse gas emissions had risen by three percent, which was an increase but a relatively modest one given the university's rapid growth. But that still meant the university now had to reduce emissions by 28 percent to reach the goal, and land-filled waste had only decreased by 1.7 percent. The university had reported an annual eight percent decrease in energy consumption, but the calculations didn't include the health system, housing, or athletics. There was a greater awareness of sustainability issues on campus, which was a goal, but people were less likely to act in support of them. And most of the programs recommended by the sustainability committee had been only partially implemented or not implemented at all.

In the fall 2015 semester, Simon re-launched his course. Working with Peter Knoop, an app programmer and senior analyst in LSA IT, Simon developed the course into a semester-long project where students reviewed U-M's sustainability goals, the steps the university had taken to meet

them, and evaluated how much progress they'd made. "It wasn't a shame game," Simon says. "It was an informed assessment that said, 'Okay, here's where we are. How do we become carbon neutral?'"

To answer the question, students learned to use geographic information systems (GIS) to map solar and wind potential, how to price electricity, and how to calculate the emissions associated with different technologies used to generate electricity. They also studied the politics that shaped natural resources regulation and commerce, and the economic factors that determined who got access to them, an approach borrowed from the social sciences known as a social license.

"The geology is relatively easy, but weighing the ethics, the history, and the politics that affect people is super hard," Simon says. "How do you convince indigenous communities or relatively recently transplanted communities to allow the resources we need to build renewable energy infrastructure to be extracted? It can't be done without some environmental change, no matter how small the footprint is. When you're trying to steer the planet away from crisis, how do you determine what's fair? They're incredibly important questions, and we spend a lot of time considering them in the course."

READ THE MAP

At the end of the semester, instead of a paper, Simon asked the students to produce a story map: a way to present all of their data in text, as maps, and as multimedia content. "A few students turned in their work and said, 'We don't want this to die,'" explains Simon. "'We don't want to just get a grade and have this work go live on a hard drive somewhere.'" Simon didn't either.

Simon quickly organized a conference with the assistance of Gregg Crane, professor of English language and literature who was, at the time, the director of Program in the Environment; Chris Poulsen, professor of earth and environmental sciences and current associate dean for the natural sciences in LSA; the Office of the President; and the Office of the Provost.

In the last days of the fall 2015 semester, the students presented ways the university could become carbon neutral, what it would cost, and its social license considerations.



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"I had eight students get all dressed up and present their findings to an audience that included LSA's associate deans and the president's counsel, and I was amazed," Simon recalls. "I was truly amazed at how they took ownership of their research."

Research is at the heart of what higher education can bring to the problem of climate change, says Associate Dean for the Natural Sciences Chris Poulsen. "We need to educate students so they can make informed decisions," Poulsen says. "We also need to be an engine of research and innovation, to serve as role models and laboratories for the rest of society, and to play an important role in community engagement around climate change."

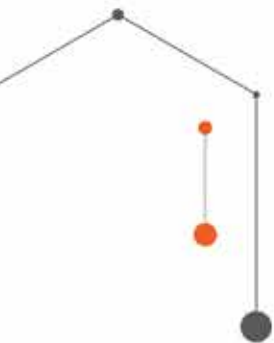
The students' findings drew praise for their detail and rigor, and some skepticism about whether the solutions they presented could actually work. "Until that point, everyone had been throwing around hypothetical back-of-the-envelope calculations," Simon explains. "But these students had actually *made* the calculations, and



used them to create a blueprint. They could tell you there are three farms within five miles of campus that have solar potential, and that if U-M bought them and put this many kilowatts of solar there and there, the installations could generate all the electricity the university needs. There were recipes, and we could tweak them.”

After the conference, Simon met Susan Fancy, program manager for technology and commercialization at the College of Engineering, who was then working at U-M’s Energy Institute. She suggested that a similar student project could help the city of Ann Arbor reach its sustainability goals. In the summer of 2017, the students investigated the





CHANGE OF MIND

solar and battery potential of more than 200 city-owned properties, such as city hall, fire stations, parking structures, and the landfill, and presented their findings to the city that fall.

In December 2017, the students' work became part of the foundation on which Ann Arbor based its commitment to making its municipal operations carbon neutral by 2035—a goal the city revised in November 2019 by committing to make the whole community carbon neutral by 2030. The students' work was part of a \$1-billion bond for improving facilities for the Ann Arbor Public Schools that passed last year. Big things were underway regionally, and Simon's students were ready to bring them to U-M, too.

CLEAN WOLVERINES

The group of students who had worked on the Ann Arbor summer project grew into the Clean Wolverines, students from across campus working to reduce U-M's carbon footprint. Lydia Whitbeck (B.S. '19) was one of its earliest members and is now a project coordinator on the Presidential Commission on Carbon Neutrality (PCCN). "Initially we focused on projects to reduce carbon emissions, but we eventually grew to develop different pathways toward carbon neutrality," she says. "There also was a lot of focus on making sure that our work was co-produced, meaning that we engaged with key stakeholders throughout our analysis process

THE AMBIGUITY AND UNCERTAINTY THAT COME WITH CLIMATE CHANGE ARE SOME OF THE HARDEST PARTS OF THE PROBLEM. SARA SODERSTROM WANTS TO UNDERSTAND HOW WE CAN BETTER HANDLE THEM, ALONE AND TOGETHER.

Assistant Professor of Organizational Studies and Program in the Environment **Sara Soderstrom** studies how people, alone and within organizations, respond to climate change. "I would say my research fits in three different areas," Soderstrom says. "In organizations, we look at how people influence others to make sustainability-related decisions, and how they create groups to work on these issues together. We also look at the way organizations work together, how they can build successful partnerships, and how these relationships can change over time. Finally, we look at the way people make sense of the uncertainties concerning climate change, how they talk about sustainability and climate change, and how this affects the way others organize around these issues.

"At U-M, the carbon neutrality efforts have been particularly exciting because of the way they have brought people and expertise together to work on something targeted," Soderstrom continues. "The university is a really interesting microcosm for considering different sustainability solutions and moving them forward. And there are groups of students and faculty who are pushing and bringing us much further than we would have come without their voices."

Including a multitude of interdisciplinary voices to combat climate change is critical if you're going to collect unbiased data on which decisions are based and understand how applying them will affect different communities and populations. "Sustainability solutions start to work when we get more potential paths forward and we really start to evaluate their pros and cons using an interdisciplinary approach," she says. "We need people working together on these problems with different perspectives and learning from each other so that we can move forward with various scenarios that we think are the most likely to help us out of this."

**D PEOPLE WORKING
ER ON THESE PROBLEMS
FFERENT PERSPECTIVES. ”**

to ensure that key people in the university were involved with our work.”

“There were students from many different majors working on a diverse set of projects centered on reducing U-M’s emissions,” says Grant Faber (Ross ‘19), a graduate student in U-M’s School for Environment and Sustainability and one of the first Clean Wolverines. “I started a team of students in 2017 to investigate power purchase agreements (PPAs) as a way to reduce the carbon intensity of U-M’s energy use. PPAs have been used to reduce emissions at other universities, often in a financially viable way. There didn’t seem to be any reason U-M couldn’t do it as well.”

The Clean Wolverines worked to reach carbon neutrality at U-M from multiple fronts: from economics to landscape architecture to behavioral psychology. And as the group’s members continued to work on the problem, they continued to find more solutions. They spoke at monthly Board of Regents meetings, presented to external advisory boards, and talked to faculty, staff, and alumni. After many more months, Simon says, “We had a crazy idea. Why don’t we have another conference that shines the spotlight on Michigan?”

In April 2018, “Toward Carbon Neutrality at the University of Michigan, 2025 and Beyond” drew sustainability leaders from Big Ten universities, regional utility companies, municipal governments, and international businesses. Simon and the Clean Wolverines didn’t shy away from laying bare the facts, even if it meant having some tough conversations. Graph after graph measured all kinds of sustainability indicators at Big Ten universities and peer institutions. “We ranked last compared to every peer,” Simon says. “We knew that if we didn’t start to do something, we were going to get left behind.”

Then in October 2018, at his annual Leadership Breakfast, President Mark Schlissel committed to putting U-M on a path toward carbon neutrality. “I was ecstatic. I was over the moon,” Simon says. “It was a huge announcement, and I was thrilled that many of the students we’d worked with realized they had a part in that.

“The effort at U-M was made with a lot of student sweat equity, and it was never just about protests and telling people that they are bad,” Simon says. “It was, ‘Hey, we’ve come up with a range of scenarios. We’ve got scenario A and scenario B.’ That’s what we’re teaching – that there is not just one answer. There are a multitude of ways to get to carbon neutrality, so now let’s sit down together and work through them.” ■






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RAISING THEIR VOICES



Communities that were once marginalized by opera are taking the stage. LSA Professor Naomi André explores what it means for them to tell their own stories.

By Alia Orra

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EVEN IF YOU'RE not an opera fan, you probably know "Habanera," the aria from *Carmen*. It's easily recognized by its rhythm—a deliberate, unhurried seduction. In fact, its back-and-forth tempo may be the most famous sound in the entire opera canon. But do you know this Carmen?

She saunters onto the scene in high-top sneakers, big golden hoops swinging from her ears, a hooded orange sweatshirt tied around her waist. She's surveying the men of her South African township, the full power of her femininity on display. A chorus of ladies cheers her on as her voice soars. And she's singing in Xhosa, not French.

That performance from *U-Carmen eKhayelitsha*, a 2005 South African version of the legendary Georges Bizet opera that originally premiered in 1875, is part of a rich black operatic tradition emerging from under the weight of more than a century of marginalization.

This reclamation of power and the portrayal of new truths on the stage spurred Naomi André—a professor in the Residential College and in the Departments of Women's Studies and Afroamerican and African Studies—to research and write *Black Opera: History, Power, Engagement*. André's scholarship explores the issues of representation in a fine arts genre that is finally beginning to grapple with a long history of discrimination.

"The goal for black opera composers and performers today is to resituate opera so that it can be used by anyone," André says. "The opera stage is becoming a space of liberation for black voices."

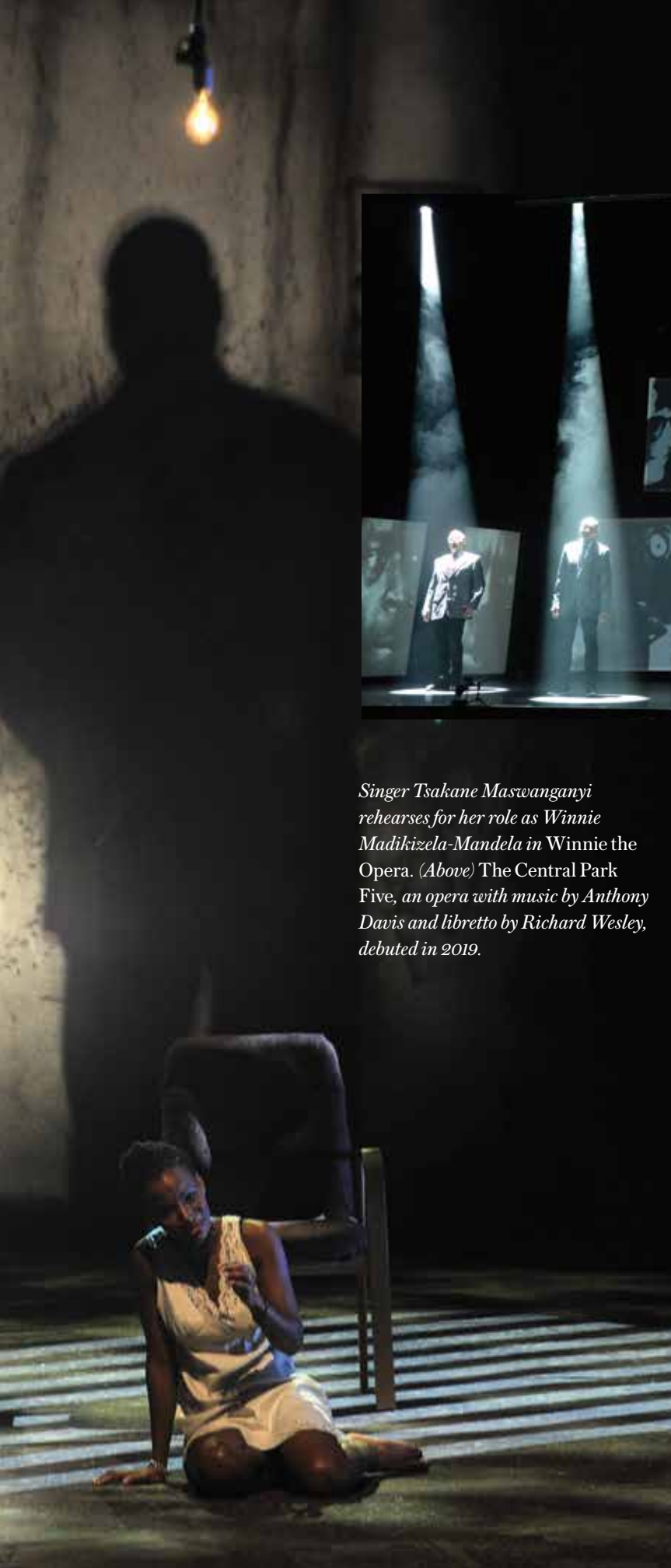
WHO TELLS THE STORY

In her new office in the Department of Afroamerican and African Studies, André is surrounded by boxes of books and opera programs. She hasn't unpacked yet, in part because of the demand on her time. In addition to her research and teaching, she regularly fields interviews from outlets including the *New York Times*, CNN, and *Le Monde* about her work—all while she juggles a role as the Seattle Opera's first scholar in residence.

Discussing opera history and culture with national and international audiences fits squarely into André's ultimate goal: to make academic research on an elite art form accessible—especially to those who might find its music stuffy and overelaborate. She is determined to push musicology, a discipline that found its footing in nineteenth-century Germany, to a new place, a place she terms "engaged musicology." Engaged musicology examines music not only in the more narrow context of its creation, but by looking at who is being represented,

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Singer Tsakane Maswanganyi rehearses for her role as Winnie Madikizela-Mandela in Winnie the Opera. (Above) The Central Park Five, an opera with music by Anthony Davis and libretto by Richard Wesley, debuted in 2019.



who is telling the story, and who is watching and interpreting that story at different times throughout history.

“My teeth were cut on that traditional musicology, and it’s important stuff,” says André. “But a lot of us want to talk about, well, where are the women composers and people of color? How does sexuality hook into music? Besides writing that the music is powerful and beautiful and intoxicating, what can we say about how it functions in its society?”

In *Black Opera*, André chooses two important opera venues: the United States and South Africa. At first, she was resistant to exploring how the art form unfolded in these different and painful histories—one of slavery and Jim Crow, the other of apartheid—for fear that readers might perceive that she was equating the two struggles. In the end, though, after extensive research in both countries, she found juxtaposing the two opera cultures gave a fuller picture of how the form has been claimed by black creators and performers telling and retelling their stories in different parts of the world.

(LEFT) Alexander Joe / Getty Images; (ABOVE) Keith Ian Polakoff / Long Beach Opera

Pioneering opera singer Marian Anderson rehearses for Un Ballo in Maschera at the Metropolitan Opera in 1954. Anderson was the first African American artist to perform at the Met.

“I am not saying that what happens in the United States is the same as what happened in South Africa,” she says. “I’m trying to say, in these two systems of white supremacy, opera was segregated. On both sides of the Atlantic, black people were not allowed to train and opera houses did not let black people on stage.”

Instead, white performers wore black-face in operas such as *Aida* (1871) and *Otello* (1887), a prejudice that persists on the opera stage. On the other side of that, plays and performances that center the black experience are coming to the fore, such as *U-Carmen eKhayelitsha* and the works of Anthony Davis, whose many compositions include *X*, *The Life and Times of Malcolm X* (1986); *Under the Double Moon* (1989); *Amistad* (1997); and the *Central Park Five* (2019). According to André, these and other pieces are doing important work “changing the narrative” away from the minstrel-like caricatures of so many early operas.

“In the United States, it’s really taken off since the 1980s. We’re getting operas that are telling a history on stage, kind of like a *Hamilton* moment: Who is telling our story and what’s the vantage point?” says André. “And in South Africa, you’re seeing Western operas put in South African settings, as well as original operas about Nelson Mandela and Princess Magogo and other subjects, all since the dismantling of apartheid.”

OUT IN THE OPEN

It was 1939, and Marian Anderson was told the concert she was meant to perform at the 4,000-seat Constitution Hall wouldn’t happen there after all. The contralto singer had just left her training in Germany because of the growing danger of fascism. A



BY THE TIME MARIAN
ANDERSON WALKED
DOWN THE STEPS
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famous performer recognized in Europe and the U.S. for her skill, Anderson returned home to find herself barred from a stage in her own country's capital because she was black. The Daughters of the American Revolution, the owners of the space, wouldn't sponsor a black American's performance in the building, placing her at the center of a national civil rights controversy.

A new venue had to be arranged. The executive secretary of the NAACP, Walter White, suggested they move the concert outside. They worked with First Lady Eleanor Roosevelt, who had resigned from the Daughters of the American Revolution in protest, and Secretary of the Interior Harold Ickes to secure permission to perform on federal land.

By the time Anderson walked down the steps of the Lincoln Memorial that Easter Sunday, 75,000 people had amassed to

hear her sing. Her performance included patriotic songs such as "My Country, 'Tis of Thee," an aria from Donizetti's *La favorite* and Schubert's *Ave Maria*, and spirituals such as "Gospel Train." The concert was broadcast by NBC Radio across the country to millions of listeners.

Sixteen years later, Anderson debuted in the role of Ulrica in Verdi's *Un ballo in maschera* on the Metropolitan Opera House stage, the first African American artist to perform at the Met in a major role. That moment in 1955 was an intersection between what André terms "shadow culture," the parallel yet obscured world where black opera performers were constrained by legal and social limitations, and dominant culture, where white singers enjoyed access to the world's major stages.

"It happened much more slowly than it should've happened," says André. "But she

“ENGAGING IS IMPORTANT, ESPECIALLY IN OPERA, WHERE NOBODY WOULD THINK THIS IS A STAGE FOR SOCIAL JUSTICE.”

opened the door for more wonderful black talent to take that stage.”

Today, performers like Pretty Yende, a South African singer born during apartheid, are performing in leading roles around the world—but in the opera world African and African American singers still face an uphill climb. André says understanding why requires a more complex discussion of the issues involved in casting.

“Some roles, like Verdi’s *Otello*, a tenor role, are monstrously hard and nearly impossible because of the wide range and power needed for the highest notes while also being able to soar over a late-Verdian orchestra,” André says. “Why there aren’t more black tenors for casting directors to choose from is a good question, and it has to do with training. It’s not an equal playing field with voice lessons and who gets the education.” In opera, like ballet and classical music, disciplined training starts early; lack of access to that training entrenches the disparity in representation on stage decades before opening night.

Acknowledging the disparity is the first step, and researchers like André are playing a role in pushing the conversation about these issues forward. As Seattle Opera’s inaugural scholar in residence, she speaks to issues of race and gender in opera, which is one way her research has a tangible role in the work companies are doing today.

IN RESIDENCE

André writes introductions, histories, and blog posts that provide historical context to traditional programs. She moderates and participates in panel discussions, and she sits down with everyone in the company, including the general director, marketing team, and development officers, to “identify what diversity, equity, and inclusion means for a company like that.

“As experts, we’re not just in the ivory tower,” says André. “Engaging this way is important, especially in opera, where nobody would think this is a stage for social justice.”

For Seattle Opera’s performance of *Charlie Parker’s Yard Bird*, an opera based on the life of jazz saxophonist Charlie Parker, André met with the company’s staff to discuss the organization’s approach. “How do we market this?” André says. “What do we do with the painful stuff? The whole company was talking about these issues.”

And she continues to make these challenges central themes in the musicology courses she teaches at U-M, knowing her student audience comprises future performers, composers, arts organization board members, and close and thoughtful patrons and listeners.

Though the challenges are daunting and complicated, André finds joy in the way opera has been claimed by communities pushed to the margins.

“One of the conclusions I came to with this research, or something I want to believe, is that the opera stage is becoming a space of liberation for black voices, literally and figuratively,” André says. “Instead of reenacting negative stereotypes, we are telling new stories.” ■

American baritone Eric Owens performs as part of the Metropolitan Opera’s 2019 production of Porgy and Bess. The Seattle Opera, where Professor Naomi André is scholar in residence, performed the opera in 2018.



(RIGHT) Jack Vartoogian / Getty Images



NEVER FEAR

YEVGENIA ALBATS, DISTINGUISHED FACULTY FELLOW AT THE INTERNATIONAL INSTITUTE, HAS TAKEN ON TORTURERS, PUTIN, AND THE KGB. NOW SHE'S USING HER EXPERIENCES TO HELP LSA STUDENTS UNDERSTAND RUSSIA AND HOW IT FITS INTO THE REST OF THE WORLD.

BY SUSAN HUTTON  JULIA LUBAS



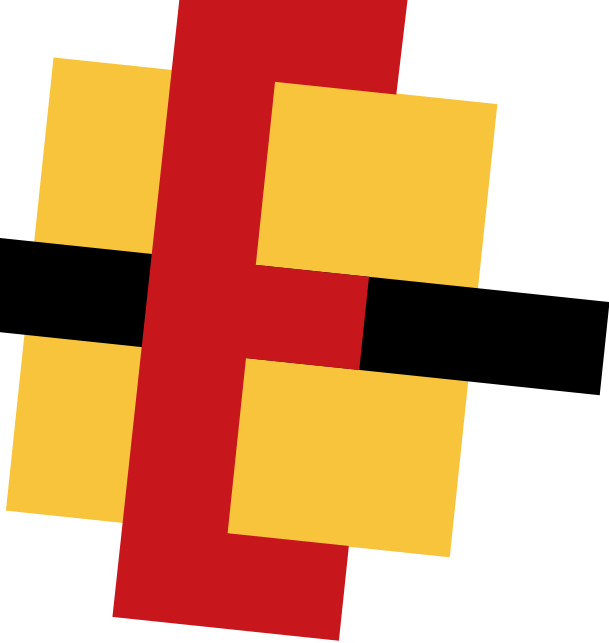
В «НЕГ»

нейшей разведки мира». А когда
проходил сам обмен, дежуривший
в аэропорту Кеннеди сотрудник
ФБР сказал: «Таких ребят
донков менс
очень
сионал
— В
рода пр
ус

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сяцев выч

ПРАВДА

МЕНЕ



EARLY IN HER journalism career, Yevgenia Albats, Distinguished Faculty Fellow at the International Institute for 2019-2020, deliberately put herself in the way of danger—not for love and not exactly for money, but because she was looking for stories.

After graduating from Moscow State University in 1980, Albats sought out adventure. She dove to the inky bottom of the Black Sea in a bathyscaphe, a free-diving vessel designed to reach the deepest parts of the ocean, and she climbed to the top of the sky in an airplane with the express purpose of leaping out of it. “I wanted to go to graduate school,” she explains, “but I have a Jewish last name and there was extreme anti-Semitism imposed by the state. The whole system was based on spoils and, of course, I wasn’t a member of the Communist Party, so I was not trusted enough to write any ideological stuff. I could only write about things that were divorced from ideology—and I had trouble with the KGB.

“So I had to find stories myself,” she says with a smile. “And it was terrific!”

Impassioned and intrepid, Albats penned vibrant stories that landed her a job as a secretary at the letters desk at the Sunday supplement, *Nedelya*, a job that paid less than her rent. “The editor came from the republic of Uzbekistan, so he knew a little what it was like to be a minority,” she explains. “He said, ‘There is no chance you can get a job as a reporter—the Central Committee of the Communist Party won’t allow it. But you can answer letters and you can write. If it is good we will publish it, and we’ll wait for better times.’”

“The better times came six years later, in 1986,” she laughs, “when I went to a new paper, the *Moskovskiy Novosti* (*Moscow News*).”

To supplement her salary, Albats reported science stories. “My beat was microphysics, history of the universe, what happened to the human body in orbit, in weightless conditions, this kind of stuff,” she says. In the Caucasus Mountains, she visited the Baksan Neutrino Observatory to report on efforts to understand neutrinos, subatomic particles that are devilishly hard to capture despite their proliferate presence in the universe. They are everywhere and impossible to catch except in the evidence they leave behind, a conundrum whose metaphor foreshadowed Albats’s investigation of the KGB.

SEKRET SOCIETY

Part intelligence agency, part secret police, the KGB operated an infamous espionage network abroad and, at home, monitored the media, anti-Communist rhetoric, scientific research, universities, the church, and even athletics from 1954 until the Soviet Union dissolved in 1991. The agency protected government leaders and arrested, imprisoned, and executed enemies of the state. “It was the most feared and most repressive institution of the Soviet Union,” Albats says.

In 1985, Mikhail Gorbachev had become general secretary of the Communist Party and appointed Alexander Yakovlev as his number two, taking helm of a government embrittled by corruption and an economy at risk of collapse. Both men understood the necessity for reforms, and that bureaucrats would fiercely oppose them because the reforms would strip bureaucrats of power. To stabilize the country, Gorbachev and Yakovlev understood they needed support from the general public, which meant they needed to free up some media to reveal some of the problems the Communist Party had kept hidden. At the same time, they wanted to control what should remain secret. It was in this social experiment called *glasnost*—or openness—that Albats had been hired as a reporter by the *Moskovskiy Novosti*.

Albats was reporting a story on the eminent geneticist Nikolai Vavilov, who was arrested in 1940



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and died in jail of starvation and dysentery in 1943. Under Stalin, KGB interrogator Alexander Khvat had tortured Vavilov in prison, and Albats wanted to find him. The KGB told Albats he was dead. Albats didn't think so, but confirming her hunch was a challenge.

"I know it's very difficult for Americans to imagine a society where everything, all information, was forbidden," she says. "There were no white pages. Maps were falsified to prevent people from finding streets and buildings. Information was the main commodity in the Soviet Union — not just for journalists, but for anyone."

In 1987, if you wanted to find someone in the Soviet Union, you went to a street kiosk and filled out a slip of paper with whatever information you had — a name, when and where they were born, an occupation or employer. For a fee, the person on duty would search the files and maybe find what you were looking for. Albats filled in what she knew about Khvat — his name, that he'd been an investigator for the KGB. She took a guess at his age and turned in the paper and then waited nervously. When the clerk returned the slip of paper, an address — 41 Gorky Street, Apt. 88 — had been written in ballpoint pen.

"I was sure that the people in the kiosk would report that I'd requested the address of a KGB colonel, so I had to go there immediately," she explains. "And I just knocked on the door. He'd never seen a journalist before, and couldn't imagine that someone could come to ask questions without permission from the KGB." But that's exactly what Albats

had done. She questioned him for hours, and he answered, which was the last thing she expected. And she certainly never expected to be able to publish any of it.

OPENING DAY

Glasnost had drawn the ire of the bureaucratic hardliners who were trying to destabilize Gorbachev, mute dissidents, and intimidate journalists. But Albats had secured a first-person account from a torturer working in Stalin's prisons. *Oh god*, her editor said when she showed him. *This is the last thing I need*. Still, he published what she wrote, and it was a sensation. In a country

"I KNOW IT'S VERY DIFFICULT FOR AMERICANS TO IMAGINE A SOCIETY WHERE EVERYTHING, ALL INFORMATION, WAS FORBIDDEN. INFORMATION WAS THE MAIN COMMODITY IN THE SOVIET UNION — NOT JUST FOR JOURNALISTS, BUT FOR ANYONE."

GLOBAL ORGANIZATION

LSA's International Institute unites students from different backgrounds in a rich and rigorous study of global politics, language, and culture, and it offers them access to learning opportunities around the world.

Established in 1993, the International Institute cultivates research and teaching on crucial regions of the world across multiple fields and disciplines. As the home to 17 centers and programs, the International Institute draws faculty experts from across campus who specialize in a range of fields. The institute's rigorous approach to research paired with its support for students and faculty help to promote understanding on campus and to forge connections to research partners and institutions around the world.

In the fall 2019 semester, the International Institute launched the Masters

that had never known anything like a free press, where thoughts were policed and ideology was controlled, Albats was inaugurating investigative journalism. And her subject—the KGB—was one that no one had ever written about.

“It was pretty easy to write something no one else had written about because everything was forbidden,” she says. Albats wrote about drugs, HIV and AIDS, and about being pregnant in Moscow, then a city of almost nine million people, that had only one maternity clothing store. After giving birth to her daughter, Olga, in a state-run maternity hospital, she described its conditions: all of the showers and bidets were broken, and there were no disposable syringes. And, as was the policy in all the state’s maternity hospitals, husbands were not permitted.

“I got 15,000 letters from men who really couldn’t believe their offspring were born in such awful conditions,” Albats says. “They were just shocked.” The articles were reprinted in European newspapers and magazines, breaking open the seal the Cold War had placed on the Soviet Union. “The stories helped Europeans realize Soviets had their own intimate lives,” she says, “and that these lives were awful.”

Albats’s experience and the insights that come from bridging Soviet life to the world outside it are exactly why LSA’s International Institute is so excited to have Albats as its inaugural fellow for its new Masters in International and Regional Studies Program (MIRS).

“With her Ph.D. from Harvard and her experience as a journalist, Albats brings an incredible

in International and Regional Studies (MIRS), a new program that is designed to give students the perspectives and analytical tools they need to understand global issues in their cultural, economic, historical, geographical, and political contexts. The program combines an interdisciplinary curriculum with regional expertise and methodological training, and offers students international experiences too.

“We wanted to create a program that leveraged the fact that we have great in-depth regional expertise and cross-regional expertise,” explains Pauline Jones, director of the International Institute and professor of political science. “And we didn’t want our area students to remain in a silo. Students take courses with students outside of their specialty, which both helps to build a cohort and to cultivate a global perspective. You might be a North African specialist, but in MIRS you’ll also understand how North Africa fits into the rest of the world.”

“We also wanted to design a master’s degree program that would be able to prepare students for different careers,” says Pär Cassel, director of graduate studies at the International Institute and

associate professor of history. “We have students interested in working in academic environments, and others who are considering careers in government, NGOs, and other international organizations. Faculty expertise like that provided by Dr. Albats is critical. She’s incredibly dynamic, and she’s very much an insider. The privilege of working with her confers a valuable veteran’s knowledge.”

INTERNATIONAL INSTITUTE CENTERS AND PROGRAMS

- African Studies Center
- Center for Armenian Studies
- Center for European Studies
- Center for Japanese Studies
- Center for Latin American & Caribbean Studies
- Center for Middle Eastern & North African Studies
- Center for Russian, East European & Eurasian Studies
- Center for South Asian Studies
- Center for Southeast Asian Studies
- Copernicus Center for Polish Studies
- Donia Human Rights Center
- Global Islamic Studies Center
- Lieberthal-Rogel Center for Chinese Studies
- Nam Center for Korean Studies
- Program in International & Comparative Studies
- Weiser Center for Emerging Democracies
- Weiser Center for Europe & Eurasia

breadth of knowledge to our students," says Pauline Jones, director of the International Institute and professor of political science. "She runs the only independent NGO media outlet in Russia, and she's an award-winning author. Her lived experience paired with her academic training offer a perspective on Russia that's unparalleled."

Albats believes the most important understanding she can offer her students is not which events were the most important in Soviet history but where the Russian people have come from. American institutions, universities, and people from private businesses invested billions in Russia, she says. "They did a hell of a lot, but they were operating under the assumption that Soviets were just like Americans, and that we just spoke another language. They thought of Russia as the country of Dostoevsky and Tolstoy and Chekhov. That was true and not true. Yes, great pieces of literature were created in the Russian language, but we had no political philosophy except for Marx and Lenin."

"We never went through a period of European enlightenment that was extremely important for Europeans to move out of the Middle Ages," she continues. "When I went to Harvard, I was stunned to see the wealth of knowledge that had been developed by Western civilization that was totally unavailable to us in the Soviet Union. Political science

and sociology – they didn't exist for us. And that, unfortunately, also extended into ethics, morals, to the whole understanding of the common good."

People from the International Monetary Fund, economists from Harvard, and political scientists that had helped liberate Poland and Germany all believed they could do the same thing in the Soviet Union, Albats says. "But in Poland and in Germany, the job was to liberate the country from Soviet rule and the institutions of Soviet power. We Russians had to liberate ourselves from ourselves, and that's a much harder, much more painful task."

"Fifty-six million Soviets were killed between 1917 and the end of the Soviet Union," she continues. "According to the latest polls, almost half of Russians see Stalin as Russia's greatest leader. It's hard to understand. I'm very honest with my students: I don't have all the answers. I know some of the answers, but I am still trying to understand my country. "And so she does what she has always done. "I'm just trying to tell them the story." ■



RESEARCH BY ANNA MEGDELL

Rewriting the Monarch Story

Every winter millions of monarchs migrate to the same places in Mexico. But do we actually know just how they do it? LSA Professor D. André Green wants to find out.

“There’s this constant hum, sometimes a *whoosh*.”

— D. André Green, assistant professor in the Department of Ecology and Evolutionary Biology, describes standing at the forests where monarchs live for the winter in the mountains of central Mexico. “You look up and think you’re just looking at bark,” Green says. “But then you see flickers of orange and realize the trees are covered with millions of monarchs.”

Green studies how complex traits, like migration, evolve. In his efforts to better understand how migration works, Green has found monarchs to be an ideal subject, allowing his research to traverse molecular to evolutionary scales and back again. “We already know a bit about the natural history of monarchs,” Green says. “What if I can start to introduce newer research methods to understand how molecules con-

milkweed — their host plant — and lay their eggs. Caterpillars grow and pupate and emerge as matured butterflies.

And every fall monarchs — each weighing less than a gram — fly as far as 2,500 miles to reach specific sites in the states of Mexico and Michoacán, where they spend the winter huddled together on trees. By the start of spring the monarchs stir, fall in pairs to the ground as they mate, and fly from the trees in large bursts before journeying northward. “A swirl of orange is constantly flying around you,” Green says, describing the experience of observing the monarchs firsthand. Over the span of three to four months — and several generations — the monarchs repopulate the northern United States and Canada.

Or that’s what we thought. Now Green’s research has begun to complicate this tidy narrative. One of the fundamental questions he studies lies in the

the molecular level when these monarchs receive signals often understood to prompt migration. But, as Green explains, there’s still a lot left unknown. “We can manipulate variables like sun and temperature easily in the lab. And we still haven’t been able to create a migrant, which suggests we’re missing something.”

FROM PIPETTES TO MILKWEED

In addition to traveling to Mexico and Guam, Green and his students collect monarchs from across Michigan, which are housed at the Matthaei Botanical Gardens and used for experiments. There, they feed the monarchs, provide extra heat, clean their cages, and tend to the milkweed. This labor is a vital part of his research, and one Green enjoys. “I say to my students all the time, ‘We have to pay attention to the butterflies and listen to what they’re telling us.’

MONARCHS FROM WESTERN NORTH AMERICA OVERWINTER IN SOUTHERN CALIFORNIA, BUT DUE TO AN ALMOST 90% DROP IN POPULATION IN THE LAST FEW YEARS — THE CAUSE OF WHICH IS UNKNOWN — COLLECTION FROM THESE LOCATIONS HAS HALTED.

nect to this migratory phenomenon we already see and experience every year?”

PEOPLE LOVE BUTTERFLIES

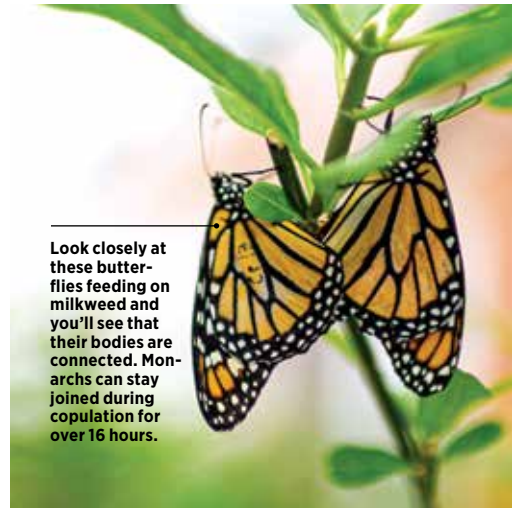
We all know the monarch’s story. Children learn the butterfly life cycle from picture books. Tourists can watch new butterflies emerge from their chrysalises and take their first flights in conservatories. But none of these rivals the real drama of the journey monarchs make each year.

Every summer, monarchs in eastern North America reproduce, search for

fact that most monarchs in the world live outside North America and don’t migrate. “You’ll find them in different tropical regions and island systems,” says Green. “Because they’re in places where milkweed survives year-round, there’s no impetus to migrate.” Green wants to understand if these monarchs are genetically incapable of migration, or if they’re just not receiving the right environmental cues.

By bringing non-migratory monarchs from Guam to his lab in Michigan, Green studies what happens on

GREEN’S DESIRE TO UNDERSTAND HOW COMPLEX BIOLOGICAL SYSTEMS EVOLVE STARTED WHEN HE WAS A KID GROWING UP IN RURAL LOUISIANA. “I LOVED DOING RESEARCH FOR SCIENCE FAIRS,” HE SAYS. “I WAS ALWAYS OUTSIDE DIGGING UP RANDOM THINGS. THERE WERE LOTS OF BUGS DOWN THERE.”



Are they happy or not? People underestimate just how difficult the monarchs are to keep happy, especially through a Michigan winter.”

Green’s research combines these practices from evolutionary biology and ecology with techniques from his molecular background. This includes lab work – measuring gene expression and RNA sequencing, or transcriptomics (“pipetting a lot of clear liquids in very, very small volumes,” Green says) – and a hefty computational component to

code large data sets.

As Green’s research encompasses the molecular and evolutionary, his perspective has similarly evolved. “As a molecular biologist, I used to think, ‘I can study the monarch in isolation to understand its migration.’ But this work has expanded my view of how particular problems interact. Can I truly understand how migration works without understanding other animals the monarchs interact with and how those interactions change the milkweed

quality? I’ve started to appreciate these questions.”

These questions reflect Green’s perspective of science more broadly, too. “We tend to pursue biology in silos,” he explains. “You can study entire populations on global scales or you can study biophysics or biochemistry. I love the idea of connecting these segments.” He stresses the slow, piecemeal nature of the scientific process, but insists opportunities exist – with the monarch and with other insects, animals, and

SURPRISE IN DIAPAUSE

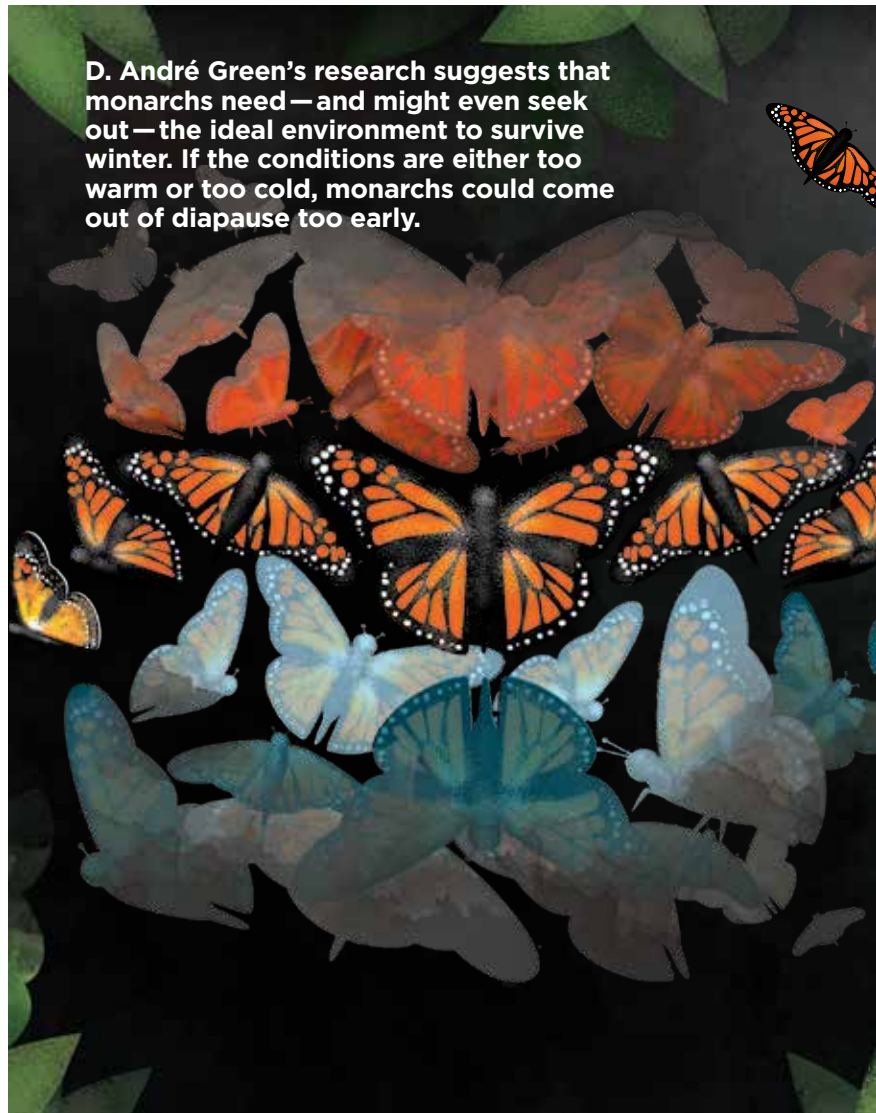
At the beginning of spring, environmental cues alert monarchs that it’s time to fly north. But LSA Professor D. André Green’s study suggests that, for the monarchs, survival is a delicate balancing act.

D. André Green’s palpable excitement and integrative approach have recently led to unexpected results in his research. He started studying monarchs during a postdoctoral fellowship at the University of Chicago in 2015. At that point, there weren’t any monarchs in the lab, so Green turned to published papers to find inspiration for an experiment he might perform during winter. That’s when he found a study about diapause, the hormonally controlled state that helps monarchs survive winter.

The common story was that monarchs, once they reached Mexico, spent the entire winter in diapause, until they’re eventually roused at the start of spring. But the results of this paper showed that diapause actually ended in the middle of winter.

Green’s curiosity led him to design an experiment using gene expression to investigate the why and how of this paper’s findings. He recognized that monarchs were either responding to some environmental cue other than spring’s longer days and warmer

D. André Green’s research suggests that monarchs need — and might even seek out — the ideal environment to survive winter. If the conditions are either too warm or too cold, monarchs could come out of diapause too early.



plants—that allow for a more integrative and holistic approach to research. “We have the tools and opportunity to start to bridge different levels of biological organization and present that as a model for how we think life works, at least on this planet.”

Green is bringing this philosophy to his next project: tracking individual migrating monarchs. He is collaborating with a team from the College of Engineering to design microsensors that will be placed onto individual

monarchs without disrupting their life cycles or flights. The microsensors are added in Michigan and collect data as the butterflies travel to Mexico. Though the complexity of the project poses tremendous difficulty, Green is optimistic. “What we can potentially learn by having a lens that combines my background with an engineer’s expertise would be amazing.”

Green’s research has received a lot of attention. (Remember: People love butterflies.) But as Green’s own per-

spective has metamorphosed, so too has his understanding of the story that initially helped catalyze his research. “I love talking about butterflies and migration, and I want this information to be accessible. But instead of oversimplifying, we need to recognize that there’s still a ton we don’t know.”

“The monarch story is still sensational without sensationalizing it.” ■



temperatures or they had an internal timer that “wakes them” at a particular time in winter. “As these things go,” Green says, “it turned out to be both.”

Although understood in developmental biology to slow down metabolic processes, Green’s study showed, rather counterintuitively, that colder temperatures accelerated diapause. Similar results have been found with many other insect systems, and the fact that this counterintuitive result is commonly seen in this phenomenon and had no specific mechanistic explanation excited Green. The study also showed that monarchs do have an internal timer—monarchs don’t use light to measure time, so how they do experience it is still largely unknown—and provided initial insight into how a timer like that could work.

These findings complicate the accepted understanding of how the environment affects monarchs. “The idea was always that the overwintering sites need to be as cool as possible without the monarchs freezing, because warmer temperatures mean monarchs run through their fat storage quickly, which leads to higher mortality,” says Green. “But my study suggested that too cold temperatures could also negatively impact the butterflies. As we continue to study monarchs, we need to consider diapause timing, since it’s dependent upon temperature control.”

Diapause is a protective state. In addition to reducing metabolism, it increases immune defense. When monarchs come out of diapause too early, they lose that defense. Although there is always some waiting between the end of diapause and beginning of mating season, it’s hypothesized that if this period increases, so does the monarch’s vulnerability to infection.

It seems that monarchs may require very specific environments—not too hot, not too cold—to survive winter. “The remarkable thing about monarchs is they migrate to the exact same places every year,” says Green. “The study suggests there’s some type of specific energy balance that may be important so they don’t come out of diapause too early or too late.” Monarchs actually move around their overwintering sites a bit, changing spots throughout the season. Green’s research suggests that this movement may reflect monarchs’ continuous search for the ideal conditions.

Green is eager to explore the potential evolutionary implications unearthed by this study on the molecular level. His current experiment centers around chemical modifications to DNA that may provide the basis for the monarch’s internal timer. “For me, if you don’t understand a mechanism then you’re always going to be making a bit of a hand-waving argument as to why organisms either choose particular habitats or behave in certain ways,” Green says. “I want to know exactly how it works.”



WHAT COULD HAPPEN TO MONARCHS IF THEIR ENVIRONMENT IS TOO WARM?

- They come out of diapause too early
- They could run through their fat storage too quickly, and might not have enough sustenance to re-migrate northwards

WHAT ABOUT IF IT'S TOO COLD?

- They come out of diapause too early
- They could freeze!
- They could lose important immune defense and potentially be vulnerable to infection

Illustration by Julia Lubas

Criminal Record

Alumna Carly Marten was the first student to win the Raoul Wallenberg Humanitarian Award and the Wallenberg Fellowship at U-M. Drawing from both awards, she's expanding her work to use data to help sexual assault survivors in Ethiopia.



Photo by Marthinolly

SOME OF THE information Carly Marten (A.B. '19) culls from patients' medical records is the run-of-the-mill, standard stuff you'd find at any clinic in the world: a patient's age, where they lived—basic demographic data.

The other information she collects concerns the event that brought the patients to the clinic in the first place. Marten is investigating the experiences of sexual assault survivors who are treated at the One-Stop Center at Menelik II Hospital, a public hospital in Ethiopia's capital, Addis Ababa.

The project was developed in collaboration with Dr. Thomas Mekuria, an OB/GYN on faculty at St. Paul's Hospital, an affiliate of Menelik II Hospital, with whom Marten had also worked in the summer of 2018. "I had received funding from the Honors Program, the Department of Linguistics, and the Department of Women's Studies to pursue research for my honors thesis. Dr. Mekuria translated my interviews from Amharic to English." He also founded the One-Stop Center.

One-Stop Centers, such as the one where Marten works, were established by the Ethiopian government to provide comprehensive care to survivors of sexual assault. At the clinics, survivors can receive clinical care, meet with mental health professionals, stay in temporary housing, consult with legal advisors, and open a legal case against their perpetrator(s). The primary goals behind consolidating services in a single place are to provide comprehensive and immediate care, to minimize secondary victimization, and to encourage survivors to use all of the services available to them.

The Addis Ababa center where Marten works is one of the few such centers in the country, and is physically separated from the hospital. "It doesn't look like a hospital," Marten says. The hope is that it won't feel like one either. The clinic walls are brightly painted with murals, and its rooms are filled with non-hospital furniture. In the nearly two years the clinic has been open, it has served approximately 500 patients. It is Marten's goal to draw data from all of them.

Marten is gathering quantitative data about the assaults: where they happened, at what time of day, who the perpetrator was, and if there was clinical trauma. She's particularly interested in knowing if legal charges were filed. In cases where they were filed, Marten wants to know whether they were dropped or pursued—and when they were pursued, she wants to know their outcomes. Marten is currently moving through all of the clinic's existing records, and she hopes to soon be able to start collecting this data in real time, too.

The clinic treats people of all genders who have experienced any type of sexual violence, Marten says, but the patient population is overwhelmingly female. At the time of this writ-

ing, Marten had reviewed 325 cases, and she had drawn some preliminary findings. The survivors, on average, were 16 years old, and 318 of them were women. All of the perpetrators were men. In talking with people she met in Addis Ababa about her work, Marten says, her early findings surprised them.

"Because it's a public hospital, many people believed our patients were poor and came from rural areas," she says. "They also tend to believe that sexual violence is mostly a rural problem, but 85 percent of our patients came from Addis Ababa." One of her early findings surprised no one: of the 325 cases Marten had reviewed only 10 had received some kind of conviction.

Even in the most favorable circumstances, prosecuting sexual assault cases is difficult. There are often no witnesses or scientific evidence, reporting is frequently delayed, and the experiences are often traumatic and painful to discuss. The same is true in Ethiopia, but the criteria for prosecution are even stricter. Marital rape is not criminalized, and the burden of proof for a survivor is almost insurmountable—and it's incumbent on the survivor to collect the proof.

At the same time, there have been some significant recent events that might signal a change. The current prime minister campaigned on appointing women to 50 percent of his cabinet, and he appointed the first female president. Marten hopes her research will help to support this transition.

"If I weren't here the research wouldn't get done right now, but there are certainly people here who could eventually and very capably do it," Marten says. "I'm really grateful to contribute a small piece to the work feminists are doing in Ethiopia, and with very few resources. It inspires, amazes, and astounds me." Marten hopes her research will improve the clinic experience for providers so they can help future survivors, and she hopes to conduct qualitative research, too, so that survivors feel like they're being heard.

For herself, Marten hopes the effort she's made to develop focused knowledge will translate into an ability to provide skilled care. When she returns to the United States, Marten wants to go to medical school and join Doctors Without Borders, and it's one reason she is working so hard to develop focused knowledge that will, she believes, help her to provide skilled care. Being in Ethiopia and at the Menelik II Hospital has only strengthened that goal. "I had never really, deeply thought about being an American before I came here," she says. "I'd thought about being white and being a woman, but I never really understood the access my American passport affords me. I realize how lucky I am, and how fickle and random and faulty a border can be." And with this understanding, Marten hopes the next small piece she contributes through her work can make the world a little more just, too. ■

Palace of the People

When the opportunity came for two professors to participate in the Chicago Architecture Biennial, they listened to elders from the Potawatomi Nation and found a way to reckon architecture's relationship to the Indigenous peoples of Chicagou.

LOOKING OUT THE east-facing windows of Yates Gallery at the Chicago Cultural Center, it's easy to admire the wide territory the windows frame. A shoreline east of Michigan Avenue is still landfilled by rubble from the 1871 fire. Millennium Park, Grant Park, and Burnham Park have become urban landmarks on land that was once covered by the waters of Lake Michigan.

Taking a step back to better regard the view, you can more easily read the text painted across the windows in front of you: YOU ARE LOOKING AT UNCEDED LAND.

The words were part of an exhibit called the Settler Colonial City Project (SCCP) that ran from September 2019 to January 2020 as part of the Chicago Architecture Biennial. The exhibit was created by History of Art Assistant Professor Ana María León and Andrew Herscher, associate professor of architecture in the Taubman College of Architecture and Urban Planning and in history of art and Slavic languages and literatures.

When Herscher and León were first invited to present work at the 2019 Chicago Architecture Biennial, they used the opportunity to start a conversation about the settler-colonial history of the city.





Herscher endeavors to bring the study of architecture and cities across a range of global sites to bear on struggles for rights, justice, and democracy. León studies spatial histories. Her research and teaching centers on the modernity of the Americas as a landscape shaped by processes of colonialism, settler colonialism, and resistance. “We might think about settler colonialism as something that happened in the past,” León says, “but settler colonialism is ongoing, contemporary, all around us.”

Herscher and León wanted to center Native voices in the project. The pair reached out to Heather Miller, executive director of the American Indian Center (AIC) in Chicago, to listen, learn, and propose a collaboration. Over the course of the project, Herscher and León worked closely with Miller to put together public events on architecture, settler colonialism, and decolonization at both the AIC and the Chicago Cultural Center.

Through Miller, Herscher and León also began a conversation with John Low, a member of the Potawatomi Nation and a prolific scholar of the Potawatomi Nation’s relationship with Chicago. Low focused the attention of the SCCP on the continuing importance of Chicago’s Indigenous communities to the history of the city, and he also wrote the foreword to the exhibit’s “Mapping Chicagou/Chicago” publication.

The SCCP installation at the Chicago Cultural Center consisted of a series of signs that explain the entangled histories of the building and the people its construction displaced. The project mimicked the style of the Chicago Cultural

(Story continues on p. 42)

THE PLACE OF WILD ONIONS

“You are acquainted with this piece of land—the country we live in. Shall we give it up? Take notice, it is a small piece of land, and if we give it away, what will become of us?”

—Chief Metea at the 1821 Treaty of Chicago

About a hundred years after being driven off their land, Indigenous people returned to their native Chicago in large numbers as a result of the 1956 Indian Relocation Act. “After 400 years of killing Indians and trying to get them off the land, the federal government went to relocation, went to reservations. It gave Native folks a hundred bucks and a bus ticket and told them to go to the cities,” says Heather Miller. “Folks that arrived in cities needed community.” That’s where the American Indian Center of Chicago steps in.

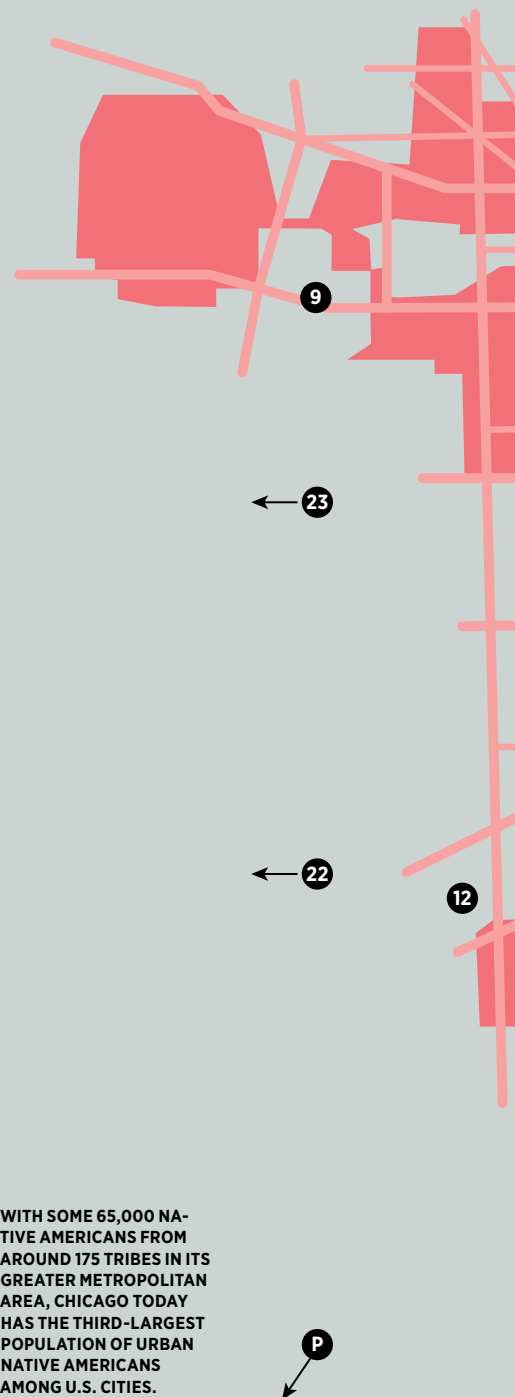
Founded in 1953, the American Indian Center of Chicago is the oldest Indian center in the United States, and it serves the third-largest urban Indigenous population among U.S. cities. “People don’t know that we still exist. They think we’re dead—they don’t know that we thrive,” says Miller, who belongs to the Wyandotte Nation from Oklahoma. Since its founding, the AIC of Chicago has been a space where people can practice their heritage and celebrate their history.

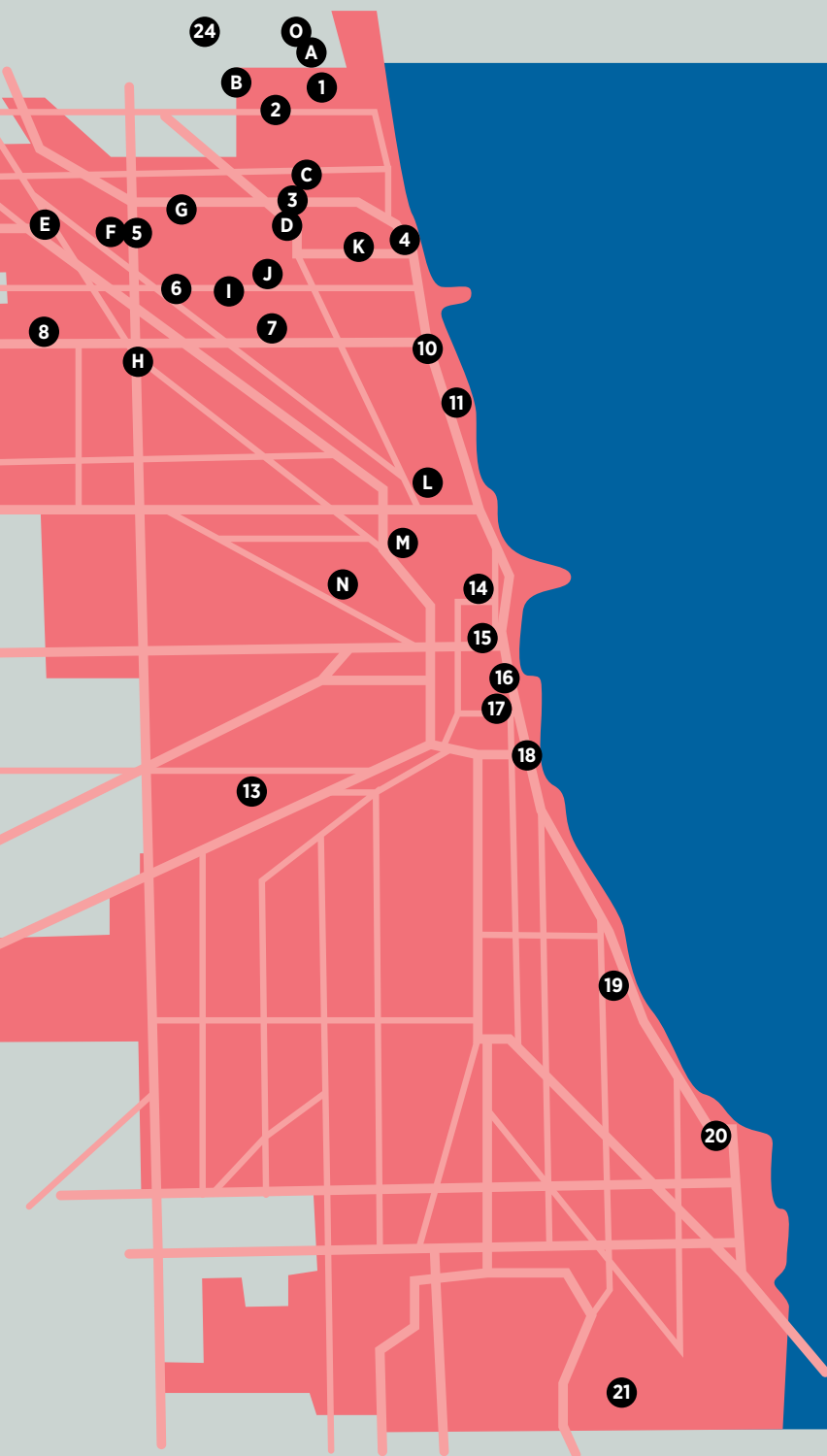
The atlas that the Settler Colonial City Project (SCCP) included in its exhibit used the familiar techniques of colonial cartography to map the unfamiliar Indigenous history of Chicago or Chicagou, an Indigenous name for the place where the wild onions known as shikaakwa grew wild and abundant in the forests. The atlas documents how hills were flattened, the river was re-shaped, the shoreline was landfilled, buildings sprang up on Native land, and Native people were displaced. And yet, the atlas also reveals how present-day Chicago is a city with a thriving Native community: a city where powwows take place in a high school gym, a gallery space curated by Native artists is packed for an opening downtown, Native seniors meet for lunch at a community center, and Native youth tend the ramps in their community garden.

León and Herscher worked with a larger team of architects and architecture students, including recent Taubman alums Emily Kutil (M. Architecture ’13) and Tyler Schaafsma (M. Architecture ’18). Using the design skills they honed at U-M, Kutil and Schaafsma visualized the timelines and landmarks of Chicago and Chicagou, studied Potawatomi scholar John Low’s history of the city, and pulled together Library of Congress materials to map treaties and draw boundaries, making the data fit together like a puzzle.

Working with a minimal palette, Schaafsma marked political and architectural variations with hard gridded graphs to demonstrate how settlers had erased the organic forms of Indigenous communities and the natural, pre-settler state of the land. Schaafsma is committed to bringing the awareness he practiced in the mapping project to his future work.

“Once you start looking, you see the erasure and misportrayals everywhere,” Schaafsma says. “Once you learn the treaties and the history you become aware of this presence.”





Indigenous Presence in Contemporary Chicago

SITES

- 1 Pottawatomie Park
- 2 Indian Boundary Park
- 3 West Ridge Nature Preserve
- 4 Foster Avenue Underpass Mural
- 5 LaBagh Woods
- 6 First Nations Community Garden
- 7 Horner Park
- 8 NW Portage Walking Museum
- 9 Schiller Woods
- 10 Kwa-Ma-Rolas Sculpture
- 11 Corn Dance Sculpture
- 12 Chicago Portage National Historic Site
- 13 Chicago Portage National Historic Site
- 14 "Dearborn Massacre" Engraving
- 15 Congress Plaza Gardens
- 16 Protested Field Museum Native Exhibit
- 17 Battle of Fort Dearborn Park
- 18 Century of Progress Expo "Indian Village"
- 19 World's Columbian Expo "Indian Village"
- 20 Potawatomi Village Historic Site
- 21 Big Marsh Park
- 22 Potawatomi Village Historic Site
- 23 Ekwabet Statue
- 24 Mitchell Museum of the American Indian

ORGANIZATIONS

- A CPS American Indian Education Program
- B American Indian Association of Illinois
- C Chicago American Indian Community Collaborative
- D California Indian Manpower Consortium of Chicago
- E Ho-Chunk Nation Chicago Branch Office
- F American Indian Health Services of Chicago
- G American Indian Center of Chicago
- H Chi-Nations Youth Council/Aloha Center
- I Annual Chicago Powwow gym
- J St. Kateri Center of Chicago
- K American Indian Center Chicago
- L D'Arcy McNickle Center for American Indian Studies
- M Native American Chamber of Commerce of Illinois
- N UIC Native American Support Program
- O Center for Native American and Indigenous Research at Northwestern University
- P Midwest SOARRING Foundation



RUBBLE FROM THE 1871 FIRE WAS USED TO LANDFILL THE SHORELINE EAST OF MICHIGAN AVENUE, CREATING NEW, UNCEDED LAND. THE CHICAGO CULTURAL CENTER STANDS AT THE THRESHOLD BETWEEN CEDED AND UNCEDED LAND.

Center’s official wayfinding and historical signage, working to complicate descriptions and dates with information about how these buildings came to be and hopefully working against what León describes as an “inability to grasp the settler colonialism all around us in our daily lives.” A massive wooden door sat behind a sign that read: “This mahogany was extracted from Indigenous land.” The Tiffany Dome in Preston Bradley Hall, which contains 30,000 pieces of glass and is the largest dome of its kind in the world, sat above text that read: “Tiffany & Co. rendered settler colonialism ‘beautiful.’” A panel at the building’s north entrance – in a room lavishly surfaced with marble – read: “This marble was quarried and assembled by exploited labor.”

Situated throughout the Cultural

Center, the SCCP’s signs were intended to startle visitors and spark conversation. The project operated as an educational tool, as a political intervention, and also as architecture because it changed the perception and experience of the building.

Herscher describes the work of SCCP as “pedagogy for the public.”

“The project was meant to offer a more nuanced narrative of the building,” Herscher says. “In so doing, our intervention encouraged people to learn about the Chicago Cultural Center’s history.”

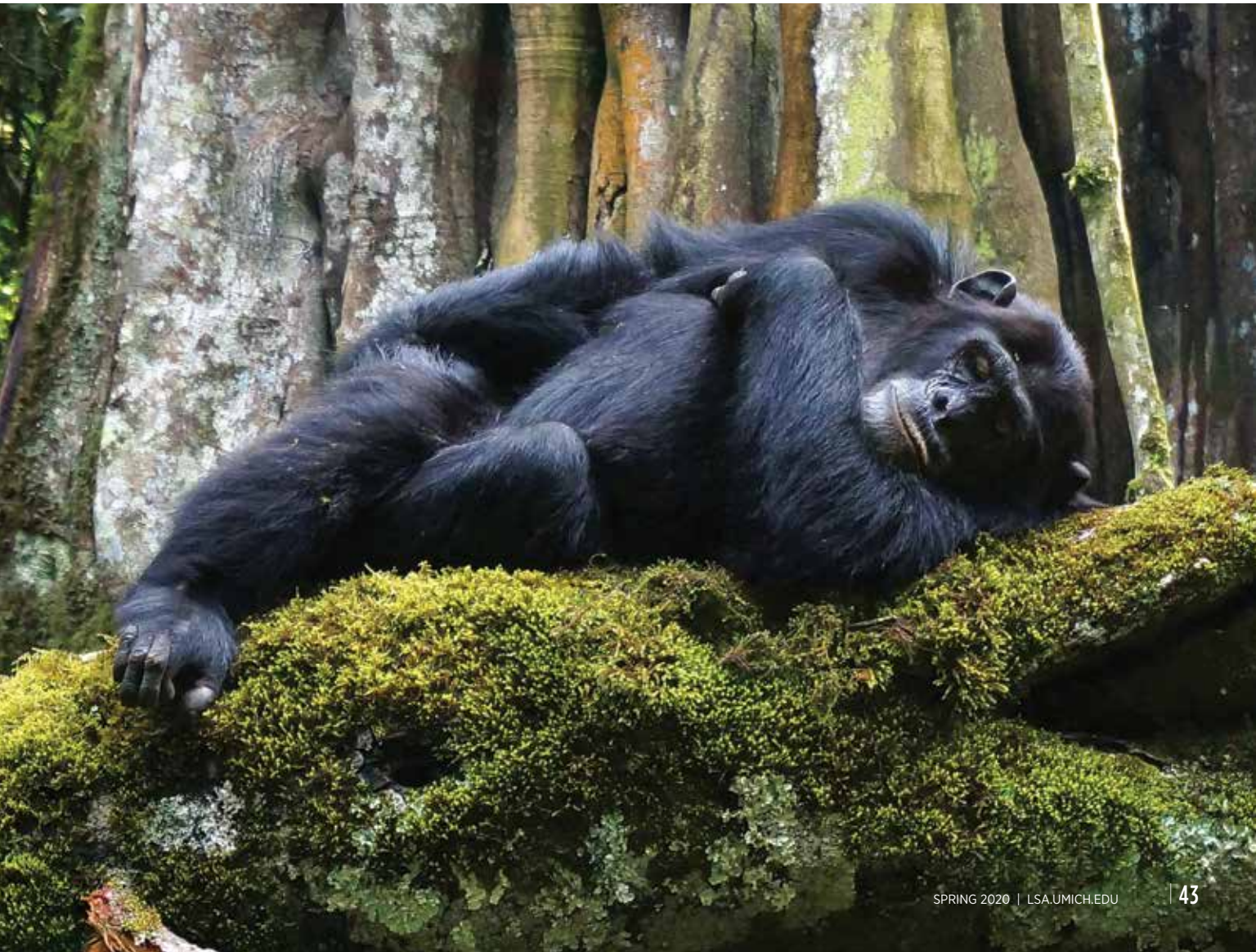
“The project really speaks to where architecture is today, which is struggling to reckon with its material, political, and social position in the world,” León says. ■

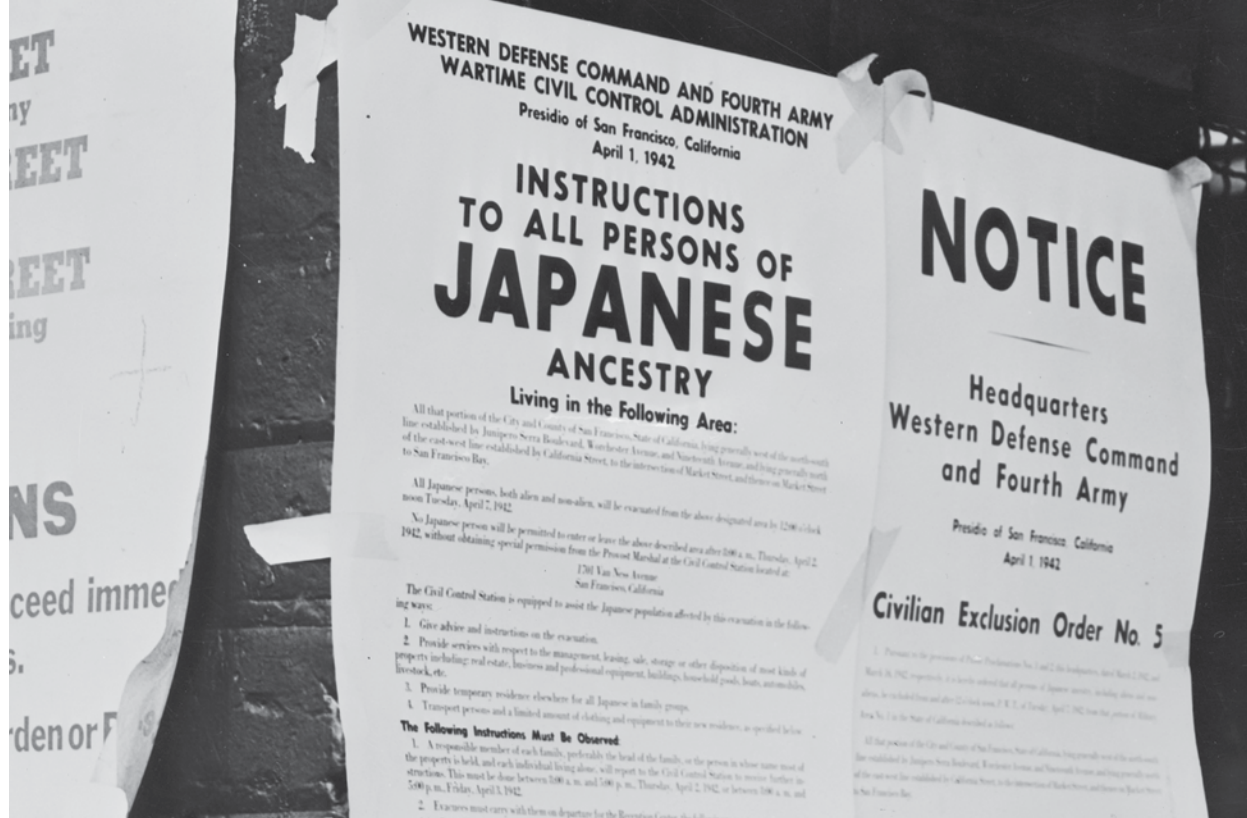
Science and Serendipity

John Mitani spent his entire faculty career at U-M, a career that was not available to either of his parents. Now the first-generation student scholarship he established in their name will help other students spark the passion that leads to their degree.

IN THE SUMMER of 2019, at the Pioneers in Primatology symposium at the annual meeting of the American Society of Primatologists, John Mitani, emeritus professor of anthropology, was asked to give a talk about his career. He had completed teaching his final semester at U-M, where he'd spent his entire career. He had a lot of material from which to draw.

In his 41 years of fieldwork as a primate behavioral ecologist, Mitani has studied the social behavior and communication of all five of the non-human apes: the gibbons and orangutans of Indonesia, gorillas in Rwanda, bonobos from the Democratic Republic of Congo, and the chimpanzees of Uganda and Tanzania. "I could claim that my entire career was planned," Mitani said to his audience that day, "but that would not be





true. As scientists, we are trained to design and execute carefully controlled studies, but more often than not things do not work out as planned. If there is any coherence to my research, it is accidental. My story emphasizes the role that serendipity plays in science.”

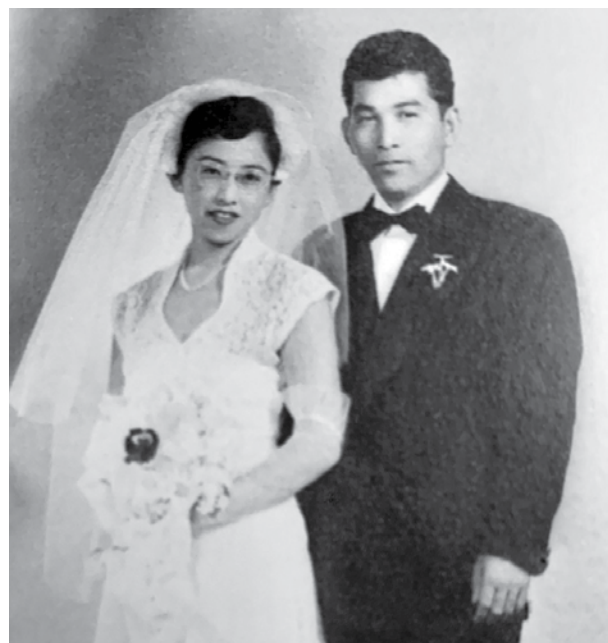
Serendipity had recently been making appearances in other parts of Mitani’s life too. The Leakey Foundation, which had funded some of his research, is headquartered in the Presidio of San Francisco. It had been a military post since the eighteenth century, when the Spanish colonialists first erected *el presidio*, until it became a national park in 1994. Visiting the foundation in 2019, Mitani came across an exhibit about the Presidio’s role in forcibly removing and incarcerating 120,000 Japanese Americans during World War II. The exhibit marked the seventy-fifth anniversary of the Civilian Exclusion Order, which had come from a Presidio corner office.

In the exhibit, the names of all of the 120,000 people who’d been interned were stenciled onto glass, and Mitani’s parents—Sally Sadako Oshita and Don Kiyoshi Mitani—were among them.

Chance crossed Mitani’s family his-

(Above) POSTING OF EXCLUSION ORDER AT FIRST AND FRONT STREETS IN SAN FRANCISCO, DIRECTING REMOVAL OF PERSONS OF JAPANESE ANCESTRY.

MITANI’S PARENTS (Right) WERE INTRODUCED TO EACH OTHER BY A MUTUAL FRIEND AND MARRIED IN 1950.



tory with his research again later. The Leakey Foundation was organizing a meeting in Wyoming, and a trustee who lived there was telling Mitani about an interpretive center at Heart Mountain, near Cody. “And I realized,” Mitani recalled, “my father had been interned there.”

After four decades of field research, Mitani knows how to distinguish significant moments from thousands of

hours of observation. Many of these moments have been captured in *Rise of the Warrior Apes*, an award-winning documentary on his research, and in *Chimpanzee*, a Disney nature film.

Other significant moments have mostly been private. Mitani knew members of his family had been interned, but, like many members of their generation, his parents didn’t talk about it. Mitani’s father, who’d

been raised in Hiroshima's mild climate, would occasionally tell his sons about Heart Mountain's fierce winters. Mitani's mother, who had been interned in Poston, Arizona, recalled the tar paper shacks she and others lived in and how little privacy they offered. Both of his parents noted the camps were located in desolate regions in the country's interior. There was an obvious reason for this, Mitani says. "The U.S. government wasn't keen to advertise what it was doing to some of its citizens."

NO-NO BOY

At family reunions, Mitani says, all the cousins get together. "Some of us are too young, but others had been born or had partly grown up in camp," he says. "But all agree that our parents never willingly talked about it."

But Mitani's father did talk about one thing: being a "no-no boy."

At Heart Mountain, the United States government asked men to answer 28 questions to determine if their loyalty was with the United States or Japan. Many questions asked ordinary things—names of family members, education levels, language skills—but the last two questions went directly to the heart of the matter: Would the men willingly serve in the armed forces? Would they swear an unqualified allegiance to America? Mitani's father answered no and no, which made him an infamous no-no boy.

Most no-no boys were interned at Tule Lake, California; Mitani's father had been there, but he was transferred to Heart Mountain. "Why he was able to remain at Heart Mountain is a mystery to me," Mitani says. When there was seasonal work outside, Mitani's father would change his answers to yes, yes. "But as soon as he got back to camp he would go back to no, no. Perhaps this was why he wasn't moved back to Tule Lake or incarcerated."



U-M ANTHROPOLOGIST JOHN MITANI AND WIFE SALLY MITANI ON THE RED CARPET AT THE WORLD PREMIERE OF THE DISNEY NATURE MOVIE CHIMPANZEE.


Other parts of his parents' lives also remained a mystery, including the Japanese language, which is one of Mitani's greatest regrets. He was never able to speak Japanese with a Japanese colleague who became a very close friend. Even visiting Japan could be painful. "They look at me and they think something's off," he says. "Now my wife, who is not Japanese, protects me. They see her, they see me, and they can figure things out."

The sense of isolation was painful, but it offered Mitani access and empathy to others' struggles to navigate their own alien and intermediate spaces. In 2017, when U-M students launched the Being Not-Rich at U-M website for fellow students also making their way through U-M without enough resources, it struck a chord in Mitani that kept

resonating. At the same time, as Mitani unexpectedly encountered his parents' history in his professional life, it felt less like worlds colliding than marveling at the turns of fortune that had brought him to where he was. Because his parents had been interned, they had been denied the chance to go to college. He decided to create the Don Kiyoshi & Sally Sadako Mitani Endowment fund for first-generation students pursuing a degree in anthropology at LSA.

"I'd been thinking about my parents and about the Being Not-Rich at U-M website. I've been a faculty member here my entire career, and I've always been tremendously grateful for how supportive this place has been—not only my department, but the college and the entire university. I think it was the confluence of all these events that made me decide to do this. I've had a long, happy, and fulfilling life here.

"Given their upbringing and background, I'm not sure my parents really understood what I did, but they were always tremendously supportive of everything I did," he says. "This is just a small way to pay it back." ■



CAMPUS BY CHRIS RUSS With additional reporting by Gina Balibrera

Learning on the Lake

A new LSA program connects students to the culture, history, and language of the Great Lakes.


AN INSTRUCTOR AND a group of students were sitting on the shore of Douglas Lake—located between Munro Lake and Burt Lake in northern Michigan—learning about how the world began in another lake.

The instructor told a creation story of the Anishinaabeg—a group that includes several Indigenous communities including the Algonquin, Mississauga, Ojibwe, Ottawa, and Potawatomi. The story goes like this: Sky Woman falls from the heavens to a watery place and the creatures living there create the world we know by dredging dirt up from beneath the water to catch her as she lands.

As the instructor spoke, she drew in the sand on the beach on Douglas Lake, explaining how giving lessons in the sand was how elders from the

Anishinaabeg taught. The lesson occurred, was learned, and then was swept away.

Here the lesson was taught as part of a program called the Great Lakes Arts, Cultures, and Environments (GLACE) program. GLACE takes place every spring at the University of Michigan Biological Station (UMBS). Founded in 1909, UMBS is a 10,000-acre property that has traditionally had a strong



two-week intensive classes on Native American studies, creative writing, and critical cartography.

“The focus of the program is to ask what it means to be here now,” says Diran. “We wanted to lead with Indigenous understandings of the place, including language, and we wanted to center interdisciplinary thinking and to make that kind of thinking part of how they look at northern Michigan.”

A SENSE OF PLACE

GLACE’s origins can be traced back to English Language and Literature Professor and Department Chair David Porter, who was looking to create a new program that possessed three core

“I WANT STUDENTS TO THINK OF GLACE AND UMBS AS A PLACE WHERE THINKING ACROSS DISCIPLINES AND ACROSS MODES AND GENRES IS NATURAL AND TAKEN FOR GRANTED.”

academic focus on environmental and biological sciences with a single, much-loved humanities course once taught by Michigan naturalist poet and retired LSA lecturer Keith Taylor.

Now, that individual course and its focus on the importance of place and the natural world has inspired and been expanded into a fully fledged humanities program of its own. GLACE runs in the spring term, with a core class taught by Ingrid Diran, assistant professor of comparative literature and LSA’s Program in the Environment, that runs the entire span of the program. Additionally, there are



GLACE'S INSTRUCTORS INCLUDED DIRECTOR IN-GRID DIRAN; HISTORIAN DAEGAN MILLER; AN-ISHINAABEMOWIN POET AND UW-MILWAUKEE PROFESSOR MARGARET NOODIN; AND CREATIVE NONFICTION PROFESSOR AISHA SABATINI SLOAN.

characteristics: a clear English component, a genuine commitment to interdisciplinary collaboration, and subject matter that was unique to Michigan.

So when Porter heard about the Transforming Learning Program, a grant-funded initiative to host new experimental programs at UMBS, Porter jumped at the opportunity to build a program that could use humanities courses to connect students meaningfully to the state of Michigan.

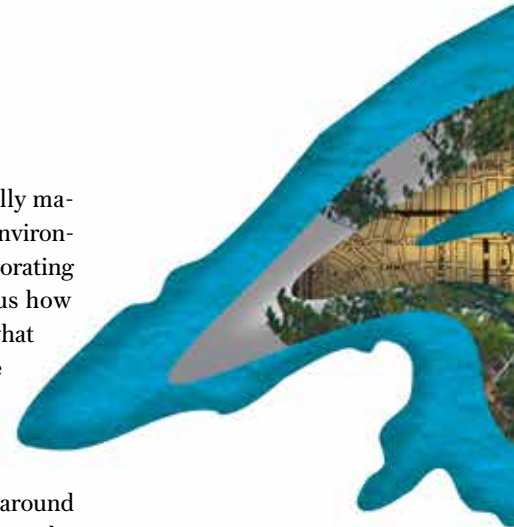
"I've been increasingly curious about the ways the Department of English in particular could take account of our institutional locatedness and leverage it as a starting point for learning experiences," Porter says. "I want students to think of GLACE and UMBS as a place where thinking across disciplines and across modes and genres is natural and taken for granted."

Locatedness is at the core of the program, but equally central to the GLACE experience is the student-led quality of collaboration and instruction. Students are asked to lead hour-long discussions on a reading or artifact of their choice as part of the program. Since the discussions take place on one of UMBS's two pontoon boats, these discussions have been lovingly renamed "bow of the boat" lectures.

"We all went in with our own major and our own expertise, things we like and things we don't like," says recent LSA graduate Andie McNally, who

took GLACE last year. (McNally majored in LSA's Program in the Environment.) "Contributing and collaborating throughout GLACE showed us how much we should take pride in what we know and be open to what we don't know."

A variety of activities encouraged students to interact and reflect on the environment around them in wildly different ways, from the serious, including working on a UNESCO grant application to protect UMBS



PATHFINDING

LSA alum Dennis Dennehy (A.B. 1989) helped launch legendary 1990s rockers such as Nirvana and Beck while doing communications for Geffen and DGC Records. Now Dennehy is the chief communications officer at AEG Presents, which owns the Coachella Festival. He says he owes a lot of the skills he built his career on to his undergraduate education.

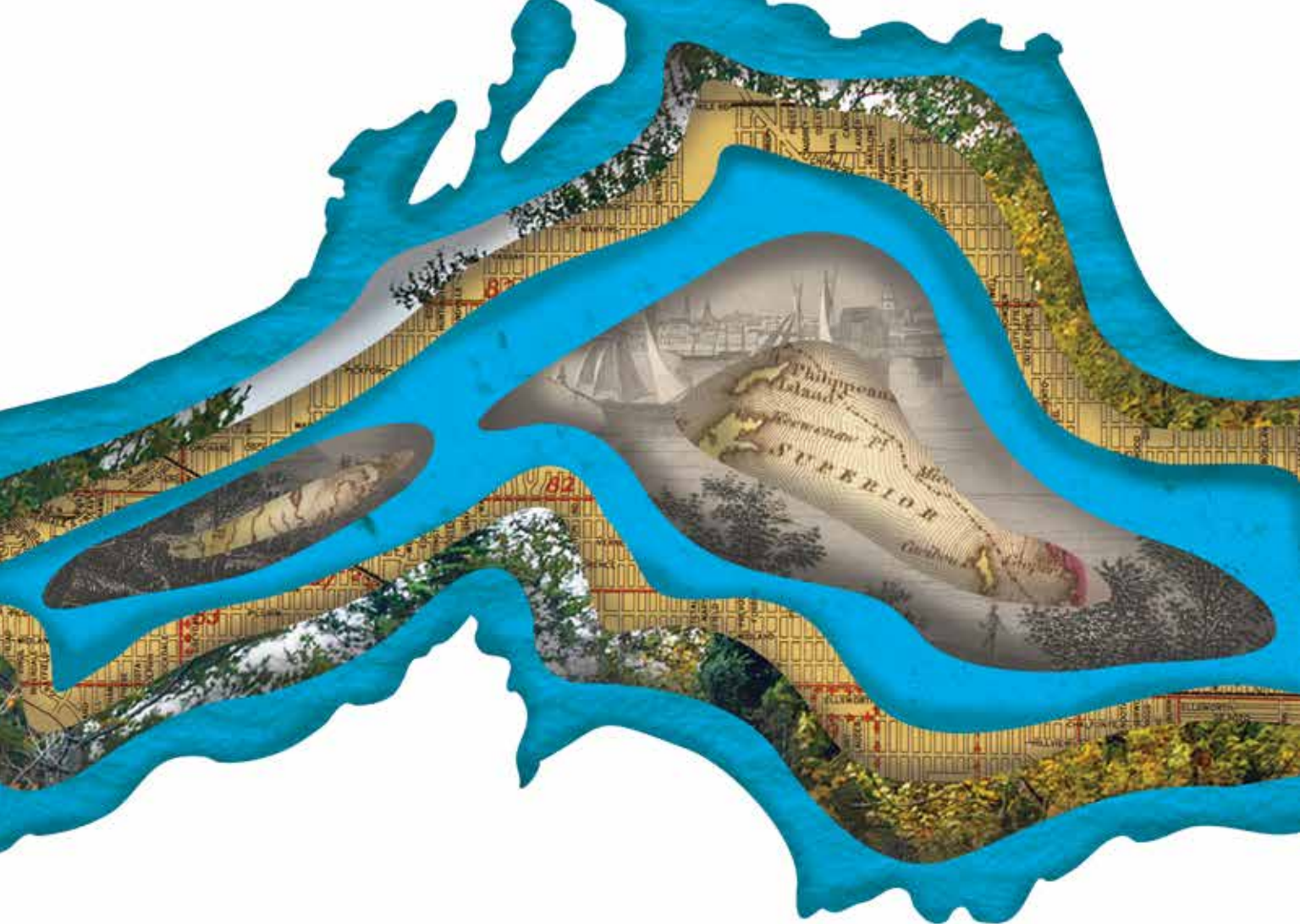
"My English degree from U-M—the emphasis on communication, storytelling, and writing skills—has served me incredibly well," says Dennehy.

In 2019, Dennehy decided to give back as the first donor to the Great Lakes Arts, Cultures, and Environments (GLACE) program.

"I was drawn to GLACE because it opens up access to the Bio Station for LSA students from all different disciplines and encourages—really inspires—them to work together," Dennehy says. "It's very fulfilling to support GLACE now so that it can establish a sure footing to take root and grow into something long lasting."

To read more of Dennehy's story, go to myumi.ch/lsgavetoglance.

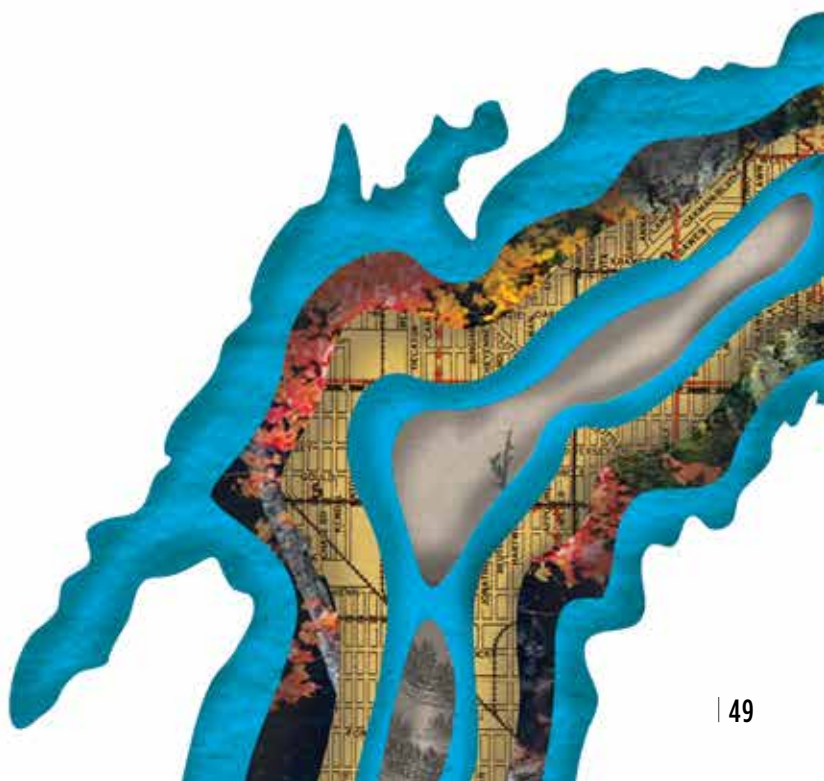
To learn about LSA's Great Lakes Theme Semester, which GLACE is a part of, go to lsa.umich.edu/greatlakes.



and parts of the surrounding Great Lakes watershed; to the scientific, including accompanying LSA natural science undergraduates on trips to do fieldwork; to the imaginative, by participating in art-writing projects where students explored ideas about coincidence and nonhuman worlds.

The diversity of projects was part of the appeal, says Cielle Waters-Umfleet, a second-year creative writing major, and it was part of what students take with them after the course is over.

“GLACE is the type of program that gives you a better understanding of all of the things that have happened in this state even before it was a state or a territory,” Waters-Umfleet says. “It gives you a better sense of where you are, who you are, how we got here, and why we’re here. Going forward, I don’t think I will look at my work the same way if I hadn’t taken the class.” ■



Singing the Song of the Land

Alumnus Marcelo Hernandez Castillo's new memoir invites readers on a journey through the borderlands.

A T A YOUNG age, poet Marcelo Hernandez Castillo's (M.F.A. '14) fear of deportation was greater than his fear of death. By the time he graduated high school, his home had been raided by ICE, he'd been separated from his mother by the U.S. immigration system, and his father had been deported from the Northern California town the family called home.

Castillo learned to hide his undocumented status, which meant hiding parts of himself. The border appeared in his poetry as a snake, a long thread of hair, a hungry lake. As Castillo writes in his memoir, *Children of the Land*, "I ventured to believe that the function of the border wasn't only to keep people out, at least that was not its long-term function. Its other purpose was to be visible, to be seen, to be carried in the imaginations of migrants deep into the interior of the country, in the interior of their minds."

In the fall of 2012, when Castillo began the Helen Zell Writers' Program, the border was on a lot of people's minds. In June 2012, President Obama had announced a new policy: Deferred Action for Childhood Arrivals (DACA), which offered people who had been brought to the United States as children a two-year renewable period in which deportation could be deferred. Castillo, who had worried about enrolling in the program as an undocumented student, was one of its earliest beneficiaries. "Miraculously, DACA arrived as soon as I needed it," Castillo says, "and my application was in the mail the first day."

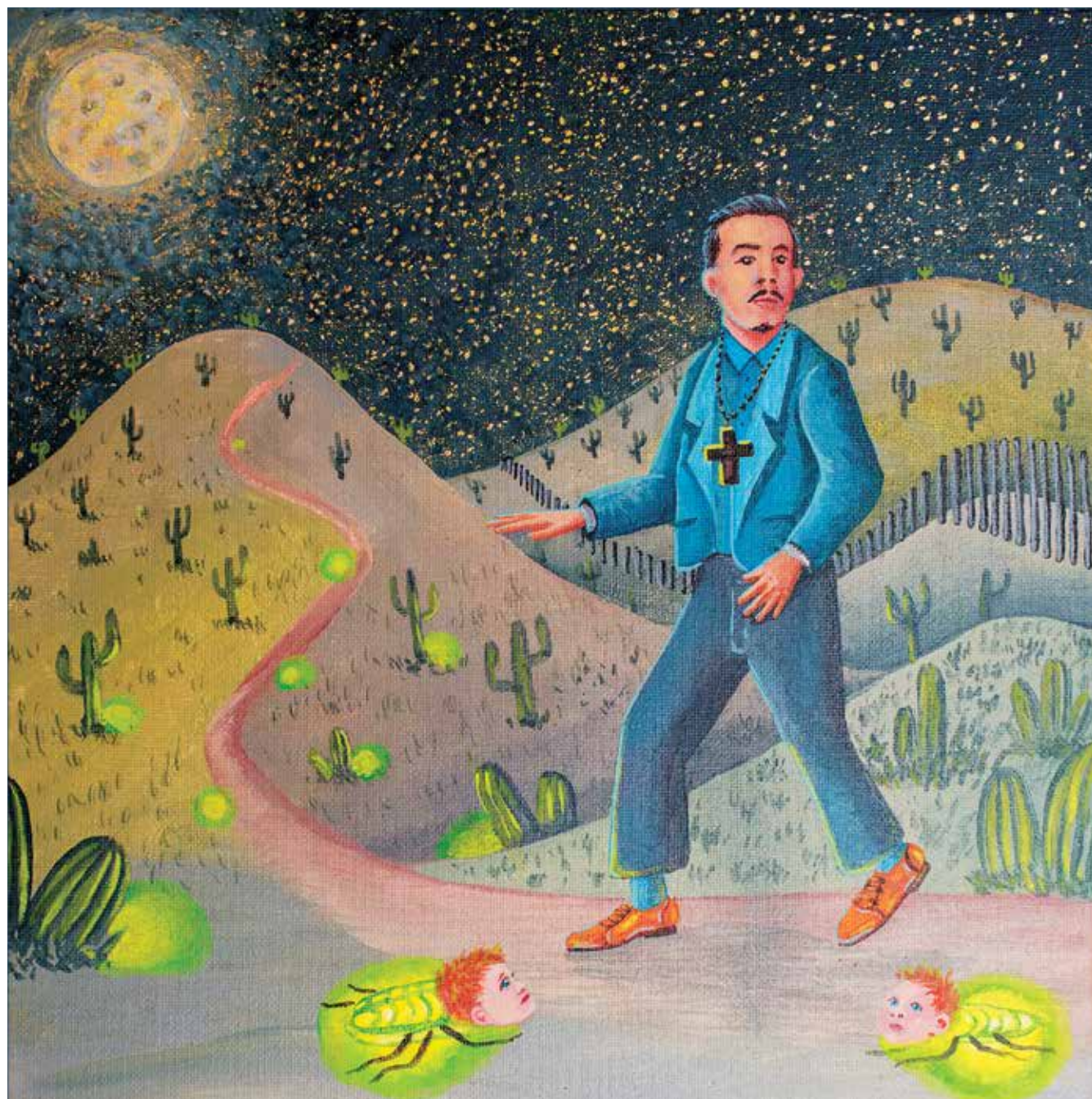
EXCERPT FROM *CHILDREN OF THE LAND*

They used to say that there were children living beneath small rocks on the west side of mountains. They were insects that had the faces of children, about the size of a frog. Their faces were white and were always positioned upward to the sky. If you looked at their faces you would go blind, so you had to look up at the sky to avoid their stare.

This was a myth brought back to Mexico from the U.S. by braceros like my grandfather Jesus. I liked to think of these myths crossing the border as well, returning to their origin from thousands of miles away.

The Niños de la Tierra had fluorescent bodies that glowed in the dark. I remember climbing a hill the adults told me not to go near because the Niños de la Tierra lived there. I looked up to the sky as I walked, careful not to look down at their faces, afraid of going blind.

Maybe those children belonged to someone, trapped in the north like everyone else, unable to return to the land of their birth. Or maybe that was the land of their birth, and they looked up because that's where all the mothers and fathers were. (From *Children of the Land* by Marcelo Hernandez Castillo. Used with the permission of Harper. Copyright © 2020 by Marcelo Hernandez Castillo.)



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ETON 2020

After spending most of his life in a Latinx community in California, Castillo found himself in the Midwest for the first time. He initially felt culturally alone, and he only communicated his residency status to a small circle of people. But working closely with other writers and being part of the artistic community in Ann Arbor helped. Castillo finished his degree and his manuscript, and he got ready to submit his manuscript for publication.

First books of poems are often published through prizes, and Castillo knew prize applications required proof of citizenship. He had always assumed he would cross that bridge when he got to it. “And then, I got to the bridge,” Castillo laughs. He had completed his first book, *Cenzontle*, and began contacting major poetry prizes independently, to see if there might be a path to publication for undocumented poets.

When Castillo heard that fellow poets Javier Zamora and Christopher Soto were interested in addressing this issue too, the three decided to begin a campaign together.

“That’s how it started,” Castillo says. “One by one people started getting on board.”

“I THOUGHT ABOUT HOW MANY VOICES WERE LEFT OUT OF M.F.A. PROGRAMS AND BOOK CONTESTS. WHO KNOWS WHAT THEY COULD HAVE WRITTEN, HAD THEY BEEN ALLOWED TO APPLY.”

They called the group UndocuPoets, and together the organization successfully petitioned ten major book awards to reconsider and, in most cases, waive the U.S. citizenship requirement for submission and publication. Castillo’s work with UndocuPoets cleared a path to publication for undocumented writers, making the poetry world more inclusive.

“I thought about how many voices were left out of M.F.A. programs and book contests,” Castillo says. “Who knows what they could have written, had they been allowed to apply.”

MOCKINGBIRD

Cenzontle was widely celebrated and won many awards, including the A. Poulin, Jr. Prize, and was selected by NPR and the New York Public Library for their top book lists of 2018.

The book established Castillo as a serious talent in the world of poetry, and the tension and ambiguity of his lines drew comparisons to Surrealists and French Symbolists because

of their ability to shift shapes, to behave like exquisitely layered masks.

Like the cenzontle, or mockingbird, Castillo was aware of inhabiting liminal space. He could be read and seen as a truth-telling poet, though he privately felt constrained by what he could say. Castillo was proud of *Cenzontle*, but he also knew what he didn’t — or couldn’t — put into it.

“In poetry I controlled how much to reveal, how much someone else could know about me. Having to hide a lot of myself, a lot of my past — that was reflected in the book of poems. I tried — I really, really tried. But the story couldn’t make its way onto paper in poetry. There was a layer of vulnerability I couldn’t tap into,” says Castillo.

He needed to write another book.

100 YEARS OF MIGRATIONS

In 2015, during Castillo’s third-year fellowship in the Zell Program, he began working on essays

that would soon grow into what is now his first memoir, *Children of the Land*. He started with the story of his family’s migration, which hadn’t begun with him or his parents, but was a much older part of his family history. Working with a linear narrative was difficult, and Castillo scrapped chronology altogether for a shape

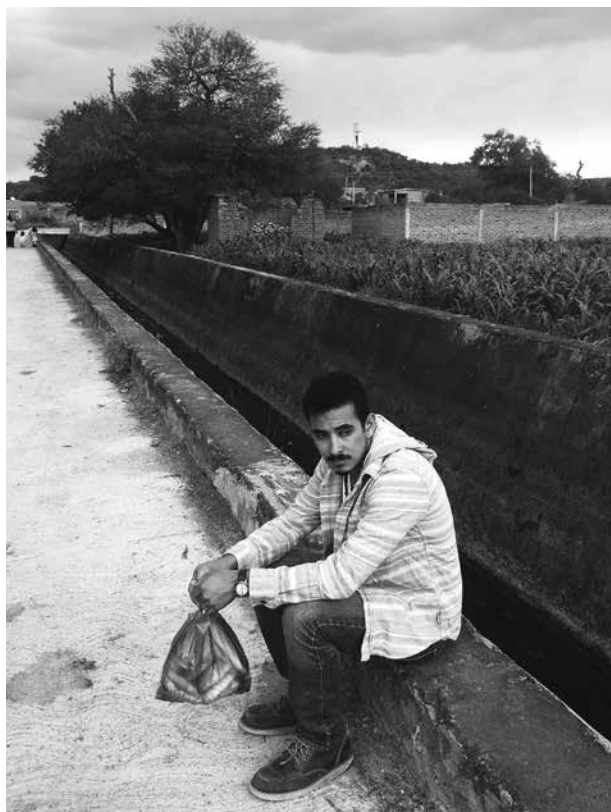
that was both more poetic and true to his family’s migration, circling through real and abstract moments and rearranging them in time, such as when his great-grandfather was deloused in the same border town where Castillo’s father was deported 100 years later.

But a year into writing this book, after a series of complicated events, Castillo’s parents found themselves back at the border seeking asylum after being detained, and Castillo’s project changed.

“Once my parents’ ankle bracelets came off in fall 2016, this was not the same book,” Castillo says. He began again entirely, and with urgency. “I really thought about poets and their second books, all of the recurring images from the first book that get retraced by the second. I admire



"I REFUSED TO WRITE MYSELF OR MY DAD AS THAT TRAGIC HERO WHO HAD TO SACRIFICE EVERYTHING TO SURVIVE." (Left) CASTILLO AND HIS FATHER.



writers who take their second book in a different direction." To the reader, *Children of the Land* introduces new material, but for Castillo it is a continuation of the things that he couldn't talk about, things that he had left unaddressed by the lyric.

In *Children of the Land*, Castillo returns to the delicate images that fill his poetry — glass embedded in flesh, a runaway horse, geraniums — and tells the stories behind them that he had kept hidden in the poems. At La Loma, the adobe house on the top of a mountain near Zacatecas, Mexico, where his mother's family had lived for centuries, he listened for the stories in those stones. His great-grandfather had set out for the United States in the first of five migrations 100 years before, and soon Castillo would be a father to a son born in the United States. It took a century for Castillo's family to get there, and he felt every moment. "In America, my family's past and present have never existed separately," he says. "We've never been able to move on from everything that has happened to us in the past — it's still with us in the present."

Now that the book is out, Castillo is working on a partnership between UndocuPoets and writing residencies around the country to provide time and space for undocumented writers to work outside of M.F.A. programs. UndocuPoets, now co-led by poets Janine Joseph and Esther Lin, has begun offering fellowships to cover application fees for undocumented writers, and they're working on a full-length feature project with *Yale Review* on stories told around the theme of documents.

As for another memoir, Castillo doesn't think he'll be returning to the form immediately. "I don't think I was really prepared for how emotionally draining it would be to dig up all this mess for *Children of the Land*," he says. "I didn't know the extent of how much I had buried." ■

HOME *Sweet* HOME

The newly renovated and expanded LSA Building is up and running and open for LSA students to make the most of their new home on campus.

The new LSA Building opened in January, and includes a range of resources including space for LSA students to connect, collaborate, and study, and access to programs and support to help them excel academically and professionally.

Those resources include: the LSA Opportunity Hub, which supports students through a range of services as they connect their academic interests to their professional aspirations; the first-ever LSA Transfer Student Center, a dedicated home on campus where transfer students can connect to the U-M community and get access to tools to help them succeed in class and after graduation; optiMize, a student-founded organization that runs an annual social innovation challenge and empowers student-powered entrepreneurship; and the LSA Scholarships Office. The new LSA Building is also home to the LSA Student Government, the Okun Bomba Family Navigation Desk, and places to

meet with employers and alumni — all together in one place.

Bringing all of these social, informational, academic, professional, and financial resources together in one place represents a new phase in liberal arts education — one where understanding and taking advantage of the connections between topics, courses, and experiences is more important than ever.

The building also represents a new front door to the college, a highly visible landmark that strengthens LSA's on-campus identity and gives students the opportunity to connect to their academic community.

The building would not have been possible without the generous support of LSA donors. A formal dedication ceremony celebrating the new building and the donors whose support made it possible will take place in fall 2020. ■



TO LEARN MORE, WATCH A VIDEO OF DEAN ANNE CURZAN
EXPLAINING SOME OF THE EXCITING PARTS OF THE NEW LSA BUILDING
AT [MYUMI.CH/LSABUILDINGNEWS](https://myumi.ch/lsabuildingnews).



TO CELEBRATE THE OPENING OF THE NEW LSA BUILDING, THE COLLEGE HOSTED A CELEBRATION FOR STUDENTS IN JANUARY. THE EVENT WAS FREE AND OPEN TO ALL LSA STUDENTS, AND INCLUDED INFORMATION SESSIONS ON THE NEW SPACE AND THE RESOURCES OFFERED WITHIN.



THE NEW LSA BUILDING IS ENVIRONMENTALLY FRIENDLY, WITH AUTO-DIMMING LIGHTS, INSULATED GLASS, AND WINDOWS THAT DETER BIRDS FROM ACCIDENTALLY HITTING THE BUILDING. THE BUILDING HAS BEEN AWARDED A LEED SILVER CERTIFICATION.



EVERY FLAVOR

No matter what your style is,
LSA is into it.

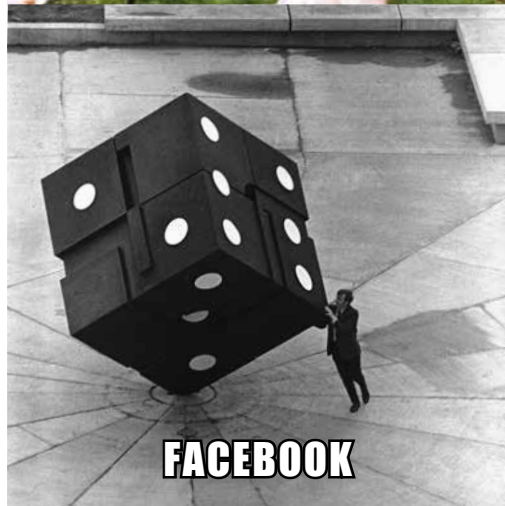
/umichLSA    



INSTAGRAM



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Give back to where it all began.

For Griffin, transferring to U-M was the opportunity of a lifetime. Now that he's here at his dream school, he is starting to feel right at home as a Wolverine. Support from the LSA Fund means Griffin can get the best education in an environment where he has the freedom to explore all the liberal arts has to offer.

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Launch Pad

For 20 years, the Michigan Community Scholars Program has empowered and supported students by helping them connect to the things they care about — and to each other.

IT'S 2002! The Top 40 station is either playing “Hot in Herre” by Nelly or “In the End” by Linkin Park or, and you can pretend you don’t remember it, “A Thousand Miles” by Vanessa Carlton. In the fall Gilbert Nuñez (A.B. ’06) will be a first-generation college student at the University of Michigan, but in the summer before he starts, he’s wondering what Ann Arbor will be like — and he’s got some concerns.

“I think I was overwhelmed by what it would look like,” Nuñez says, “and I was afraid of getting lost.” Nuñez knew he wanted to be part of a student community that shared his values about social justice, and that summer he received a mailer for something called the Michigan Community Scholars Program (MCSP).

The mailer led to a phone call, which led to Nuñez joining MCSP, an academic community that cared a lot about things that Nuñez cared about — about reaching back and helping others, and about standing up and having your voice heard.

Nuñez’s work with MCSP amplified the other academic work he was doing at U-M, leading him to eventually get his doctorate and work on voting rights and civic participation. He now works as an electoral data analyst with Community Change Action in Washington, D.C.

“I feel very fortunate to have received that mailing from MCSP,” Nuñez says. “It eventually led me to my career.”

MCSP Director David Schoem says that Nuñez's experience isn't unique. Schoem regularly hears from alumni who credit MCSP with supporting them meaningfully during their time at U-M and for helping them build a community of friends that they're still close to.

"The university can be a very competitive and stressful environment," says Schoem. "For us, though, our goal is for everyone to succeed and for us to help them succeed. Our emphasis on building a diverse community and engaged relationships results in very high retention rates and academic success. Students enjoy building community and making lifelong friendships, but it's also serious work — and it's work grounded in the best practices in higher education.

"The result is that MCSP students thrive personally, academically, intellectually, and socially. We're proud of the work we do and we're proud of them."

MAKING CONNECTIONS

Started in 1999, MCSP spun out of a similar program, the 21st Century Living Learning Program, which was ending. Based on requests from students and support from faculty, MCSP was established by then LSA Interim Dean Patricia Gurin and Schoem, then assistant vice president for academic and student affairs. The founding directors were Penny Pasque as program director and Schoem as faculty director, and Wendy A. Woods has served as associate director for the past 16 years. Since then, the program has moved from Mary Markley Hall to Couzens Hall to West Quad to East Quad and finally back to West Quad, where it lives now. But while the space may have changed, the program's diverse community has remained true to its core mission.

The 2020 version of the program combines a focus on deep and engaged learning with a vibrant and diverse community as well as service learn-

ing and intercultural communication and dialogue. Students enjoy shared and intentional coursework with their fellow MCSPer and robust academic support from program staff and faculty. The community service

component has in the past connected students to community gardens in Detroit's Brightmoor neighborhood and today continues to work with survivors of persecution who are seeking asylum through Freedom House Detroit, naturalists and park preservation work in Ann Arbor, and K-12 students throughout Southeast Michigan through a range of in-school programs.

Students also have multiple opportunities for leadership, including on the program's Intergroup Relations Council (IRC), a group that challenges students to speak and work across difference and to embrace dialogue as a force for change. For second-year student Latifa Cheaito, the IRC gave her an opportunity to host a dialogue with other students about mental health, an issue that's important to her personally and professionally.

Cheaito is interested in continuing her education after graduation by going to medical school for psychiatry, partly so she can work to destigmatize mental health issues. She credits MCSP with enlarging her perspective around identity and culture in ways that made her see herself and her future professional work more clearly.

"MCSP is diverse in so many ways," Cheaito says. "It changes up the conversation to live with totally different people who are studying totally different things. I feel like I've learned so much more about myself through learning about others."

A DIFFERENT REALITY

In October 2019, MCSP celebrated its twentieth anniversary on campus. People who'd been part of the program throughout its history attended and spoke of the program's importance, as did current students, faculty, and friends. LSA Associate Dean for Undergraduate Education Tim McKay called it one of LSA's signature successes, adding that "the work of MCSP rests at the very heart of the purpose of liberal arts education."

Gilbert Nuñez was there, also.

He told the story of how, when he and his wife moved to Washington eight years ago, it was fellow MCSP alums who helped them move into their new apartment. Nuñez talked about meeting MCSP friends every year for Friendsgiving, and explained that he had even met his spouse, a fellow MCSP alum, in Couzens Hall.

At the event, Schoem talked about meeting the challenges of the twenty-first-century world through education. Schoem also pointed out how important the cross-difference dialogue element of MCSP is in 2020 and beyond.

"In MCSP, we're modeling in students' everyday life the highest ideals and aspirations of U-M's diversity, equity, and inclusion initiative. We're trying to experiment with a different reality," says Schoem. "We're saying, 'Let's engage across difference, let's get to know our neighbors, let's listen.' This is how democracy is supposed to work.

"I'm very inspired by students living out the values of our program every day," Schoem says. "It's about community, about dialogue, about learning, and about service to others." ■

MCSP COMBINES SHARED INTELLECTUAL EXPERIENCES, INTENTIONAL COMMUNITY BUILDING, AND PUBLIC SERVICE COMPONENTS TO SERVE AND EMPOWER STUDENT LEADERS.

Take It Outside

LSA offers numerous summer learning and outreach opportunities for K-12 and college students, including Earth Camp, where students swim in the Great Lakes and hike in Yellowstone. What can students learn from going outside and getting dirty? It turns out, they learn a lot.

I **MAGINE HIKING MOUNT** Washburn in Yellowstone National Park, elevation 10,243 feet. It's the first time you've ever climbed a mountain. Your legs ache. You're sweating. You're exhausted and basically

terrified by the whole experience.

Then you reach the top and look around.

"The view is incredible," says second-year LSA student Erica Pillar. "You can see the other mountains. There are mountain goats. You feel like you're on top of the world."

"I thought, 'Wow, this exists?' Then I thought, 'I want to study how these mountains were formed.'"

Pillar is a former participant of LSA's Earth Camp, a program for teenagers in Michigan who have a budding interest in science but aren't often exposed to engaging opportunities to learn about earth sciences in their high schools, extracurriculars, or with their families. The free program makes a point to recruit students often underrepresented in science and math.

Pillar now studies geology in the Department of Earth and Environmental Sciences.

"I want to understand the planet on a physical level," she says. "People ask why I'm studying rocks, and I say, 'Because it's exciting!'"

TALKING ROCKS

Earth Camp spans three summers—students remain in the same cohort for all three years—and begins the summer after ninth grade. During that first summer, students come to Ann Arbor, stay in dorms, and get a chance to become familiar

with campus. They also search for macroinvertebrates in the Huron River, go kayaking, and visit Sleeping Bear Dunes. "For some, it's their first time ever being in the Great Lakes, their first time ever being away from family," says Jenna Munson, Earth Camp's program director. "We want them to have a strong home base."

Students travel to the Upper Peninsula for the second summer, where they meet with local geologists to discuss environmental consulting and remediation, visit the Quincy Copper Mine, and explore Pictured Rocks National Lakeshore.

The capstone summer takes place in Wyoming and is based at LSA's Camp Davis field station. From there, students travel to Grand Teton and Yellowstone National Parks and hike Mount Washburn.

All of these field trips help prepare students to enter science classes once they get to college, exposing them to subjects like natural rock formations and tectonics.

"Instead of sitting in the classroom and being shown diagrams of how the water cycle works, we get to go out in the field and see all of the factors that influence that process in action," says Pillar. "Things you never have a chance to experience in real life."

Founded in 2015, Earth Camp is a relatively new program, but the results are impressive. "Over 95% of our graduates are majoring in STEM," says Munson. "They're first-year and second-year students now, so they haven't officially declared, but half have indicated they're planning to major in

THE FIRST TWO SUMMERS OF EARTH CAMP FOCUS ON THE WATER AND ENVIRONMENTAL ISSUES IN MICHIGAN. STUDENTS LEARN ABOUT STUDYING EARTH SCIENCES THROUGH INTERACTIVE ACTIVITIES AND CONVERSATIONS WITH ALUMNI.



geology or another field in earth sciences.”

Forty students have completed all three summers of Earth Camp. Eight of those are current U-M undergraduates, all majoring in STEM. “We’ve already had a positive impact on increasing diversity in majors in only two years,” says Munson, “and not just in the Department of Earth and Environmental Sciences.”

Munson advocates for students after they’ve finished Earth Camp, too. For those at U-M, she acts as an advisor, connecting them with work opportunities and organizing a monthly

dinner. Pillar says that this sense of close-knit community has shaped her college experience.

“We spent hours together in the mountains and we all got really close,” she says. “Jenna really supports us. She’s super dedicated to making sure we’re thriving.”

Pillar still goes to Earth Camp, only now as an instructor.

“The program gave me a launchpad for what I want to do in college,” she says. “Being an instructor felt like the least I could do for the program that has given me so much. I don’t know where I’d be without it.” ■

SUMMER IS IN SESSION

Every summer, LSA offers a variety of camps for kids and teenagers to participate in hands-on learning and connecting them to real-life researchers.

SUMMER FILM AND MEDIA CAMP

In 2019, the Department of Film, Television, and Media (FTVM) and Wolverine Pathways—a college readiness program for middle and high school students who live in Detroit and within the Southfield and Ypsilanti school districts—created the Summer Film and Media Camp. Students traveled to and from Ann Arbor for two weeks to take classes at the free

camp, which is the first of its kind offered in the humanities at U-M.

The camp was designed by FTVM under the guidance of chair Yeidí Rivero and professors David Marek, Dan Shere, and Sarah Murray. They wanted to give students a realistic, humanities-based college experience that was also hands-on, creative, and mimicked the media industries. Classes focused on production and screenwriting as well as media theory, history, and culture. “A lot of students don’t even know you can study media,” says Murray. “They become more knowledgeable consumers and makers of media when students see how the ingredients come together.”

Students learned to produce and direct a studio set with Marek and wrote screenplays with Shere, a unique challenge for high-schoolers. “Sitting around a room sharing story ideas is a vulnerable experience, especially when you’re that age,” says Murray.

Students also got to pitch a television show concept to their classmates. In many cases, the projects became personal. “The students’

itches were often modified versions of shows they’d already seen,” Murray says. “They talked a lot about how they’d do those storylines differently, based on their own life experience.”

“For a lot of these students, realistic representation of life in different socioeconomic situations really mattered,” says Murray. “With a richer, more realistic, behind-the-scenes understanding of how media are made, students felt more empowered to challenge existing narratives about family and hardship. By teaching them why some stories get told and others don’t, things really started to click.”

IN HIS PRODUCTION CLASS, PROFESSOR MAREK GUIDED STUDENTS THROUGH THE ENTIRE PROCESS OF MAKING MEDIA. CAMPERS WORKED WITH EQUIPMENT AND GOT COMFORTABLE BEING ON SET AND IN THE STUDIO.



(LEFT PAGE) Levi Stroud; (RIGHT PAGE) Natalie Condon



“WE WANT TO SHOW KIDS THAT YOU DON’T JUST NEED A LAB COAT AND GOGGLES TO BE A SCIENTIST.”

CAMP EXPLORATIONS

Every summer at Camp Explorations, dozens of students aged 4–12 become paleontologists, astronomers, zoologists, and archaeologists. At full- and half-day sessions at the University of Michigan Museum of Natural History, campers play games and do activities centered around themes like dinosaurs, space, and detective work to name a few. Even more fun? The activities often take place in the galleries of the museum.

“Students learn by doing,” says Brittany Burgess, director of Camp Explorations. “They can play a fossil game in a space where they’re surrounded by actual fossils.” This hands-on approach is integral to the camp and transforms students’ understanding of science.

“We want to show kids that you don’t just need a lab coat and goggles to be a scientist,” Burgess says.

Each activity lets students take what they learn and express it in a creative and fun way. Physics becomes rocket launching. Forensic science becomes visits to a real-life police station and following clues to solve a pretend

crime. Paleontology becomes creating dioramas of the ideal T. rex habitat. Astronomy becomes trips to the planetarium and talking about constellations.

Campers also visit the new labs in the Biological Sciences Building to see professors and graduate students at work. Since they’re so young, Burgess wants campers to feel that science is approachable and inclusive as a way to keep them excited about learning.

“Even if they don’t understand exactly what the professor is talking about, the kids get so excited to be in a place that studies something cool like fish brains,” she says.

CAMP EXPLORATIONS DESIGNS ACTIVITIES TO MAKE SCIENCE FUN, HANDS-ON, AND FOCUSED ON THE CAMPERS. “WE WANT KIDS TO BELIEVE THEY CAN EXPLORE SCIENCE AND NOT FEEL INTIMIDATED,” SAYS BURGESS.



Mapping the Universe

For one alumna, there was more to being a college student than meets the eye. For instance? Searching for an undiscovered planet in the outer solar system.

AN AMBITIOUS AND dedicated student with a love of science, Tali Khain (B.S. '19) emailed Arthur F. Thurnau Professor of Physics David Gerdes right after high school graduation to ask if he had any research projects she could work on the summer before she became a student at U-M.

Surprisingly, Gerdes did.

"I didn't really have formed interests," Khain says. "I just vaguely knew I liked math and physics, and everyone in the research group was lovely."

The group Khain joined was led by Gerdes and Ta-You Wu Collegiate Professor of Physics Fred Adams. The team's research focused on analyzing the outer solar system using data gathered from the Dark Energy Survey (DES), an international collaboration of more than 400 scientists from more than 25 institutions who are exploring the universe's origins by mapping galaxies far beyond the Milky Way.

As Khain's interests and knowledge developed, she was given more freedom to pursue the aspects of the project

she found most interesting. For Khain, the project felt like a dream come true.

"I got really lucky," Khain says. "To be quite honest, everything sort of feels like an accident."

EVERYTHING IN MOTION AT ONCE

Beyond Neptune, thousands of (relatively) small balls of ice and rock orbit the sun, the dust and debris left behind after the solar system's formation that never coalesced into something larger, like a planet. These are Kuiper (rhymes with "hyper") Belt objects, or KBOs. "I call them cosmic leftovers," says Gerdes. "The same processes that gave birth to the Kuiper Belt gave birth to Earth and to us. When we study the outer solar system, we're writing chapters in the story of where we came from."

Using powerful telescopes, the DES has captured images of distant solar systems roughly the equivalent of detecting a single candle halfway to the moon. Using this data, the

research group identified hundreds of KBOs, some as small as 100 km in diameter.

KBOs have elliptical orbits: some long and skinny, some inclined, some unstable, some very long and very skinny. Because everything in the solar system is in motion at once, calculating orbits on paper is tricky, so theorists rely on computational simulations to analyze the images and run experiments. Using this method, Khain created a scheme to classify the dynamics and specific trajectories of some 300 objects, and then used that method to actually code all of their properties.

The simulations track the orbits of the planets and objects over time. Khain calculated and analyzed how the orbits of specific KBOs have, or haven't, changed. Because KBOs take hundreds, or even thousands, of years to orbit the sun,

Batygin and Mike Brown, experts in Planet Nine, as first author on a paper that investigates the relationship between KBOs and Planet Nine using numerical simulations. "It would be amazing if Planet Nine were found, in part because there is very indirect evidence of its existence."

Before she graduated, Khain's involvement with these research projects conferred an expertise in the dynamics of planetary systems, and the numbers speak for themselves. She made original contributions to ten peer-reviewed publications, including three as the first author, and has one additional first-author paper currently under review. She presented on the dynamics of the outer solar system at research conferences, where she was often mistaken for a graduate student or postdoctoral fellow. In 2019, Khain received the American Physical Society LeRoy Apker Award

"WE WANT TO FIND THE SIMPLEST EXPLANATION FOR WHAT'S GOING ON. IT'S REALLY EXCITING WHEN YOU DON'T QUITE KNOW WHAT YOU'RE LOOKING FOR AND THEN YOU FIND A PATTERN."



Khain's work allows the research team to predict the behavior of these objects over millions of years of their orbital evolution.

Though it can be arduous, the work of combing through complicated data sets excites Khain.

"By using physics, math, and modeling, we can understand if there's a driving mechanism that explains the complexity of the solar system," says Khain. "We want to find the simplest explanation for what's going on. It's really exciting when you don't quite know what you're looking for and then you find a pattern."

A NEW FRONTIER IN OUR COSMIC BACKYARD

During a summer research assistantship at the California Institute of Technology (Caltech), Khain used computational modeling to analyze the orbits of several KBOs whose particularly weird orbits all bizarrely point in the same direction.

One possible explanation for the coordination? A massive, undiscovered planet, hypothetically called Planet Nine.

If Planet Nine exists, its orbit is probably elliptical and unlike the circular orbits of other planets. It's also very big, much bigger than any KBO.

At Caltech, Khain worked with professors Konstantin

in undergraduate physics achievement, which honors phenomenal achievements in undergraduate physics research.

Now a graduate student at the University of Chicago, Khain studies soft matter, another classical physics field that examines how systems of particles interact in various ways. It's similar to her work with the outer solar system but on a much smaller scale.

Khain's scientific accomplishments are well beyond her years, and she says that doing research as an undergraduate enabled her to approach her work from a place of wonder and play.

"It's nice when you're an undergrad because you don't have high stakes," Khain says. "Planet Nine is such an interesting problem, the orbit is so weird. I found the physics of it very fun."

The research groups she worked with inspired Khain to explore open-ended problems and added dimensions of meaning and joy to her undergraduate education. Ultimately, she says, it was this collaboration that launched her success.

"The value of a mentor can't be overstated," says Khain. "Research is difficult, and it's important to have people who encourage you to go on. It's a gift." ■

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