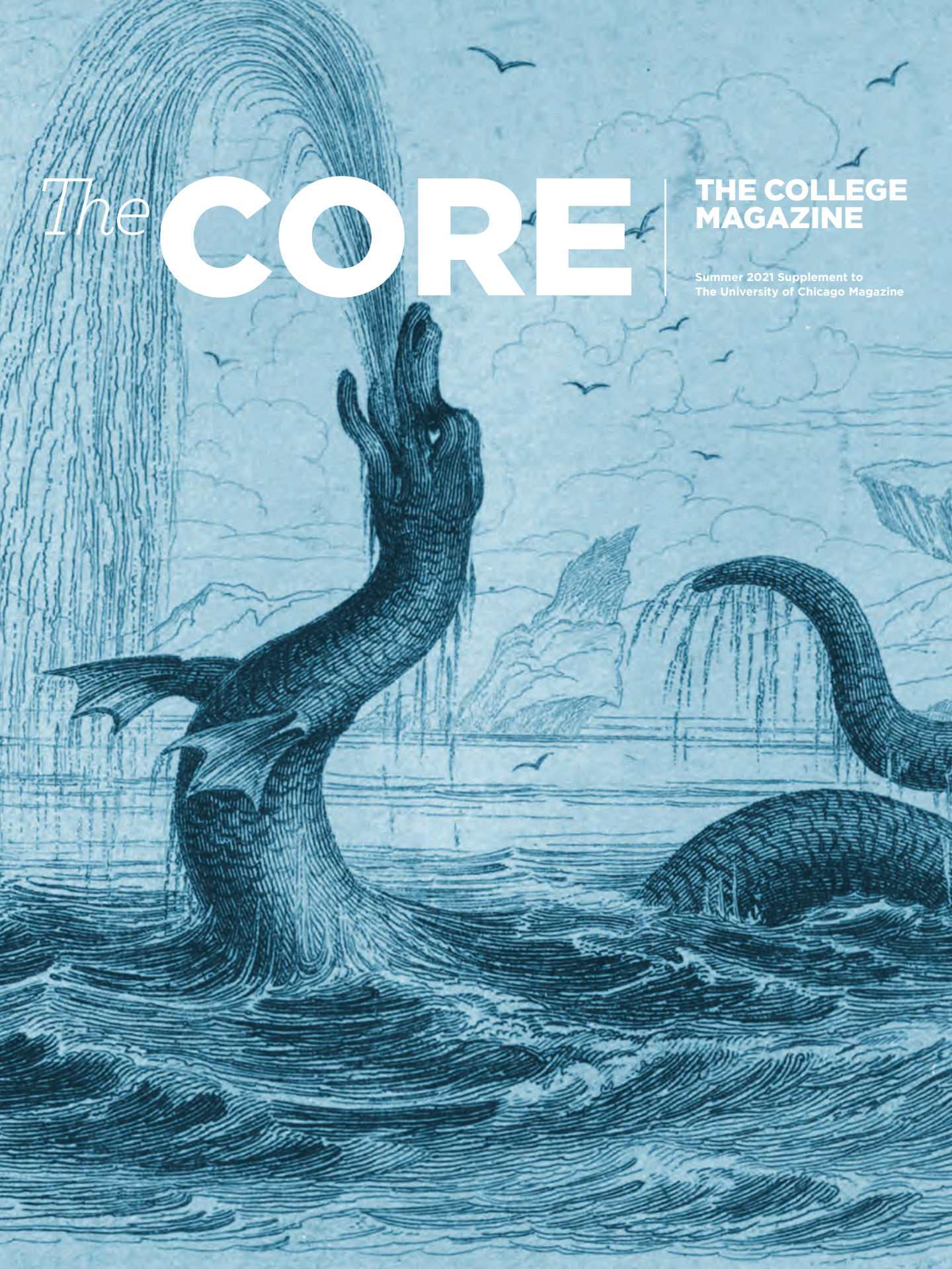

The CORE

THE COLLEGE MAGAZINE

Summer 2021 Supplement to
The University of Chicago Magazine

Photography by Jason Smith

Teams of art faculty, prominent artists, and 800 students worked together to design and construct large-scale masks for the Spring Forward pageant in May. The event was organized by Frank Maugeri, a designer of artistic pageants and processions.

INSIDE

SHORT

MEDIUM

LONG

ET CETERA

Front cover: Image courtesy Biodiversity Heritage Library
Back cover: Photography by Devon Wenzel, Class of 2022

From the editor

TINY MONSTERS

I met Elise Covic, PhD'10, 11 years ago, when she placed an ad on UChicago Marketplace: "Pet Praying Mantids/Natural Pesticide." The listing included a large photo, assurance that releasing mantids into the wild was legal and environmentally sound, and instructions for pet care: "Make sure the prey has been gut loaded (feed a vitamin-enriched food to the prey, which will be passed on to the mantid)."

I showed up at her Woodlawn apartment with two excited six-year-olds in tow. Not only did Covic refuse to accept payment, she insisted on supplying a habitat and everything else we needed for our new pets.

In 2015 Covic was appointed deputy dean of the College, where her long list of responsibilities included overseeing this magazine. She has been just as generous and supportive in that role as when she was an impecunious new grad, trying and failing to make extra money by selling fi e mantids for $10.

This summer Daniel Koehler, AM'02, PhD'10, was appointed deputy dean of the College. Formerly associate dean, Koehler also teaches Classics of Social and Political Thought and History of European Civilization. Covic has moved on to Information Technology Services at UChicago, where she is now chief operating offi er. I hope she keeps a mantid habitat on her new desk.

—Carrie Golus, AB'91, AM'93

THE CORE · *Supplement to the Summer 2021 issue of the* University of Chicago Magazine

EDITOR
Carrie Golus, AB'91, AM'93

ART DIRECTOR
Guido Mendez

DESIGNER
Michael Vendiola

CONTRIBUTING WRITERS
Susie Allen, AB'09
Jeanie Chung
Lucas McGranahan
Maureen Searcy

COPY EDITOR
Rhonda L. Smith

CONTRIBUTING EDITORS
Laura Demanski, AM'94
Mary Ruth Yoe

773.702.2163
uchicago-magazine@uchicago.edu
mag.uchicago.edu/thecore

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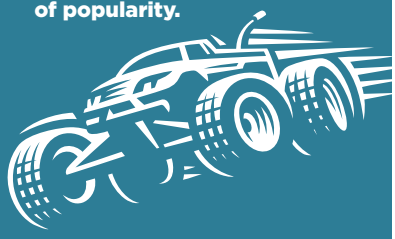
Top 11

MOST POPULAR INTRAMURAL E-SPORTS

During the COVID-19 pandemic, intramural sports—like everything else—went online.

In a typical quarter, the intramurals program offers around 12 sports and games, so Matthew Fox, director of intramurals and recreational sports, organized a similar number of online substitutes during 2020–21. Here is the list of games in order of popularity.



1. *Super Smash Bros.*
2. Chess
3. Scrabble
4. *FIFA*
5. GamePigeon
6. Backgammon
7. *Rocket League*
8. *Minecraft*
9. Mah-jongg
10. *League of Legends*
11. *Mario Kart*

WHAT'S NEW IN THE COLLEGE

2021 Quantrell winners

Five faculty members have been recognized with the Llewellyn John and Harriet Manchester Quantrell Award for Excellence in Undergraduate Teaching, which is based on letters of nomination from students. This year's recipients are Sally Horne-Badovinac, associate professor of molecular genetics and cell biology; Patrick Jagoda, professor of English and of cinema and media studies; Jonathan R. Lyon, associate professor of history; Ada Palmer, associate professor of history; and Blase Ur, Neubauer Family Assistant Professor of Computer Science. Established in 1938, the Quantrell is believed to be the nation's oldest prize for undergraduate teaching.

New majors and minors

In 2021–22 the College will offer two new majors: media arts and design and data science. In addition, the former interdisciplinary studies major has been redesigned and renamed inquiry and research in the humanities (IRHUM). Each IRHUM major receives funding to support research with faculty and a senior thesis.

Nine new minors have also been added. Seven of the minors are in molecular engineering: quantum information science; molecular, cellular, and tissue engineering; immunoengineering; systems bioengineering; molecular science and engineering of polymers and soft materials; molecular engineering of sustainable energy and water resources; and computational molecular engineering. Wrapping up the list are quantitative social analysis and Romance languages, literatures, and cultures.

Recruiting season starts in August

Because online recruiting grew so much during the pandemic, the Offi e of Career Advancement kicked off its annual recruiting season on August 2, eight weeks before Autumn Quarter begins. Students can search for job and internship opportunities for 2021–22 and attend virtual recruitment events. Employers interested in hiring UChicago students should contact Nadia Casperson, director of employer engagement, at ncasperson@uchicago.edu.

New director of Athletics and Recreation

Angie Torain has been appointed the director of Athletics and Recreation. She comes to UChicago from the University of Notre Dame, where she was the senior associate athletics director of culture, diversity, and engagement. As UChicago athletics director, Torain oversees 20 varsity sports, nearly 40 sports clubs, an intramural sports program with thousands of student participants annually, and the FitChicago program of exercise classes.

Green Fund

Campus and Student Life, in collaboration with the student-led UChicago Environmental Alliance, launched the Green Fund supporting research and projects to increase sustainability at the University. Six projects received grants during the 2020–21 academic year, including Battle of the Buildings, a competition among the University's residence halls to reduce water and electricity use. The winners were Max Palevsky Residential Commons for the largest electricity reduction (down 19 percent from their average use) and International House for the largest water reduction (down 26 percent).

Quantum engineering program for high school students

UChicago Quantum Quickstart, an introduction to quantum engineering for Illinois high school students, was held for the fir t time this summer. The program aims to pave the way for more courses and opportunities to engage students interested in pursuing quantum engineering at the college level.

Campus philanthropy tour with Dean Boyer

Who were Joseph Regenstein and Leon Mandel? How many campus buildings did John D. Rockefeller fund? Find out during a campus philanthropy tour led by Dean John W. Boyer, AM'69, PhD'75. If you're in Hyde Park, you can download the Vamonde app, search for "University of Chicago Campus Philanthropy Tour," and take a self-guided walking tour. You can also use the app to take a virtual tour from anywhere in the world. For more information, go to chicagostudies.uchicago.edu.

Illustration by Michael Vendiola, partially adapted from sodesignby/iStock

UChicago creature

NESTOR THE MIDWAY CAT

During pre-orientation in 2018, **Devon Wenzel**, Class of 2022, glimpsed an orange streak. It was Nestor, a friendly, free-roaming tabby from Amsterdam. He was brought to Hyde Park by his grad student owners, **Rik Peters** (classics and social thought) and **Thalia Lysen**, AM'17 (Hittitology).

Wenzel loves cats and taking photos of cats, even though she is so allergic she once ended up in the hospital. She set up a fan Instagram page, @nestorthemidwaycat, and began posting pictures almost daily. Nestor lolls on the pavement, lurks outside Cathey Dining Commons (where students often would wait in line to pet him, Wenzel says), raises his paw for a fist bump, makes prints in the snow, and occasionally climbs trees. One photo shows him outside the Smart Museum, a mile from his South Campus home.

Wenzel last saw Nestor in person in March of 2020, when the pandemic hit; he's now back in the Netherlands with Peters and Lysen. Although they will travel to Hyde Park occasionally until they graduate, Nestor will not accompany them, Peters says.

Wenzel's Instagram notes he has returned to the "Nestorlands," but she still posts photos every few weeks for her 2,000-plus followers. "I probably have over 5,000 pictures of Nestor on my phone," she says. "I could post for years and never run out."

In Hyde Park, unlike the Netherlands, outdoor cats are rare, and Nestor was reported by concerned cat lovers many times. So in addition to a GPS tracker on his collar, his owners added a tag with this message on one side:

My name is Nestor
I am not lost
I always have access to my home and food

And on the other:

I go on adventures on 61st St. and campus
Please do not feed

Nestor's student fans particularly liked the part about going on adventures. "They at some point talked about making a line of T-shirts with that text," Peters writes in an email interview. "I personally have always been very fond of the line 'I always have access to my home and food.' This is something I now tell myself for comfort when times are tough."

—Carrie Golus, AB'91, AM'93

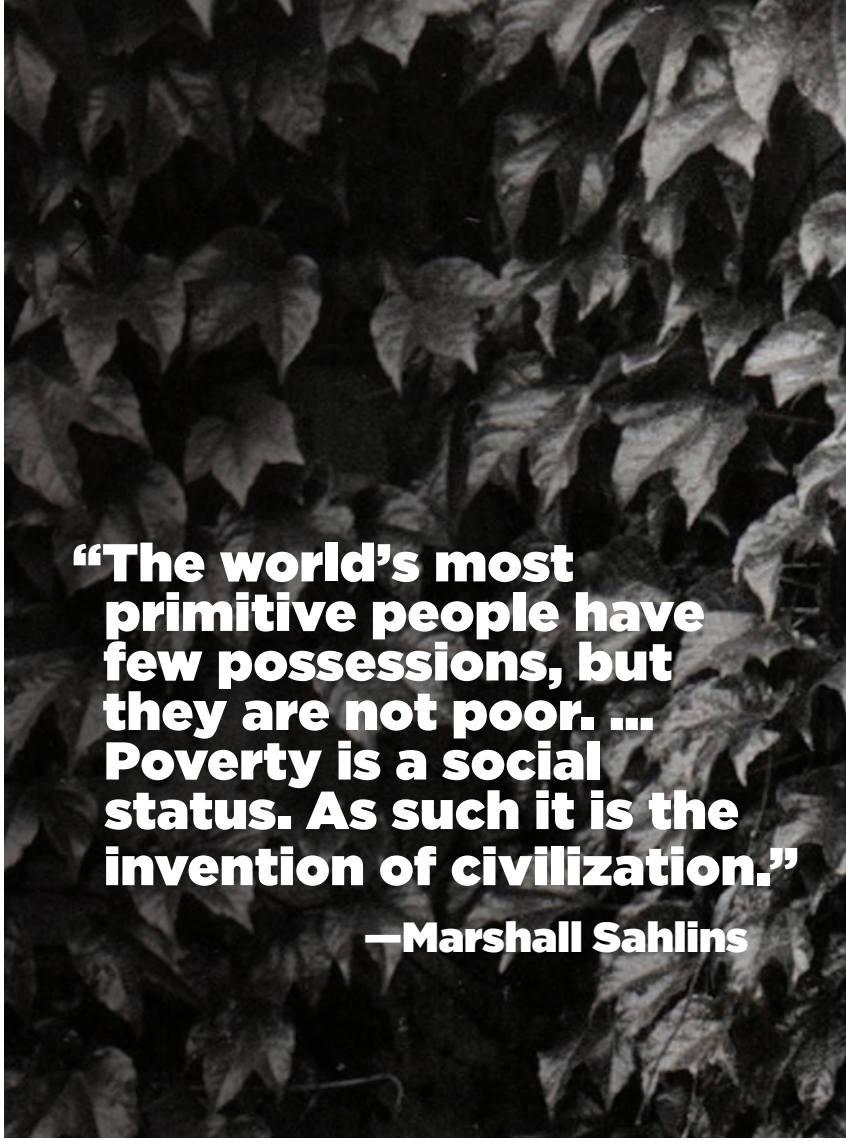
Nestor, who was part of a forest cat colony in the Netherlands, shows off his tree-climbing skills.

Photo courtesy Rik Peters and Thalia Lysen, AM'17

Anthropology

MARSHALL SAHLINS TAUGHT ME HOW TO THINK

An excerpt from How to Think Like an Anthropologist *by Matthew Engelke, AB'94.*

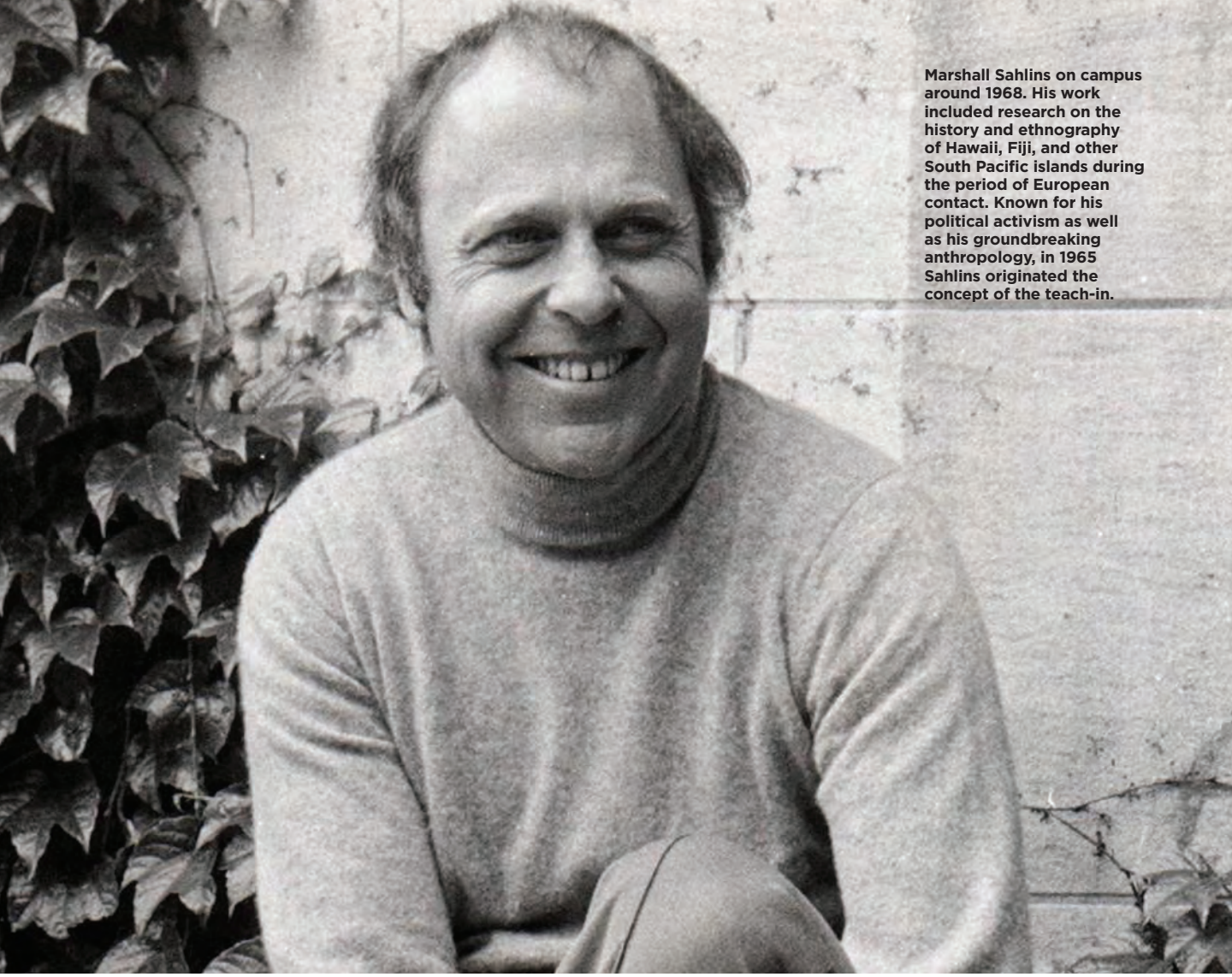


***Matthew Engelke**, AB'94, is professor of religion and director of the Institute for Religion, Culture, and Public Life at Columbia University. His book* How to Think Like an Anthropologist *was published by Princeton University Press in 2018. This excerpt, "First Contact: A Personal Tale," comes from the book's introduction.*

Anthropologist Marshall Sahlins, the Charles F. Grey Distinguished Service Professor Emeritus at the University of Chicago, died on April 5, 2021. He was 90.
—Carrie Golus, AB'91, AM'93

I remember very well the first piece of anthropology I read. I was a first-year student at university, holed up in the library on a cold Chicago night. I remember it so well because it threw me. It challenged the way I thought about the world. You might say it induced a small culture shock. It was an essay titled "The Original Affluent Society" by Marshall Sahlins, one of the discipline's most significant figures. In this essay, Sahlins details the assumptions behind modern, Western understandings of economic rationality and behavior, as depicted, for example, in economics textbooks. In doing so, he exposes a prejudice toward and misunderstanding of hunter-gatherers: the small bands of people in the Kalahari Desert, the forests of the Congo, Australia, and elsewhere who lead a nomadic lifestyle, all with very few possessions and no elaborate material culture. These people hunt for wildlife, gather berries, and move on as necessary.

As Sahlins shows, the textbook assumption is that these people must be miserable, hungry, and fighting each day just to survive. Just look at them: they wear loincloths at most; they have no settlements; they have almost no possessions. This assumption of lack follows on from a more basic one: that human beings always want more than they have. Limited means to meet unlimited desires. According to this way of thinking, it must be the case that hunters and gatherers can do no better; surely they live that way not out of choice but of necessity. In this Western view, the hunter-gatherer is "equipped with bourgeois impulses and paleolithic tools," so



Marshall Sahlins on campus around 1968. His work included research on the history and ethnography of Hawaii, Fiji, and other South Pacific islands during the period of European contact. Known for his political activism as well as his groundbreaking anthropology, in 1965 Sahlins originated the concept of the teach-in.

Photo courtesy the Sahlins family

"we judge his situation hopeless in advance." Drawing on a number of anthropological studies, however, Sahlins demonstrated that "want" has very little to do with how hunter-gatherers approach life. In many of these groups in Australia and Africa, for example, adults had to work no more than three to five hours per day in order to meet their needs. What the anthropologists studying these societies realized is that the people could have worked more but did not want to. They did not have bourgeois impulses. They had different values than ours. "The world's most primitive people have few possessions," Sahlins concludes, "but they are not poor. … Poverty is a social status. As such it is the invention of civilization."

After reading Sahlins, I could never hear talk about "affluence" in quite the same way. I could never rest easy with my own assumptions about what it means and how my assumptions often took on the rather dangerous garb of common sense. This lesson from Sahlins was only the first of many when it came to words I thought I knew how to use, how to think with. As a student, I quickly learned that anthropology is very good at questioning concepts, at questioning "common sense." One of the discipline's trademark clichés is that we make the familiar strange and the strange familiar. It is a cliché, but it's no less true for being so. And that process of questioning, that process of turning things upside down, is one of lasting value.

***There and Back Again*, the title of Bilbo Baggins's memoir, is *Eno ha Distro* in Breton.**

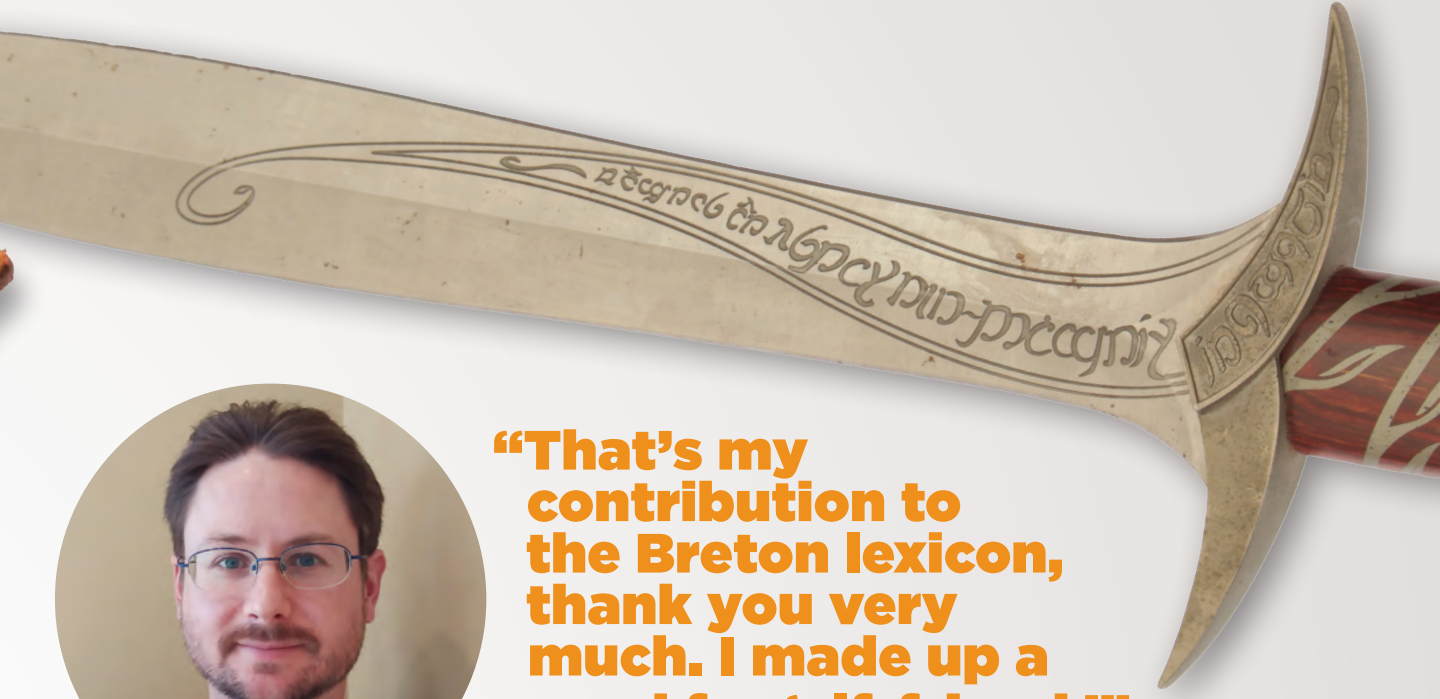
Josh Tyra, AB'01—a language nerd in the mold of J. R. R. Tolkien—helped create a new Breton translation of The Hobbit.

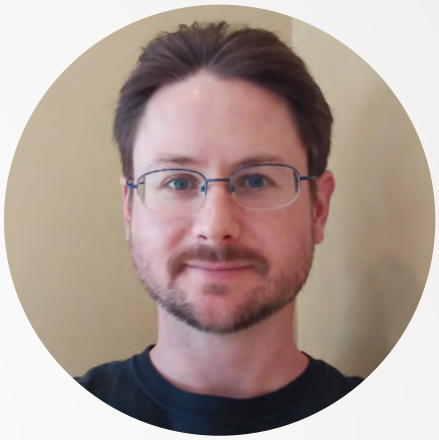
When he was 17, **Josh Tyra**, AB'01, went on a summer immersion program to Brittany, France. A "burgeoning language nerd" (he'd already taught himself Old English, just for fun), Tyra was thrilled to discover the region had its own tongue—Breton. The Celtic language has around 250,000 speakers today, few enough to be considered endangered.

Tyra spent the summer asking everyone he met if they spoke Breton or knew anyone who did, and scouring the Breton section of local bookstores. "I returned from that trip with a whole suitcase full of Breton books, grammars, and dictionaries," he says. He continued to independently study Breton at UChicago ("often when I should have been studying other things") and after.

In 2001, on another trip to France, Tyra bought a paperback copy of *An Hobbit, pe Eno ha Distro* (ARDA, 2001), a new Breton translation of J. R. R. Tolkien's 1937 classic *The Hobbit, or There and Back Again* (G. Allen & Unwin). The translator, Alan Dipode, is a native Francophone who also speaks fluent Breton. It was a lucky find. The initial run of Dipode's *Hobbit* was small, and it would soon fall out of print.

Over the years, Tyra's career followed a winding path: he served in the Army, then went to graduate school to study biblical archaeology and language. "A lot of the translation tools that I brought into this project, I





"That's my contribution to the Breton lexicon, thank you very much. I made up a word for 'elf-friend.'"

—Josh Tyra, AB'01

learned from Bible translation," Tyra says. (Today he works as a private tutor.)

All the while, he remained active in online groups for Breton speakers and enthusiasts. That's how he eventually met linguist Michael Everson, whose press Evertype issues an eclectic range of titles in minority languages, including Cornish and Hawaiian.

Tyra made his pitch: Would Evertype rerelease Dipode's Breton *Hobbit*? Sure, Everson told him, if you can figure out the copyright. A few Facebook messages later, Tyra had tracked down Dipode through his son. Everson got him on board—not just to reissue *An Hobbit*, but also to update the translation with Tyra's help as a native English speaker.

First on the list: mild oaths. Tolkien's characters are prone to grandmotherly euphemisms for "my god" and "my lord": "good gracious" and "bless my soul." Dipode had translated these with the common Breton phrase *ma Doue* (literally, "my god"), which didn't mesh with Tolkien's efforts to avoid explicit references to Judeo-Christian religion in the novel. Tyra developed a list of softer Breton alternatives—*boulch'urun* ("thunderbolt"), *ac'hanta* ("well, then"), and *biskoazh kement-all* ("never such a thing"), to name a few—for Dipode to consider.

Other translation issues were more interpretative. Among Breton's unusual features is that "humanness—being human or not human—is a grammatical category," Tyra explains. This poses obvious challenges for a novel populated with hobbits, elves, goblins, and trolls. In Dipode's original translation, heroic hobbits and elves were treated as grammatically human, while nasty goblins and trolls were not. It was an interesting choice, but Everson felt strongly that "rational two-legged peoples of Middle Earth should probably be treated as humans," Tyra says.

One of the few other languages that treats humanness as a grammatical category is Arabic, which Tyra also speaks. "There is conveniently an Arabic translation of *The Hobbit*," so he consulted it to see how that translator handled the challenge. "Lo and behold," he says, good guys and baddies alike were treated as grammatically human. This, along with Everson's conviction, proved convincing.

Then there was the problem of "elf-friend," a term used as something like an honorific for those who have provided a service to the elves. Dipode's original, *ur mignon d'an elfed*, was more or less literal ("a friend of the elves"). Tyra proposed a loftier alternative, using a word closer to "comrade": *elf-kariad*.

"So that's my contribution to the Breton lexicon, thank you very much," Tyra says, smiling. "I made up a word for 'elf-friend.'"

—Susie Allen, AB'09

Photo illustration by Michael Vendiola; photo courtesy Josh Tyra, AB'01

Film

BABY, ONE MORE TIME

A "lost" documentary on Britney Spears, made by faculty member Judy Hoffman two decades ago, resurfaces.

In April UChicago's Film Studies Center hosted a screening of the 2002 film *Stages: Three Days in Mexico* on the streaming service Twitch. The hour-long documentary was directed by **Judy Hoffman**, professor of practice in the Department of Cinema and Media Studies, in collaboration with Albert Maysles (*Gimme Shelter*, *Grey Gardens*). Although the film is not in distribution as of press time, it has been written about in *Vanity Fair* ("The Shockingly Melancholy Britney Spears Documentary You've Never Heard Of"), the *Chicago Tribune*, and elsewhere.

The fly-on-the-wall documentary, shot during the last stop of Spears's Dream Within a Dream tour, focuses on the backstage work that goes into producing the spectacle. Spears is not interviewed and does not address the camera directly; nonetheless, a portrait of a sweet, funny, vulnerable young woman emerges. It's heartbreaking to watch, knowing that just six years later, her mental health struggles would lead to a conservatorship overseen by her father.

A longtime member of the Kartemquin Collective,

Britney Spears in 2000. She is 20 years old in Hoffman's documentary.

NBC-TV/Album/Newscom

Hoffman has worked on numerous PBS series and political documentaries. A major focus of her work is the Kwakwaka'wakw people of British Columbia and the reclaiming of Native culture.

After the screening, **Neda Ulaby**, AM'98, National Public Radio arts desk reporter, led a discussion with Hoffman. Viewers could submit questions through the chat. This discussion has been edited and condensed.

—Carrie Golus, AB'91, AM'93

Neda Ulaby
How did a nice socialist filmmaker like you end up backstage at Britney Spears's world tour in 2002?

Judy Hoffman
I was going to a hairdresser to get my hair dyed. He had another client, Jim Forni, who ran Brit's web page. And my hairdresser, Keith Mitchell, said the two of you need to meet because Jim is really interested in documentary.

So we met. A couple years later, he called and said, "Remember that documentary that we talked about on Britney? It's going to happen, and you're going to direct it."

Ulaby
It seems like the absolute opposite of everything you've ever worked on.

Hoffman
Well, yeah, but not totally. I worked for a living in film. I was a camera assistant on the Scorpions world tour, a film on the Four Tops, numerous music videos. There's nothing like shooting rock and roll.

I didn't know her music at all. Jim Forni said, even better that you don't, so you can walk into this fresh.

As someone who believes in women's liberation, which I guess we now call feminism, I was curious about what she was like and how she was marketed. She's a woman working and being on the road, which I could relate to, because I had been on the road for a long time making films. I was curious about the work that goes into the production of a show, the labor. Britney's a hard worker. Virtually everything she did, when she wasn't on stage performing, had to do with work.

Ulaby
I'm very familiar with how painstaking and painful it is to negotiate time to get any kind of behind-the-scenes glimpse of celebrities. What was your experience?

Hoffman
When we got to Mexico we found out her people didn't know anything about it. Jim had gotten clearance, but the people on tour weren't aware. We spent two days in meetings trying to negotiate access.

The idea was to do direct cinema no matter what—to not do an interview with Britney, to save that for another time. Just follow her and get what we could of the work she does, hoping that we would have a story somehow.

Ulaby
Somebody has asked such a great question. "Albert Maysles made so many intimate portraits of celebrities. How did Britney respond to Albert?"

Hoffman
You know, it's a story. Like two ships in the night.

Britney decided I would have to shoot her. Particularly in hair and makeup, she wanted a woman. When I was going for a wide shot of her bodyguards, I kept backing up and backing up, because they were so big, I needed to keep reframing. And I fell downstairs and sprained my ankle really severely. They sent me to Britney's massage therapist to get worked on.

After that Albert had to shoot. At that time, Albert was in his mid-70s. Very grandfatherly, very sweet. In trying to get to know her a little bit, Albert said, "You know, I've shot a lot of beautiful women in my time, and their eyes are always far apart. Like Jackie O." Britney had no idea who Jackie O. was. Al had to explain it to her. And then Britney said, "Oh, you mean like Brandy." And Albert had no idea who Brandy was.

Ulaby
My sense is her people thought you were making a publicity film, not a cinema verité documentary. Do you think she knew what your project was?

Hoffman
I'm not sure she had any clue. At one point—given my background in making sure that people who are the subject of the film have agency—I gave her a camera. I thought it would be interesting to have her shoot her own experiences, but she had no interest. And I couldn't blame her. I mean, she was constantly working.

We were present, but we weren't pushing her for anything. So maybe she trusted us a little bit more because of that.

Read more excerpts from the discussion at mag.uchicago.edu/britney.

Illustration by Melinda Beck

Freedom of expression

FIGURE OF SPEECH

Questions for Leila Brammer, inaugural director of the College's Parrhesia Program for Public Discourse.

As a child growing up in South Dakota, **Leila Brammer** suffered from a speech impediment and social anxiety. When she mustered the courage to sign up for debate in high school—"because that's what smart people did"—she could only talk "for 45 seconds" before needing to sit down. She pressed on and continued with debate in college, becoming an assistant coach and tournament judge.

Building on 21 years of experience as a communications professor at Gustavus Adolphus College in St. Peter, Minnesota, Brammer is the inaugural director of the College's Parrhesia Program for Public Discourse. Named for an ancient Greek term meaning "to speak freely and openly," the program aims to foster "vigorous, inclusive, and productive public discourse" through its undergraduate curriculum, live events, and support for principles of free expression. The program offered its first class and first event—a talk on combating hate speech without censorship—in Winter Quarter 2019.

The following interview has been edited and condensed.

Leila Brammer

Photo courtesy Leila Brammer

How did your early struggles with speaking in public inform your teaching?

It gave me a perspective about how discursive space is not level. In the public sphere on a given issue, certain people have more access to discursive space and others have less. I'm always thinking about how we level that. How do we make sure we get all the voices into a class discussion?

As faculty, we have often honored the person who is quick, who fills a void, who says the first thing that comes to mind. That doesn't necessarily mean it's the best thinking. But that person sets the agenda. Other students who are taking a beat to think more deeply maybe don't get their agenda on the table.

I'm thinking of a student at my previous institution, for example. Everybody thought he was just a dumb jock. He sat in the back with a hat on and didn't say anything. Oh my gosh, he was one of the most brilliant students I've ever worked with. And it just took somebody to read his first paper and ask, How do I get you into the discussion?

What methods do you use to encourage broad participation?

Many, many techniques. Slow down discussion. Open space for those who wish to think more before responding. Set a standard that thoughtful is the value rather than being quick.

Pair-share before large group discussion. Write before discussing. Prompt students prior to class about discussion themes. Ask, Who hasn't spoken and has something they want to share? Use prompts that do not have a "right" answer but require working with others to develop an argument for a position.

For individual students, talk with them about their barriers to class discussion. Then work with them to create a plan to get their voice into the room. I often will have reticent students write down three things they found interesting about the reading and send them to me before class. Then I can ask a question and call on them.

For students who do not share and are writing really insightful papers, I will email them that I would like to bring up an insight that they had in class. Once students are able to get into class discussion, they are more likely to find their way in by themselves.

As a whole, I'm clear that discussion is something we do together and establish norms of listening to everyone—ensuring that everyone is included, heard, and challenged.

Tell me about Parrhesia's events and outreach work.

Live programming was stymied last year by the pandemic. Next year, programming will involve a regular live lecture series—at least one a quarter—bringing people in to talk about various aspects of free expression. I'd like to have one talk a year about free expression as an international human rights issue. And ideally with every lecture series, we'd have a conversation series that would continue after it.

I've also been doing a lot of presentations to high school students, high school faculty and staff, and college faculty and staff about the principles of discourse and how to embed them in the curriculum and campus life. That's all building up to something that's been on hold: a Parrhesia signature summer program that includes precollege students.

Your book* Excluded from Suffrage History *(Greenwood Press, 2000) focuses on 19th-century feminist Matilda Joslyn Gage. What drew you to studying her life and work?

I've always been fascinated by people who are on the margins, yet find a way to get their ideas into the mainstream. How do people get their seemingly radical or threatening ideas heard?

Matilda Joslyn Gage was a central figure in the early woman's suffrage movement. Here was a person who had some of the most advanced, far-

reaching ideas. In the later years of her life she was marginalized from the movement that she helped found. It moved away from big principles. The movement decided to start compromising with some who made the argument that women should have the right to vote because it would make a more moral country. For Gage, the biggest principle was that women are human beings. And because of that they're citizens. And because of that, they deserve the right to vote.

I'm interested in those types of tensions. We see them play out in lots of social movements.

You helped develop an award-winning public discourse curriculum as chair of your department at Gustavus Adolphus College. Is that similar to your curriculum at UChicago?

It looks a lot like the course I'm teaching here.

I've always been dissatisfied with the teaching of public speaking. We were teaching a formula. It was not developing voice, and it wasn't getting students to speak out in the world. Rhetoric is so intertwined with civic life. When you separate it out, that's when it becomes empty and vacuous.

After I became department chair, we threw out the old curriculum and rebuilt it from the ground up. Every single student goes into the community to advocate for something. We made it a course in rhetoric, argument, and civic life.

We live in an increasingly hyperpartisan world. How do you counter that?

In community conversations or classroom conversations, I try to get away from the either/or. When we get a third piece in there, or a fourth way of seeing things, the discourse changes.

Both sides of that partisan divide go to automatic arguments. They're no longer responding to the other side in any way. Instead, the goal is to find some flaw in the opposing argument or make an ad hominem attack. Anything other than think, What does that idea mean? What are the values behind it? Why would somebody want to pursue that? What are the alternatives? Where can we find common ground?

For me, it's about creating frameworks and conversations that are not either/or, that provide opportunities for different ideas to be at the table so we can capitalize on the creativity of discourse.

How do you help someone not react in a defensive way when they're trying to protect a view they strongly identify with?

In the classroom, when we're discussing a charged issue, I like to do some stakes gathering: What's your stake in this? I have students think through why they hold the views they do and present that to the class. All of a sudden, I know where you're coming from, and I know why you're so invested in your position.

Sometimes that's when the breakthrough moment comes. It gets us away from Rock 'Em Sock 'Em Robots or the Green Bay Packers versus the Chicago Bears. As a Bears fan, I should be able to appreciate Aaron Rodgers, right? That guy's a good quarterback. I'm glad he's in the stadium today, because he's going to test my team.

The Chicago Principles have been an inspiration for many different universities. Do you imagine other schools might adopt something like the Parrhesia Program?

Oh, I would hope so. We have lost an ability to talk across differences and test ideas. The University of Chicago is a great place to figure this out.

The two-sided debate with winners and losers—a zero-sum game—doesn't lead to our best thinking. We've got to bring in different voices and perspectives.

You've tied public discourse to the health of democracy. What do you mean by democracy?

I am very much with [Laboratory Schools founder] John Dewey on this. Democracy is a way of life. It is a civic daily practice. It is in the daily interactions and how we live. It is the ways in which we connect with others and gain and learn different perspectives. And for me, that's why rhetoric is so important. I think voting is the lowest hanging fruit of democracy—it's necessary but absolutely not sufficient.

—Lucas McGranahan

Stephanie Reitzig, Class of 2022, was one of more than 100 College students who presented their work at the online symposium.

Undergraduate research

ABSTRACT THOUGHT

At the Undergraduate Research Symposium, students presented work on smallpox inoculation, social and emotional learning, and more.

In the spring of 2020 **Stephanie Reitzig**, Class of 2022, was working as an intern at the Newberry Library's Center for Renaissance Studies. As a CRASSH scholar—funded by a College Research in the Arts, Social Sciences, and Humanities grant—she was supposed to help prepare an exhibit scheduled for April 2020. But when the pandemic hit, the library closed.

Instead of the exhibit, Reitzig helped create a video series, Learning from Premodern Plagues, for the Newberry's YouTube channel. She edited the seven videos in the series, which includes "The Perils of Reopening: The Plague in Marseille, 588 CE" and "Surviving the Black Death." She also researched and recorded her own video, "Mary Wortley Montagu and Smallpox Inoculation in Early Modern England," focusing on the woman who introduced the practice of inoculation—a precursor to vaccination—to England from the Ottoman Empire.

By July her video had been watched more than 2,300 times, "which is mind-boggling," Reitzig says. After graduation, she hopes to pursue a PhD in history with a focus on early modern Europe, and eventually a career in the public humanities: "This project dovetailed extremely well with those plans."

Reitzig was one of more than 100 College students from across the disciplines who presented work at the virtual 2021 Undergraduate Research Symposium, held in May. The annual symposium, organized by the College Center for Research and Fellowships, is UChicago's only campus-wide interdisciplinary research event.

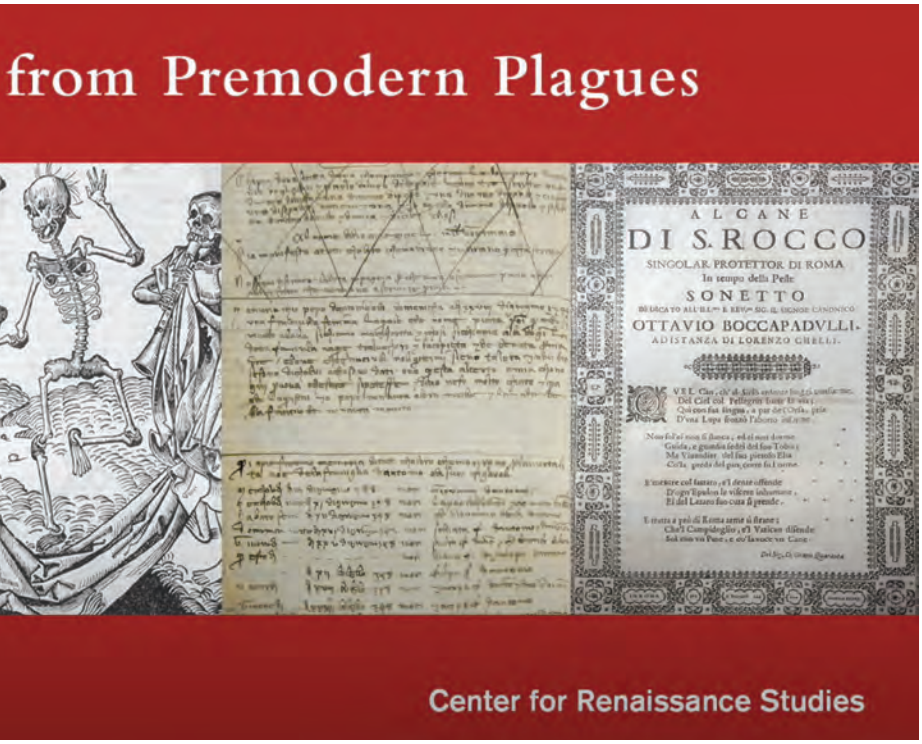
The symposium is open to students involved in undergraduate research or creative scholarship—meaning research practice undertaken in creative disciplines. (As one example, **Mahria Baker**, AB'21, created a collection of visual poems inspired by the art and writing of 18th-century British caricaturist James Gillray.) Students share their work through abstracts, posters, and prerecorded presentation videos.

During this year's event, which was open to the public, attendees could chat with individual presenters over Zoom. As well as current College students, recent graduates who could not present last year were invited to participate.

Reitzig was not the only student whose project was affected by the pandemic. **Tinyan Dada**, Class of 2022, a College Global Health Research Scholar, had planned to do research at a clinic in Thomassique, Haiti, during the summer of 2020. She had created a study to identify health care gaps that affected hypertensive and preeclamptic pregnancies. When her study was canceled, Dada shifted her focus to the South Side of Chicago, looking at how a positive COVID-19 diagnosis affected pregnancy outcomes.

A large majority of patients in her study were asymptomatic and diagnosed with COVID-19 by universal screening, Dada discovered. The rates of preterm labor and cesarean delivery were similar or higher than the national average. None of the patients died, but 5 percent had to be admitted to the intensive care unit. She also collected data on the babies, finding that both severe neonatal complications and transmission of the virus to the babies were rare.

Photo courtesy Stephanie Reitzig; screenshot by Michael Vendiola



"This project made me realize that there are numerous factors that contribute to a diagnosis—socioeconomic status, transportation, patient knowledge, et cetera—and only through dedicated analysis can we turn our current 'sick care system' into a health care system that works for all," says Dada, who plans to attend medical school and pursue a master's in public health.

Amara Cohen, AB'21, a Dean's Fund for Undergraduate Research awardee, looked at social and emotional learning (SEL) in Title I schools (which have a large number of students from low-income families) during the past academic year. Her interest was sparked by an internship at the Collaborative for Academic, Social, and Emotional Learning (CASEL) in the summer of 2020. "Students were under a lot of stress during the pandemic, which meant that schools needed to prioritize SEL more than ever," she says. "Yet I wondered if this need was reflected in practice." Her findings: only schools that had fully integrated SEL into the school structure kept it up during the pandemic.

During her interviews with teachers, Cohen was surprised when several of them thanked her. The teachers appreciated having the chance to discuss their own SEL plans and reflect on what worked—and what had not—in the classroom. Although Cohen was happy to hear that her interviews were helpful, "it made me realize that schools need to be providing more spaces for teachers to talk in depth about their experiences, and someone needs to be carefully listening."

Next year Cohen will teach third grade at the Hamlin School in San Francisco. She chose that school over others because Hamlin "clearly emphasized their commitment to SEL," she says. "I look forward to integrating my research with my teaching practices."

—Carrie Golus, AB'91, AM'93

PANDEMIC PROJECTS

Six other research projects from a range of disciplines focused on aspects of the COVID-19 pandemic. All were supported by grants from the College Center for Research and Fellowships.

Bryan Gu, Class of 2022

Family Conflict and Mental Health Outcomes in Chinese American Young Adults During the COVID-19 Pandemic

Rahul Gupta, Class of 2022

Developing Computational Tools to Predict COVID-19 Symptom Severity

Beatrice Katsnelson and Elise Katsnelson, both Class of 2023

Automatic Segmentation and Analysis of COVID-19 Patient CT Scans Using Deep Learning

Elise Katsnelson and Beatrice Katsnelson

Improving COVID-19 Patient Care by Deep Learning–Based CT Scan Assessment

Yena Kim, AB'21

Psychological Resilience and Distress During the COVID-19 Pandemic

Jacqueline Lewittes, Class of 2022, and Fady Shokry, AB'21

Child Care Providers Responding to COVID-19

Read more at mag.uchicago.edu/undergrad-research.

Photo courtesy Andy Kim, AB'04

Andy Kim, AB'04, cites a moment in Karl Weintraub's Western Civilization course as one of his most enduring memories of UChicago.

THE VALUE OF THE INDIVIDUAL

An interview with Class Day speaker and US Rep. Andy Kim, AB'04.

By Jeanie Chung

Rep. **Andy Kim** (D-NJ), AB'04, spoke at the College's Class Day ceremony in June. A political science major at UChicago, he studied international relations as a Rhodes and then a Truman Scholar at Oxford. He worked for the US Agency for International Development, the State Department, the Department of Defense, and the White House National Security Council before being elected to the House in 2018.

The Class Day tradition began in 2017. Previous speakers, all with ties to the University, have included cancer researcher **Otis W. Brawley**, SB'81, MD'85; journalist **Rebecca Jarvis**, AB'03; **Valerie Jarrett**, former senior adviser to President Barack Obama and distinguished senior fellow at the Law School; and *New York Times* columnist and University trustee **David Brooks**, AB'83.

This interview has been edited and condensed.

What are your memories from your own convocation?

I remember having a deep level of excitement. There was a lot of uncertainty about the future, but I felt prepared. The hardest part was saying goodbye to friends without knowing when we would see each other again.

What drew you to UChicago from Deep Springs College? (Deep Springs is a two-year college in the California desert, all male at the time Kim attended, where its 24–30 students also work on a cattle ranch.)

Deep Springs is an extraordinarily unique two-year education. I was looking for another unique place to finish off my undergraduate experience. Coming from the rural ranch environment, I found the urban dynamics of UChicago to be incredibly complementary to provide a new perspective.

I wanted a place where I could find a balance between the life of the mind and tangible hands-on work. I also deeply respected the approach to education of UChicago that embraced the pursuit of depth. The main goal was to learn how to ask good questions, and UChicago helped me hone that kind of critical thinking.

What's your most enduring memory of UChicago?

The first class meeting of Western Civilization, taught by Professor Karl Weintraub [AB'49, AM'52, PhD'57]. He was a legendary teacher who had taught at UChicago for nearly 50 years. He was unwell at the time, though, and struggled to always articulate the brilliant thoughts he had in his mind.

He paused the class and mentioned that he had people suggest to him that he stop teaching and retire. I started to choke up as he talked about how much meaning teaching provided for his life and how he wasn't sure what life would be like without teaching. I remember looking around the room and seeing 20 other students who all were internalizing the power of that moment and the ability to be a part of something so special and inspiring. Professor Weintraub passed away shortly after. I feel blessed to have had the time as one of his students.

Was there one class or one book that's been relevant in your career in public service?

I did an independent study with Professor Nathan Tarcov [the Karl J. Weintraub Professor in the College and the Division of the Social Sciences] on Plato's *Republic*. That was the first book I read as an undergrad [at Deep Springs]. I wanted to read it again as the last book to get a sense of how much my thoughts had grown in four years. I keep that same copy of the *Republic* with me at my office at the Capitol, and I still return to those passages that I highlighted. There is an eternalness to many of the struggles we face.

What aspects of serving in Congress have surprised you—and what parts did you feel prepared for?

My time in Congress has been anything but ordinary. I started during a shutdown, voted on two impeachments, and spent half of it during a pandemic. The thing that prepared me most was my time as a diplomat. A lot of people in Congress are great at talking, but as a diplomat, you learn to listen. It doesn't matter if it's a member of the other party in Congress or someone who may not agree with you on a lot of things back home, finding that middle ground starts with listening. It's something that's lacking in Washington. It's something I work every day to be better at.

You've talked a lot about how your second son's birth inspired you to run for public office. How is it balancing family and your demanding job?

It's tough. My wife and I are lucky—we both work, we have parents who live nearby and can help, and we've got a healthy family. Watching my two sons grow up every day is a blessing, but it is difficult to raise a family in America.

Kim with his wife, Kammy, and their sons at a polling place in New Jersey.

AP Photo/Mel Evans

There aren't a lot of working parents in Congress. I wish that were different.

You've also been very vocal about anti-Asian hate crimes. What was it like for you as an Asian American student at UChicago?

When I was at UChicago, I was at a difficult place in understanding my Asian American identity. At times I tried to downplay or ignore my heritage. I wanted to be seen as just American without any qualifiers.

I studied Hannah Arendt and thought that talking about universal aspects of the human condition meant to focus on that which we share rather than what makes us different. But her book *Eichmann in Jerusalem* and other writings showed the clash within plurality.

These experiences, in addition to my work at the Chicago Coalition for the Homeless, pushed me to visit all 77 Chicago neighborhoods and see the range of life experiences in the city I called home. My understanding of my own identity shifted considerably during my time in Chicago.

After the Capitol insurrection of January 6, a photo of you helping to clean up trash—the only lawmaker alongside the building staff—went viral.

It was a traumatic moment—for me, for my colleagues, for our nation. In traumatic moments, people process things differently; I started cleaning up. There's always something you can do, there's always a way you can help or make things better. It doesn't have to be a big act; it can be something as small as picking up the garbage.

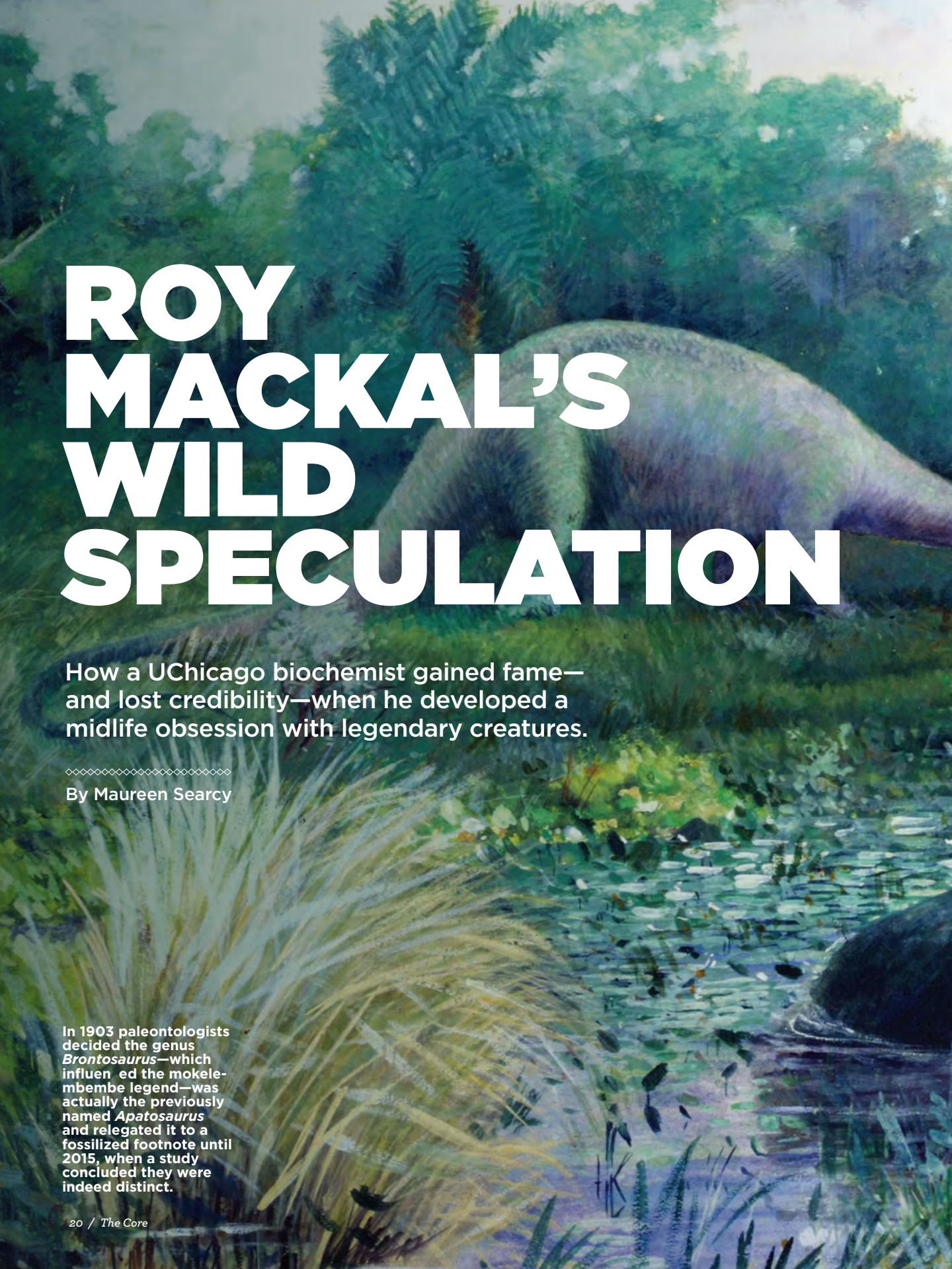
What gives you hope for the future?

My two baby boys. My oldest son is five, and I just watched him ride a two-wheel bike for the very first time. It was a humbling feeling to watch him seek out these milestones in the human experience. Seeing them grow up and enter the world—it drives me to do better every day and gives me hope about the great things they'll accomplish one day.

ROY MACKAL'S WILD SPECULATION

How a UChicago biochemist gained fame—and lost credibility—when he developed a midlife obsession with legendary creatures.

By Maureen Searcy



In 1903 paleontologists decided the genus *Brontosaurus*—which influen ed the mokele-mbembe legend—was actually the previously named *Apatosaurus* and relegated it to a fossilized footnote until 2015, when a study concluded they were indeed distinct.

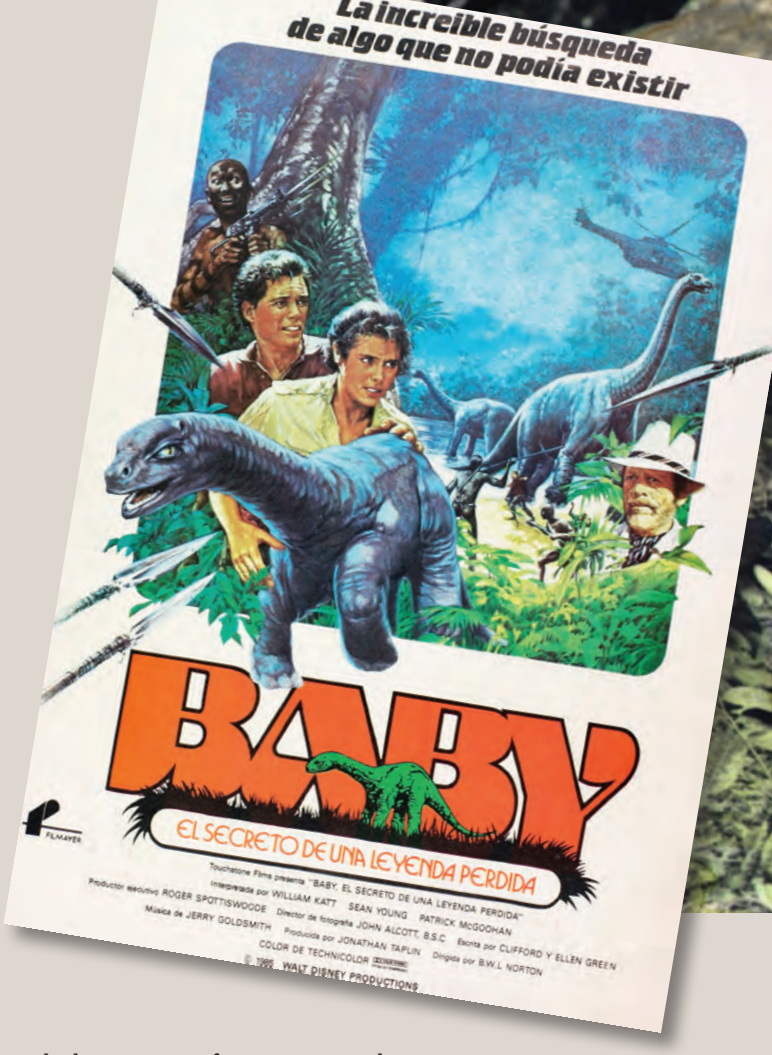
Illustration by Charles R. Knight, 1897

In the 1985 Disney movie *Baby: Secret of the Lost Legend*, a paleontologist finds a living brontosaurus family in Ivory Coast. The locals refer to these dinosaurs as mokele-mbembe, real-life legendary creatures rumored to roam the Congo River Basin.

The film's villain is a ruthless professor who will stop at nothing to claim credit for the discovery. He too is purportedly based on a real (though by all accounts scrupulous) character: Roy P. Mackal, SB'49, PhD'53, a University of Chicago biochemist who undertook two expeditions to find the mokele-mbembe in the early 1980s. In addition to—and sometimes in conflict with—his career as a scientist, Mackal was a self-proclaimed cryptozoologist, a seeker of hidden animals.

Cryptozoology is a pseudoscience aimed at finding hypothesized but unsubstantiated creatures called cryptids. Bigfoot, the Loch Ness Monster, and the Abominable Snowman are the most famous, but the list is extensive: hybrids, extinct species surviving in secret, megafauna, wandering wildlife in unnatural habitats, and missing evolutionary links. These capture the minds—and money—of cryptid hunters, who search for evidence. Their grandest ambition is to trap a creature. (Killing a cryptid would be antithetical to cryptozoology's growing conservationist leanings. In fact, it's illegal in many states, by ordinance or default, to kill a Sasquatch. It is perfectly legal, however, to shoot a Bigfoot in Texas.)

Cryptid hunters range from hobby tourists, who camp in rumored habitats hoping to glimpse a cresting lake monster, to academics, who publish scholarly research and mount expeditions. Mackal was of the latter breed, and the mokele-mbembe was his great white whale.



***Baby: Secret of the Lost Legend* features a fictionali ed version of Roy Mackal as a professor who steals credit for discovering a brontosaurus family living in Ivory Coast.**

Mackal's passion for cryptozoology came at a high professional cost. He did not lose his job at UChicago—he was protected by tenure—but he was scorned by his colleagues and his prestige as a biochemist plummeted. Meanwhile, as his cryptozoology work appeared in the *New York Times*, *People* magazine, and *Arthur C. Clarke's Mysterious World*, Mackal rose to stardom as a "monstrologist."

He never abandoned his scientific ideals, but Mackal felt trapped by the confines of his lab. He made groundbreaking discoveries about the smallest microbes on earth—viruses contained in test tubes—but he wanted something bigger, wilder, able to consume him. Creatures at that scale are rare in the modern world—except in legend. Rather than return to his bench and his "cute little scientific problems," as he called his biochemical work, he chased the dream.

When Mackal died, in September 2013 at 88, word spread through the cryptozoology community before news outlets published an obituary. Much like reports of the creatures he hunted, his story was passed from person to person, without conclusive documentation.

Mackal was born in 1925 in Milwaukee. As a child he was entranced by books of lost worlds, like Jules Verne's *Twenty Thousand Leagues Under the Seas* (James R. Osgood, 1873). Mackal himself cited *The Lungfish and the Unicorn* (Viking Press, 1941) by self-proclaimed "romantic naturalist" Willy Ley as sparking an interest in fantastical beasts.

His path to science—and on to pseudoscience—started at the University of Chicago. After serving in World War II, he enrolled at the University to study biochemistry, investigating bacteriophages (viruses that infect bacteria) and the lysogenic cycle, one way a virus replicates its DNA using the host cell's natural processes. After earning a PhD, Mackal joined the faculty in 1953. In 1964, the year he rose to associate professor, he and another scientist were the first to grow viruses outside of living cells.

When he wasn't in the lab, he was often in the machine shop, former colleague **Edward Brody**, MD'64, PhD'65, told the American Society for Biochemistry and Molecular Biology member magazine in 2014. An accomplished engineer, Mackal held several patents, including designs for an automatic parachute and recovery system for research rockets and a hydrogen generator for weather balloons. Being a "master craftsman," in Brody's words, helped him later in his cryptozoology career. Another former colleague remembered Mackal as an imaginative scientist and an adventurer. He reportedly married four times and had several children.

From left: Touchstone Pictures/Album/Newscom, United Archives/Impress/United Archives/Newscom

In 1965, at age 40, Mackal was vacationing in Scotland when he happened upon members of the Loch Ness Phenomenon Investigation Bureau, who were monitoring the lake from observation vans. Fascinated, he joined them and began monitoring Loch Ness himself. A man in search of a zoological romance had found one.

While he continued virology research at UChicago, Mackal also served as scientific director of the Loch Ness Investigation Bureau, where he attempted to bring systematic methodology to the organization. Under his leadership, from 1965 through its disbanding in 1975, the bureau used sonar and miniature submarines to scan the lake, and Mackal engineered a biopsy harpoon to sample DNA should he ever get close enough to the monster. "Roy's approach to cryptozoology was scientific," Brody said. "He studied the subject assiduously and knew that finding positive results would be difficult, even unlikely, but he thought the risk was worth taking, because he was passionate about the subject."

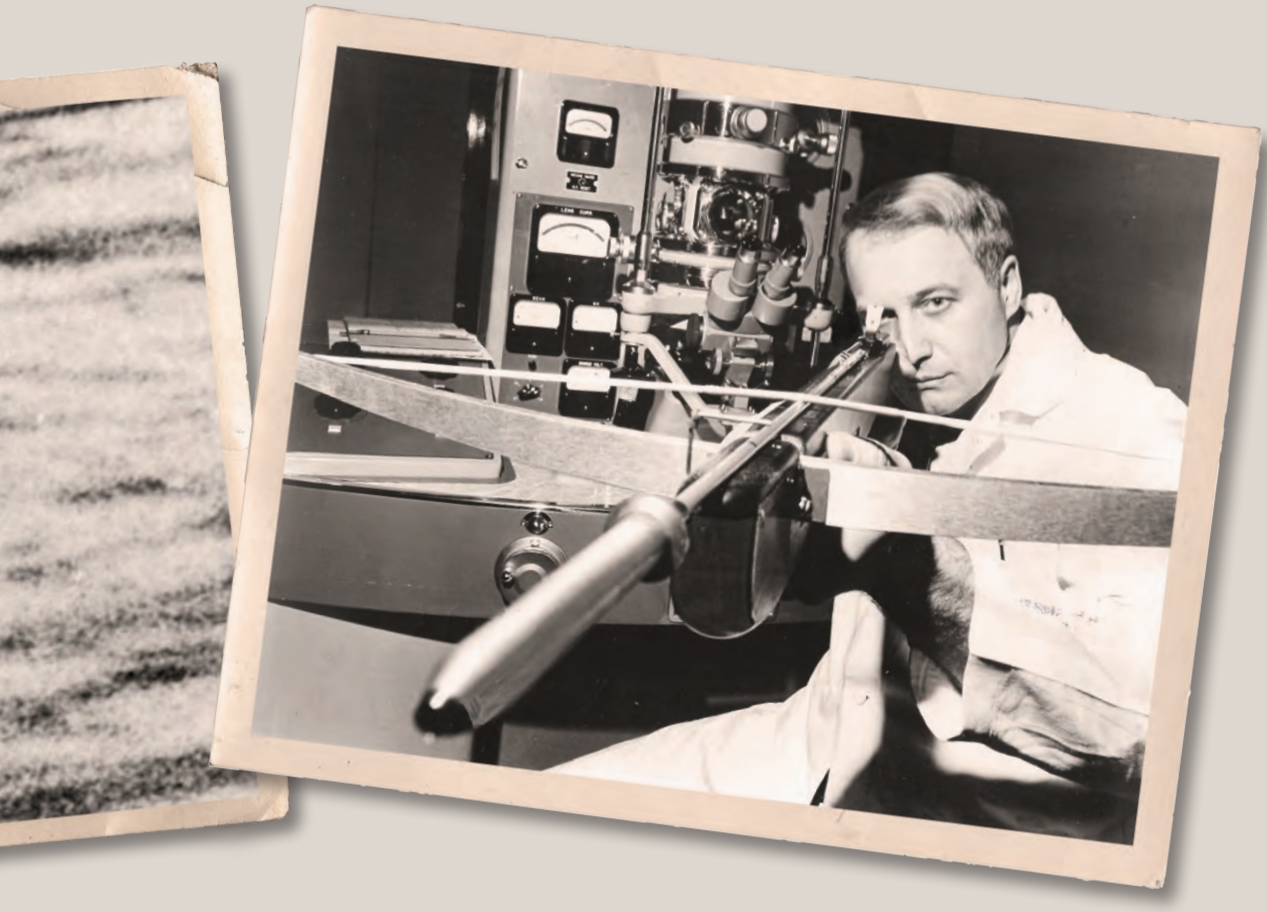
Mackal's doctorate appealed to the cryptozoology community; his academic pedigree lent credibility to their cause. Cryptozoology is full of doctorates, but often in specialties unrelated to wildlife. The emphasis on expertise is a practice called "credential mongering," writes paleontologist and cryptozoology skeptic Donald Prothero, coauthor with Daniel Loxton of *Abominable Science! Origins of the Yeti, Nessie, and Other Famous Cryptids* (Columbia University Press, 2013). The premise is that someone with expertise in one field must be credible in others, like a cardiothoracic surgeon hawking diet pills.

When Mackal published his first book, *The Monsters of Loch Ness* (Swallow Press, 1976), credentialed zoologist Bernard Heuvelmans gave it a blistering critique. Considered the "father of cryptozoology," Heuvelmans took exception not to Mackal's lack of scientific rigor but to his failure to adequately address the extensive Loch Ness Monster literature. Undeterred, Mackal followed his Loch Ness chronicle with *Searching for Hidden Animals: An Inquiry into Zoological Mysteries* (Doubleday, 1980), positioning him as a prominent voice in cryptozoology.

The 1934 "surgeon's photo," Nessie's most famous portrait, was revealed to be a hoax by one of the conspirators in a deathbed confession.

Despite no substantiated Nessie evidence, Mackal hit the lecture circuit in the late 1970s. After a 1977 talk at Amarillo College in Texas, he was approached by independent explorer James Powell Jr., who had studied crocodiles in Gabon and heard stories of a river monster. Through Powell, Mackal became enamored with the mokele-mbembe, whose Lingala language name is often translated as "one who stops the flow of rivers." They organized an

From left: Photography by Marmaduke Wetherell; Historic Images Outlet



An accomplished engineer, Mackal designed a biopsy harpoon to sample DNA should he ever encounter Nessie.

expedition to the Republic of the Congo; so eager was Mackal that he booked plane tickets before obtaining visas.

Documented sightings of the legendary creature date back to 1776, when a French missionary described animal tracks three feet in circumference. Since then, the mokele-mbembe has been reported in the Democratic Republic of the Congo, Equatorial Guinea, Gabon, Cameroon, the Central African Republic, and the Republic of the Congo, especially around Lake Tele. Anecdotes from indigenous inhabitants describe a hairless, elephant-sized, red/brown/gray animal with a long neck and long tail.

Something important to note about cryptozoology: stories from indigenous peoples are treated as legend until cryptozoologists find the creature themselves, mirroring the historical practice of zoology and science at large. A creature (or medicine or process) is not "discovered" until it is described by missionaries or colonial explorers.

Africa was particularly subject to European biases that the continent was primitive, and indigenous inhabitants had been left behind by civilization and even evolution. Mackal's introduction to his third book, *A Living Dinosaur? In Search of Mokele-Mbembe* (E. J. Brill, 1987) reads: "Africa! For two centuries the name has conjured up for westerners an image of a dark continent filled with strange beasts, primitive peoples, vast unexplored deserts, swamps, and jungles." If dinosaurs still roamed the earth, it would be in Africa.

Descriptions of the mokele-mbembe began referencing dinosaurs after the first brontosaurus fossils were found in the 1870s. Exotic-animal dealer and showman Carl Hagenbeck connected the mokele-mbembe to the newfound dinosaurs in his book *Beasts and Men: Being Carl Hagenbeck's Experiences for Half a Century Among Wild Animals* (Longmans, Green, 1911). "The natives, it seemed, had told both my informants that in the depth of the great swamps

there dwelt a huge monster, half elephant, half dragon," he writes. "It seems to me that it can only be some kind of dinosaur, seemingly akin to the brontosaurus." It was a brief mention in the book, but driven by Hagenbeck's fame, a legend was born.

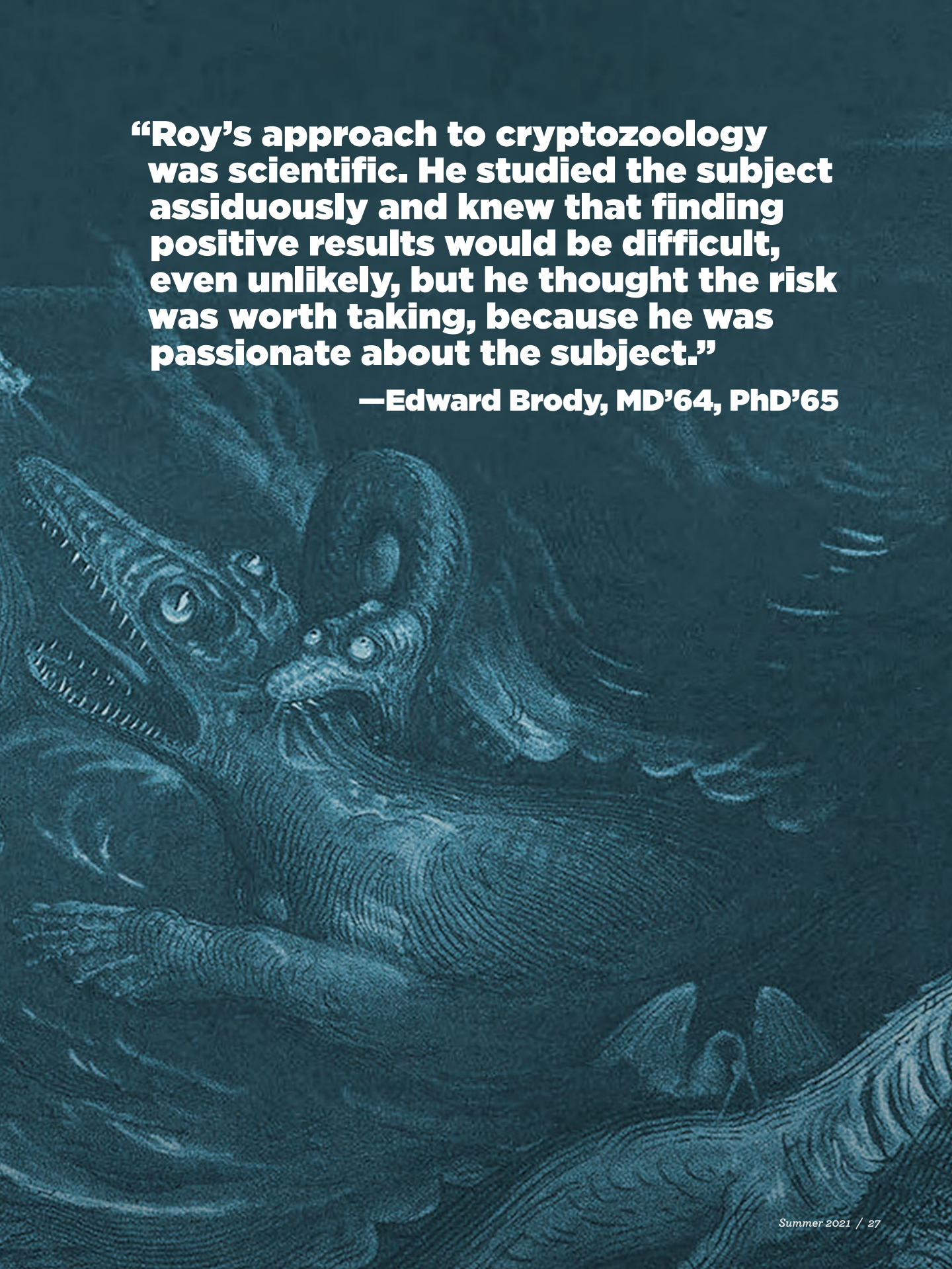
Mackal and Powell organized two expeditions to the Congo River Basin in 1980 and 1981—the second funded in part by the National Geographic Society—which were chronicled in *A Living Dinosaur?* The book, which reads like a travelogue, details how they mounted an expedition, including connecting with an embedded host. For Mackal, that was Pastor Eugene Thomas, who had ministered in the area since 1955 and "was with us not only to interpret, but also to spread Christianity."

Between providing medical supplies to locals and scanning the river with sonar, Mackal interviewed indigenous inhabitants, searching for informants who had seen the creature. Some stories were unreliable or even coerced. In a village near Lake Tele, inhabitants told Mackal they had never seen a mokele-mbembe, to his astonishment. "It became clear that the people of Moungouma Bai were hiding information," writes Mackal. A Congolese government official tasked with keeping the expedition safe "made an impassioned plea for cooperation, first conciliatory and then threatening," which conveniently jogged their memories. Eight years later, British travel writer Redmond O'Hanlon was told by the son of a village elder that tales of the Congolese dinosaur were "to bring idiots like you here. And make a lot of money."

Mackal's expeditions turned up only inconclusive footprints. He believed the creature to be a sauropod or a monitor lizard but writes: "If ... the Mokele-mbembe is a giant monitor lizard, it would have to be a very strange lizard indeed, quite unlike any known forms, living or extinct."

In 1811 the fir t *Ichthyosaurus* fossils were found in England by 12-year-old Mary Anning. She then found the fir t *Plesiosaurus* (which the Nessie legend is based on). So monstrous was the creature that it was deemed a hoax. The earliest paleoart, including *The Book of the Great Sea-Dragons* (London, W. Pickering, 1840), is based on Anning's work.

Image courtesy Biodiversity Heritage Library



“Roy’s approach to cryptozoology was scientific. He studied the subject assiduously and knew that finding positive results would be difficult, even unlikely, but he thought the risk was worth taking, because he was passionate about the subject.”

—Edward Brody, MD’64, PhD’65

Clockwise from left: Photography by guenterguni/iStock; image courtesy Biodiversity Heritage Library; image courtesy Biodiveristy Heritage Library; photography by Michel VIARD/iStock

During a 1982 meeting at the Smithsonian National Museum of Natural History, Mackal cofounded the International Society of Cryptozoology (ISC) along with Heuvelmans (who wrote a glowing foreword to *A Living Dinosaur?*) and Richard Greenwell, a cryptozoologist who accompanied the second African expedition. The ISC would analyze potential evidence, like "photography, sonar tracks, footprint casts, tissue samples, and hair samples."

The society, which dissolved in 1998, ran a peer-reviewed journal, *Cryptozoology*. One might wonder how such a journal would be refereed; until the field is a recognized discipline, Mackal said in a 1998 interview with a fellow cryptozoologist, "we are all amateurs." If the ISC's board of directors was indicative of professionalism, reviewers were experienced scientists in related fields.

Mackal's UChicago colleague and fellow eccentric Leigh Van Valen (1935–2010), an influential but controversial evolutionary biologist who served on the board, founded his own academic journal that may exemplify *Cryptozoology*'s mindset and methodology. In an editorial note Van Valen writes: "I suppose *Evolutionary Theory* does get more than its share of crank papers submitted to it. I treat them all seriously; it can be hard to tell a crank from an unfamiliar gear."

Mackal's last virology paper appeared in 1971, but he continued writing scholarly articles about cryptids, including "Biochemical Analysis of Preserved *Octopus Giganteus* Tissue," published by *Cryptozoology* in 1986. Drawing on his biochemical training, Mackal analyzed the amino acid composition of tissue collected from a preserved carcass found on a Florida

To bolster claims of hidden wildlife, cryptozoologists cite creatures from legend (like the Komodo dragon, top left) or rediscovered after presumed extinction (like the deep-sea dwelling coelacanth, bottom left). Cryptid hunters continue to seek the extinct Tasmanian tiger (top right) and ivory-billed woodpecker.

Cryptozoology "uses no paradigm that is contrary to established science. The only difference is that we are a little bit humble."

—Roy P. Mackal, SB'49, PhD'53

beach in 1896. The cryptozoology angle: the carcass is a "globster," an unidentified organic mass that washes ashore, inspiring reveries of sea monsters or an as yet undiscovered gigantic octopus. He concluded the tissue was consistent with a cephalopod.

(A follow-up study in 1995, which cites Mackal, deemed it whale blubber: "with profound sadness at ruining a favorite legend, we find no basis for the existence of *Octopus giganteus*." That article appeared in the *Biological Bulletin*, published by the University of Chicago Press in conjunction with the Marine Biological Laboratory, under a department gamely named Sea Monsters.)

After Mackal retired in 1990, his later years were spent mostly in obscurity, but his name crops up now and then in reference to the Congolese dinosaur and the plesiosaur-like Loch Ness Monster—his first cryptid love. His papers are archived at the Traveling Museum of the Paranormal & Occult after being found in the shed of an undisclosed contributor.

In 2012 a new *Journal of Cryptozoology* debuted. Its run was brief, but it prompted paleozoologist Darren Naish, who believes that cryptozoology and skepticism aren't mutually exclusive, to write that the field shouldn't be considered a pseudoscience. After all, cryptozoology employs hypothesis testing, self-correction, and evidence gathering.

Mackal himself believed that cryptozoology, at least the way he practiced it, "uses no paradigm that is contrary to established science. The only difference is that we are a little bit humble," Mackal told the *Chicago Tribune* in 1988. "We don't laugh at people when they say they have seen something new." Nor does investigation hinge on the assumption that cryptids truly exist. "That's the difference between me and the fanatic. And it's crucial: I'm a scientist," he said in a separate *Tribune* interview. "People on the fringe aren't prepared to accept no for an answer. I am."

Of course, cryptozoology relies on hope that there are hidden creatures out there. Mackal's *Searching for Hidden Animals* cites wildlife formerly known only to locals, like the Komodo dragon and the okapi (a giraffe relative that looks like a deer-zebra hybrid, found in the Democratic Republic of the Congo). He also notes that the coelacanth, the Mesozoic-era lobe-finned fish, was thought to be extinct until one was caught near South Africa in 1938. "A Lazarus taxon," says **Michael Coates**, an evolutionary biologist in the Department of Organismal Biology and Anatomy, "arisen from the dead."

So could Nessie be a dinosaur-era creature? "The Loch Ness Monster is not a plesiosaur, no," says Coates. (But we have two dino-contemporaries in or around Lake Michigan, he notes: the sturgeon and bowfin. The living editions of these fishes look pretty much like their Cretaceous ancestors.) Mackal came to believe that the monster was a zeuglodon, a primitive snake-necked whale, and

that there was a sustainable breeding population to propagate the species—yet Loch Ness was under a glacier for most of the past three million years. And a sizable population of any animal would leave traces in the environment.

Those traces would alert cryptid hunters and zoologists alike to Lazarus taxa reappearances. Take, for instance, the thylacine, the "so-called Tasmanian tiger, rather more of a wolf," says Coates, declared extinct in 1936. Enthusiasts continue to search, and photographic evidence continues to be debunked. They're hoping to find dung, which "would be useful because that would have DNA," he says, "but no such luck." Perhaps that's why people prefer the idea of Bigfoot, "highly sentient and clever enough to cover its tracks." There would also be distinctive sounds exposing a covert creature; when an ivory-billed woodpecker was reported in 2004, half a century after its last sighting, the Cornell Lab of Ornithology went looking—and listening—for the elusive bird, but never found evidence.

"I'm not sure exactly what the boundaries are," Coates says. "Is hunting for a thylacine or an ivory-billed woodpecker cryptozoology or just a hopeful search?" Because things do turn up. (In May scientists announced the discovery of a Galapagos Island tortoise whose species was declared extinct over a century ago. The expeditioners suspected one might be out there after they found tortoise droppings. Her lineage was confirmed via DNA.) But searches must be grounded in data, with hypotheses that have predictive and testable outcomes. Those criteria aren't often met by cryptozoological expeditions.

Hundreds of new species are also found every year. In 2020 London's Natural History Museum described 503 new species, including a monkey—but most were beetles. "What's the chance of finding a new large mammal? It's fairly remote," says Coates. "The curve of discovery is flattening out." New finds are more likely to be invertebrates, but cryptozoologists don't get excited by insects. If you want to find a new vertebrate, Coates says, look for fishes.

Mackal was dedicated to maintaining skepticism—but he was also convinced he saw Nessie. In 1970, while recording lake audio, he saw the water boil up 30 feet away. "The back of the animal surfaced, rising eight feet out of the water, roiling, twisting from left to right," he told the *Tribune* in 1981. "I *know* what I saw. But the sight sent my credibility down the tubes."

Mackal was mocked by colleagues and received hate mail. He told the *Scientist* he was "kicked out" of the biology department and told the *Chicago Sun-Times* that he got a "lateral promotion" to University energy and safety coordinator in the 1970s. But he told the *Tribune* he had struck a deal—he would save the University money by making buildings more energy efficient and would manage radiation hazards and toxic chemical disposal, and in return he would retain a research appointment in biology and teach one course—An Inquiry into Zoological Mysteries.

"They've been wonderful to me," he said. "The administration believes a professor should be able to make a fool of himself if he wants to, so long as it's not immoral or illegal. If something works out and we get famous, I'm their boy. If not, they never heard of me."

If Mackal were in UChicago's biology department today, Coates would hope that his extracurricular activities would be tolerated, that creativity wouldn't be stifled. "It's all good for an argument," he says. "There's room for all of this." But resources are limited, and you "do have to make difficult decisions about what you think is valuable." (Mackal funded his expeditions though personal savings, media collaborations, and book proceeds.)

Mackal holds a preserved eel-like specimen in 1979. By then Mackal's fame as a cryptozoologist had brought about a "lateral promotion" to University energy and safety coordinator with a research appointment in biology.

Yet Coates finds the need to seek awe in imaginary (or as Mackal would have said, undiscovered) creatures slightly exasperating when the natural world is already wondrous. "Sea serpents are the rotting remains of basking sharks," he says. (Baskers decay in a pattern that leaves a plesiosaur-like carcass.) "I get excited about basking sharks! They're just gorgeous."

Lorraine Daston, visiting professor of social thought and history and coauthor with Katharine Park of *Wonders and the Order of Nature, 1150–1750* (Zone Books, 2001), imagines that Mackal and his ilk do view hidden creatures as wonders of nature—but wonder, she says, is the response to something that seems to defy expectations. (Heuvelmans defined a cryptid as "truly singular, unexpected, paradoxical, striking, or emotionally upsetting," fitting Daston's conditions for wonder, and those characteristics set most cryptids apart from known animals.)

Cryptozoology's obsession with natural marvels, Daston suggests, may be driven by "the thrill that a fairy tale or legend might turn out to be true." But the conviction that such legends must have arisen from real creatures, she says, is a contracted, narrow view of creativity, a "very pessimistic statement about the human imagination."

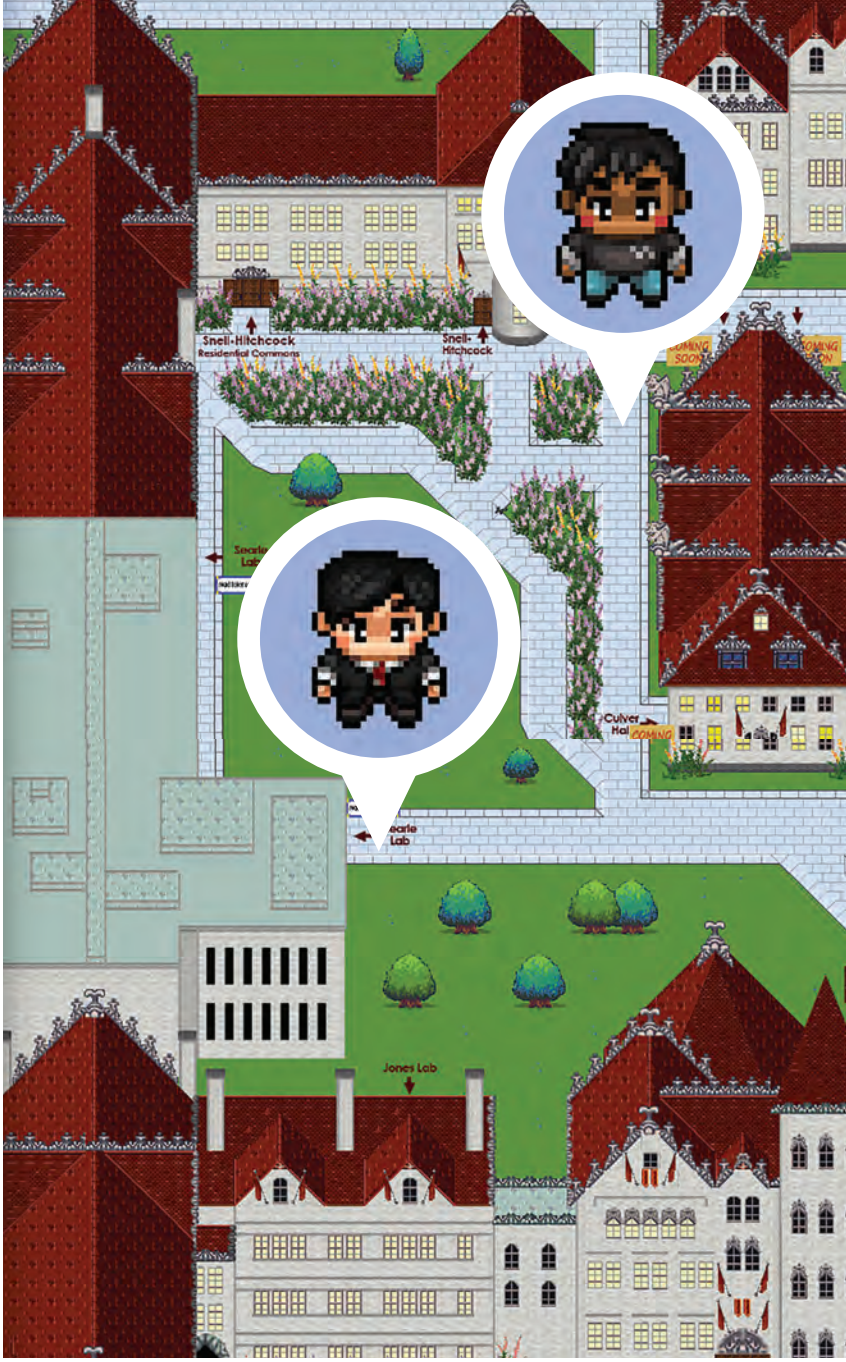
For Mackal, it seems a cryptid's eternal elusiveness was the source of wonder more so than the creature itself. When he thought he saw Nessie, the passion evaporated. "For me, it was solved. Not really, but hey, I saw it. I don't care if anyone believes me." He needed a new quest: to the Congo seeking the mokele-mbembe, to Namibia searching for pterosaurs, to exotic Vermont looking for a monster in Lake Champlain. The yearning for adventure he'd harbored since childhood was never satisfied—merely redirected.

UChicago Photographic Archive, apf7-00696, University of Chicago Library

Pandemic life

"IT'S-A GO TIME!"

The Gather Town version of UChicago re-creates campus in 2D, 8-bit glory.



Screenshot by Michael Vendiola

It's UChicago, only flatter.

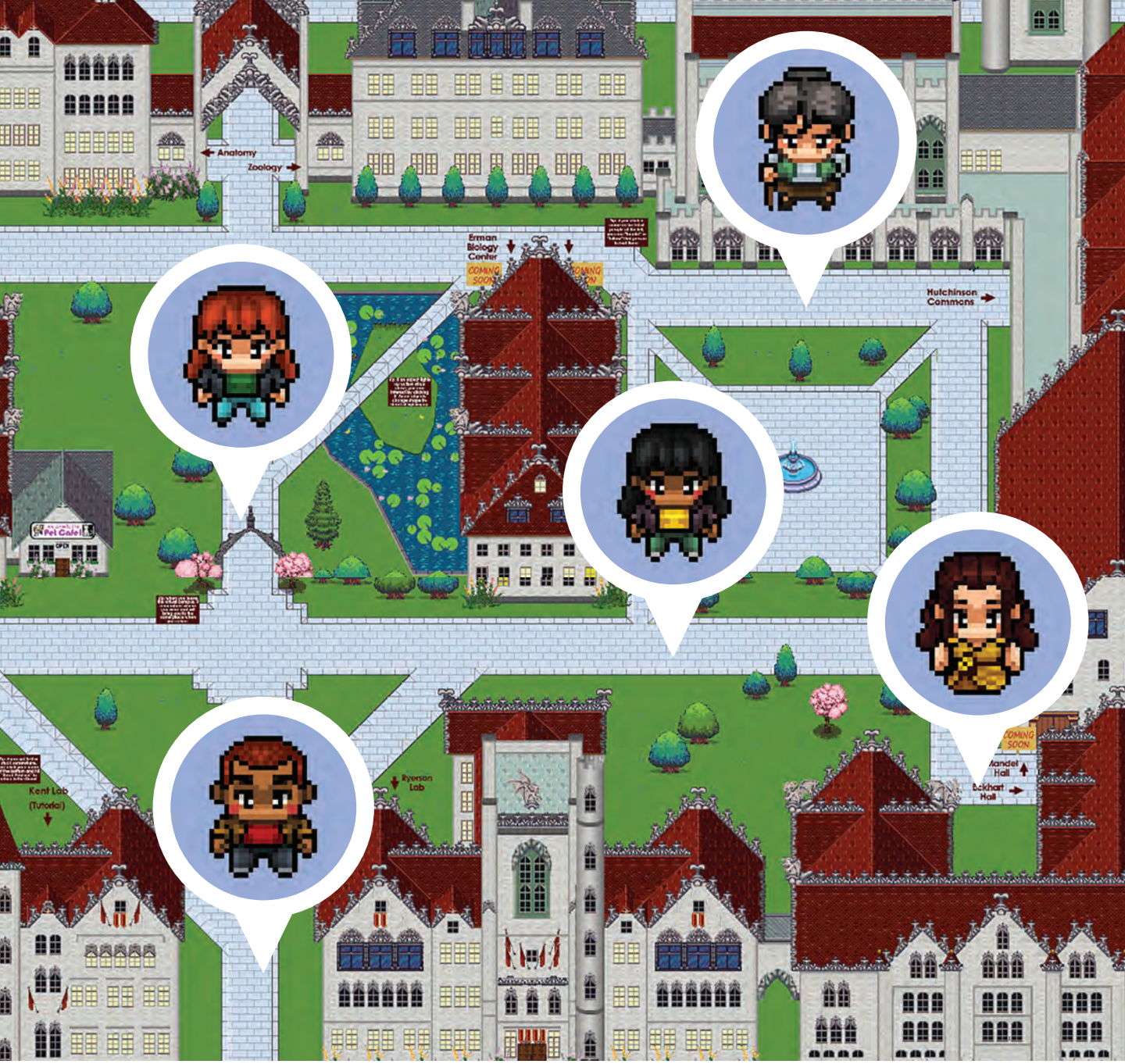
Unlike Zoom, the Gather Town version of UChicago's campus works more like the real-life one—a shared space where you can move around and run into other people. This allows the spontaneous, low-key human interaction that students, faculty, and staff missed last academic year: hanging out on the quad or in the Reg, meeting up in a coffee shop, playing impromptu card games.

The project was spearheaded by historian **Ada Palmer**, whose annual Italian Renaissance course has students reenact a papal election. Palmer's friends suggested the platform as a way to virtually recreate Rockefeller Memorial Chapel, which serves as the Sistine Chapel.

"Zoom can't enable circulating through a space, ducking out for a private conversation, or walking to the middle of the room and suddenly making a big announcement, but Gather Town can handle those things," says Palmer, associate professor of early modern European history. "As I looked into what it would take to make Rockefeller, I thought of how many other things—like receptions, dorm groups, RSOs, conference receptions, even a game like Humans v. Zombies—might be able to make use of it. So I thought: Why not make a whole campus?"

Palmer and a team of undergraduate students collaborated virtually through a Discord server to build the world from scratch. The result includes favorite UChicago spots as well as hidden, imagined spaces like a fantasy castle and a spaceship.

Users choose customizable pixel characters to represent themselves. The "interaction distance" feature launches a video call between users who are five virtual feet or closer to each other.



Another unique feature is the speaker view. A user can stand on a stage and see everyone in the audience. Audience members hear only the speaker, much like a real-life presentation or performance—but they can also whisper to people sitting beside them.

Soon after Gather Town went live, Palmer entered a new test room, where she was delighted to discover eight other faculty members playing cards. "Serendipity has been almost erased from our lives for most of a year," she says. "Now we can have those unexpected hellos and chance conversations again."

—Lily Levine, Class of 2022

In the Gather Town version of UChicago, users can choose their own avatar. Then they can move around campus like it's a '90s video game.

Recipe

MEAL PLANNING FOR VICTORY

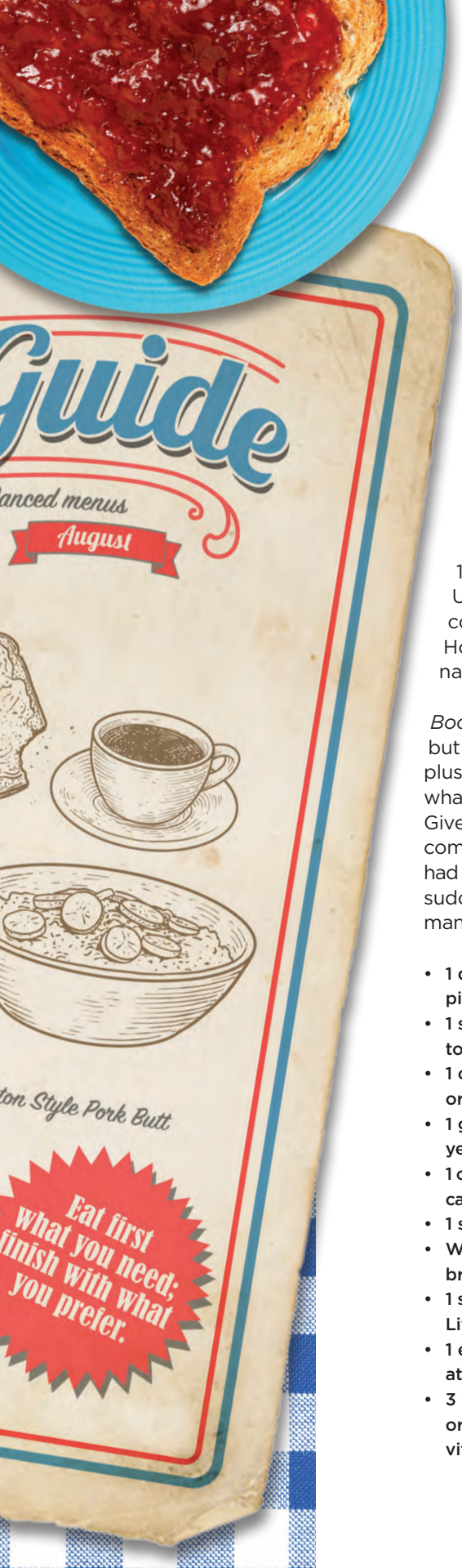
During World War II, cookbooks by Meta Given, PhB 1924, EX'27, helped guide a malnourished nation.

In 1940, after Germany invaded and conquered France, the United States launched the first peacetime draft in American history. But military draft boards soon made a startling discovery, according to *The Secret History of Home Economics* (W. W. Norton, 2021): one-third of men called up for service failed their physicals due to poor nutrition.

By May of the following year, the government had issued new nutrition guidelines. There were seven basic food groups, Americans were told, and all seven should be eaten every day. It was a simple message designed for a time when many people lacked even a basic understanding of nutrition. Most respondents to a 1941 poll did not know the difference between a vitamin and a calorie.

"Feeding the family has always been a matter of supreme interest to the individual; now, in the present emergency, it is a matter of national concern," read the foreword to *The Modern Family Cook Book* (J. G. Ferguson and

Photo illustration by Michael Vendiola



A sample menu for August. A "moderately active man" required 3,000–3,300 calories daily, a "moderately active woman" 2,200–2,500 calories. "Sedentary" was not an option. It was added in later editions.

Associates, 1942), by Meta Given, PhB 1924, EX'27. Given had focused on cooking and nutrition during her graduate study in home economics—a popular subject of study for women at UChicago in the 1920s. She dedicated the book to "Dr. Evelyn G. Halliday [SB 1915, SM'22, PhD'29] and Dr. Lydia J. Roberts [PhB 1917, SM'19, PhD'29] of the University of Chicago, whose contributions to the field of Home Economics have won nation-wide recognition."

The Modern Family Cook Book included not only recipes but 366 menus (a menu per day plus an extra for leap year) that fit what she called "the diet pattern." Given's pattern—slightly more complex than the federal model—had 10 food groups. Like nutritional sudoku, her generous daily menus managed to include them all:

- **1 quart milk for each child and 1 pint for each adult.**
- **1 serving of citrus fruit, or tomatoes, or tomato juice.**
- **1 other fruit, either fresh, canned, or dried.**
- **1 green (preferably leafy) or yellow vegetable, raw or cooked.**
- **1 other vegetable, either fresh, canned, or dried (aside from potato).**
- **1 serving of potato.**
- **Whole grain or enriched cereal—bread, breakfast food, cake, etc.**
- **1 serving of meat, fish, or cheese. Liver or other meat sundry weekly.**
- **1 egg daily if possible; otherwise at least 3 or 4 times weekly.**
- **3 to 5 tablespoons of butter, or oleomargarine fortified with vitamin A.**

Once a week, Given noted, the potato could be replaced with "rice, macaroni, spaghetti or noodles" for variety—but on those days, more green and yellow vegetables, bananas, or other foods should be eaten. (Given took a dim view of supplements, warning that "the vitamin fad" might even be harmful.) She kept tight control over the food budget as well as nutrients. The weekly cost of feeding a family—defined as two parents and three children—was $12 to $15 in 1941 dollars ($220 to $275 today).

Given did not forbid much. Once the minimum daily requirements had been met, homemakers could "go ahead and add anything your family likes," she wrote: "a savory gravy, pie, cake, or some other dessert" or additional servings.

Given followed *The Modern Family Cook Book* with a two-volume *Modern Encyclopedia of Cooking*, published in 1947. Volume 1 covered appetizers to fish; volume 2, foreign foods (including garlic bread and pizza) to vegetables.

Updated editions of both books appeared throughout the 1950s and 1960s, and still inspire a dedicated fan base. "Like grandma used to do!" reads a typical five-star Amazon review. Other reviewers write that they are buying replacement copies after decades of use: "I have had a copy of this book for about 50 years, I wore mine out and could no longer read the recipe for Lemon Cream Pie."

—Carrie Golus, AB'91, AM'93

Poem

The Mother Behaves Like a Young Woman with a Lover When Nat King Cole Comes on the Box

Angela Jackson, AM'95

She takes off her run-over shoes.
She removes her re-run stockings.
She unzips her re-hemmed skirt.
She parts with her polyester blouse.
She lies down on the sagging couch.
Husband and children hide in the living room dark.
The television glow slides over her slip
Like moonlight.
Nat King Cole's glossed hair glistens like an onyx.
His voice shines in her eyes. She closes them.
His song ends on the edges of her
Mona Lisa smile.

Midnight sighs over the silence of sleeping children.
She sleeps on and on the sagging couch.
Until husband invites her to his bed,

His voice
    newly tender,
    newly televised.

Angela Jackson, AM'95, was appointed Illinois Poet Laureate in 2020. She teaches at Kennedy-King College in Chicago.

Strange Planet

By Nathan W. Pyle

THE MIDWAY

My name is Nestor
I am not lost
I always have access to my home and food
I go on adventures on 61st St. and campus
Please do not feed

—Tag worn by Nestor the Midway Cat