Kimberly Allotey, Class of 2024, holds Fabricated Mirror, a 1957 etching by Vera Berdich, one of 140 artworks in the Smart Museum’s Art to Live With program. The program, which began in 1958, lends art to students to keep in their dorm rooms. Some students camped out overnight to get the best choice.
INSIDE

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LONG

IF YOU FRIGHTEN EASILY ...

Radio dramatist Arch Oboler, EX’36, shone a light on the horrors of humanity—in fiction and in reality.

YOUNG MAN AND THE SEA

At 18, Jack Schultz, AB’50, began a journey that set the course for the rest of his life.

DATA, DATA EVERYWHERE

A new major in data science helps undergrads make sense of it all.

ET CETERA

Poem: “Helen Grown Old” by Janet Lewis, PhB 1920  ■  Comic: Strange Planet by Nathan W. Pyle

Front cover: Illustration by Michael Vendiola
Back cover: Photography by Michael Vendiola

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What's new in the College

UN PLUS GRAND CENTRE À PARIS? MAIS OUI!

Expanded Center in Paris

Last November UChicago held a groundbreaking ceremony to launch the expansion of its Center in Paris. The new facility, designed by Chicago architectural firm Studio Gang, will be nearly triple the size of the current Center, allowing 100 additional undergraduates to study in Paris each year.

Scheduled to open in January 2024, the Center will be located at 39–45 Rue des Grands Moulins in the 13th Arrondissement, close to the French National Library. The site is part of one of Europe’s leading civic projects, focused on developing former industrial sections of Paris’s Left Bank.

The building’s amenities will include an amphitheater, laboratory classrooms, a small library, and a vertical courtyard of gardens. The current Center, located two blocks away, will close once the new building is completed.
Divinity School faculty develop a Core SOSC sequence

This academic year, for the first time, students can study religion for their Core social sciences requirement. The new sequence, Religion: Cosmos, Conscience, and Community, has been unexpectedly popular, with five sections offered. The Autumn Quarter syllabus focused on myths and creation stories. Winter Quarter will center on religious responses to suffering, and Spring Quarter on the political dimensions of religion. The course is global in scope, with texts from ancient China, medieval Spain, contemporary Iran, and more.

Preparing students for 21st-century engineering careers

Careers in Engineering is the latest specialized preprofessional program offered by the Office of Career Advancement, in partnership with the Pritzker School of Molecular Engineering. Careers in Engineering prepares aspiring engineers for success with design immersions, hands-on engineering projects, personalized career advising, networking opportunities, and internships with a diverse range of employers. The program is open to students of all years and majors.

College advising moves to Alumni House

During Autumn Quarter a new College Academic Advising Center opened in Alumni House, 5555 S. Woodlawn Ave. The center, which replaces the old advising offices in Harper Memorial Library, will have space for the College’s 25 academic advisers, as well as student lounges and shared workspaces. Outdoor space at the Center will be used for hosting picnics and other social events when the weather is nice.

—Carrie Golus, AB’91, AM’93

Photo courtesy Office of Career Advancement; rendering courtesy Studio Gang

Students visit Covanta, a company that produces energy from municipal trash, during a 2019 career trek to Boston.

The new Center in Paris, seen here in a rendering, was designed by Chicago’s Studio Gang.
Around campus

AUTUMN QUARTER IN PICTURES

Top left: Ashley Gao, Class of 2023, drives for a layup during a November game against Wisconsin Lutheran College. The women's basketball team owned a 7–3 overall record at the beginning of January.

Top right: Incoming first-year Awonder Liang became a chess grandmaster at age 14—the third-youngest American to earn the title. He describes his playing style as defensive: “I even joke with my friends that I’m not able to play chess unless I’m in a lost position, when my back is against the wall, and I’m fighting to save my life.”

Bottom right: In December UChicago Athletics announced the creation of the Clifford Ernest Cox “Step Up” Award for the Maroon wrestler who best exemplifies dedication to his teammates and the wrestling program. The honor is named for Clifford Cox Jr., AB’64, MBA’66, a standout varsity wrestler and former head wrestling coach.

Bottom center: Dean John W. Boyer, AM’69, PhD’75, leads a group of cyclists through UChicago’s neighboring communities. Dean Boyer and political scientist and fellow historian John Mark Hansen have given an annual bike tour of the South Side for more than 20 years.

Bottom left: Woodie keeps warm on a walk in Washington, DC, with his owner Jane Mason, AM’50, and her daughter, Peggy Mason, professor of neurobiology. “My mom bought the doggy sweater and the U of C patch separately and sewed the patch on,” Peggy Mason notes, “so likely a one-of-a-kind outfit.”
QUESTION FROM AN UNCOMMON APPLICATION

In Homer’s Iliad, Helen had a “face that launched a thousand ships.” A “millihelen,” then, measures the beauty needed to launch one ship.

The “Sagan” unit is used to denote any large quantity (in place of “billions and billions”).

A “New York minute” measures the period of time between a traffic light turning green and the cab behind you honking.

Invent a new unit of measurement. How is it derived? How is it used? What are its equivalents?

—Inspired by Carina Kane, Class of 2024, and Ishaan Goel, Class of 2025
Entrepreneurship

FRÖNEN BY THE NUMBERS

The cold, hard figures behind an alumni dessert company.

4 Ingredients in a pint of Frönen’s Madagascar vanilla: coconut cream, water, honey, and vanilla extract. The nondairy ice cream company, run by Jessy Gartenstein, AB’17, and Erik Nadeau, AB’18, prides itself on having minimal, simple ingredients. Most Frönen flavors have four or five; mint chip is the outlier at seven.

13 Age at which Gartenstein was diagnosed with celiac disease, an autoimmune disorder in which gluten damages the small intestine. She met Nadeau, a fellow public policy major, during his first year and her second at UChicago.

17 Ingredients in Halo Top’s vanilla bean ice cream, including milk and erythritol, a low-calorie sweetener that can cause digestive upset. In the summer of 2016, Gartenstein and Nadeau were eating Halo Top weekly—“We thought it was healthier,” she says—when both became ill. It turned out Nadeau had trouble digesting erythritol, and Gartenstein’s dairy sensitivity had flared up.

Going without a frozen treat was not an option since they are, as Gartenstein says, “kind of addicted to ice cream.” But many nondairy ice creams have gluten—in the form of malt or in the catchall “natural flavors”—or other additives. Nadeau proposed his family’s recipe: blended frozen bananas to make a creamy base for “nice cream.”
Soon they were eating it every night, making different flavors by mixing in peanut butter, honey, berries, whatever struck their fancy. They started sharing with friends. Though neither had ever considered a career in food or entrepreneurship, Gartenstein said they, along with their friend Grant Kushner, AB’17, MBA’21, decided to enter the College New Venture Challenge (CNVC) as “a fun experience that we wanted to try before we graduated.”

Pages in the business plan required for the CNVC, along with a feasibility study and two pitches to the judges. The business plan was due on Nadeau’s birthday. In true UChicago fashion, the three pulled an all-nighter in the Reg.

Dollars won in the 2017 CNVC. Since Frönen’s main ingredients were honey and bananas, the company was known at the time as BeeNana. Most of the money, which went quickly, covered various legal start-up fees, ingredients for the first R&D run, and commercial production.

Food scientists who thought their recipe was actually scalable. It’s one thing to make a dessert for a small group of people who will eat it immediately and another to make a product that will survive processing, shipping, and sitting in a freezer for weeks.

Nadeau described an early effort’s texture as “almost like frozen sand.”

Meanwhile, Gartenstein said customers found the banana base “just a bit polarizing.”

So they started tinkering. They had already changed the company name from BeeNana to Frönen: German for “to indulge.” With a name that no longer mentioned specific ingredients, they gradually phased in coconut cream and phased out bananas, creating a creamier product. They staked out a market niche of ice cream with simple ingredients.

Unexpected challenges, such as the time Frönen was preparing to launch to Mariano’s and a shipment of bananas didn’t clear customs. Or the time a truck full of product blew a tire and flipped over. The driver was fine, says Nadeau, “but all of our ice cream melted on the side of the road somewhere up in Wisconsin.”

Grocery stores carrying Frönen today—mostly in the Midwest, but also on the East and West Coasts—including Whole Foods, Walmart, Mariano’s/Kroger, Jewel-Osco/Albertsons, Fresh Thyme, ShopRite, and Wegmans. Pints are also available directly through the Frönen website.

Full-time employees: Gartenstein and Nadeau. Kushner left to work in pharmaceutical consulting before enrolling at Chicago Booth. Gartenstein oversees sales and marketing while Nadeau handles operations and finance, though they make big decisions together. But with expansion on their minds—more flavors, possibly branching out into other desserts and beyond—they are adding at least one employee.

Days a week Gartenstein and Nadeau live and work together. They still eat ice cream most days. Their favorite Frönen flavor is salted caramel swirl.

—Jeanie Chung

### “NICE CREAM” CUPS

A serving suggestion from a Frönen fan.

It’s never too cold for ice cream. Eat it as is (out of the carton if necessary) or if you have more patience, try this recipe from Chicago food blogger Kaila Hardy of @kailascleanplate, who tagged Frönen in her Instagram post.

**Ingredients**
- Frönen chocolate nondairy dessert
- Nut (or seed) butter
- Dairy-free chocolate chips
- Plant-based sprinkles

**Directions**
- Line a standard-sized muffin tin with cupcake wrappers.
- Put a spoonful of thoroughly mixed nut or seed butter in the bottom of each cupcake wrapper.
- Top with dairy-free chocolate chips and plant-based sprinkles.
- Freeze for one hour.
- Meanwhile, take Frönen chocolate out of the freezer and let soften for 15 minutes.
- Remove the tin from the freezer and spread Frönen on top of the nut or seed butter, chocolate chips, and sprinkles in each cup.
- Top with more plant-based sprinkles and return to the freezer for three hours.
- Serves 12. Or one. (No judgment!)

Photo courtesy Kaila Hardy of @kailascleanplate
OLYMPIC DREAMS

Rhythmic gymnast Liza Merenzon, Class of 2023, took a trip to Tokyo before her retirement.

Liza Merenzon, Class of 2023, was at a business club meeting this past fall when she was asked how she had spent her summer. She offered a version of the truth: she went to Tokyo. But a listener who knew the real story didn’t let her play it so cool. “She went to the Olympics,” Merenzon’s friend announced.

For as long as she’s been an elite athlete, Merenzon has been trying to not make a thing about being an elite athlete. At her high school in Buffalo Grove, Illinois, people knew her mainly for being gone a lot; she missed most of her final semester to compete in Europe. She’s been able to maintain a degree of stealth in part because her sport, rhythmic gymnastics, is not very well known in the United States.

Merenzon’s path to the Olympics began in her native Ukraine, where the sport is much more prominent and where she first took classes. At six, her family moved to the United States and she began training at North Shore Rhythmic Gymnastics Center—a gym with a long history of training top US rhythmic gymnasts.

In her early teens, at the suggestion of a coach, Merenzon began competing in the group event, where five athletes perform a complex, dazzlingly synchronized routine set to music. The rudiments of the individual and group events are the same—athletes use the same five pieces of equipment (hoop, ball, ribbon, rope, and clubs) for their acrobatic feats—but for Merenzon, the feeling was different.

“I’m 100 percent a group gymnast,” Merenzon says. “I don’t love being on the carpet alone. I love having four other girls right beside me, knowing that they’re supporting me along the way.”

For the members of the 2020 Olympic team, the way was long (and ultimately made even longer by the COVID-19 pandemic, which delayed the Tokyo games). In a sport long dominated by other countries—Russia, Bulgaria, Ukraine—there was no guarantee the US team would even qualify.

Merenzon wasn’t sure she was willing to put her life on hold for that slim chance. So in 2017, at age 18, she retired from the sport and enrolled at UChicago. She quickly realized she couldn’t keep her mind off rhythmic gymnastics, and began training again the summer after her first year—alongside an internship at the American Medical Association. That summer decidedly-not-vacation involved full eight-hour workdays, followed by three hours of gymnastics training each evening.

The road to Tokyo involved placing well at multiple international competitions in the years leading up to the games, and a little bit of luck. After a complicated round of national musical chairs involving the US women’s strong performance at World Championships, Ukraine’s placement in continental championships, and Japan’s automatic qualification as the
host country—the rules were every bit as intricate as the gymnast’s routines—Merenzon and her fellow athletes learned in July of 2021 that they had made it.

For Merenzon, it was the greatest achievement at the worst time. In April of 2021, she’d injured her foot. “The only thing that would heal it was rest,” she says—exactly what an athlete competing in the Olympic games can’t do.

So, despite having been part of the team that allowed the US to qualify, she was sent to Tokyo in July as an alternate. (Always a multitasker, she was also working remotely as a consulting intern with UChicago’s East Asia Innovation Challenge.) While she didn’t ultimately get to compete on the Olympic stage, Merenzon—now retired for good—takes comfort in knowing she did what she set out to do: “I reached my fullest potential in the sport and got to my ultimate goal.”

Though her injury kept her from competing, the many doctor visits it entailed renewed Merenzon’s simmering interest in studying medicine. Now the aspiring physician is preparing for her next challenge: going to the 2032 Olympics as a sports medicine doctor.

—Susie Allen, AB’09

Read an interview with Merenzon at mag.uchicago.edu/merenzon.
A temporary version of an ancient design to help students be in the moment.

Once or twice a year, Rev. Stacy Alan creates a labyrinth on the quads for students and other passersby to walk through. Alan started the tradition in 2005, shortly after she became chaplain of Brent House, the Episcopal Center at UChicago. In recent years, the Late-Night Labyrinth has become part of Orientation Week programming and is usually scheduled after the Aims of Education address.

Sometime in the ’90s labyrinths came onto the stage, at least in my circles in the Episcopal church. The parish where I worked before I came to Chicago—St. Luke’s in Kalamazoo, Michigan—had a canvas labyrinth. Every couple of months we would put it out and have a prayer service. I loved the way that labyrinths are accessible to all ages. I remember my son at age three very carefully, quietly walking the path.

When you walk a labyrinth, you intentionally disorient yourself in a controlled way. You can’t get lost. It’s not a maze. There’s only one path. But once you start walking it—even the simple labyrinth that we do at UChicago—you can’t calculate the distance from the center or the beginning. You can’t get caught up in where you’ve come from or where you’re going. You have to be absolutely in the moment.

When I came to interview at Brent House, I remember thinking that the quads would be a lovely spot for a labyrinth. But it was more complicated than I thought. Canvas is not great for outside, and painting a labyrinth involves a lot of effort. The labyrinth that most people think of is the one on the floor of the cathedral at Chartres. It’s beautiful, and it’s really hard to draw.

Eventually I got connected with an architect, Ben Nicholson, who has been doing work on labyrinths for a long time. He gave a presentation at Brent House about labyrinths, mathematics, the myth of Theseus and the Minotaur. He said things like, “Eleven is an uncomfortable number.” I’m not even sure what that means, but I’ve thought about it for years. Then he helped us make a Cretan labyrinth out of Styrofoam cups in the living room. And that’s the pattern we’ve used ever since.

The next challenge was what to make it out of. We needed something biodegradable. We practiced on our lawn at Brent House—we tried flour, we tried grits, and we finally chose cornmeal. It’s just heavy enough to stay put, but not so heavy that it’s unwieldy. It takes maybe 30 pounds.

Five or six years ago, we decided to try it at night. For the Late-night Labyrinth, we draw it in cornmeal. Then we highlight the outline with battery-operated tea lights.

To make a Cretan labyrinth, you start by drawing an equilateral cross. Next you draw a right angle in each of the quadrants and put a little dot in each of the angles. (You can add more angles, if you want a more complex labyrinth.) Then you draw curved lines to connect the dots and lines to make the path. It takes some coordination. If people get too excited, we’re going to disconnect things, and the path won’t take you anywhere. Oftentimes about three-quarters of the way through, you start to wonder if it’s right, because even the process of making a labyrinth is a little disorienting. In all the
years that we’ve done this, we’ve gotten it wrong only once.

We like to have people at the labyrinth to explain what’s going on. We assure the students that they won’t get lost. You can’t do it wrong, you can’t break it. You can engage with it in whatever way you choose.

But there are some traditional practices. For example, a labyrinth can be used as a form of discernment. If there’s a question you’re asking yourself, you can hold that intention as you walk in. The strange thing about walking a labyrinth is it’s almost soundless. Once you start walking, the world outside falls away. When you get to the center, you meditate for as long as you feel you need to. Then as you walk out, you reenter the outside world, perhaps with a new perspective on the question.

One of our innovations has been to have cookies in the center. That’s not traditional.

We also have some handheld labyrinths, about the size of an index card. You can use a stylus or a finger to trace it. So if walking is an issue, you can do that instead.

The labyrinth lasts a couple of days, until it biodegrades or the squirrels eat it. The squirrels are very interested whenever we’ve done a labyrinth during the day. The first time we did it, a squirrel fell out of a tree onto the labyrinth—it probably dropped 25 feet—and landed right behind someone who was walking. She nearly jumped out of her skin. The squirrel just shook itself and looked around like, “I meant to do that.”

One of the things I love about my work is I’m continually engaging with people who have lots of questions. The labyrinth is a particularly useful practice for questions. There’s just something about intentional walking in circles. It gets at something really deep.

—As told to Carrie Golus, AB’91, AM’93

Watch a video demonstration of how to draw a labyrinth at mag.uchicago.edu/how-make-labyrinth.
THE BABY NAMER

For $50, Sophie Kihm, AB’19, AM’20, will name your baby.

Sophie Kihm, AB’19, AM’20, a self-taught baby name expert, has worked for the website Nameberry since the Autumn Quarter of her first year at UChicago. She is also a clinical therapist at Ashé Consulting and Coaching, where she specializes in prenatal and postpartum therapy.

This interview has been edited and condensed.

How did you become a baby name expert?

I was interested in pregnancy and babies and motherhood, starting at maybe 11 years old. It was a strange interest and wasn’t really encouraged. I got into names because I was also into fortune-telling at the time. My mom bought me a fortune-telling book about names. I just read it, read it, read it. Then I started doing research, looking at baby name websites, watching videos about baby names.

I didn’t know this could be a career. I thought it was an obscure hobby.

When did we stop giving kids basic names, like John and Mary?

Traditionally, boys were often named after their father or grandfathers or uncles. The pool of traditional boys’ names is much smaller. Girls generally were given names deemed attractive or cute or modern.

Around the 1960s, you start to see an increase in new names, especially word names—words that existed but weren’t used as names. Now we’re seeing more of a balance between the sexes in terms of new names.

In general, there are more and more unique names. The percentage of babies given a name that’s included in the “Top 1,000” is much lower now.

What is the percentage?

About 72 percent of babies are given a name that’s in the top 1,000 names of their birth year. But the top 1,000 names of 2020, for example, represent just over 6 percent of all names recorded by the Social Security Administration. The list only includes names given to five or more babies of a single sex in a given year.

Slightly over 1 percent of all boys born in 2020 were given the top name, Liam. And slightly over 1 percent of girls were given the top name, Olivia.

In 1970, Jennifer was the top girls’ name, at just over 2.5 percent. For boys, the top name was Michael, at 4.48 percent.

Going back to 1940, it’s Mary and James: 4.76 percent of girls were named Mary, and 5.27 percent of boys were named James.

I hear this a lot: “I was always Jennifer W. growing up, and I don’t want my daughter to go through that.” But even if you give your daughter the top name, she’s not going to have that same experience. You’re not dealing with the same numbers.

You offer consulting at Nameberry, from $50 for one name suggestion, up to the nine-month concierge service for $10,000.

It’s a good combination of my naming skills with my training as a therapist.

The one-name option is very popular. The tiebreaker [for $49, a consultant will help you choose between two names] was a surprise hit. With most people you can tell which name they want. They just need to be told it’s OK. That’s a therapy skill.

Are celebrity baby names, like Apple, the name of Gwyneth Paltrow’s daughter, still made fun of?

People still cite Apple as one of the crazy celebrity baby names. It’s out there. She didn’t
convince anyone else to use the name Apple.

Some celebrity names catch on. Hilary Duff named her daughter Banks. It’s one of the fastest rising names right now—except for boys. It fits with current styles, whereas Apple wasn’t what people were looking for. They weren’t interested in fruit names at that time. And Apple is a company people were familiar with. There are a lot of reasons not to name your baby Apple.

Is it OK to give a kid a name from another culture, or is that cultural appropriation?

It depends. A French name or an Irish name, not having that heritage, seems OK. For other cultures, it’s more about the individual name.

A good example is Bodhi, a Sanskrit name. Twenty years ago, it would have been weird to name your kid Bodhi if you didn’t have any connection to Buddhism or Hinduism. Now it’s very popular. Once a name gets used enough, it feels somehow appropriate.

Another example is Cohen, a sacred Jewish surname. People are using it as a first name. It’s ranked 282. Last year, 1,178 baby boys were named Cohen.

If you go on any message board about parenting or names, you see people getting into huge fights about it. There are people who are like, my son’s name is Cohen, and I didn’t know it was a sacred Jewish surname. I just like the name and I’m not being disrespectful.

When you meet people, do you immediately know when they were born?

Absolutely. And sometimes you can tell their parents’ political leanings.

Seriously?

It’s unintuitive, but conservative people are more likely to use new names or nicknames as names. Liberals are more likely to use traditional names. Benjamin skews really liberal, for example.

If you’re liberal, you’re more likely to use a longer, formal name on the birth certificate, even if you call your children by a nickname. If your name is

Josie—just Josie, not Josephine—your parents are probably conservative, based on the data.

I have a son named Benjamin and I feel called out. So when I first emailed you, did you immediately think, this person Carrie is probably X years old?

I thought, you’re probably my parents’ age—Gen X. Probably born in the 1970s.

You have a superpower.

It’s a good party trick. I can also guess people’s siblings’ names, based on the year they were born. I don’t always get it right but when I do, people are like, oh my god.

What do you think of your name? The meaning is nice.

So nice. As a teenager, I was so mean to my parents about it. I went to Evanston High School and I think there were six girls in my class called Sophie or Sophia. My birth name is Sophia. Sophie isn’t a nickname for Sophia. It’s a variant, the French form of the Greek. That’s annoying.

I fall firmly in the camp of naming children what I want to call them. One of my favorite girl names—which has been vetoed by the boyfriend, should we have children—is Tilda. Not Matilda, just Tilda.

But it could have been much, much worse. I could have been named Emily. Emily was the top name in 1997. I could have been Emily or Sarah. So popular.

—Carrie Golus, AB’91, AM’93
In May 2020 Paul Kaufman, AB’00, an assistant US attorney in Pennsylvania who prosecutes cases of fraud against the government, was elected chair of the National High School Mock Trial Championship. The academic competition is organized by an all-volunteer board that Kaufman now leads. Teams from more than 40 states, Guam, the Northern Mariana Islands, and South Korea—which participates through a partnership with Yale—compete to show their legal skills and understanding in a real courtroom.

This interview has been edited and condensed.

How does mock trial work?

Between six and eight students are put on each side of a fictional trial. In most places, you have three student attorneys and three who pretend to be the witnesses. The trial proceeds just like in real court. There’s preliminary stuff with a judge and opening statements. Then you have direct examinations of witnesses and cross-examinations by the other team. Flip sides: the defense puts on its three witnesses and the prosecution or plaintiff cross-examines them. Then you have closing arguments, and there are objections under a slightly stripped-down version of the federal rules of evidence.

The students are assessed—typically by attorneys, paralegals, or occasionally law students—on each aspect, including the witness performances. These are judged as a sort of theater, but also on the ability to convey the important points for their team and perhaps resist cross-examination.

Mock trials are held in real courthouses?

Oh yeah. We try to be in a courthouse for every round that we can. Some of the rooms are palatial, ceremonial courtrooms that hold 150 people, and some are landlord-tenant hearing rooms that maybe hold 40. But the experience is of being in a real courtroom.

What do you do as an assistant US attorney?

Fraud prosecution, usually in health care and defense procurement. If you think about Medicare, Medicaid, and defense, they’re ripe places for people to try to color outside the lines.

I also teach courses on health care fraud at Penn and Temple. I am good at teaching subjects that people find intimidating or boring. Maybe that ties into my Chicago experiences, too. My bio sequence, Origins of Cancer, was a beautiful con job because they were just teaching you cell biology. You did eight or nine weeks of cell biology and then they were like, oh, and by the way, here’s how it all gets screwed up.

What lesson from the College has stuck with you?

I have gratitude to UChicago for introducing me to Cicero. We talk a lot about rights in this country, but Cicero argues that every right is related to a corresponding duty. You have the right to vote, but you have a duty to think through what that vote means. In order to be a good citizen, you have to work.

—Lucas McGranahan

Read more at mag.uchicago.edu/mock-trial.
Radio dramatist Arch Oboler, EX’36, shone a light on the horrors of humanity—in fiction and in reality.

By Maureen Searcy

In 1938 Arch Oboler, EX’36, (shown left) crossed the Atlantic to hunt the Loch Ness Monster. Instead he found “the fascistic Frankenstein’s monster moving over Europe.”

It’s 1943. Bernice and Mary are working overtime typing an episode of Lights Out, an NBC radio program that Mary describes as full of “blood and people dying and murderers and worms.”

Bernice: “I wonder what kind of a screwball he is … the fellow who writes these plays.”

Mary: “Arch Oboler?”

Bernice: “Personally, I think he’s a wolf … one of these werewolves.”

As the night progresses, the lights go out, one by one. Typewriter keys clack chaotically; desks move; one remaining light turns green. The women descend into fear and psychosis, ending with their demise—ostensibly scared to death.

Bernice and Mary are the primary characters in “Murder in the Script Department,” one of Arch Oboler’s self-referential episodes of Lights Out, a weekly half-hour show with millions of listeners despite its midnight airtime.

Oboler—a fiction writer, radio dramatist, and filmmaker—has largely been forgotten, but from the 1930s through the ’50s he was a household name. A technical innovator, he experimented with novel sound effects and 3D film. And as an entertainer with his finger on the pulse of shifting mores, he depicted the horror he saw in humanity. His platform and message made Oboler one of the earliest,
most prominent American voices condemning fascism.

He wrote drama, comedy, and polemics, but it was Oboler’s “weird fiction”—speculative storytelling blending fantasy, science fiction, and horror—that made him famous during radio’s golden age. Supernatural or suspenseful shows were wildly popular. One of the programs that kindled the trend was *Lights Out*, the brainchild of writer-director-producer Wyllis Cooper, launched in 1934 and broadcast on NBC-affiliate WENR in Chicago. Cooper innovated the use of macabre narratives and eerie sound effects, but most of his plays have been lost.

When Cooper left for Hollywood in 1936, the network tapped Oboler, EX’36, a young NBC playwright, as his successor. Under Oboler’s direction, *Lights Out* ran another three years, took a hiatus, and returned in 1942 for one season. The show was syndicated during a nostalgic radio boom in the 1970s as *The Devil and Mr. O*. (As many episodes were lost, recreated, or recycled, the provenance of archived recordings is frequently disputed.)

The program opens with a warning: “It ... is ... later ... than ... you ... think. ... If you frighten easily, turn off your radio now.”

The exception was a 1943 episode condemning the Third Reich: “We urge you to turn your radios up and listen as you never did before.”

**Oboler—a fiction writer, radio dramatist, and filmmaker—has largely been forgotten, but from the 1930s through the ’50s he was a household name.**

At Hyde Park High, he served as president of the Stone Age geology club. In *Oboler Omnibus: Radio Plays and Personalities* (Leisure Books, 1971), a collection of plays interspersed with autobiographical reflections, he describes an early ambition to become a paleontologist and find a living descendant of the plesiosaurus. As a teenager Oboler developed a passion for radio, building a receiver by winding wire around an oatmeal box, which led to an interest in electrical engineering. He considered writing a hobby.

Oboler enrolled at Chicago in 1926 but left after a couple of years. Accounts differ: some report he left voluntarily to write; others claim he was expelled. (Notably, in 1936, the year he began writing *Lights Out*, he returned for a course in psychology.)

In 1933 Oboler wrote his first radio play: a science fiction drama, *Futuristics*, that satirized the present by casting it as the past as viewed from the future. The script was bought by NBC and proved hugely successful, earning Oboler an opportunity to write for *Grand Hotel* and *The Irene Rich Show*.

He also contributed to variety shows including the *Royal Gelatin Hour* (programs were often named for sponsors), “Soon I was pleading for the opportunity to do a weekly half-hour series of original plays written not for yeast, or soap, or hand lotion,” Oboler said, “but idea plays written for the radio medium.”

**(Super)naturalist**

Born in Chicago in 1907 to Jewish immigrants from Latvia, Oboler was a prodigious writer. A 1942 profile in the *Sentinel*, a Jewish weekly, painted Arch as a naturalist-in-training who collected a veritable zoo of animals and insects. Inspired by his menagerie, he sold his first story at age 10 to the *Chicago Daily News*. It was about an amorous dinosaur.
Oboler and Russian silent film star Alla Nazimova review the script for “This Lonely Heart,” which first aired in 1939 on NBC as an Arch Oboler’s Plays episode.

That opportunity arose when Oboler inherited Lights Out. While still beholden to sponsors—frequently Ironized Yeast (fight the Gray Sickness of iron deficiency)—the show’s late-night airtime bred apathy from advertisers. Oboler made Lights Out his own in craft and content. His plays feature killers (“Murder Castle”), ghosts (“Poltergeist”), animal transformations (“Cat Wife”), and yes, worms (“Revolt of the Worms”). He also made monsters hatched from human faults: anger (“Valse Triste”), susceptibility (“Kill”), and ambition (“Chicken Heart”). He excelled at manifesting the evils and fears of human interiority. His debut, “Burial Services,” featured a paralyzed girl who is buried alive. NBC purportedly received 50,000 protest letters.

In response, Oboler escalated the fantastical, but maintained the worst horrors are in and of human nature. At the end of “Kill,” in which a man is driven to murder by a sleep-borne demon, Oboler offered a moral: “The evil that men do may be caused by outside influences—poverty, the will to power, the wrongful examples of others—but as to evil being a living monster, well supposing we call tonight’s story a parable of a man who really wanted to kill and saw the evil intent within himself personalized so vividly that he thought it actually existed outside of himself.”
Disembodiment of fear

Legendary horror actor Boris Karloff, who starred in several *Lights Out* episodes, told *Radio Stars* magazine in 1936, “All sheerest horror is in sound.” Radio is best suited for terror: “the Unseen, the ghastly scream out of Nowhere, the cry in the dark … if we do not know through our eyes what bodies these sounds wear, we are helpless and … a thousand times more terrified.”

Oboler harnessed those unbodied fears, writes novelist and spiritual descendent Stephen King in *Danse Macabre* (Everest House Publishers, 1981), a meditation on the horror genre. King writes that Oboler “utilized two of radio’s great strengths: the first in the mind’s innate obedience, its willingness to try to see whatever someone suggests it see, no matter how absurd; the second is the fact that fear and horror are blinding emotions that knock our adult pins from beneath us and leave us groping in the dark like children who cannot find the light switch.”

When radio drama first emerged, writers thought about it in relationship to the stage, says Neil Verma, AM’04, PhD’08, author of *Theater of the Mind: Imagination, Aesthetics, and American Radio Drama* (UChicago Press, 2012). The goal was to find a quality that would make radio “fundamentally different,” says Verma. The obvious difference is radio’s lack of visuals.

So radio dramatists used sound cues to design a stage in the mind, with four implements: voice, for information and plot; music, for mood; sound effects, for movement; and silence.

Oboler was a sound effect innovator. His most famous technique appears in “The Dark,” in which a doctor and police officer respond to a call for help. They arrive at a house to discover a cackling woman, a man’s body turned inside out, and smoke filling the room. The smoke engulfs the characters and inverts their bodies. Oboler simulates the sound by pulling a wet rubber glove inside out.

The method is famous for its originality and as a result of Oboler’s self-promotion: he enjoyed talking about his tricks. The play Bernice and Mary are typing in the “haunted” script room is, in fact, “The Dark,” and a note to the sound department suggests using a wet rubber glove. (For a visual interpretation of the deadly smoke, including a similar sound effect, see the end credits for *The Simpsons’ “Treehouse of Horror V*” Halloween special.)

“There’s a kind of a psychological depth to sound effect usage that can’t be achieved with music or words,” says Verma. (See “Sound Foundations,” mag.uchicago.edu/sound-effects.) Yet Oboler accented voice as well. Some of the most unnerving moments in Oboler’s *Lights Out* plays are vocals: the ubiquitous terrified screams, hysterical laughter, quiet gasps, death rattles.

One of Oboler’s most famous plays, “Chicken Heart,” uses both vocals and sound to disturbing effect. Originally aired during the show’s first stretch but lost, the story reappears on his 1962 album, *Drop Dead! An Exercise in Horror!* (Capitol Records). It tells the tale of the eponymous chicken heart, kept alive by scientists, that grows until it consumes the world.

Throughout the play, a heartbeat thumps, sirens scream, and propeller blades whirr as a doctor and pilot attempt to escape. Calm and resigned, the doctor describes the world ending while the pilot descends into panic. The premise is ridiculous, admits Verma, but there’s something “deep happening with this play, and it’s hard to put your finger on it.” One element that contributes to that indescribable response is the reaction of the crowd. The growing heart may not be believable, but the panic, fear, and anger of the populace are.

Oboler was inspired to write “Chicken Heart” in 1937 after reading
about French surgeon Alexis Carrel, considered the father of transplant surgery. Carrel kept a sample of chick embryo heart tissue alive and dividing from 1912 through 1946, revolutionizing tissue culture by developing a cell propagation method called passaging. His experiment implied that biological cells were intrinsically immortal.

The notion of science-forced immortality struck Oboler as monstrous: thus, chicken heart obliteration. He did not know that Carrel’s experiment was the result of either negligence or fraud. It has since been established that ordinary cells have a preprogrammed number of divisions before cell death. (Cancer and stem cells play by different rules.)

What seems prescient is Oboler’s sense of science’s potential harm to humanity. Carrel was a self-proclaimed eugenicist and suspected Nazi sympathizer. In 1940 he formed an institute devoted to curing what he deemed the weaknesses of the human race.

War at home and abroad

In 1936 Oboler wrote a Lights Out episode, “Nobody Died,” about a cancer researcher somewhere in Europe who discovers a treatment that reverses aging. A fictionalized version of Nazi propaganda minister Joseph Goebbels, dreaming of creating an invincible army, executes the doctor to obtain the concoction. He takes the serum for eternal youth himself but reverts to infancy.

The story is a parable about the dangers of using science to subvert nature, writes Richard Hand in Terror on the Air!: Horror Radio in America, 1931–1952 (McFarland & Company, 2006). “But it is also a political parable about fascism’s abuse of science for imperialistic and militaristic ends, concluding with the implied moral that the greed and aspiration of fascism will lead it to its own annihilation.”

In 1938, following a four-month stay in Europe, Oboler returned home with
a galvanized hatred for fascism and a determination to use radio to defeat it. “I found myself wanting the dimensions of that half hour on the air expanded to take in the actual horror of a world facing, with half-shut eyes, the fascistic Frankenstein’s monster moving over Europe.”

He recorded a pilot for an experimental radio series, leading to Arch Oboler’s Plays, which was supported by NBC and free from sponsors. Oboler had complete creative control. “Nobody Died” was rebroadcast in 1939 as part of this series, which ran for a year.

Oboler was writing antifascist plays before there was an Office of War Information to sponsor anti-Nazi propaganda, notes Verma. The United States was mostly isolationist before Pearl Harbor; critics accused Oboler of being “prematurely antifascist.” Verma adds, “I think his sense of the incredible horror of what was happening in Europe at the time was pretty personal.”

After America entered World War II, Oboler devoted his writing to destroying totalitarianism. He created the radio series Plays for Americans, for which he took no payment. The first episode, “Johnny Quinn, U. S. N.,” about an American who died at Pearl Harbor, was named outstanding dramatic broadcast of the year by the Institute for Education by Radio.

Oboler was asked to speak at the institute’s meeting, where he was enraged after three days of his peers chasing “academic tails.” His speech reflected that anger: “I said that we at home needed a little of this hatred of evil in us; with nothing but defeat after defeat behind us at this point in the war, and with the certainty of sudden death ahead for thousands of our men, too many of us back here at home were concerned only with ‘getting the war over with by any means.’ … The time had come for us to begin to hate a little.”

The press responded with “cries that I was advocating a foul way of thinking,
said Oboler. *Plays for Americans* was promptly cancelled, after less than six months. Oboler had by then depleted his savings—but fortunately for him, interest in horror tends to spike in times of turmoil, and *Lights Out* was resurrected.

In cooperation with the Office of War Information and the Hollywood Victory Committee, Oboler created his *To the President* plays. Later came his series *Everything for the Boys*, sponsored by spark plug manufacturer Autolite. Over the course of the war, he produced more than 70 “beat the Axis” radio plays.

**Off the air**

While producing *Arch Oboler’s Plays* in the late ’30s, Oboler was invited to Hollywood to adapt for the screen one of the earliest anti-Nazi novels, *Escape* by Ethel Vance (Little, Brown, 1939). He and his wife, Eleanor, relocated to Los Angeles, bringing his radio series with them. Oboler commissioned a residence, near Malibu, California, from his friend Frank Lloyd Wright, named Eaglefeather—never completed and now called The Arch Oboler Complex.

Arch and Eleanor had four sons while living there, and the home went through fits and starts of construction, in tandem with Oboler’s financial fluctuations. This perpetual state of incompleteness led to tragedy: In 1958 the Obolers’ six-year-old son Peter fell into a 14-foot-deep excavation filled with rainwater and drowned. (Oboler lived there until in 2018 the home was consumed by the Woolsey wildfire.)

During this period Oboler transitioned to filmmaking. In 1951 he wrote, directed, and produced *Five*, the first known film to depict a world after atomic annihilation, with five humans left on Earth. He shot the movie at Eaglefeather.

In the 1980s, horror director Joe Dante attended a screening of *Five* at which Oboler spoke. It was paired with another Oboler film: *The Twonky* (1953), a comedy about a possessed television set. The impatient crowd laughed at *Five*’s serious themes, and Dante remembers Oboler speaking to the audience afterward with such anger, “he was nearly in tears.” One of the film’s villains was a “vaguely Aryan heavy,” and “the director accused the audience of indifference to Nazi-ism.”

Oboler never achieved the critical success he enjoyed as a radio dramatist, but “cinema scholars find his films really remarkable and noteworthy,” says Verma. Between *Five* and *The Twonky*, he released *Bwana Devil*, the first 3D feature-length film. It was the fictionalized story of the 1898 Tsavo lion attacks, and the movie poster promised “a lion in your lap!” As with radio, Oboler was a keen innovator.

All told, Oboler has a couple dozen film and television credits to his name. He wrote a stage play, *Night of the Auk* (1956), envisioning the return trip from the first moon landing. It was a Broadway flop but was adapted for TV in 1960, starring a pre–*Star Trek* William Shatner. He published one novel, *House on Fire* (1969), to lukewarm reviews.

In his quasi-memoir, Oboler describes his final *Lights Out* episode, “The Author and the Thing.” In a mise en abyme story, Oboler plays himself writing his final *Lights Out* episode, which features an author (also Oboler) writing a play about a creature that comes to life. The monster transcends the layers, killing Oboler twice, “murdering myself off so completely, within the frame of the play, that the series, so far as I was concerned, could never be resurrected.” In 1987, though, just months before he died, Oboler sold the rights to rebroadcast surviving *Lights Out* episodes—setting the stage for one final resurrection.
At 18, Jack Schultz, AB’50, began a journey that set the course for the rest of his life.

By Carrie Golus, AB’91, AM’93
In May 1947, Jack Schultz, AB’50, decided to make his way back to UChicago from his family’s home in Quito, Ecuador. After a lift to the end of the road he set out alone, hiking east over the Andes, paddling down the Amazon, then sailing across the Caribbean to Miami. Schultz doesn’t remember how he made the final leg of the journey to Chicago: “I think I probably hitchhiked,” he says. “I always loved hitchhiking.”

But why? “Because it’s there” is the most famous answer to that perennial question: a quip attributed to English mountaineer George Mallory, who tried to climb—and later died on—Mount Everest.

It was a poem that inspired Schultz’s journey, according to “Sea Fever,” a first-person account in the February 1949 issue of National Geographic: “I must go down to the seas again, to the lonely sea and the sky...” The poem, by John Masefield, also inspired the name of Schultz’s second boat, the Sea Fever.

A romantic story and not exactly true. The real reason for his travels, says Schultz: “I was a rootless 18-year-old with no status in the world.” Now 93, Schultz is working on a memoir about his experiences—but not the swashbuckling adventure version. He’s trying to get at something deeper.
Schultz comes from a family of adventurers, although “they wouldn’t think of themselves that way,” he says. His father, an early aviator, served in World War II in his mid-forties and was killed in China. His parents had been divorced for some time; his mother had moved the family from Miami to Quito, where she ran a hotel catering to Americans.

Schultz enrolled in the Hutchins College in 1944 at age 15. When he began his journey back to school, hiking a mule trail that reached elevations of 13,000 feet, he intended to reach Chicago by Autumn Quarter 1947. In fact, it took more than a year to reach Miami.

Schultz bought his first canoe at the headwaters of the Río Napo, a tributary of the Amazon. He named the dugout canoe, which was 16 feet long by 16 inches wide, the Lizzie, after his Chicago girlfriend. Farther down the Amazon, in Iquitos, Peru, Schultz paid about $11 (a little more than $135 today) for a larger canoe made by stretching a soft cedar log over a fire rather than by hollowing it out. The Sea Fever, almost four feet across, had been made from a log just two and a half feet in diameter.

In Manaus, Brazil, a carpenter helped him fortify the canoe for an ocean voyage, raising the sides and adding masts for sails. Some experienced sailors—horrified by Schultz’s plan to sail the ocean alone with just a pocket compass and a few hours’ sailing experience—gave him how-to books, a nautical almanac, a plastic sextant, and lots of advice.

Unfortunately, “I have never been much good at taking advice,” Schultz wrote in National Geographic. Seven days out, he capsized and lost almost everything. Luckily he was able to save the rubber bag containing the sextant, the books, his passport, and some clothing.
1. **Quito, Ecuador**  
The starting point of Schultz’s 6,000-mile journey.

2. **Iquitos, Peru**  
Here Schultz bought a larger canoe, which he named the *Sea Fever*.

3. **Santerém, Brazil**  
A novice sailor, Schultz capsized and lost nearly everything.

4. **Royale Island, French Guiana**  
By mistake, Schultz landed on Devil’s Island, a French penal colony. The prison nurse, a former Parisian pickpocket, treated him for saltwater boils.

5. **Trinidad**  
Schultz earned $1,200 to complete his journey by helping blow up mooring dolphins—installed by the US Army during the war—with dynamite.

6. **Miami, Florida**  
Schultz arrived on June 30, 1948. When he asked for directions for entering the country, the official looked at his tiny craft and said, “What the hell do you want to know for? You haven’t been anyplace.”
Schultz comes from a family of adventurers, although “they wouldn’t think of themselves that way,” he says.

Even before he reached the ocean, there were dangers. In the lower Amazon he was bitten by something in shallow waters—possibly a piranha. He got caught in a tidal bore, a strong tide that pushes up the river; by the time he realized what was happening, it was too late to pull up anchor. Surrounded by a wall of rushing brown water, there was nothing to do but wait and hope to not be killed.

In December 1947 he sailed out into the Atlantic. He meant to sail directly to Trinidad, but an error of navigation brought him to Devil’s Island, the French penal colony. There he received treatment for saltwater boils from the prison nurse—just another example of the kindnesses Schultz received from strangers who supplied food, shelter, equipment, medical care, and the often-ignored advice all along his journey.

“I tell people for shock value,” Schultz says, “I died on the boat.” One day he was terribly hungry and had caught a shark, using his last morsel of food as bait. But the shark cut through the line and got away. “I found myself out of my body, looking down at my body in the boat,” he recalls. “That was one of the most desperate, desperate times I ever felt. And then—not feeling any special emotion—I decided to live.” Two days later, he landed on Trinidad.

By the time Schultz arrived in Miami, he was already a minor celebrity; local newspapers had been writing about him along the way. National Geographic commissioned an article, but he struggled to produce more than a few pages. Finally, the magazine flew him to its offices in Washington, DC, where he sat in a room with a stenographer for three days, dictating his story.

After the article appeared, publishers were interested. Schultz tried to write—but never completed—a book-length version. Speaking about the experience was easier. Schultz traveled the country giving lectures; the Executives’ Club (a club for businesspeople, similar to the Rotary Club) was a major client. “People want to hear this sort of adventure stuff,” Schultz says. “I was professionally entertaining. There’s a great temptation to exaggerate, but I tell people I try never to lie about the same thing twice.”
In 1952 Schultz gave up his speaking career to train as a carpenter. In the mid-1950s, he worked as a firefighter while studying physics at San Diego State University. Later he became an engineer and built many custom homes (including his own).

But he never lived an entirely staid life. In the 1960s he organized and led an expedition to study migration patterns of nursing gray whales. More recently he sailed around Bali, where one of his sons was living. “That doesn’t sound like much, but it happens to be very difficult sailing conditions,” he says. “I’m sort of proud of doing that.”

The bite on his leg healed quickly, not leaving much of a scar. He recovered from the saltwater boils as well as malaria, sustaining no serious physical injuries. “My biggest illness,” says Schultz: “I suppose you could call it PTSD. After all these years, it affects me.” The feeling is physical rather than emotional: “sort of like being cold all over,” he says. “It goes away. I hold onto it if I’m trying to write, but otherwise I just get my mind off it pretty quick.”

His best writing time, Schultz says, is about an hour before dinner. With encouragement from his wife, Linda, he’s written 70 or 80 pages so far. The work goes slowly because he can’t tolerate doing it for very long.

After years of telling the adventure tale, Schultz struggles to convey a more realistic version of his journey and his complex emotions. Being caught in the tidal bore, for example, which he considers the most dangerous moment, “was like being closed up in a womb. The womb of a woman who’s running in a race.”

Revisiting that moment to try to write about it, “I’ve realized I did not feel a great deal of fear,” Schultz says. “It was beautiful. It was absolutely beautiful. How can I explain the ‘beautiful,’ being surrounded by a wall of water which any second could kill you?”
Our world is awash in data. The digitization of everyday life means humanity tosses out measurable data in our wake, which might—in the right hands—give us insight into how our economy, our society, even our universe works. Our web browsing histories? Data. Car loan applications? Data. Scientific experiments? More data than scientists know what to do with.

The future belongs to those who can take that data and derive meaning from it—which is why UChicago launched a major in data science this academic year. But how does a field go from being a set of miscellaneous tools for computer programmers to a full-fledged major?

Lies, damned lies, and statistics

Social Sciences 401 has pointed Gothic windows and a peaceful treetops-height view onto the Midway Plaisance’s Winter Garden. But none of the dozen students gathered here for Data Science 26100: Statistical Pitfalls and Misinterpretation of Data were gazing out the window on the November day I visited. Their attention was fixed on the slide that David Biron, assistant senior instructional professor of statistics and director of undergraduate data science, was projecting.

According to the catalog description, Biron’s course provides “tools for thinking critically about data and
models that constitute evidence,” and examines “examples of misleading language and graphics.” Which means there’s a lot of looking at other peoples’ mistakes, immortalized in poorly thought-out studies and articles.

Today’s lesson is all about regression to the mean—the statistical phenomenon that can make natural variation in data look like real change. Take an example just a few miles from the quads. Chicago White Sox catcher Yermín Mercedes began the 2021 season by getting eight hits in eight at-bats, posting an impossibly high 1.000 batting average. Baseball fans recognized this was an outlier; sure enough, over the season, Mercedes’s batting average regressed to the mean, dropping to a pedestrian .271. Outliers in a data set like this tend to revert to a value closer to the mean over time, regardless of whatever effect is being studied; a simplistic analysis misinterprets that as cause and effect. Regression to the mean trips up many researchers.

Biron cues up an example from a 1987 New York Times article touting the ability of a beta-blocker called propranolol to help overanxious students on their SATs. Twenty-five test-takers who scored lower than expected took the SAT again, but this time they were given propranolol. They performed an average of 120 points higher the second time. Sounds good? Not to Biron: “So, what might be wrong with the design of the study?”
A student points out it’s not a random sample and there’s no control group. She’s right on the money: “This is the worst thing you can do” in designing an experiment, says Biron. It’s easy to think of reasons other than anxiety that could have depressed the students’ original scores. Or it might be another example of regression to the mean. The point is, he explains, “with the original study design, you can’t prove anything.”

The next example was another drug study, this time on the bone density of patients taking one of two drugs intended to prevent osteoporosis. Biron explains the data were measured at the start of the study, after 12 months, and after 24 months. People who lost bone density in the first 12 months of treatment seemed to recover it by month 24. But people who gained bone density in the first 12 months ended up losing it by the end.

If you only look at the data after 12 months, he says, you might conclude there’s a class of patients for whom the drugs were extremely effective, and another for whom they were worse than nothing. But the convergence of all the patients’ results by 24 months demonstrates regression to the mean. The outliers at 12 months—both positive and negative—were just chance. If the researchers had focused only on the patients who appeared to be responding to the drugs, Biron explains, they would have missed the regression to the mean of the other patients.

Biron closes by giving the students pointers on how to avoid bad data and flawed conclusions. Avoid preselecting data based on a cutoff; focusing on extreme data points that might regress to the mean later—as in the bone-density study—ends up biasing your conclusions. Randomly allocate subjects to trial and control groups as much as possible. (Remember the SAT study, bereft of a control group.) Take multiple baseline measurements to understand what natural variation exists before your study begins. (You’d want to know what role random chance plays in baseball statistics before declaring Yermín Mercedes the finest hitter ever, wouldn’t you?) Following this advice will minimize spurious effects in data analysis, he says: “Luck does not persist from trial to trial.”

Data—it’s not just for data scientists

Students interested in data science fall into roughly three cohorts, says Biron. One group is primarily interested in statistics and theory. Another group is drawn to the computational aspect. But the third and largest group comes from all over: the humanities, the social sciences, the biological sciences.
As asked whether data science should be thought of as a toolkit for researchers—methods to interrogate data, regardless of field—or as a discipline all its own, Biron responds, “It’s a bit of both. But the entire spectrum, all the gray levels between, are actually useful and required.”

When developing the major, Biron says, the College faced a choice. “One approach would be to build a lot on the commonalities with statistics and computer science and basically pick and choose—make a program of the most relevant computer science and statistics courses.” The other alternative: treat it as a new and separate discipline, “which meant it would take a little more time to get off the ground because you can’t come up with this whole new curriculum, like 12 courses, in one year.”

The organizers chose the second option. Data science started as a minor in 2019, laying the groundwork for and gauging the interest in a full major by 2020. Like many plans, that one was pushed back a year by the COVID-19 pandemic. Biron notes data science is compatible as part of a double major with every other major in the College except one: molecular engineering. There are so many required classes for molecular engineering that “it’s very hard to fit a second major along with that.” (Consider this a challenge to overachievers.)

Even for students who don’t major or minor in the field, he sees an advantage in picking up data science skills. “You can be more creative and more critical of what you’re doing if you understand” the techniques behind the science, he says. “You can be a much better part of a team.”

Biron is enjoying teaching both majors and nonmajors. “It’s a joy to have a class with philosophy students and a couple of economics students and somebody from biology,” he says. “It’s really fun.”
Dirty, messy data

Given the old chestnut about UChicago being a place of theory and not practice, you might suspect a new program like data science would be heavily tilted toward the former.

Au contraire, says David Uminsky, senior research associate for computer science and executive director for data science. Whereas dealing solely with theoretical data might be enough to get you through a statistics program, he says, “you cannot separate a data science education from looking at real data.”

The data clinic class, which he oversees, is where the rubber hits the road for students—a real-world test of their skills. The clinic layers “the theory and learning from the UChicago classroom into a rigorous practice setting,” with “the structure of really being on a data science team.” Students learn how to problem solve as a team and how to handle meetings with mentors and clients. They also learn how to use scrum frameworks, which enable members to build self-organizing, cross-functional teams, and Agile methodologies, processes in which software development is broken down into iterative stages. These methods are de rigueur in software development and becoming common in other business fields.

Students must apply to the data clinic class; then they’re offered a list of possible projects, which they rank in order of preference. The instructors match each student with a team and a project. Some projects are from research groups on campus; some are from the national laboratories. Others come from nonprofits, government, and industry. Uminsky notes they’re trying to develop more relationships with Chicagoland nonprofits—South Side ones in particular.

By way of example, Uminsky offers a project done in conjunction with Inclusive Development International (IDI), a nonprofit that monitors corporate activities in the developing world. IDI wanted to track deforestation in Indonesia around palm oil harvesting.

An extremely versatile product used in many processed foods, palm oil accounts
for 40 percent of the world’s vegetable oil. It’s an incredibly efficient crop, using just 6 percent of the land used to cultivate all vegetable oils worldwide. The problem: palms only grow in the tropics. This provides a financial incentive for unscrupulous growers to clear fragile rainforests—often illegally—for palm oil plantations. Multinational corporations are under pressure to show that their palm oil comes from responsible growers.

As it happens, palm fruit must be processed within 24 hours of harvest, which means plantations have to be close to mills. So students in the clinic first took lists of every registered mill. (The vast majority are in Indonesia and Malaysia.) They partitioned the land into what are called Voronoi cells, irregular polygons in which the entire region enclosed is closer to that particular mill than any other. Plantations within each cell were presumed to supply that mill.

Next, the students matched historic satellite imagery from each mill’s territory to learn whether or not the surrounding area was still protected virgin rainforest or whether it was being cleared for plantations. Recent clearing was a sign that the mill might be supplied by illegal plantations; conversely, virgin rainforest in a mill’s territory was a sign that rainforest might be in imminent danger of being cleared. All this from openly available data.

Uminsky says this problem will take multiple clinic teams to solve. “They’ll make progress,” he says. “We’ll get to certain milestones. And then the next team will pick it up.” The first results came in late 2020, with the launch of an online tool matching mills with each multinational’s list of palm oil providers and giving them a score based on how well they were living up to their environmental pledges.

The upside of working with dirty, messy data, then, is that students’ efforts can go from the classroom to having an impact on real people within a few years, or even months.

Trending up?

So far 13 students have declared data science as their major—not bad, considering the new major was announced just a month before the academic year began.

Ever the careful statistician, Biron estimates the program’s eventual size—somewhere between 30 and 50 undergraduate majors at any one time—based on interest from information sessions and his own conversations with students. Meanwhile, the Autumn 2021 introductory classes in data science had 90 students. The analysis of these data is left to the reader, but I’ll venture that the trend is clearly positive.

“You cannot separate a data science education from looking at real data.”
—David Uminsky
HELEN GROWN OLD

by Janet Lewis, PhB 1920

We have forgotten Paris, and his fate.
We have not much inquired
If Menelaus from the Trojan gate
Returning found the long desired
Immortal beauty by his hearth. Then late,

Late, long past the morning hour,
Could even she recapture from the dawn
The young delightful love? When the dread power
That forced her will was gone,
When fell the last charred tower,

When the last flame had faded from the cloud,
And by the darkening sea
The plain lay empty of the arméd crowd,
Then was she free
Who had been ruled by passion blind and proud?

Then did she find with him whom first she chose
Before the desperate flight,
At last, repose
In love still radiant at the edge of night,
As fair as in the morning? No one knows.

No one has cared to say. The story clings
To the tempestuous years, by passion bound,
Like Helen. No one brings
A tale of quiet love. The fading sound
Is blent of falling embers, weeping kings.

Strange Planet

By Nathan W. Pyle

MY HOME MY REGULATIONS

LIFEGIVER YOU WERE CORRECT

EW
It's a kindness that the mind can go where it wishes.

—Ovid, Poems from Exile
Translated by A. S. Kline