

The Ledger



ACADEMICS

BACK TO SCHOOL, SAFELY

It was a fall term for the history books, as Drexel welcomed 2,350 first-year students to virtual classrooms. Below, we've assembled stats on who they are and what their fall term was like. Meanwhile, a portion of medical students and graduate students, including the Kline School of Law students photographed here, returned to in-person classes in lecture halls with safe spacing and masks. Starting in January, all undergraduates will have the option of returning to single-occupancy dormitories, and additional classes will be offered in person or hybrid for students who require access to labs and studios.

3.81

Average high school GPA, up from 3.76 in 2019 and 3.71 in 2018.

14.3

Percentage of underrepresented students of color.

6.9

Percentage of international students. Top countries are India, Vietnam, Nigeria, China, Pakistan and Kazakhstan.

THREE HUNDRED

Number of virtual programs attended by new undergraduates.

1290

Average median SAT score, same as last year and up 10 points from 2018.

39.4

Percentage who hail from Philadelphia, versus only 13 percent in 2018.

TWO HUNDRED

Number of grad students facilitating remote courses.

1 in 4

Number who are first-generation college students.



THE VIEW FROM MAIN

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'I Knew We Were on the Edge of Radical Change'

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A Philosophy of West Philadelphia's Future

Two major projects underway in West Philadelphia cap a decade of construction on campus, where Drexel is building a district of innovation and inclusion. Virtually all of this development yields income and assets for the University. None of it cost Drexel a dime.



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Solving this puzzle will be easy if you've spent time during the pandemic catching up on your reading.



In September, we embarked on an academic year unlike any in our history — amid the global pandemic, a clarion call for racial justice and as our country engaged in a divisive political season. It was a moment for all of us at Drexel to innovate, support one another, and strive to be the best version of ourselves as individuals and as a University community.

Despite the disappointment over not being able to welcome to campus the nearly 2,400 members of the incoming class of 2020, our necessary pivot to remote learning, the enactment of sweeping health and safety measures, the smooth resumption of research by faculty and graduate students, and the launch of life-saving scientific inquiry around COVID-19 all show Drexel at its best.

At the same time, we know we must build a better University by creating a truly anti-racist culture at Drexel. The cornerstone of our efforts is Drexel's Anti-Racism Task Force, actively engaged in examining all aspects of Drexel to craft recommendations for how we can be better. We've also established a new Center for Black Culture, which will serve as a hub of information, activity and community.

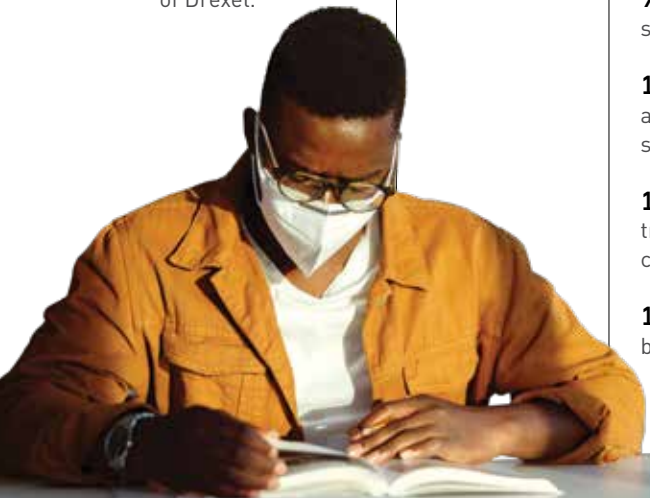
Our efforts to enliven campus and community — including the Pennoni Honors College move to Bentley Hall — have reached beyond the classroom and lab. The Powel Elementary / Science Leadership Academy Middle School at 36th and Warren streets is moving toward a spring opening, while an academic tower is being built next door for the College of Nursing and Health Professions and College of Medicine. Meanwhile, there's burgeoning activity in Schuylkill Yards, with Brandywine Realty Trust planning two research and commercial buildings by Drexel Square.

Work continues on a 10-year strategic plan that will enhance the University's leadership in experiential learning and external partnerships as a model for higher education at a time of profound change and disruption for all colleges and universities. And we are acting globally to tackle climate change through our new Environmental Collaboratory, anchored by the Academy of Natural Sciences, the College of Engineering, and the College of Arts and Sciences.

As we all look forward to a time when the pandemic will be behind us, I wish you continued good health and I want to assure you, our devoted alumni, that Drexel will emerge from this challenging period strengthened and enriched in countless ways.

Sincerely,

John Fry
John Fry / President





EDITOR'S LETTER

Drexel Magazine Goes Digital

At press time, it is the 5th of November, and the world is midway between the ghouls of Halloween and the blessings of Thanksgiving. Summer gleams in the rearview mirror and winter lays heavy on the road ahead. We're poised in the bell-curved hollow between the first coronavirus peak and a second surge that will once again test our hearts and the readiness of our hospitals.

I can only hope that by the time this edition reaches readers the election ballots are counted (maybe more than once), the lawsuits settled, and a clear choice ratified — and that we are not still hovering between two directions for the country.

But one can't be too sure. I tuned into the news today to see a crowd of Philadelphians lifting signs outside the Pennsylvania Convention Center demanding that their votes be counted, while across the country in Maricopa County, Arizona, a crowd in red MAGA hats were making the same demand. It seems Americans are all asking for the same things, even as our actions conjure disparate outcomes. What a year for the history books!

With that preamble, I want to announce that a change is coming to *Drexel Magazine*. The print edition will be suspended for a while — a first for the magazine, as far as I'm aware.

Like other universities that locked down last spring, Drexel suffered a significant decline in revenues from tuition, housing and dining fees. Although some aspects of campus life have revived, there are new costs associated with health safety and COVID testing, and it will be a while before the University regains fiscal balance.

In the meantime, we will continue to publish news about our alumni, faculty, research and campus life digitally throughout the year at drexelmagazine.org and in a new e-newsletter format you will receive in the new year.

Please take a moment, therefore, to update your email address on record with the University. You can do so at alumni.drexel.edu/updates, by emailing bioupdates@drexel.edu, or by calling Drexel University Records at 215.895.1694. After this fall edition, your email address will be the only way to receive news about alumni career changes, friends who have passed away, and the stories that keep you abreast of how Drexel is changing.

And it is changing, as are so many things.

Thank you for reading.

Sonja Sherwood / Editor



ABOUT THE COVER
Illustrated by Diana Ejaita.



LETTERS

Soul Music

Just finished reading the Summer 2020 edition. It presented the hope and promise of a great university, starting with the article that showed adaptability at the start of the pandemic; Drexel supporting Harold Naidoff '53 falsely accused of being disloyal; former Eagles player Jon Dorenbos; the campus Spider-Man; 19 stories of Dragons helping others during COVID-19; David Shulkin, MD, working to serve veterans; Nigerian immigrant and Drexel faculty member Rita Adeniran making a difference around diversity and inclusion, and others.

"Dance like no one is watching," wrote Assistant Clinical Professor Dawn Morningstar. Well, this issue provided the music for my soul to dance with song and music provided by great Drexel students, faculty and alumni. Thank you.

ANTHONY STANOWSKI
MS business administration '89
Lower Gwynedd, Pennsylvania

Proud Alumna

I always enjoy reading *Drexel Magazine*, but the latest issue has made me so proud to be a Dragon. The 19 Dragons helping others literally brought me to tears (count me as No. 20 as I sew and donate masks). I didn't know anything about [former Secretary of the Department of Veterans Affairs] David Shulkin, MD, but I just put his book on my reading list. And

the Philadelphia Teacher Residency program? Amazing.

As a third-generation alumna, married to an alumnus, and maybe raising two future Dragons, I could not be more proud of Drexel. Thank you for some bright news during a difficult summer. Good work!

AMY KUSEN
BA history '09
Aston, Pennsylvania

Commendation

Just a short note to compliment *Drexel Magazine* on its "excellent look" (and of course, content). From the front cover, through the various articles, to the back cover, the magazine is very appealing, colorful, easy to read, classy format, and it speaks well for Drexel University.

I attended Drexel Institute of Technology as a business student from 1956–1960. My goodness, the Drexel campus was so different then. The newest building at that time was the science building (since replaced) and I remember the cornerstone as "1957." I lived in a fraternity house on Powelton Avenue, and ... was privileged to have a column in the *Drexel Triangle*.

It is easy to criticize when something is wrong, but it is very important and rewarding to express praise and commendation when the job is done very well.

RICHARD NICOLL
BS business administration '60
Boca Raton, Florida

Blue Calm

The cover of the latest issue is beautiful! The selected format and presentation fully reflects the massive incompleteness of the current situation.

I was especially pleased to see the choice of monochrome — just before I entered Drexel, in '61, Philly's Chief of Police and soon-to-be-Mayor Frank Rizzo intentionally changed the colors of the flashing lights on the Police Department's cars from red to blue, recognizing that red lights evoke feelings of fear and opposition, and that blue lights would have a more calming effect on those stopped by police. This was a safety measure for the Police Department, back in the late '50s or early '60s. It worked, well enough for police departments across the country to adopt the idea. I decry the loss of his image overlooking South Philadelphia!

I really look forward to receiving the issues! There have been many, many changes since I helped dedicate the Drexel Activities Center (the DAC) at 32nd and Chestnut streets!

LARRY SCHEAR
BS electrical engineering '74
Indian Shores, Florida

Pandemics Past

My father's grandparents arrived from Ireland in 1849 and 1852

aboard "famine ships" and settled in the coal regions of Northeastern Pennsylvania. My father, at age 27, was a third-generation coal miner when he entered the U.S. Army in 1918 and sailed to Europe aboard a troop ship.

The Centers for Disease Control and Prevention believes the pandemic first started at Camp Funston in Fort Riley, Kansas, in April 1918 and was spread to Europe by our troops. The CDC estimates fatalities in the United States were 675,000, and at least 50 million worldwide.

My father returned by troop ship after Armistice and was discharged December 1918. The only time I saw him cry was when he described to me fellow soldiers dying of the flu. More U.S. soldiers died from the flu than on the battlefield in France.

My father's seven sisters and five brothers survived the pandemic, including one brother who was wounded by poison gas on the battlefield in France.

My father died at age 61. At the time I was 15. I am now 83.

RAY CARDEN
MBA '67
Orlando, Florida

Remembering Calhoun Hall

While skimming through the Summer 2020 edition, I recognized the picture of the now-renovated and renamed Bentley Hall, which was "known to older alumni by its previous names Calhoun Hall or

Kling Dorm."

For its first two years, I served as a resident assistant at Calhoun Hall and was honored to speak at its dedication ceremony in October 1972. It's been over 50 years since I began my Drexel experience. I had applied to Drexel Institute of Technology, but in 1970, I was among the first class to enroll under its new name, Drexel University. It also was the last year for Drexel football. The annual tuition was around \$1,400. There were just two dormitories, Kelly Hall for men and Van Rensselaer for women. Though I grew up in the Philly suburbs in Broomall, I moved in and lived on campus at this "commuter" school.

Drexel and Kelly Hall provided me the opportunity to meet and befriend so many people [who became] lifelong friends. We have played football (at Belmont Plateau, at Burke Lake Park in Virginia and recently at the Outer Banks in North Carolina) every year on the weekend before Thanksgiving. Brothers, friends, children and even grandchildren have participated in this fall classic. Yes, we're grayer, older, slower and not as tough as before but we wouldn't miss it, as our families have come to realize.

2020 marks the 50th year for Tech Football and the pandemic presents a new challenge. How do you call plays on Zoom? How do you go to the bar after the game? But we're Drexel graduates; we'll figure it out.

ROBERT (BOB) BYCER
BS business administration '75
Landenberg, Pennsylvania

Correction: A story about Bentley Hall on page 11 of the summer 2020 edition contained information that was out of date. The story should have said that Pennoni Honors College relocated to the building in April. Pennoni now occupies a new, two-story glass and stone addition of about 10,800 square feet at Bentley Hall.

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Recovery and Resilience in West Philadelphia

When shops in West Philadelphia were damaged on May 31 in the aftermath of citywide social justice protests, Drexel professional staff jumped in to help. By Alissa Falcone

While walking her dog early on June 1, Una Massenburg spotted debris and merchandise scattered near the City Avenue Shopping Center in the Overbrook section of West Philadelphia, where stores had been damaged the day before following a weekend of protests against police killings and systemic racism. As she walked, she also saw people with brooms and garbage bags cleaning — and when she got home, she knew what she was going to do next.

Massenburg, who is Drexel's director of Travel & P-Card, met up with a fellow Procurement Services colleague, Strategic Sourcing Specialist Charlene Rice, and they worked for four hours to remove shattered glass and trashed goods outside of impacted businesses.

That same morning, other Drexel faculty and professional staff from the Office of University and Community Partnerships were offering their services to businesses along the 52nd Street corridor near Market Street, where on May 31 the scene was filled with tear gas and property damage. Less than two weeks later, Massenburg and Rice were joined by two more colleagues from Procurement Services — Director of Supplier Inclusion Allen Riddick and Director of Disbursements and Surplus Services Bo Solomon — at an event hosted by the Urban League of Philadelphia to help clean up the area around 52nd and Market streets.

The 52nd Street corridor is a busy commercial avenue in a predomi-

Community members clean up broken glass on June 1 outside a McDonald's and other businesses on 52nd Street in West Philadelphia.



PHOTOS BY JESSICA GRIFFIN



CROSSWALK BRIEFS

Protesters and police faced off at 52nd and Chestnut streets in West Philadelphia on May 31, 2020.

COMMUNITY

nantly Black neighborhood located west of Drexel's campus. It is home to a mix of small, often minority-owned businesses as well as chains such as Foot Locker and McDonald's, and it has been a locus of efforts to beautify and revitalize street life. On May 31, it was one of the city's streets hit by conflict in a series of ongoing demonstrations, rallies and marches in protest of the May 25 death of George Floyd while in police custody in Minneapolis. In Philadelphia as in other cities, civic action related to Floyd's death has been a complicated mix of sometimes-peaceful and sometimes-confrontational actions by disparate members of the public and by police as the movement has grown into an international societal reckoning aimed at redressing systemic racial inequities.

For individual shopkeepers, the movement has had collateral consequences, with locally owned businesses experiencing vandalism, looting or street closures on top of losses caused by the pandemic. In late October, anger erupted in the city again, with damages on the same street, following the shooting of Walter Wallace Jr. by police in West Philadelphia.

"I just felt like I had to help where help was needed," Massenburg says. "Your heart goes out to the people who have been here for the community. These are livelihoods that were impacted by people who don't realize how their actions impact the whole sum."

Community cleanups are just one of the ways Massenburg and her colleagues demonstrate solidarity with the community, and Procurement Services is just one Drexel unit helping West Philadelphia businesses weather recent events. Over the years, the University has built community engagement into its volunteerism, academics, partnerships, strategic plans, social gatherings — fostering opportunities to meet up and connect with the neighbors adjacent to its campus.

"We didn't just suddenly jump into action these last few weeks," says Jennifer Britton, director for communications and special projects in the Office of University and Community Partnerships. "This is a set of business supports and relationships that we've been building and cultivating for almost 10 years."

Drexel was already working with some local businesses that were suffering from stay-at-home closures or diminished sales as a result of the pandemic. Those efforts include building websites, supporting business plans, and assisting with marketing and branding.

More recently, Director of Workforce and Economic Inclusion Soneyet Muhammad in the Office of University and Community Partnerships helped Kline School of Law volunteers staff an insurance pop-up clinic for business owners filing property claims.

"The damage done to several commercial corridors we represent is severe and many of our businesses are on the edge of closing permanently," says Jabari Jones '16, founder of local business association West Philadelphia Corridor Collaborative. "In these challenging times, I am thrilled that Drexel has made this commitment to boost support for local businesses and continues to support us in efforts to rebuild quickly."

In June, the Office of University and Community Partnerships also

contributed \$5,000 to the Lancaster Avenue 21st Century Business Association's fund to support businesses near or on Lancaster Avenue (from 34th to 44th streets) and Market Street (from 34th to 38th streets).

"This is an opportunity for us to show we mean it when we say, 'We stand with you in solidarity,'" says Muhammad. "It means we recruit volunteers to help folks rebuild after disaster. We give money to help small businesses rebuild. We share our time, talent and treasure, and we're doing all of these things to make sure that we work as a neighbor, as a partner and as an anchor institution to rebuild the communities we collectively value."

In addition to providing external support, the University has also been working over the years to build its internal institutional investment in civic engagement — that means buying local, hiring local and building local not just at Drexel, but also with Drexel partners and vendors.

In 2018, Associate Vice President of Accounts Payable & Procurement Services Julie Jones was brought in to better align Drexel's purchasing practices with a "buy local" mentality, both through direct purchasing and by offering local businesses mentorship and connections to other opportunities.

When spending tightened due to the coronavirus, her team became even more strategic about what to buy and who to buy it from. In June, Procurement Services accelerated the University's payment terms to businesses in need of immediate payment for their services. And Drexel Surplus strategically aligned with the Enterprise Center, the People's Emergency Center and other local nonprofits to donate Drexel's gently used office equipment to businesses.

"With the most recent events within West Philadelphia, it's been a complete acceleration in regards to the care, intent and even financial commitment as people are really beginning to open up to change," says Procurement Services' Riddick, who oversees the University's Supplier Inclusion Initiative to develop partnerships and arrangements with diverse businesses.

"We're also reaching out to some of the larger suppliers that we work with to say, 'Hey, how can you help out or what can you contribute to West Philadelphia? Our community is important to us and needs to be important to you, too,'" explains Riddick.

At the start of the pandemic, he started a monthly call with peers at more than a dozen colleges and universities to discuss how universities can help their local diverse businesses recover. He sponsors similar discussions with other large Philadelphia institutions who are members of Philadelphia Anchors for Growth and Equity initiative, of which Drexel is a founding member.

"We understand that all of our work alone isn't enough to play a part in economic impact and economic equality, so we're working together with other institutions to find and help navigate relationships with those businesses," Riddick says. "A large part of what I do is really about connecting good people together."

Keep up with current news about Drexel at drexel.edu/now.

Quoted

Faculty experts weigh in on a summer of solidarity and outrage.

ROBERT J. KANE, College of Arts and Sciences, on police recruitment.

GEORGE FLOYD'S DEATH IS, IN PART, A RESULT OF A FUNDAMENTAL FLAW IN AMERICAN POLICING — ONE THAT IS SO INGRAINED AS TO BE VIRTUALLY INVISIBLE.

KEVIN M. MOSEBY, College of Arts and Sciences, on supporting communities.

CRIME IS NOT RANDOM. IT'S DUE TO THE LACK OF EDUCATION, THE LACK OF JOBS.

BLACK MEN SEE THEMSELVES IN GEORGE FLOYD. BLACK MOTHERS SEE THEIR SONS IN TAMIR RICE.

EBONY WHITE, College of Nursing & Health Professions.

SHARRELLE BARBER, Dornsife School of Public Health, on racial disparities in health care.

WITH ALL THE HORRIFYING AND SHAMEFUL VIDEOS CIRCULATING NOW, I AM GLAD MINE IS ONE OF LOVE & HUMANITY! SO MUCH NEEDS TO BE ADDRESSED THAT CAN ONLY BE ADDRESSED BY THE POWER STRUCTURES THAT CREATED INEQUITY IN THE FIRST PLACE.

RACHEL E. LÓPEZ, Kline School of Law, who shot the viral video of newlyweds joining a June 6 protest rally in Philadelphia.

Show & Tell

CO-OP

DAHRAH MUHAMMAD BA ENTREPRENEURSHIP AND INNOVATION '20

In a typical year, more than 92 percent of Drexel's undergraduates participate in the Drexel Co-op program — our signature model of education that balances classroom theory with job experience. What does a Drexel co-op look like? In this regular feature, we ask Dahrah Muhammad, who completed her entrepreneurship co-op in the spring–summer cycle of 2019, to show us. — *By Beth Ann Downey*

THE INSPIRATION

In 2012, my brother Musa was diagnosed with autism. In honor of him, I founded Musa's World, which will be an online platform that automates and digitizes transition portfolios to expedite the start of care. I call my brother "my sunshine" because he is an absolute light in all of our lives. When he was first diagnosed, it shook us. We didn't hear him speak for a while. I couldn't really hold him or communicate with him the way I had with my sisters and that hurt. But the first time we heard that boy sing, before he had spoken a sentence to us, I knew that I wanted to help other families feel what I felt.

Dahrah's brother,
Musa Muhammad

Musa's World
T-shirt



THE CO-OP

For my entrepreneurship co-op I conducted research to make sure that Musa's World was filling the needs of both families and autism service organizations. I had six months to conduct the research I needed, to build a small team, and to begin building out a product to pilot test. Having that time, the mentorship, and the like-minded individuals surrounding me was a great gift. The \$15,000 of entrepreneurship co-op funding I received from the Charles D. Close School of Entrepreneurship was also very helpful.

THE TAKEAWAY

As part of my research, I heard the stories of so many people and have felt the frustration of their situations. That was a big thing to learn because it tells you that you don't just have a service/product that people need, it inspires you to help solve the issues that exist.

CROSSWALK

BRIEFS



Drexel is collecting computers to refurbish for the community.

Paul Shattuck, co-author of the Autism Institute's "Indicators Report."



ACCESS

Digital Access During COVID

Nearly 15,000 Philadelphia students do not own a computer and some 21,500 do not have internet access, according to Census data.

That's why Drexel's Expressive and Creative Interaction Technologies (ExCITe) Center joined a network of citywide organizations to help ensure all Philadelphians have access to the devices and bandwidth they need to learn and work remotely during the pandemic.

With grants of \$30,000 from a Philadelphia Digital Literacy Alliance initiative, Drexel will be one of three partners to provide support for access to low-cost internet options, wireless device connectivity, and computer equipment for people in need.

The ExCITe Center's partners in this effort include the Community Learning Center and SEAMAAC.

At Drexel, the funding enables the Information Technology department and the ExCITe Center to collect and refurbish used computers to be distributed to community members through partner organizations with Drexel's Promise Neighborhood program. In addition, experts from the ExCITe Center are available for technological support and training.

It also funds community partners to assist residents via phone and text message with general computing support, School District of Philadelphia laptops and software, and additional resources such as kindergarten registration and online learning and enrichment.

HEALTH

Autism and Financial Hardship

American families with children on the autism spectrum face higher levels of poverty, material hardship and medical expenses compared to households of children with other special health care needs, according to a May report released by the A.J. Drexel Autism Institute.

"I have talked with countless families of children with autism over the past 20 years who are struggling with the dual challenge of parenting a child with special needs and covering the basic needs of the entire family," says Paul Shattuck, formerly the director of the Autism Institute's Life Course Outcomes Program and co-author of the report.

PAUL SHATTUCK SAYS:

"Our hope for this Indicators Report is that it will raise awareness and spark discussion about the ways in which families are struggling and need our collective societal support."



Over half of children with autism live in low-income households (below 200 percent of the poverty level).



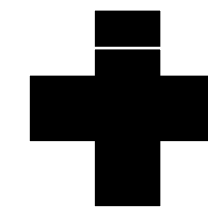
30 percent live in very low-income households (below 100 percent of the poverty level).



Roughly 15 percent had difficulty affording food for the family.



Almost one-third had to reduce work to care for their child with autism.



About one in five families had problems paying for their child's health care.



Nearly half reported difficulty paying for basics like food or housing.



More than two-thirds of low-income households of children with ASD reported that someone in their family received governmental cash assistance.

GLOBAL

At the Moka Wildlife Station (right), Drexel delegates met with Bioko program staff and local grade school students.



The Drexel delegation hiked to the Bioko program's research site on a beach where marine turtles' nesting grounds are being monitored.



Drexel Goes to Equatorial Guinea

In February, President John Fry and a group of Drexel leaders visited the Republic of Equatorial Guinea in support of the Bioko Biodiversity Protection Program (BBPP), a long-standing academic and research partnership between Drexel and the Universidad Nacional de Guinea Ecuatorial (UNGE) that promotes conservation efforts and environmental research on the country's Bioko Island.

Drexel's partnership with UNGE represents the world's only international study-abroad program in Equatorial Guinea.

The Drexel delegation participated in several events and toured research sites operated by the Bioko program. In the capital of Malabo, Fry also met with the president of Equatorial Guinea, President

Teodoro Obiang Nguema Mbasogo, to discuss biodiversity conservation.

The Bioko program officially started in 1998 and has been operated by Drexel since 2007. Drexel undergraduate and graduate students, as well as volunteers, are involved in all of the research activities at BBPP sites. "I was blown away by what the Bioko program has done, because not only are they doing world-class scholarship, but at the same time they're engaging with the local community and bringing our cultures together," says Executive Vice Provost for Research & Innovation Aleister Saunders, who was a member of the delegation. "This isn't just about collecting knowledge for knowledge's sake, but to improve the world."



Jason S. Schupbach

ACADEMICS

Westphal's New Dean

Jason S. Schupbach was named the new dean of the Antoinette Westphal College of Media Arts & Design, starting Sept. 1.

Schupbach is an advocate for reimagining urban civic spaces through placemaking, arts and design. He comes to Drexel from Arizona State University, where he was director of The Design School. At ASU, he led an ambitious "Re-Design.School" initiative to make the school more collaborative, relevant and equitable.

Previously, he was director of Design and Creative Placemaking Programs for the National Endowment for the Arts, where he oversaw all design and creative placemaking grantmaking and partnerships, including Our Town and Design Art Works grants, the Mayor's Institute on City Design, the Citizens' Institute on Rural Design, and the NEA's federal agency collaborations.

The new Westphal leader has written extensively on the role of arts and design in making communities better, and his writing has been featured in the Aspen Institute's "Best Ideas of the Day" series.

Schupbach succeeds Allen Sabinson, Drexel's longest-serving dean, who stepped down from the position after nearly 15 years. Under Sabinson's leadership, the college added eight new undergraduate programs, four new master's programs, launched its first doctoral program, grew its enrollment by nearly 25 percent and faculty positions by nearly 43 percent, and more than doubled funding and support.

PHOTOS: BY DAVID MONTGOMERY AND SCOTT COOPER

For more about Drexel's research enterprise, see EXEL Magazine at exelmagazine.org.

PUBLIC HEALTH

BUGS IN THE WATER

April showers bring May flowers, but they may also mean more gastrointestinal illness — such as diarrhea or vomiting — for the city's inhabitants. Dornsife School of Public Health researchers studied a three-year period from 2015–2017 and found an increased rate of acute gastrointestinal illnesses in the spring, starting one week after a heavy rainfall and persisting for 28 days. At its peak, the number of daily cases was more than double the average number seen during dry spells. Researchers speculate that heavy precipitation brings pathogens into stormwater runoff and local water supplies.

Research



BUSINESS



Real-Time Decline

Here's more reason to tip your waiter, housekeeper or clerk. André Kurmann, associate professor in the School of Economics in the LeBow College of Business; Etienne Lalé of the Université du Québec à Montréal; and Lien Ta, a Drexel doctoral student, analyzed national real-time data and found that employment in

hospitality contracted by an estimated 19.8 million between mid-February and the end of April — a staggering 60 percent decline. One-third of this decline was due to businesses shutting down, and employees in continuing businesses also saw a 10-percent reduction in their hours.

BUSINESS



Employee Loyalty and Ethics

Employees are more likely

to engage in unethical behavior when they believe it will benefit their organization, according to a recent study co-authored by Christian J. Resick, associate professor of management in the LeBow College of Business. Employees who identify strongly with their organization show decreased moral sensitivity to the broader implications of unethical behaviors, while those who don't identify as strongly are more likely to consider competing informa-

tion, the study found.

PUBLIC HEALTH



Screen Time and the Spectrum

Bad news for parents forced to resort to letting toddlers watch more television. Researchers from the College of Medicine and the Dornsife School of Public Health found that screen time for 1-year-old children was associated with 4 percent greater display of autistic be-

haviors later in childhood. Contrastingly, daily playtime with a parent was associated with 9 percent fewer autism-disorder-like symptoms.

ARTS & SCIENCES



The Brain on Jazz

A new brain-imaging study out of Drexel's Creativity Research Lab sheds light on how creativity functions in "left-brain"

and "right-brain" thinkers. Researchers studied the brain activity of jazz guitarists during improvisation, and their findings suggest that creativity is a "right-brain ability" when a person deals with an unfamiliar situation but that creativity draws on well-learned, left-hemisphere routines when a person is experienced at the task. The study was led by doctoral graduate David Rosen, who is co-founder and chief operations officer of a music tech

startup called Secret Chord Laboratories; and John Kounios, professor of psychology in the College of Arts and Sciences.

ENGINEERING



What a Blast

Researchers from Drexel University have found a way to destroy stubbornly resilient toxic compounds, ominously dubbed "forever chemicals," that have con-

taminated the drinking water of millions across the United States and have been detected in the bloodstream of as much as 98 percent of the population. Christopher Sales, an associate professor of environmental engineering, is part of a team from the College of Engineering and the C. & J. Nyheim Plasma Institute exploring how a blast of charged gas, called cold plasma, can be used to eliminate these chemicals from water.



Executive Director
Harris Steinberg

Support the Lindy Institute at
drexel.edu/lindyinstitute/give.

Faces

URBAN PLANNING

THE LINDY INSTITUTE RISES TO URBAN CHALLENGES

The Lindy Institute's mission to forge prosperous, equitable and sustainable solutions to the challenges faced by cities and their residents has never been more relevant.

— *Alissa Falcone*

The Lindy Institute for Urban Innovation is commemorating its first five years against a tumultuous backdrop of social unrest, economic freefall and a global health crisis that has forced cities from coast to coast to confront long-standing inequalities. Such realities make the institute's mission of helping cities plan a future that benefits *all* citizens more timely and urgent than ever.

The Lindy Institute is a University-wide applied think tank that advises urban policy decision makers in Philadelphia and elsewhere by harnessing thought leaders and citizen stakeholders to imagine innovative, inclusive solutions. "In a real sense, the Lindy Institute is the conscience that ensures that Drexel achieves its vision as a trusted community partner and impactful urban research university," says President John Fry.

Since its inception, the institute has become a bully pulpit on urbanism for the University locally, nationally and globally. It

has made a name for itself in the realms of Philadelphia real estate, creative placemaking, metropolitan finance and civic visioning. Its network and influence extends as far as Chile, Demark and Israel and as close at hand as Lancaster Avenue and the Benjamin Franklin Parkway in Philadelphia.

Over the past year, the institute has taken the lead in imagining a community-informed design for the former Philadelphia Energy Solutions refinery site on the Lower Schuylkill. The institute's recently released plan, "Visioning the Future of the Philadelphia Energy Solutions Refinery Complex," calls for constructing new green and open spaces on the 1,400-acre former industrial site, connecting it to public transit and to the Schuylkill River Trail, and creating street grids to integrate it with nearby neighborhoods. The plan's emphasis on community health, sustainable development and family-sustaining jobs is the embodiment of the Lindy

Institute's mission of putting urban planning at the service of the broad community.

The institute also plays a role in educating future urban problem solvers through an innovative two-year master's degree program launched in 2017 in partnership with the Department of Architecture, Design and Urbanism in the Westphal College of Media Arts & Design. The Masters of Science in Urban Strategy is the first of its kind in the country to combine fields such as sociology, public health, history, economics, design and engineering with a community-centered approach. "This hands-on, solutions-oriented approach prepares students to assess complex urban issues more comprehensively than their counterparts at other schools," says Program Director Andrew Zitcer.

Graduates from the program's first two classes have gone on jobs at places such as the Manufacturing and Industrial Innovation Council of the City of New York and Philadelphia's Commerce Department.

The Lindy Institute also continues to bring in expertise from all different fields, backgrounds and levels of leadership through its fellows and fellowships. Its Urban Innovation Fellowship program, created in 2017, connects emerging Philadelphia leaders in areas such as the public health response to the opioid crisis, the impact of trauma on Black youth and new models of neighborhood economic development with Drexel's intellectual resources, networks and mentoring.

The institute is also home to the Nowak Metro Finance Lab, an entity launched in 2018 that is working with a national network of urban finance experts to craft a road map for Black- and brown-owned small business recovery across the country and in Philadelphia. The lab is led by eminent public policy expert Bruce Katz, who served as the inaugural Centennial Scholar at the Brookings Institution. Katz brings expertise on innovation districts, Opportunity Zone finance and how cities and metropolitan regions can harness local assets to build infrastructure, create community wealth and rethink governance.

With much work remaining to be done and cities under increasing pressure to solve problems both old and new, the Lindy Institute is raising an endowment to build a physical space on campus as a base from which to expand its network and infrastructure.

"COVID-19 and the ensuing economic collapse, coupled with the long-overdue cry to end systemic racism in America, gives the institute its marching orders for the next five years," says Harris Steinberg, executive director of the Lindy Institute and distinguished teaching professor in Westphal College. "As we begin to think about how the city and region can emerge stronger from the events of 2020, our focus will be on racial reconciliation, public health and economic recovery and social and environmental resilience."

LEFT: A proposal for the Philadelphia Energy Solutions refinery site. **ABOVE:** Lindy Institute Executive Director Harris Steinberg is a prominent architect and urban planner who came to Drexel in late 2014 from the University of Pennsylvania, where he founded PennPraxis — the applied research arm of Penn's School of Design. "Harris is known for thinking about urban planning as participatory and engaging in this sort of larger civic listening, rather than a bunch of architects just doing plans," says Senior Vice Provost of University and Community Partnerships Lucy Kerman. "I think it says a lot about what urban planning needs to look like if it's going to be really responsive to the many voices that exist." In December 2020, Steinberg will receive the John Frederick Harbeson Award from AIA Philadelphia in recognition of his lifetime contribution to the city's built environment.



Send letters to the editor to magazine@drexel.edu.



Michel Barsoum
and Yuri Gogotsi



INNOVATION



Top: College of Engineering researchers Michel Barsoum and Yuri Gogotsi were named among the most highly cited researchers globally in 2019. Bottom: Researchers inside Drexel's newest research lab, the Center for Functional Fabrics, spent the spring creating high-filtering masks for health care workers.

Drexel Named Most Innovative

Drexel is the country's most innovative mid-sized research university, according to a report released in June by the George W. Bush Institute and Opus Faveo Innovation Development.

The organizations evaluated U.S. research institutions based on public data about their productivity in research, teaching, commercialization and entrepreneurship. Drexel achieved the highest "innovation impact productivity" score of its size category, ahead of the University of New Mexico, Princeton University and Carnegie Mellon University.

Drexel demonstrated outstanding performance "in terms of productivity in converting research inputs to innovation impact outputs" and scored far higher than any member of the largest university group, according to the report.

The rankings are the first of their kind to be produced by the two organizations. The Institute is an offshoot of the George W. Bush Center located on the campus of Southern Methodist University, and Opus Faveo is an innovation consulting firm whose university clients include the University of Texas in Dallas, Texas Tech University and the University of Michigan.

REPUTATION

Philly's First Age-Friendly University

The number of Americans ages 65 and older is projected to nearly double by 2060, and Drexel intends to be a place where they can explore their intellectual interests and benefit from public health research focused on their generation.

Drexel was recently named by the AFU Global Network the first Age-Friendly University in Philadelphia, and is only one of two in Pennsylvania. The network, created by Dublin City University and championed by the Gerontological Society of America, promotes the participation, inclusion, education and wellness of older adults in higher education. Drexel joins more than 60 institutions worldwide recognized for their commitment to meeting the needs and aspirations of all generations.

In keeping with the age-friendly designation, Drexel will seek new ways to engage older adults and the organizations that serve them; ensure that current and future generations of students and faculty adopt an intergenerational lens throughout their careers; and increase aging-related research that is informed by older adults, local communities and other stakeholders.

The College of Nursing and Health Professions is also helping to develop evidence-based clinical and social programs for older adults through its AgeWell Collaboratory, which aims to disrupt the traditional health care system's approach toward caring for older adults.

'As more of us live longer and in many cases better lives, we have the opportunity to reimagine what aging means in this country and globally.'

LAURA N. GITLIN, dean of the College of Nursing and Health Professions and the College's AgeWell Collaboratory.



Nina
Redevelopment Advisor

Nina

Great news!

Lomax Real Estate has proposed a \$43 million supermarket complex for lot 435. This could improve food access and bring jobs into the community, but reduce housing capacity. Should we accept the proposal?

Reject

Accept

CROSSWALK BRIEFS

In SIM-PHL, you play the role of city manager, tasked with building a neighborhood of happy residents.



CAMPUS

A Facelift for Main

Main Building is Drexel's finest architectural treasure and the premiere building on an ever-expanding campus — and at almost 129 years old, it's one that needs special TLC.

Which is why Drexel launched a \$9.8 million renovation project in the spring to restore the roof and the immense skylight over Great Court. The work has remained on schedule throughout the campus lockdown despite pandemic work stoppages.

The first phase of this project was to replace the roof and skylight to counteract moisture infiltration and other problems that arise in antique buildings. While this sounds simple, it was a big undertaking. The large size of the roof meant that a temporary structure needed to be built over top of the skylight in order for the existing one to be taken apart and replaced.

Main Building's elevator was also taken offline over the summer to receive shaft work while campus was closed, but it was brought back online in mid-September in time for the start of the new academic year.

With the roof and skylight project almost complete, crews will move on to plaster repairs inside the building around the Great Court. Following that, a safety net that has been suspended under the skylight for nearly two years can be removed, and this campus crown jewel will once again shine in all its glory.



How Would You Run the City?

You're the city manager, and a real estate developer offers to build a supermarket in your neighborhood. It would improve food access and create jobs, but it would also mean less space for affordable housing. What do you do?

This is one of the game scenarios players will face in Simulated Interactive Management of the City of Philadelphia (SIM-PHL), a new SimCity-style game created by designers from the Westphal College of Media Arts & Design with support from the John S. and James L. Knight Foundation's Open Data initiative.

The game is set in the city's Mantua neighborhood, an area adjacent to Drexel's campus that is part of a national initiative to support and restore marginalized communities.

The city-simulator game uses public data, made available by the City of Philadelphia at Atlas.Phila.Gov, to inform residents about the impact that real estate development can have on rental rates, food distribution, crime, population flight, political

struggle, gentrification and other forces that shape urban neighborhoods.

In the game, players face complicated decisions about zoning, housing, and the preservation of open spaces and historical sites. They will try to work for the good of the community while contending with challenges — all drawn from real-life incident reports in Philadelphia's database — such as contested zoning, natural disasters and political pressure.

"These are all difficult decisions and they all have serious ramifications for citizens," says project leader Frank Lee, who is director of Drexel's Entrepreneurial Game Studio. "If by playing this game people gain a better understanding of the real effect of policies, they can become even more effective advocates for their communities."

Lee is working with Gossamer Games, an award-winning Philadelphia game design company run by alumni of Drexel's Entrepreneurial Game Studio, to release SIM-PHL for Android and iOS devices in 2021.



Elizabeth Malsin

MEDICINE

ELIZABETH MALSIN MD '11

As the attending physician of record in charge of caring for the pandemic's first double-lung transplant recipient, Elizabeth Malsin has seen firsthand the damage COVID-19 can wreak even on patients in their prime. — *Jen A. Miller*

"...some people in their 30s we can't even get well enough to survive a transplant."

The patient was fit, active and only 28 when she contracted COVID-19. But the disease conspired inside of her with a pre-existing autoimmune condition, and soon Mayra Ramirez was struggling to live. On April 26, she ended up at Northwestern Memorial Hospital in Chicago, where on June 5 she became the first known COVID-19 patient in the United States to receive a double-lung transplant.

The job of getting Ramirez well enough to survive the transplant belonged to Elizabeth Malsin, MD, a 2011 Drexel College of Medicine graduate who specializes in pulmonary and critical care at Northwestern Memorial. From the time Ramirez arrived in the hospital's COVID Intensive Care Unit until her transplant, Malsin was one of three rotating physicians who took turns as "quarterback" on her case.



It takes a team of ICU physicians, specialists, nurses and other rotating care providers to care for seriously ill patients with COVID-19, says Malsin.

"For days, she was the sickest person in our COVID ICU and possibly the entire hospital," Malsin recalls.

At first, caring for Ramirez meant just keeping her alive while a ventilator and extracorporeal membrane oxygenation (ECMO) machine took over for her lungs and heart while her body fought the virus.

"COVID caused irreversible damage and scarring in her lungs, and her lungs weren't getting any better," Malsin says. "They were very stiff. If you look at them after they were explanted, they were like swiss cheese."

In time, Ramirez cleared the virus, and her team was able to get her well enough to be considered to be a good candidate for transplant. Malsin worked with the transplant team to get her ready for the surgery, and coordinated after care. Seventy-two days later on July 8, with her breathing restored, Ramirez was able to go home.

Northwestern Memorial Hospital does about 40 to 50 lung transplants a year, and Malsin normally sees about half of these patients, she says.

As of the end of August, the hospital had done three additional COVID-19 double-lung transplants.

By then, Chicago's summer surge had abated, and Malsin says the number of patients in their COVID Intensive Care Unit was back into the single digits.

Now, as in other parts of the country, the unit is seeing younger patients, who maybe thought that they didn't need to worry, says Malsin, who is 35. She says that although dramatic complications are relatively rare among younger patients, she's seen "people in their 30s that we can't even get well enough to survive a transplant."

It's more likely though, she warns, that young people will pass the virus on and hurt the people they love. "Think about people other than yourself," she says.

Faces

Faces

ATHLETICS

LIFE INSIDE THE 'NBA BUBBLE'

Malik Rose just spent three months at Disney World with the NBA, and hey, that's not terrible. — *Mike Unger*



Three weeks into his new job with the National Basketball Association, Malik Rose found himself in the middle of a bubble. Not just any bubble — The Bubble.

The NBA was the first major American professional league that opted to isolate everyone — players, coaches, referees and a select few support staff and reporters — in order to protect its season from coronavirus outbreaks.

Twenty-two teams entered ESPN's Wide World of Sports complex at Disney World in Orlando. For three months, the teams would play their full schedule in the complex's three empty arenas and agree to strict rules and virus testing. Rose, who started his job as vice president of basketball operations on June 22, entered the complex on July 12 and didn't plan

to leave until the NBA crowned a champion in October.

"It's about 40 square miles," Rose said of the Wide World of Sports complex, which is serviced by hotels with full amenities for the players. "The food's pretty good. There's plenty to do for the players, and they're the most important part. Fishing, bowling, movies, golf. I'm missing my family like crazy. Thank god for FaceTime and Zoom. That's probably the hardest part for me, being away from [my wife, Tiffany, and two children] here in the bubble."

The NBA's experiment saved the season and kept basketball alive, which has always been important to Rose, who attended high school in Philadelphia and stayed home to go to Drexel. As a senior he led the Dragons to

their first-ever NCAA Tournament win when he scored 21 points and grabbed 15 rebounds in an upset of Memphis. He graduated in 1996 with a dual concentration in computer information systems and in teacher preparation and was selected in the second round of the NBA draft. (He later received a Drexel honorary doctorate and completed a master's of science in sports management.)

"Getting drafted was great especially during that time because Philly had tons of guys in the NBA," says Rose, a member of Drexel's Janet E. and Barry C. Burkholder Athletics Hall of Fame. "Rasheed Wallace, Cuttino Mobley, the list goes on and on. I was never on their level in high school but I was able to make it to the NBA along with them."

Rose did more than make it. Although he was never a star, he played in the league for 13 seasons, winning two titles with the San Antonio Spurs (including in 2003, when he averaged a career-high 10.4 points per game), coached by the legendary Gregg Popovich.

"When I won championships, it's hard to describe those moments," he says. "For me it's just realizing that you're the best in the world and this is what all that work was for. This is what running in the heat or swimming or lifting when you're tired was for. Coach Popovich is a great, great man. He cares a lot about his players and people in general. The thing I took away most from him was preparation. He's probably the most prepared guy in the game. That goes for on and off the court. I'm always trying to learn something new. Maybe that's why I took this job on the league side. Just being prepared for anything if and when I get a chance."

Since his playing days, Rose has served as a television analyst for Philadelphia 76'ers games, worked in the front offices of two NBA teams, and was general manager of a minor league franchise. When the opportunity arose to work in the league office, he leapt at it.

"Primarily we're a liaison to the teams," he says of roles he and his fellow vice president of basketball operations, David Booth, play. "As former players we understand what they're going through. We're basically the NBA's eyes and ears — their connection to the teams. We try to get ahead of problems and issues. We also have input on everything that goes on in the NBA as far as referees, analytics, strategy, NBA International, all the events. It's a pretty heavy lift, but I enjoy it because it deals with basketball."

"I've been around the game of basketball since I was 8 and it's provided a tremendous life for my family and me," he says. "I haven't worked a day in my life, thank God."

See a full roster of donations at [Drexel.edu/24](https://drexel.edu/24)

RAISED

\$885,864

DONORS

4,035

The tracking will include DNA samples from blood and nasal swab samples during medical care.

MEDICINE



Beginning in the first 36 hours of patients' time in the hospital, researchers will track study participants in the hospitals for up to 28 days.

Researchers will also get samples during patients' follow-up appointments every three months, for up to a year, to assess their recovery and level of immunity, if any.



Why Do Some COVID Patients Fare Better?

Drexel's College of Medicine and Tower Health are among 10 leading medical institutions nationwide to embark on a study funded by the National Institutes of Health's National Institute of Allergy and Infectious Diseases intended to answer the many baffling questions about COVID-19.

The "ImmunoPhenotyping Assessment in a COVID-19 Cohort" study, or IMPACC, will study approximately 2,000 patients nationwide who are undergoing treatment for COVID-19 in a hospital. Drexel and Tower researchers are tracking adult COVID-19 patients at Tower Health facilities. The research will compare severity of the disease with amounts of the virus detected.

All this information, researchers say, may help in improving care for COVID-19 patients.

"We look forward to harnessing our expertise in infectious diseases to garner critically important insights into why some patients fare better than others against this devastating disease," says principal investigator Charles B. Cairns, MD, the Walter H. and Leonore Annenberg Dean of the College of Medicine and senior vice president for medical affairs. "As the work could not be more urgent and the stakes could not be higher, I'm gratified knowing my Drexel research colleagues and exceptional care team partners at Tower Health may help turn the tide against COVID-19."

Virtual Day of Giving a Big Success

Undeterred by the pandemic that forced the University's day of giving to go completely online this spring, Dragons came together in impressive numbers on June 24 to support student success at the University.

Altogether, Drexel's "24 Hours of Impact" event raised \$885,864 from 4,035 Dragons throughout the day's events, which included themed, virtual scavenger hunts, videos and social media.

This year, Institutional Advancement encouraged donations to the Student Emergency Fund and Operation Graduation, two funds that provide emergency aid to students experiencing unexpected financial crisis. In the midst of COVID-19, the funds helped students get home during the spring campus closure, gain access to virtual learning resources, and address other unexpected situations that could have jeopardized their education.

"The call to action was truly to help drive student success, and Dragons really stepped up," says Ivy Lane, executive director of The Drexel Fund.

Though the day looked different, one thing was consistent: Donors affiliated with the Drexel Athletics Department once again made up the majority of the individual gifts, with Drexel's wrestling team securing the most total gifts for the fifth year in a row, followed by men's soccer, club ice hockey and women's lacrosse.



COMMUNITY

8.12.20

CIVIL DIALOG

Social distancing has sharply curtailed our ability to speak together, yet rarely have there been so many urgent social issues to discuss.

Police reform, sexism, racism, COVID-19... these charged topics are all on the table right now. And for four evenings in August, they were also on the wall.

From Aug. 12–15, a team of Dragons turned the side of a 7-story academic building on Drexel's University City campus into a giant scrolling Twitter feed for community discourse.

The interactive art installation, called Civil Dialog, was produced by a team of students and alumni led by Digital Media Professor Frank Lee, who took inspiration from a similar project called Social Graffiti created by Westphal College of Media Arts & Design students. From their @Civil_Dialog Twitter account, the team moderated and selected responses to be projected onto the façade of Drexel's Nesbitt Hall. The project sought to create a public space that would allow a form of civil discourse for people anywhere in the world.

"We really wanted this to be a chance for people to express thoughts and feelings that have been weighing on them during the pandemic," says Lee. "It's important that we all keep talking about these issues in a civil fashion. In many ways this conversation has already been happening, so this event is just one way to remind us that we are all in this together and we need to do our best to listen to and support one another."

Both the Twitter thread and building display were live streamed on Twitch and Twitter Periscope.

Topics for the conversation were seeded by students from Drexel's Pennoni Honors College.

The project was supported by the John S. and James L. Knight Foundation. — *By Britt Faulstick*

1 THE PROFESSOR

Professor of Digital Media Frank Lee is known for lighting up building fronts with interactive art installations. In 2013, he programmed the exterior LED lighting array of the 29-story Cira Centre to run a gigantic arcade game of Pong, and in 2014 he did it again with the game Tetris. Most recently, he used the building to share new games created by local middle-school students. He is director of Drexel's Entrepreneurial Game Studio, a startup incubator for game studios that he founded in 2013 to seed a Philadelphia gaming economy.

2 THE PROJECTION

The animated Twitter feed was projected in high definition above University City on the side of Nesbitt Hall at 33rd and Market streets, home to the Dornsife School of Public Health. "We want this to be a space where residents and viewers can develop empathetic views and become co-creators of public space — both virtual and on Drexel's campus," says Lee.



JEFF FUSCO

3 THE ALUMNUS

Game art and production graduate Tom Sharpe '16 ran the Twitter feed during the installation. Sharpe is the founder of Gossamer Games, a Philadelphia game studio startup he began while a student in Lee's Entrepreneurial Game Studio. A number of other Entrepreneurial Game Studio alumni and students from Westphal College also helped to execute the project, including Utkarsh Dwivedi, Kate Wagner, A.J. Easterday, Sarah Roach, Anna Panczner, Isabella Haro-Uchimura and the students of DIGM 591 from winter 2020.

SOCIAL

IT'S TIME TO UNDERSTAND WHAT

JUSTICE

MATTERS IN PEOPLE'S LIVES.

SYLLABUS

WRITTEN BY SONJA SHERWOOD • ILLUSTRATIONS BY DIANA EJAITA

WHEN GEORGE FLOYD died under the knee of a white police officer on a Minneapolis street this past May, the world collectively recoiled in horror. His final eight minutes and 45 seconds of life, captured on cellphone video, exposed only the latest in a litany of high-profile deaths of Black citizens that had spawned the Black Lives Matter movement a half dozen years earlier. This summer, it became a truly mass movement, with huge multi-racial demonstrations in cities around the world and even in many smaller American towns unaccustomed to such activism. Protesters chanted the names. There were calls to change how communities are policed. In some U.S. cities, overwhelmingly peaceful marches were followed by violent confrontations.

But the movement also energized a much broader reckoning with the enduring injustice wrought by the nation's fraught racial history and growing economic inequality. And for so many institutions in American society, it raised challenging questions. What does it mean to be "anti-racist"? Does "colorblindness" represent equality, or does it devalue difference? And how can an increasingly diverse country, despite the genuine progress that's been made, finally address the systemic racial inequality that has been further revealed in the deeply disproportionate impact the pandemic has had on communities of color?

At Drexel, these questions consumed administrators, faculty and students throughout the summer and fall, ushering in a season of introspection that President John Fry called "long overdue."

"We are not just going to talk," said President Fry during a June 5 virtual Town Hall on race. "We are going to develop both short- and long-term goals and then take tangible and substantive actions to

achieve these goals. Our commitment will be to change Drexel, deeply and fundamentally, together."

Initial changes have been both symbolic — recognizing Juneteenth as a University holiday and naming Oct. 12 Indigenous Peoples' Day — and concrete, such as establishing a Center for Black Culture in the Rush Building and launching an assessment of Drexel's Police Department. To advance scholarly work on racial inequity, the University awarded 22 faculty members with grants from a \$100,000 Rapid Response Racial Equity Project Award fund.

Drexel also convened an Anti-Racism Task Force of more than 100 students, faculty, staff and alumni in 11 subcommittees whose mission is to listen: to collect questions, comments and concerns from all Dragons. The group is developing specific action steps to breathe life into the University's anti-racism pledges. Their recommendations will be shared in University's 2020-2030 Strategic Plan, being finalized this year, and will influence Drexel actions and priorities for years to come.

Throughout the University, meanwhile, syllabi and lecturers are answering the need for explanation and representation. In the spirit of this as a teachable moment, *Drexel Magazine* asked faculty members who are conducting relevant scholarship to suggest one work from their area of expertise that illustrates the issues compelling calls for an end to systemic racism. Among them are professors of all races doing scholarship in justice reform, data bias, health disparities, identity and workplace discrimination, among related fields. They drew from their course material, their research or their personal readings to help us understand the moment and, hopefully, to grow from it.



Edward Kim

Associate Professor, Department of Computer Science •
College of Computing and Informatics

Kim conducts research in computer vision, sparse coding and artificial intelligence. His current work examines racial and gender bias in the algorithms that underlay artificial intelligence and machine learning.

► Cathy O’Neil. **“WEAPONS OF MATH DESTRUCTION,”**
Crown Publishing Group, 6 September 2016.

We all have a certain worldview that makes sense of the world around us. A worldview can be thought of as thousands of models in our heads, that take what we know, tell us what to expect and guide our decisions. As computer scientists, we can formalize these models into an algorithm and distribute these models at scale. However, what happens when the mathematical models we create are racist, biased or flawed? This is the premise of “Weapons of Math Destruction” by mathematician Cathy O’Neil.

At an individual level, racism is a human predictive model that is built upon faulty, incomplete and generalized data. It is reinforced by confirmation bias and spurious correlations.

Mathematical models, meanwhile, are often marketed as fair and objective. After all, algorithms do not “see” race and are not prejudiced. They base their decisions upon big data patterns and correlations that arise from statistics. This is in part true; however, as uncovered within the book, algorithms that are opaque and deployed at scale can create serious damage.

For example, most people agree that it is not OK to use race when distributing bank loans. But is it OK to use ZIP codes? Should the history of human behavior in a patch of geography determine what kind of loan rate you get? In other words, the algorithm is asking the question, “How have *people like you* behaved in the past?” rather than “How have you behaved in the past?”

It’s important for all of us to be aware that mathematical models learned from big data codify the past. These models often include simplifications and generalizations that do not reflect the complexities of real life. We need to be aware of what the model seeks to optimize, be careful of broad categorization, and when possible, explicitly program moral values and ethical decision-making into the mathematical objectives. In the end, we need to remember that the error or outliers in our dataset are not just data points or mathematical symbols, but rather reflect human injustice, prejudice practices and casualties.



Sharrona Pearl

Associate Teaching Professor, Department of
Health Administration • College of Nursing
and Health Professions

An historian and theorist of the body and face, Pearl researches how we perceive people based on their faces. Other areas of interest include critical race, gender and disability studies; media studies, science and performance; freak shows through history; and the ethics of images.

► Sabrina Strings. **“IT’S NOT OBESITY. IT’S SLAVERY. WE KNOW WHY COVID-19 IS KILLING SO MANY BLACK PEOPLE,”** *The New York Times*, 25 May 2020.

► Roxane Gay. **“REMEMBER, NO ONE IS COMING TO SAVE US. EVENTUALLY DOCTORS WILL FIND A CORONAVIRUS VACCINE, BUT BLACK PEOPLE WILL CONTINUE TO WAIT FOR A CURE FOR RACISM,”** *The New York Times*, 30 May 2020.

In the spirit of this moment, I turn to my own syllabi in health care ethics. The very first two readings I assign purposefully center the voices of Black women scholars to reflect upon the particular ways that racism, history and lack of privilege intersect to disproportionately affect Black people in the United States. These are absolutely ethical and public health issues that are vital to name, acknowledge and identify as part of the struggle against structural violence, discrimination and racism, and to honor the pain, rage and terror that Black people are experiencing at this moment in history.

These pieces are two *New York Times* op-eds that powerfully place the current epidemic and its devastating effects on Black Americans in particular in a historical, cultural and sociological context.

In “It’s Not Obesity, It’s Slavery,” University of California–Irvine sociologist Sabrina Strings challenges the easy and wrong narrative that Black people are dying more because of obesity — it’s simply not true. Strings then carefully shows how health disparities, access and life expectancies among Black Americans can be traced to the continuing and ongoing legacies

of slavery that still see the bodies of Black people as less worthy of health care and support.

In the second piece, “Remember, No One Is Coming to Save Us,” Roxane Gay, currently a visiting professor at Yale University, takes up related themes, highlighting the ways that a vaccine for COVID-19 will staunch the effects of one of the epidemics currently taking the lives of Black Americans, but will offer no suture for racism. As the current pandemic shows and Gay forces us to acknowledge, racism causes death: at the hands of the police and the state, as a result of medical catastrophe, because of poverty. Black lives do not, Gay forces us to witness, matter. Despite the hashtags and rallies and marches, they do not yet matter. The longing to return to normal is no longing for those for whom normal is also death.

These pieces are not just beautifully written, carefully researched and narratively impactful. They are not just compelling, and personal and profound. They are the mirror that we need to the past, and the framing we need of the present, if we are to create a future in which Black lives matter to everyone.



Bruce Katz

Co-Founder and Director, Nowak Metro Finance Lab •
Lindy Institute for Urban Innovation

Katz is the director of the Nowak Metro Finance Lab within Drexel’s Lindy Institute for Urban Innovation, which seeks to equitably advance cities and train the next generation of urban leaders. Currently, the lab is developing a scorecard of minority-owned businesses to troubleshoot economic recovery.

► Ta-Nehisi Coates. **“THE CASE FOR REPARATIONS,”** *The Atlantic*, June 2014.

“The Case for Reparations” by Ta-Nehisi Coates is one of the most powerful indictments of the structural racism that has permeated the U.S. land, housing and financial sectors since the founding of the republic.

Coates’ essay shows in excruciating detail how a toxic mix of government policies, predatory practices and parasitic capital have not only suppressed the growth of Black wealth in the United States but have also extracted income and assets from families living in segregated neighborhoods.

One cannot discuss the current state of Black wealth and Black home- and business-ownership in the United States without understanding Coates’ painful recitation of history. The COVID-19 crisis has precipitated a massive recession among small businesses that is unlike anything our nation has experienced prior.

At the same time, the civil unrest following George Floyd’s death has exposed our deep racial disparities in income, health and wealth, particularly around business ownership and capital access. Data already shows that businesses owned by people of color have been the hardest hit during the pandemic, given their typical concentration in vulnerable sectors, their low capital reserves and their lack of access to capital in general and to federally designed relief products in particular.

Coates’ essay is an inspiration and provocation to the work of the Nowak Metro Finance Lab, which works with partners across the country to assess the impact of economic contraction on minority-owned small businesses and encourage relief efforts.

Jordan Hyatt

Assistant Professor, Department of Criminology and Justice Studies •
College of Arts and Sciences

Hyatt’s research in corrections and reentry focuses on the evaluation of criminal justice policies and interventions. His goals are to help develop actionable, evidence-based public policies that improve humanity, reintegration and public safety for agencies, justice-involved individuals and communities.

► Sarah Esther Lageson. **“DIGITAL PUNISHMENT: PRIVACY, STIGMA, AND THE HARMS OF DATA-DRIVEN CRIMINAL JUSTICE,”** Oxford University Press, 24 June 2020.

The criminal justice system has become increasingly reliant on electronic resources in its day-to-day operation. Understanding this landscape is essential for addressing the ongoing harms and stigmatization of our current system.

In her new book, “Digital Punishment: Privacy, Stigma, and the Harms of Data-Driven Criminal Justice,” Rutgers sociologist Sarah Esther Lageson convincingly outlines just how pervasive — and potentially harmful — these datasets can become when they are posted online and made available to the general public. The core of the modern criminal justice system is the billions of records that are created as the system functions. Most are well-protected, and access is limited, but many are not. These include electronic law enforcement blotters, listing out the names of everyone who has been arrested by the police, inmate lookups provided by correctional agencies and publicly available criminal dockets hosted by local court systems.

While this has arguably increased both transparency and efficiency, Lageson argues that these datasets also magnify the collateral consequences and the stigma of a conviction, especially for minority and impoverished individuals. Criminal court data, for example, are often purchased in bulk by for-profit companies, combined with other information like credit histories, and then sold as unofficial background checks for employment and housing. Mugshots and jail booking photos are posted on other websites, even when the individual is found not guilty, and may remain public unless a fee is paid.

Through these channels, criminal justice datasets are coopted and monetized by weakly regulated for-profit companies, Lageson claims, and individuals are revictimized. These online records are often just a Google search away, shadowing individuals for the rest of their lives, even when their convictions are decades old.



Digital Punishment clearly describes a modern Pandora's Box — after all, the internet never forgets — while also providing important new insight into the intersection between our networked society and a criminal justice system that still operates under assumptions about privacy, security and harm that are more appropriate for an analog world.

Brea M. Heidelberg

Associate Professor and Program Director, Entertainment & Arts Management • Westphal College of Media Arts & Design

► **"THE WIRE."** Written and produced by David Simon, HBO, 2002–2008.

In the field of arts management, helping artists tell compelling stories is the most meaningful part of our work. We believe that the arts can reflect and change the world.

To that end, I would encourage everyone to watch season four of David Simon's crime drama "The Wire," which ran on HBO in 2006. Over its five seasons on television, the show created an in-depth portrayal of the narcotics trade in Baltimore that examines the issue from the vantage points of drug dealers, law enforcement and those suffering from drug addiction, using that specific context to highlight racial inequities and critique capitalism.

If you are able to see all of the characters as human and deserving of the kind of grace usually reserved for white middle- and upper-class individuals, then seeing the devastating intersection of race and socioeconomic status, specifically for the Black poor, can illuminate concrete examples of the issues discussed by Black scholars throughout the history of the United States.

The fourth season in particular deals with the education system through the eyes of young Black boys in a purposefully underfunded middle school housed in a low-income area. (Note the focus on boys only; I would argue that sexism prevents any meaningful storytelling from a Black girl's perspective, and that we can see that silencing echoed in public policy such as the Obama Foundation's My Brother's Keeper Alliance.)

RECOMMENDED READING: DREXEL'S DEPARTMENT OF SOCIOLOGY COMPILED "THE PHILADELPHIA RACIAL JUSTICE SYLLABUS," TO EXPLORE OUR CITY'S FIGHT FOR EQUALITY THROUGH HISTORY, AVAILABLE AT BIT.LY/35TAZ6Q.

ALUMNI WITH QUESTIONS OR CONCERNS FOR DREXEL'S ANTI-RACISM TASK FORCE CAN EMAIL ANTI-RACISM@DREXEL.EDU.

When I first watched this season many years ago, it broke my heart. I have heard many people discuss "The Wire" through the lens of "poverty porn," where privileged audiences consume hardship as spectacle — but the stark difference between the way addiction within the Black community is criminalized while opioid addiction in the predominantly white population has received empathy and support is unmistakable.

This viewing is especially important for a Drexel alumna, faculty member, parent and Philadelphia resident like me. As a student, I took part in the University-wide course that plopped Drexel freshmen into underfunded public schools to teach financial literacy. I now understand that the icky feeling I had while teaching third graders about financial responsibility was an aversion to participating in a savior-esque initiative promoting the idea that disenfranchised people can bootstrap themselves out of purposeful marginalization by saving part of their wages. I view that season of "The Wire" and its commentary on inequitable school funding through the eyes of a parent looking at the grossly inequitable public-school system in Philadelphia. I look at how property and its relative value is discussed during that season from the vantage point of being a Drexel faculty member who is eligible to take advantage of Drexel's home purchase assistance program, but is unable to use it due to a lack of intergenerational wealth, a reality for most Black families. And I look at how the University's development influences gentrification in surrounding neighborhoods that has pushed out long-time residents and inflated home prices.

With exhausted skepticism, I view the plight of the boys depicted in that season through the eyes of a city resident who is watching the space where Drexel is, in partnership with the school system, erecting a building to house Samuel Powel Elementary and Science Leadership Academy Middle schools. At a moment when members of both the University of Pennsylvania and Drexel communities are banding together to ask the nonprofit institutions to voluntarily surrender their property tax exception, this is a particularly timely watch.





Ramesh Raghupathi

Professor, Department of Neurobiology and Anatomy • College of Medicine

Raghupathi's work in the College of Medicine centers on examining the effects of traumatic brain injuries. He is studying, in collaboration with Drs. Andrea Wiechowski and Giacomo Vivanti of the A.J. Drexel Autism Institute, whether racial disparity contributes to delayed diagnosis of autism spectrum disorders in children with brain injury.

▶ Ed Yong, "HOW THE PANDEMIC DEFEATED AMERICA" *The Atlantic*. September 2020.

▶ Vann R. Newkirk II. "AMERICA'S HEALTH SEGREGATION PROBLEM," *The Atlantic*. 18 May 2016.

▶ Vann R. Newkirk II. "THE FIGHT FOR HEALTH CARE IS REALLY ALL ABOUT CIVIL RIGHTS," *The Atlantic*. 27 June 2017.

While most of us are aware of the death toll and economic consequences of the COVID-19 pandemic, less attention has been paid to the pandemic's disparate racial impact, which has been particularly adverse for Black, indigenous and other minority communities. On these topics, I turn to writers in *The Atlantic*, particularly science writer Ed Yong. Both online and on Twitter, Yong makes a strong case for how the ineptitude of the public health system and the misinformation engine on social media together pushed the country to the depths of illness and death.

In the September issue of *The Atlantic*, he provides a backgrounder on the situation that describes how and why a particle smaller than an average human cell brought the world's most powerful country to its knees economically and medically. He extensively details why the United States was hammered by the pandemic — from the inequities of the health care system to the inadequacies of the infrastructure of hospitals and buildings.

The part of his essay that particularly caught my attention was when he delved into the reasons why almost 50 percent of minorities and 30 percent of Black Americans do not have adequate (read: any) health

care coverage. Whether this was a consequence of segregationist policies from the middle of the 19th century or the systematic dismantling of civil rights for minority communities, it is clear that racial disparity has a large effect on the health of these groups. In turn, this leads to reduced economic success: Without good health, can workers continue to work? Without sustainable jobs, do workers have access to good health care?

Yong's articles and earlier work by Vann Newkirk in *The Atlantic* provide a very good explanation for the causes and consequences of a system that marginalizes communities of color.

Kathleen Powell

Postdoctoral Fellow in Criminology and Justice Studies, Department of Criminology and Justice Studies • College of Arts & Sciences

Powell's research broadly assesses the collateral consequences of involvement with the justice system, with a focus on health and inequality over the life course. She is currently studying racial differences in the link between school suspensions and arrests.

▶ "RAISED IN THE SYSTEM." Produced by VICE News. HBO, 6 April 2018.

I often screen the VICE News documentary "Raised in the System" in my courses because it poignantly and powerfully explores the challenges faced by Black youth in the justice system and the failure of institutional responses to meet their needs.

The 50-minute documentary, which aired in 2018 in the sixth season of HBO's weekly televised news magazine "VICE News," uses firsthand accounts of persons actively or previously incarcerated. It uniquely elevates their voices with scenes and interviews that illustrate the root challenges they faced leading up to their involvement in the juvenile system, such as under-resourced schools, traumatic personal histories or parents who are absent, sometimes due to incarceration.

Further, "Raised in the System" considers how juvenile courts' responses to delinquent behavior are often more closely aligned with goals of retribution than foundational rehabilitative principles of juvenile justice. While some scenes provide hope by exploring programs rooted in social support and mentorship, viewers see that many other court-administered sanctions fail to prioritize treatment as a way to improve these youths' lives and to prevent future crime.



In all, the producers make a compelling case that injustices will proliferate across generations if we don't solve problems in juvenile justice and policy responses continue to prioritize punishment over treatment for the most vulnerable youth in society.

Amy Carroll-Scott

Associate Professor, Community Health and Prevention • Dornsife School of Public Health

Carroll-Scott's research focuses on understanding and addressing urban health inequities and underlying social inequities. This research consists of rigorous social epidemiological and mixed methods studies applied to the lived experience of urban neighborhoods and schools, driven by community-based participatory approaches.

▶ Camara P. Jones. "ALLEGORIES ON RACE AND RACISM." TEDxEmory, July 10, 2014.

▶ Camara P. Jones. "LEVELS OF RACISM: A THEORETIC FRAMEWORK AND A GARDENER'S TALE." *American Journal of Public Health*. August 2000, pp. 1212-1215.



As a public health researcher and healthy-equity advocate, I work closely with Philadelphia community organizations and leaders in neighborhoods experiencing poor social, economic and health outcomes to document and understand the root causes. My desire is to co-create and advocate for new public health programs or policies that will lead to community health improvements. However, these efforts are doomed to failure unless they are able to address the systems of oppression that created these severe and persistent racial inequities in the first place.

To illustrate this, I turn to Camara P. Jones, a preeminent physician and researcher in the field of public health. In her TEDx talk called "Allegories on Race and Racism" and in an article in the *American Journal of Public Health*, Jones shares allegories to illustrate how racism impacts the health of individu-

als and of populations over time. In her telling of "The Gardener's Tale," for instance, a gardener sows red flowers in a bed fortified with fertile soil and sows pink flower seeds in rocky soil. Season after season, the red flowers flourish and grow tall, while the pink flowers do poorly. The flowers' divergent outcomes seem natural but are actually structural. I teach these allegories to students in the Dornsife School of Public Health to empower them to take action to reduce racism as a primary strategy for achieving health equity and social change.

If we don't transform our systems of government, education and health care into equitable and anti-racist systems, these inequities will persist.



Critical Conversations in Urban Education

School of Education • Submitted by co-chairs Kristine Lewis Grant and Sherrri Manson, and committee members Ayana Allen-Handy and Deanna Hill

Since 2012, *Critical Conversations in Urban Education (CCUE)* has been a vehicle for action and critical dialogue on issues important to the education of youth in urban settings, preparing urban educators and developing university-community partnerships. In February 2018, CCUE hosted a screening and panel discussion on "Teach Us All."

▶ "TEACH US ALL." Directed by Sonia Lowman. Netflix, 2017.

"Teach Us All" is a groundbreaking documentary that honors the "Little Rock Nine" — the nine Black students who desegregated the all-white high school in Little Rock, Arkansas, in 1957. The documentary takes a critical look at educational inequities that continue to plague the United States more than six decades later. Filmmaker Ava DuVernay, whose company distributed the film, told "CBS News" in 2017, "It's not true that education is equal in this country, because there's still very intense segregation happening in all kinds of forms all over this country."

DuVernay likens the film to her own 2016 documentary "13th" about racial inequities in mass incarceration, and says of Lowman, "What I loved about her film and what she did is — I think it spoke to my film, '13th,' in a way — in that we're trying to deconstruct the truths that are supposed to be evident, are actually falsehoods, are actually kind of veils pulled over an ugliness that America hasn't dealt with."

SHERRI MANSON
Program Administrator and Assistant to the Associate Deans

DEANNA HILL
Associate Clinical Professor

KRISTINE LEWIS GRANT
Clinical Professor

AYANA ALLEN-HANDY
Assistant Professor



JEFF FUSCO

A PHILOSOPHY OF WEST **PHILADELPHIA'S FUTURE**

Two major construction projects underway this year in West Philadelphia cap a decade of building that has brought over a million square feet of new housing, retail and offices to campus, where Drexel is laying the foundation for a district of innovation and inclusion. Virtually all of it yields income and assets for Drexel. None cost the University a dime.

BY LINI S. KADABA

HERE, AT 30TH and Market streets, a grassy new city park has opened adjacent to Amtrak's bustling 30th Street Station. Graceful, 30-foot down redwoods in huge concrete planters ring the 1.3 acres, and at its center, a striking elliptical hillock rises, its lawn crisscrossed with granite pathways and bordered by café tables with yellow umbrellas.

This is Drexel Square. Before, this space was an asphalt parking lot alongside an unadorned office building. Its transformation is the preamble to a swath of development that will ring the square with landscaped streets and modern high rises to house a new life sciences and tech innovation district that will change West Philadelphia.

On this sweltering July afternoon, a suited President John Fry with a snug blue tie lingers in a spot of shade. As he savors this first fruit of a master plan 10 years in the making, Fry unspools a far-reaching vision, one that's research-centric, but also civically engaged, for what's to come here and beyond — all built on what he calls "really sweet deals."

"We get to curate what we need," Fry says, "but use other people's financial capital to achieve our goals."

For instance, Drexel needed a childcare center. It needed more beds for its swelling student population.

It needed accommodations for visitors and parents.

Drexel didn't have the financial depth for such projects, but it snared all three and then some through public-private partnerships with independent developers: a childcare facility inside Radnor Property Group's Vue32, a hotel with Hospitality 3's The Study at University City, and student housing with American Campus Communities' Chestnut Square, University Crossings and Summit. Most include street-level retail, restaurants and services.

Put simply, third-party developers erect, at their own expense, buildings on Drexel-owned land, for which Drexel collects ground rents as well as options to occupy space on favorable terms for classrooms, labs and faculty offices. At the end of the leases, which range from 50 to 99 years, ownership of the buildings reverts to Drexel.



JEFF FUSCO

President John Fry, on the uCity Square site where a Drexel partner is constructing a new building to house two overcrowded public schools that serve 800 K-8 students in West Philly.

The University has always taken the long view with its land acquisition and is now capitalizing on past investments. Third-party developments monetize the land, resulting in cash and appreciated assets that diversify Drexel's endowment portfolio and enhance its balance sheet. Current annual ground leases with American Campus Communities, Radnor Property Group and Hospitality 3 generate \$1.3 million annually to support University operations. Over the full term of these long-term leases the University is projected to receive over \$60 million.

Best of all, the projects free up Drexel to focus its own expenditures on academic investments: classrooms, laboratories and endowed chairs. "If you do it well, public-private partnerships are a win-win for the developer, the University and the end users within the University — and the community benefits," says Donald E. Moore, who was Drexel's vice president for real estate and facilities from 2018 to October 2020.

CIVIC ANCHOR

Over his long career, Fry has always had an urban planner's eye. As chief operating officer at the University of Pennsylvania, his pioneering use of public-private partnerships at the Ivy unleashed a wave of revitalization in West Philadelphia. Fry continued that charge as president of Franklin & Marshall College, where he brought together partners for the \$75 million Northwest Gateway reclamation project — one of the largest in the history of Lancaster, Pennsylvania.

"It's a way to secure the future," says Harris Steinberg, executive director of the Lindy Institute for Urban Innovation, a Drexel think tank. "John took the lessons he learned from his Penn days and walked purposefully into the role of being a civic leader, an anchor institution. He brought it to Drexel with vision."

From the get-go, Fry understood the power of unlocking Drexel's prime location to expand campus life without draining Drexel's financial resources, in a way that also creates jobs and resources for the low-income neighborhoods to Drexel's north.

"John Fry was one of the very first to realize that universities had an obligation to tear down the walls and barriers that separate them from their communities and become a true partner in the community development of their neighborhoods," says Richard Florida, an urban studies theorist at the University of Toronto.

Last year, while a Philadelphia Fellow with the Lindy Institute for Urban Innovation, Florida noted that Drexel — with its University-wide diversity policies for local hiring, procurement and construction contracts — has moved the needle by "rethinking its institutional bound-

aries, including finding new ways to make the campus physically more inviting to neighbors."

Drexel Square is one of those ways, but it's just the beginning of something vastly larger. The \$14.3 million makeover is phase one of Schuylkill Yards, a massive \$3.5 billion district of purposefully designed mixed-use buildings and streetscapes that Philadelphia-based developer Brandywine Realty Trust will construct across 14 acres of Drexel land over the next 20 years.

With palpable excitement, Fry explains why the park is a point of pride. "The single most valuable piece of real estate in Schuylkill Yards is this — the square," he says. "Any sensible person would have put up a 50-story building right here. Inclusion is symbolized by the fact we didn't. We put a park."

The square is the first thing one sees when arriving in Philadelphia from an Amtrak train, and it serves as a gateway to the campus and to the future Schuylkill Yards district. It will put out a welcome mat to the larger community with yoga classes, art exhibits, concerts and more, forming an epicenter for social engagement (well, post COVID-19 at least). It also acts as a bold statement piece — a sign of Fry's commitment to the civic health of the larger community that he has embraced from his first days at Drexel.

"We wanted to make the point that because it's the most valuable space," he says, "it should be here for the public."

With Drexel Square complete, Brandywine is turning toward JFK Boulevard, on the square's north side, where two modern high-rises will fill what is currently a sea of asphalt. The structures will house nearly 1 million square feet of apartments, offices, labs and shops. JFK's faceless lanes will be made over into a tree-lined, pedestrian-friendly thoroughfare finally worthy of the name "boulevard." Undeterred by the pandemic, Brandywine is also accelerating development of a nearby parcel at 32nd and Market streets, to enhance "flow" between the towers and Drexel's campus.

"The biggest challenge in the university space is how to allocate resources," says Jerry Sweeney, president and CEO of Brandywine. "We've found that universities that think broadly create the most value over the shortest period of time at the most optimal return level." Schuylkill Yards, by way of Brandywine's upfront, long-term ground lease, has monetized \$80 million of land assets held in Drexel's endowment, which totaled \$811.3 million at the end of fiscal 2020.

"You begin with simple geography," Fry says of his vision.

University City, sprawling on the west bank of the Schuylkill River, is the true "center of the city," he and others contend, given its proximity to the train station and cutting-edge "eds and meds" institutions. Add in smart real estate buys by Drexel over the years, including in 2011 the parking lot that is now Drexel Square, and "it didn't take a genius to figure out that what we need to do is begin to think about those big parcels and how we begin to stimulate meaningful, mixed-use, neighborhood-friendly development," Fry says.

BY THE NUMBERS

\$1.3M

Ground lease income contributed to the University's operations from development of **CHESTNUT SQUARE, THE STUDY, THE SUMMIT** and **VUE32**.

\$80M

Value of land assets converted to cash in Drexel's endowment through the first phase of the development of **SCHUYLKILL YARDS**.

\$26M

Approximate increase in the value of the University's asset balance sheet as a result of the acquisition of the former University City High School site at **UCITY SQUARE** (though some parcels were since sold to Wexford as part of the development agreement).

GROWTH THROUGH INNOVATION

At the time of Drexel's founding in 1891, this area was a grimy, chaotic industrial hub filled with factories, ironworks and slaughterhouses. Anthony J. Drexel chose to build his school close to the workers who roamed this region, to provide them with access and advancement, regardless of race, sex or creed.

"That was not an accident," says Fry. "He thought deeply about that."

Nonetheless, for most of the 20th century Drexel has fallen short of the founder's dream.

Forty-five percent of residents in the 19104 ZIP code, which includes Drexel and Penn, live below the poverty line — more than double the Philadelphia metro area's rate, the Census finds. In his first Convocation speech in 2010, Fry imagined how A.J. Drexel would feel if he strolled through parts of West Philadelphia today.

"I think he would have felt, 'Boy, my institution could have done a lot more but didn't,'" Fry says. "I tried to call the community on that."

Once Drexel chose Brandywine as its projects master developer, Brandywine introduced a \$16.4 million neighborhood engagement initiative as part of Schuylkill Yards. The program is considered the largest of its kind in Philadelphia, and addresses community needs including small, local and minority business development; job creation; affordable housing; capacity building; and educational support. One highlight: About 50 new minority apprentices are either working in the construction trades or on the way to those living-wage jobs, according to Sweeney.

"The objective was to create a true neighborhood, not a collection of buildings, and to have one of the driving predicates of that neighborhood be how we tap into the innovation economy," Sweeney says.

As part of the Drexel Square renovation, Brandywine undertook a \$43 million rehab of the 1954 George Howe-designed modernist Bulletin Building (acquired by Drexel in the '90s) on the square's western flank. Now refaced with contemporary glass and 10,000 square feet of street-level retail, it is occupied by Spark Therapeutics, a gene-therapy biotech with a path-breaking treatment for an inherited retinal disorder. Last year, Switzerland's Roche Holding acquired Spark for \$4.3 billion, a stunning return.

The startup was founded as a result of technology and know-how accumulated at Children's Hospital of Philadelphia. It has grown to 500 employees and plans to hire 100 more this year in spite of the pandemic.

Fry sees Spark's success as emblematic of how Drexel land development can unite academic researchers, student co-ops and local workers around an innovation economy.

"Innovation is symbolized by Spark," Fry says, looking toward the downtown skyline reflected in the Bulletin Buildings' façade of windows. "It is a company with incredible potential for growth and development to change the economy of Philadelphia."

For Spark CEO and co-founder Jeff Marrazzo, the company's expansion in the Bulletin Building offered an opportunity beyond the bottom line: Create a bio-tech ecosystem that supports jobs of the future in West Philadelphia. "I personally wanted to make a bit of statement," he says.

He calls the national dialogue around social justice an inflection point. "We can accelerate a lot of that work," he says. "This foundational decision, where we located, set us up to be able to have that impact. Now, we have to do it more consciously, more aggressively and with more directed programming."

He's on board with Fry's vision, which includes developing a training program for community residents to prepare them for Spark's hiring needs in research, of course, but also in manufacturing, finance, human relations, communications and strategy. The company already participates in the Chamber of Commerce for Greater Philadelphia's Future Ready program that brings middle school students to Spark for an immersive day exploring gene therapy career options. And Marrazzo looks forward to the "natural connections" with Drexel faculty that come with being a block away, as well as continued hires of co-op students and new graduates.

Around the corner, at 3101 Market Street, is another marker of Drexel's growing innovation district: The Center for Functional Fabrics, led by fashion designer turned tech innovator Geneviève Dion, professor of design in the Westphal College of Media Arts & Design.

In fall 2019, state and federal government officials celebrated the opening of the Pennsylvania Fabric Discovery Center inside Dion's new lab, surrounded by advanced machinery for prototyping tomorrow's textile inventions: a 3D body scanner, an ultrasonic sewing machine, and textile testing machines.

Funded by the Department of Defense and the Commonwealth, the venture aims to restore Pennsylvania's standing as an American textile manufacturing hotspot.

"By marrying design to technology, Professor Dion has the means to rebuild Pennsylvania's textile manufacturing industry, this time with an unassailable competitive advantage," says Richard A. Greenawalt '66, chair of Drexel's Board of Trustees. "I'm proud that her discoveries will seed new industries, and that Drexel had the imagination to back her years ago."

"It's not just the place," Dion says. "Schuylkill Yards is a philosophy about what can be the future."

'CRADLE TO CAREER'

Meanwhile, six blocks to the west, rising like a twin bookend to Schuylkill Yards, is the \$1 billion uCity Square development.

The construction site at 36th and Warren streets will house a \$40 million building for two public schools serving 800 students in grades K-8. It is being developed by Baltimore-based Wexford Science & Technology, another of Drexel's third-party partners. Drexel staff spent six years raising funds to pay for the project — an investment of manpower that ensured the construction of a new school for the neighborhood at no direct cost to Drexel.

Here is where Fry envisions a route for West Philadelphia residents and their children to enter the innovation hub Drexel is building at Schuylkill Yards.

As Fry walks past the uCity Square construction site, where the two-story frame of the school is underway, an excavator beeps and hums over a gravel patch.

"Take a look all around you," Fry says. "This is going to be amazing."

In 2014, Drexel University City Development, a joint venture between the University and Wexford, purchased a 14-acre site from the School District of Philadelphia that held the former University City High School, thereby expanding the uCity Square footprint that Wexford already was developing along Market Street.

The complex deal was no sure-fire proposition. Drexel's hope to build a facility to accommodate the overcrowded Samuel Powel Elementary School and the new Science Leadership Academy Middle

School, or SLA-MS, required a careful piecing together of public, private and foundation dollars to pay for construction once the land was acquired, in itself a feat. The School District of Philadelphia will operate the schools and lease the facility from Drexel for a nominal fee.

“It took five or six years to have a creative mechanism to pull it off,” says Moore of the financing. “It took thinking outside of the box. It was one of the more robust discussions I had with the Board of Trustees over a deal.”

Drexel’s persistence paid off. Here, after all, was a chance to create transformational change through what Lucy Kerman, senior vice provost for university and community partnerships, calls a “cradle-to-career” ecosystem.

“We are a University that sees ourselves as deeply engaged in the life of our city and focused on solutions,” she says. “If we educate local children in a location that is in the heart of the innovation economy, these children will be exposed to jobs of the future.”

The dream is that a child born into poverty nearby could achieve prosperity in a generation with a degree and a well-paying job. Drexel also partners with training groups such as the West Philadelphia Skills Initiative to help unemployed adults get jobs on its campus, and its popular Dornsife Center for Neighborhood Partnerships provides an array of resources to West Philadelphia residents.

“We’re in this in a wrap-around way,” Kerman says, “to ensure inclusion of local residents.”

Once again, Drexel’s success has depended on its partner. In Wexford, it found common ground. Executive vice president Joe Reagan says the uCity Square development not only advances the economic development of West Philadelphia but also Wexford’s community-oriented focus through the collaboration with Drexel on Powel and SLA-MS.

“To me it was the perfect alignment,” he says.

Like Schuylkill Yards, this section of campus will meld life sciences, tech, education and entrepreneurship. On a parcel next to Powel and SLA-MS, Wexford is building a multi-story academic tower that will house the College of Nursing and Health Professions and parts of the College of Medicine, which are currently renting space in other parts of the city. The University City Science Center incubator is a neighbor. And last year, Drexel’s College of Computing & Informatics moved into 3675 Market Street, a Wexford-owned building across from the uCity site, uniting for the first time its faculty under one roof in state-of-the-art facilities.

“The exciting key factor is location,” says Dean and Isaac L. Auerbach Professor Yi Deng. “That creates a very conducive ecosystem to drive our

core missions of talent and research development and industry partnership.” Besides collaboration with startups, he expects joint programs with the schools and with nursing and medicine.

Likewise, Laura N. Gitlin, dean of the College of Nursing and Health Professions, anticipates that the college’s move from Center City to uCity in 2022 will expand simulation labs, where nursing students practice disaster scenarios in reenactments with locally hired actors. “We need more space to expand,” she says, “and also to provide better and higher state-of-the-science laboratories.”

Drexel is commencing this forward-looking transformation of West Philadelphia with eyes wide open to past errors, when public-private partnerships displaced communities in the name of “urban renewal.”

In the ’50s, federal housing legislation made it attractive for cities to use eminent domain to acquire land for redevelopment. Around the country, private universities in need of expansion space worked with city agencies to demolish aging neighborhoods around their campuses. Section 112 of the Housing Act of 1949 subsidized these clearances with federal money and permitted liberal interpretations of what constitutes “blight.” At Vanderbilt University, for example, Nashville condemned a middle-class neighborhood of largely white professionals and retirees despite the vast majority of homes being in acceptable condition.

In Philadelphia, the city condemned large sections of West Philadelphia, including Black Bottom, a neighborhood that stretched from 32nd Street to 40th Street and from University Avenue to Lancaster Avenue. Eminent domain spelled the end for a community of predominantly working-class African Americans, renters and small businesses.

In its place, a consortium of “eds and meds” institutions led by the University of Pennsylvania erected the University City Science Center, superblocks for Penn dorms, and parking lots. One parcel was allocated to Drexel, which later built dormitories abutting the residences of Powelton Village.

“If you go to any parking lot in this part of town and you tear it up,” Kerman says, “you’ll see bricks; you’ll see the bones of these neighborhoods.”

Conflict spawned during that era influences relationships between West Philadelphia institutions and its neighbors to this day, and Drexel is determined that in future development, the community be involved.

This is why Drexel insists that hiring and procuring contracts for these projects include the local economy. With a sensitivity to the history of the site, Drexel and its partners are committed to returning some of the old street grid — 37th, Cuthbert, Warren streets — to the development plans. And even when financing seemed like an impossible hurdle, Drexel steadfastly pursued the means to build a public school on the site, as a replacement for the University City High School that closed in 2013.

Drexel’s ongoing conversations and regular engagement with the Powelton Village Civic Association and local homeowners is why, in gaining approvals for

the Summit Tower, Drexel guaranteed Powelton Village residents that it would require all sophomores, in addition to freshmen, to live on campus — a step administrators hope will assuage the kind of town-and-gown frictions that boiled over in the ’70s.

“For years and years, we without ill intention grew and developed and grew and developed,” Fry says, “and it created dynamics within the neighborhood that were very negative.” As the university evolved from a commuter school to a residential one, its student population increased from 3,500 students two decades ago to 25,000 today, he says. Many of those students spill into nearby communities, leading to a market for skinny apartment buildings in the middle of residential blocks, which in turn depresses homeowner occupancy rates.

“That’s on Drexel,” he says, “because we never constructed enough beds to meet our enrollment. We’re trying to reverse some of those trends. We have worked to reset our relationship.”

As Steinberg of the Lindy Institute puts it: “It’s not just real estate deals. It’s not just opening a Starbucks on every corner. There’s a coherent and evolving strategic narrative that is really about the greater good and Drexel’s role in that.... It’s part of our moral imperative.”

Community leaders and residents are watching Drexel’s actions closely, skeptical about gentrification and the changing skyline.

“I think it’s wait and see,” says Stephen Sebeliski, president of the Powelton Village Civic Association. “Schuylkill Yards and uCity Square are in such early stages.” While he expresses hope that the forthcoming school and other commercial development benefit his neighborhood, he says such projects are “always going to be a negotiation, and it’s always going to be trying to work together to do more.”

Gwen Morris, secretary of the Mantua Civic Association, also called on Drexel to find more ways “to open its arms to the community,” to invite residents onto its campus and to get community groups involved earlier in development plans.

Fry says he understands the distrust, especially among long timers who have heard the promises and seen them broken. “Ties to the community are complicated,” he says. “It always will be. I understand that people who live in the neighborhood might be saying, ‘When is this going to happen?’ It takes a while; all of this takes a while.”

In fact, Fry has a 50-year timeline for the transformation he envisions. “We’ve just done the first fifth,” he says. “There’s a long road ahead.”

In the meantime, hints of the future abound in one pocket. Look no further than the Dornsife Center, “the embodiment of what an engaged university can do,” Kerman says. The center opened in the Mantua neighborhood in 2014 offering health checks, creative writing workshops, youth dance programs, computer labs, legal clinics and more — all programs developed with Drexel faculty in response to expressed community interests, she says. At the same time, students get real-world experience and the chance to give back to West Philadelphia.

“It’s the responsible thing to do,” says Rachel Lo-



pez, an associate professor of law at Drexel and director of the Andy and Gwen Stern Community Lawyering Clinic at the center. “[Mantua and Powelton] were here first. They really saw the university as the biggest threat to their existence.” At one early community meeting, Lopez recalls a resident saying, “The dragon is coming to get us.”

Initiatives such as the legal clinic have helped “cut through a lot of that,” she says, “and build a lot of trust. People see us as an ally.”

Angelys Torres, a 24-year-old third-year law student from Chicago, has worked with a team at Dornsife on several cases seeking expungement and pardons. “A lot of people just need to be heard and giving them an opportunity to share whatever grievance they may have and providing some type of solution makes all the difference,” she says of appreciative clinic clients. “It’s taught me a lot of compassion and empathy.” Torres plans to pursue public interest law as a result of the experience.

Ultimately, Drexel’s task is to forge relationships, often one person at a time. That’s how Kerman spends a lot of her day. Ditto for Brian Keech, senior vice president for government and community relations.

“I have spent a career building up trust and confidence with the community,” says Keech, who came to Drexel in 1998 and regularly meets with the Powelton Village Civic Association. “This is hard work, and it takes a lot of time, energy and money to do it. But we believe in it.”

Drexel looks for similar commitment from its developer partners. When the Radnor Property Group was building Vue32, it changed the initial location because residents voiced concerns that the high-rise blocked sunlight for a community garden. In return, residents supported a taller structure.

Wexford also met regularly with civic associations, and based on community input, shifted the future school building from facing Lancaster Avenue to Warren and 36th streets, where the design fit the streetscape better. “It wasn’t ideal from our planning perspective,” Reagan allows. “But OK, we did it. We want to be part of the community.”

And so the give and take goes on.

Looking ahead, on a much longer horizon, Fry is eyeing the air rights over the Amtrak railyard. A study Drexel commissioned concludes a potential 16-million plus square feet for the having, in the mold of Manhattan’s Hudson Yards.

It would be one more investment, not only in Drexel’s future, but in West Philadelphia’s future.

“The work is never done,” he says. “It’s fair to say the promise is there, the need is there, and what we need to do is work at it.”

The future home of Samuel Powel Elementary and the Science Leadership Academy Middle School is being built on Drexel-owned land that the University leases to the School District of Philadelphia for a nominal fee.



Construction on the Powel/SLA-MS public school building paused during the lockdowns but the project is now expected to be complete in time for spring 2021 occupancy.



1 UCITY Despite a temporary slowdown at the start of the pandemic, construction has resumed at the uCity Square site. Wexford Science & Technology is building, at its own cost, new K-8 classrooms at 36th and Filbert streets. When complete, the 87,000-square-foot, two-story building will house students currently attending the Samuel Powel Elementary School and the Science Leadership Academy Middle School, with expected occupancy in spring 2021. Drexel will own the building and lease it long-term to the School District of Philadelphia, which will operate and maintain the facility. Drexel secured private and public funding for the project, including generous contributions from the Lenfest Foundation, PECO, real estate investment trust Ventas, as well as New Market Tax Credits, the School District of Philadelphia, and Redevelopment Assistance Capital Program funding from the Commonwealth of Pennsylvania. The uCity Square parcel will also house a 450,000-square-foot Academic Tower where the College of Nursing and Health Professions

and the College of Medicine will be co-relocated from other locations in the city. Wexford began construction on the Academic Tower in July, and aims for initial occupancy by academic year 2022–23.

2 CHESTNUT SQUARE Drexel's first third-party partnership was in 2012, with Austin, Texas-based American Campus Communities (ACC). ACC spent \$100 million to transform Chestnut Street between 32nd and 33rd streets into a lively block that boasts 361,200 square feet of mixed-used student housing (860 beds) and retail space. ACC developed the space and manages it, while providing annual ground-rent payments to Drexel under a 70-year ground lease.

3 VUE32 The \$72 million, 16-story Vue32 tower was built at 3201 Race Street by Wayne, Pennsylvania-based Radnor Property Group in 2017. It houses a large daycare, sorely needed by Drexel working parents, and

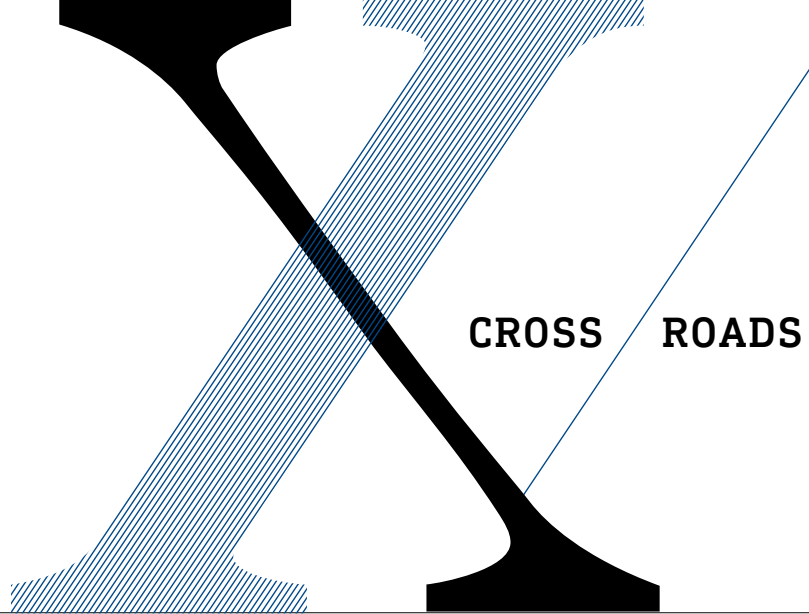
164 apartments. Adjacent to it is the Summer12 market-rate townhomes (including one owned by Drexel for visiting VIPs). The project was named Deal of the Year in 2017 by the *Philadelphia Business Journal*.

4 THE STUDY Several years ago, Fry invited Hospitality 3 to duplicate its sophisticated but comfortable The Study at Yale, where he happened to stay while in New Haven. Opened in 2016 at a price tag of about \$50 million, The Study at University City at 33rd and Chestnut streets provides 212 rooms, 7,000 square feet of banquet and meeting space and a 105-seat restaurant and bar — a welcome abode for visitors to campus.

5 JFK TOWERS This year, Brandywine Realty Trust will begin construction on two towers flanking Drexel Square. The tower at 3025 John F. Kennedy Blvd. will have 200,000 square feet of offices and 326 apartment units. The other, at 3001 John F. Kennedy Blvd., will comprise

775,000 square feet of offices. Later phases of the Schuylkill Yards master plan will eventually build out a total of 14 acres throughout Drexel's campus over a period of 20 years.

6 THE SUMMIT In 2015, American Campus Communities financed and built the Summit, a gleaming, eco-friendly apartment building with street-level retail that rises 25 floors above the corner of 34th Street and Lancaster Avenue. Its 1,315 beds fulfill Drexel's need to house students on campus where they will be less likely to disrupt nearby residential neighborhoods. Econsult estimated that its construction had a one-time economic impact to the city of about \$240 million, including 850 jobs. As ACC was building Chestnut Square and the Summit, Drexel was able to focus on academic buildings: Drexel opened the URBN Center and Gerri C. LeBow Hall, renovated Stratton and Nesbitt halls and modernized several other core facilities.



CROSS ROADS

Healthcare Heroes

Reflections from a doctor and a nurse — one in New York City, one in a tiny county in Montana — on the frontlines. By Louisa Wilson

There have been ups and downs in the nine months since the COVID-19 pandemic hit the United States in earnest, yet with every fluctuation of the virus' trendline, healthcare professionals around the nation have stood firm, serving their communities with dedication and determination.

Avir Mitra, MD '15, and Sara Bonanini, MSN '20, are two such healthcare heroes working on the frontlines of the pandemic in very different environments. Mitra is an emergency medicine doctor in New York City, the country's first COVID-19 hotspot, and Bonanini is an emergency department nurse on the Crow Indian Reservation south of Billings, Montana.

Throughout the pandemic, and as it continues to unfold, these recent Drexel graduates have proven that collaboration, adaptability and strong commitment to community can make meaningful differences in trying times.



Avir Mitra '15
New York City

Mitra and others in the emergency room (ER) at Mount Sinai Beth Israel Hospital in New York City were probably unknowingly seeing patients with COVID-19 back in February, and perhaps even as early as January, but the virus wasn't then top of mind. Mitra, who is assistant professor at the Icahn School of Medicine and clerkship site director for Emergency Medicine at Mount Sinai Beth Israel, remembers vividly the first positive test he ran.

"It really shook me, and the pandemic started to feel very real," says Mitra. "We had already been seeing patients in the emergency room who had traveled to high-risk countries. I remember thinking their symptoms had to be related to COVID-19, but we didn't yet have a test. I remember thinking that COVID-19 might be everywhere and we just didn't know it. And then after we finally

had swabs to start testing, cases really started to rise."

Recalling those early days Mitra continues, "It felt like the ground was falling out from under us. We didn't have the tests or the treatments we needed. We didn't have enough PPE [personal protective equipment], so we were reusing one mask for the week. Then all of a sudden, it was like every other problem disappeared — no heart attacks, no strokes, no appendicitis. The ER was overrun with COVID-19 cases."

Over time, Mitra and his colleagues learned a lot about the virus and developed new protocols. Says Mitra, "By early May, in some ways I felt like we knew what we were dealing with, we had processes in place, and all that helped my colleagues and I better cope with the situation."

Collaborations kicked into high gear. "We started to figure out tools and tricks that seemed to be

"It felt like the ground was falling out from under us. The ER was overrun with COVID-19 cases."

— AVIR MITRA

"Every day, someone tells me, 'Thank you for doing what you do!' During this pandemic, this sense of community has been vital."

— SARA BONANINI



working, and we spread this information among each other through WhatsApp messaging groups and blog posts. On YouTube, doctors in different cities would post videos of their ideas; we would try them and vice versa. These makeshift communities emerged and this sharing and making use of new ideas was all happening in real time. I had never seen that before."

It's difficult for Mitra to take stock of all that he's experienced. "This pandemic has changed me," he reflects. "It's still changing me, and I'm trying to figure that out."

He says he knows a couple of things for certain: "I always took my job seriously, but now I feel that sense of seriousness in a much more profound way. And now more than ever, I realize the importance of systems. Being a good doctor is important, of course, but we also need healthcare systems that work well so we can respond quickly and deliver good care."

Mitra wasn't surprised to see another surge in the fall, but this time everyone is prepared. "We have the facilities we need," he says. "I'm not so worried about running out of ventilators. In fact, we've figured out that putting everyone on a ventilator isn't the answer, and we've discovered better ways of treating patients. We understand the disease a lot better."

Concludes Mitra, "I feel proud of how New York has managed this pandemic. Everyone is working together."

Sara Bonanini '20 Big Horn County, Montana

Across the country, on the Crow Indian Reservation near Billings, Montana, Sara Bonanini was watching the pandemic unfold on the news. Bonanini, who is supervisory clinical nurse of the Emergency Department at Northern Cheyenne Hospital, felt like she had a pretty good handle on the situation. "I remember telling our service unit here that we need to make sure we have enough staff and plenty of PPE because COVID-19 is eventually going to make its way here."

Despite Montana's low case rates throughout the spring, the Crow Reservation announced stay-at-home orders right away. Says Bonanini, "Tribal workers were posted at entrances to the reservation to limit unnecessary travel in and out."

"We made certain adjustments early on," continues Bonanini. "We limited open access to the hospital, so not everyone can just walk through. We're having people wait in their cars and call into the ER, screening them and making sure they have masks before entering. We also bought some small sheds for outside the ER in case we needed triage areas, and once COVID-19 started hitting this area, we started using them as testing sites."

Just as in New York City, collaboration has been key at the small hospital in Northern Cheyenne. Says Bonanini, "Our ER has eight beds, and we have only four permanent

nurses and six contract nurses. As supervisor, I fill in when needed, even in ordinary times. Now working with other units is even more crucial. We had to prepare in case our little eight-bed ER got overwhelmed. We cross-trained nurses from other departments to come over to the ER if needed. There was also one week when people in other departments were out sick, so I was acting director of nursing and acting inpatient supervisor on top of my regular ER supervisor duties."

Throughout the pandemic, adaptability has been important. "For us, a new service that has come out of the pandemic is telehealth," says Bonanini. "It's a more convenient way for people to access their primary care provider, especially here where it's such a rural environment and patients may live an hour away."

In early August, Big Horn County, where the Crow Reservation is located, experienced a surge in COVID-19 cases and had the highest number of cases per capita in Montana. Bonanini feels the effects of that. She says, "I have my ups and downs. There are times when I go home and really feel the stress and pain of it all. We've had some deaths related to COVID-19, and it's something that we're all dealing with."

Around the country, COVID-19 has disproportionately affected Native Americans, who have been three-and-a-half times more likely than non-Hispanic Caucasians to test positive. Says Bonanini, "One of the factors here is that there are numerous multi-generational families living together. Once one person tests positive, it's not unusual for the rest of the family to become positive. Native Americans are also known to have numerous underlying conditions and, therefore are experiencing higher rates of serious complications with coronavirus."

Bonanini adds, "As a Native American myself, a member of the Blackfeet Nation, I'm really proud to be taking care of the Native-American population."

"I try to remain positive," says Bonanini. "I focus on the knowledge that I'm taking care of my community. In rural communities like this one, we all come together to help each other through tough times. Family, friends and neighbors are there for me and my colleagues when we need support and encouragement. Every day, someone tells me 'Thank you for doing what you do!' During this pandemic, this sense of community has been vital."



Amish Dasai

Catching Up with Your Board of Governors

In a year like no other, the Alumni Board of Governors has carried on with forging lasting bonds and opportunities for fellow Dragons.

**VALERISSA BAKER**

BS biological science '15

WHY I JOINED

I joined to increase representation in alumni engagement activities and policies. Current board member Angela Harris '02 was also a huge inspiration because of her continued leadership and commitment to Drexel. I've been blessed to connect with many Dragons across the globe who have influenced my career and personal growth, and I plan to pay it forward through our alumni network.

ABOUT ME

While attending Drexel, I studied abroad and took coursework at Nanyang Technological University located in Singapore. I have since travelled to more than 50 countries, learning and appreciating cultural norms of different communities. Traveling and meeting new people are two of my greatest passions and I hope to encourage others to explore the world around them and connect with people who are unlike themselves.

**KRISTIN DUDLEY**

BS fashion design '06

WHY I JOINED

I have always felt aligned with the University's ethos and I'm a very proud alumnus. Contributing to Drexel's future by serving on the board is one way I feel I can give back and give forward!

ABOUT ME

In 2015, I hiked the Appalachian Trail for eight days with 11 strangers. We stayed along the hut system that exists within the White Mountains of New Hampshire. It was one of the most powerful experiences of my life, and I can't wait for the day I can recreate the experience with my husband and son.

**ORCEL KOUNGA**

BS engineering '17

WHY I JOINED

Being on the board will hopefully put me in spaces to be able to advocate for the needs of the alumni community. I see my role as a liaison between the University and alumni, specifically our younger alumni. I want to be a diverse face in the crowd and help ensure that alumni can see themselves in this group that is meant to represent them.

ABOUT ME

I was raised in Italy for close to 10 years of my life. That time period shaped my thinking of the world. Because of that, I speak four different languages: English, Italian, French and conversational Spanish.

**DANIELLE SCHROEDER**

BS/MS civil engineering '17

WHY I JOINED

As I look back fondly at my time at Drexel, I see how my connections with alumni had a great impact on me as a student. Now as a board member, I want to pay it forward by giving back to the current students. I look forward to using this role to elevate stories of my fellow alumni about how they are continuing the "Drexel Difference" and foster new connections with alumni I have not met yet.

ABOUT ME

I love the performing arts space and have participated in plays and musicals since I was 8 years old. Most notably, I was in the play "The King and I" at Plays & Players Theatre in downtown Philadelphia.

**PATRICIA MCKELVEY DIETER**

RN nursing (Hahnemann) '75, AS physician assistant (Hahnemann) '77

WHY I JOINED

I've not previously been involved with my own alumni organizations, although I have experience with them through my professional role as chair of the Physician Assistant program at Duke University. I owe Hahnemann University and Drexel a lot — they accepted a small-town Pennsylvania girl and gave me a strong clinical base and self-assurance that allowed me to expand into other areas in my career.

ABOUT ME

I was a twirler in high school — but please don't ask for a demonstration today!

The Alumni Board of Governors welcomes five new members of elected directors this fall. We asked them to share their reasons for joining the Board of Governors and one surprising detail about themselves.

Dear Drexel Alumni,

Earlier this year, we all abruptly transitioned to remote work, life and learning. Our alumni engagement efforts were no exception. Still, I am proud of how our organization — and the Dragon community around the world — came together to support each other.

Despite the unexpected spring and summer we've had, here are some highlights from the year's accomplishments:

- Connected alumni and co-op students in a series of "Dragons at Work" events to celebrate the **100th Anniversary of Co-op**.
- Broke records for the **46th Alumni Turkey Project**, raising more than **\$70,000** to provide holiday meals to **2,000** Philadelphia families.
- Hosted more than **100 alumni career services**, lifelong learning, social and student engagement programs online throughout the spring and summer.
- Achieved our initial **fundraising goal** for the Alumni Impact Scholarship and celebrated the graduation of our first recipient.
- Heard from more than **750 alumni** who "Answered the Call for Co-op" by stepping up to conduct informational interviews with students who had a canceled or delayed co-op (see page 46).
- In October we convened the **10th annual** Global Night of Networking, where we welcomed the Class of 2020 to the alumni community.
- We also launched the **Dragon Network** (see page 49), our new online professional development community.
- We look forward to supporting the efforts of the University's **Anti-Racism Task Force** and have created a working group within the board to ensure that we are part of promoting action and ensuring lasting change.

I hope that next spring, we will be able to return to campus for Alumni Weekend 2021. In the meantime, I hope to "meet" many of you online. Please feel free to email alumni@drexel.edu to share how Drexel Alumni can continue to be a resource to you in the coming months and beyond.

Sincerely,

Amish Dasai '03
Chair

Alumni Answer the Call for Co-op

This summer, an incredible 750+ alumni volunteered to conduct nearly 3,000 informational interviews with students whose co-ops were canceled or postponed due to the coronavirus. — Lara Geragi

The University's co-op program is the cornerstone of a Drexel education, but the ability of students to participate in co-ops and cultivate professional connections was greatly impacted by the pandemic.

As a way to lessen this disruption, Erin Glaser, senior cooperative education advisor for educational enrichment, and her colleagues in the Steinbright Career Development Center created the course "Advance Your Career: Log In and Level Up" for students who experienced a co-op interruption.

"In developing the course, I thought about the major benefits of co-op," says Glaser. "And one is the students' ability to network and build professional relationships."

To replace that important opportunity for professional exposure, Glaser asked students within the course to participate in informational interviews with an alumnus in a relevant field. For the assignment, students selected, contacted and interviewed alumni in a position or industry of interest to them. They were encouraged to ask alumni about industry trends, professional insights, career advice, resources for development and current projects.

Glaser connected with the Office of Alumni Relations and, within just a couple of months, turned her idea for these interviews into a successful reality. Glaser put out a request for alumni to volunteer to be interviewed by students and got an overwhelmingly positive response from more than 750 volunteers.

"A secure database was created to safely store alumni volunteer information," says Glaser. "And students could then filter by criteria such as major, job title and industry to select who they wanted to interview."

For his interview, current senior Daryl Nelson selected Danielle Brief, a 2014 design and merchandising graduate and an associate buyer for the discount toys retailer Five Below.

"Danielle explained so much about her background and how I could one day reach her same level," says Nelson. "My biggest takeaway from the interview was that anything is possible. People tend to limit themselves because of pressure to succeed, but Danielle talked about trying out different jobs to find out what you truly love and being your authentic self."

According to Brief, her conversation with Nelson went so well that she forwarded his résumé onto her colleague, a buying recruiter at Five Below.

"When I was interviewed by Daryl, as well as a second student, I was so impressed by their professionalism and enthusiasm," says Brief. "I know times are difficult and uncertain, but Drexel is doing something right in fostering these organic connections between current students and alumni. I'm so glad that these conversations are happening now, given the total shakeup of the traditional corporate retail world."

"LOG IN AND LEVEL UP" will seek another crop of alumni volunteers for informational interviews when the course reconvenes. If connecting with current students and giving back to Drexel in this way is something you'd like to learn more about, contact the Office of Alumni Relations at alumni@drexel.edu.



ERIN GLASER



DARYL NELSON



Danielle Brief at her studio.

Pandemic lockdowns impacted about a quarter to a third of Drexel co-ops, but you can help.

HIRE A CO-OP

Now more than ever, we are looking to our alumni community to provide co-op opportunities to students on a full-time or part-time basis. If you are interested, contact our Employer Relations team at drexel.edu/scdc/employers/contact.

MAKE A GIFT TO THE CO-OP OPPORTUNITY FUND

Donations of every amount have an impact on the Drexel Co-op program and our students. Support the fund at giving.drexel.edu/campaign/priorities/co-op.

HOST A WORKSHOP

The Steinbright Career Development Center is always looking for alumni to host professional development workshops for our students. To learn more, contact scdcworkshops@drexel.edu.

CAREERS

60s

John J. Degnan III, BS physics and atmospheric science '68, was presented with the Albert Nelson Marquis Lifetime Achievement Award by Marquis Who's Who as a leader in the field of physics.

80s

Carl Richardson Ballinger, MS interior design '86, joined SOSH Architects, an award-winning architecture, interior design and master planning firm, as a project coordinator.

Martin G. Belisario, BS mechanical engineering '85, of intellectual property law firm Panitch Schwarze Belisario & Nadel LLP, was named among 2020 Pennsylvania Super Lawyers.

Jill Leibman Kornmehl, MD '80, celebrated the graduation of her son, Adam Kornmehl, MD, from Temple University School of Medicine. Adam is also the grandson of Neil Leibman, BS mechanical engineering '48.

Wendell C. Roberts, BS commerce and engineering '82, MBA '86, was elected chair of the Virginia Council of School Attorneys. Roberts currently serves as school board attorney for Chesterfield County Public Schools in Virginia. He is also an associate adjunct professor of education at the University of Richmond and teaches at the Curry School of Education at the University of Virginia.

90s

Mark Lee, BS architectural engineering/civil engineering, was appointed to CEO at Harriman, an integrated design services firm.

Lisa M. Gensemer Pflaumer, BS history and politics '91, was named the first executive director of Heartis Yardley Senior Living in Yardley, Pennsylvania.

Gina Furia Rubel, BS corporate communications '91, founder and CEO of Furia Rubel, developed a Coronavirus Crisis and Resource Center and launched a podcast, On Record PR. Rubel was also recognized by Lawdragon among the 2020 Lawdragon Global 100 Leaders in Legal Strategy and Consulting.

Christopher A. Saponaro, BS mechanical engineering '90, is a new shareholder at RVE, a full-service engineering firm. Saponaro is the firm's head of the Mechanical, Electrical and Plumbing/Fire Protection Department, serving as principal-in-charge for all MEP projects implemented by the firm.

John Simmons, BS electrical engineering '92, of intellectual property law firm Panitch Schwarze Belisario & Nadel LLP, was named among 2020 Pennsylvania Super Lawyers.

Glenn W. Stambo, MD '91, chief of Vascular and Interventional Radiology at AdventHealth Carrollwood Hospital in Tampa, co-wrote an article, "The Use of Rapid Sequence Magnetic Resonance Imaging of the Brain as a Screening Tool for the Detection of Gross Intracranial Pathology in Children Presenting to the Emergency Department With a Chief Complaint of Persistent or Recurrent Headaches," that was published in *Pediatric Emergency Care*.

Leona Jean Thomas, BS electrical engineering '92, MBA '10, is the new chief technology officer at Benefits Data Trust.

Marc Wintjen, BS management of computerized information

We want to hear about your weddings, new babies, special traditions, group trips and regular get-togethers with fellow alumni. Send stories and photos to Sara Keiffer at seb434@drexel.edu.

systems '98, published a book on data literacy, "Practical Data Analysis Using Jupyter Notebook: Learn How to Speak the Language of Data by Extracting Useful and Actionable Insights Using Python."

00s

James A. Blair, MD '08, an orthopedic trauma surgeon, completed his active-duty service obligation with the U.S. Army shortly after receiving a promotion to lieutenant colonel. Blair practiced at William Beaumont Army Medical Center in El Paso, Texas, for six years and completed two combat tours to Afghanistan and Syria. He will be transitioning to the civilian world as an associate professor and chief of orthopedic trauma at the Medical College of Georgia – Augusta University.

Andrew Bleaken, BS sport management '09, was appointed director of development for the Martin J. Whitman School of Management at Syracuse University.

Amanda Carlin, BS Architectural Engineering '05, president of The Carlin Collaborative, a South Jersey-based owner's rep/project management firm, celebrated the one-year anniversary of her firm and ribbon cutting of a \$27 million medical office building and orthopedic surgery center.

Jennifer A. Hermansky, BS business administration '05, JD '09, of global law firm Greenberg Traurig, LLP's Philadelphia office, was named as one of *The Legal Intelligencer's* 2020 Professional Excellence Award winners.

Asif M. Ilyas, MD '01, launched the Rothman Orthopaedic Institute Foundation for Opioid Research & Education, dedicated

to providing resources and insight into the opioid epidemic as well as who it affects and how we're addressing the issue.

Vanessa Brown Nedrick, BS civil engineering '00, MS engineering management '09, is regional manager for RVE's Bucks County office. RVE is a full-service engineering firm that provides design, planning and construction management and inspection services.

Tejal Patel, BS business administration '04, published *Meditation for Kids: 40 Activities to Manage Emotions, Ease Anxiety and Stay Focused (Ages 4-8)*. It explains how to make meditation a fun, family activity, and teaches readers how to help kids manage their bodies, their energy, big emotions and their reaction to stress.

John M. Pyne, BS civil engineering '01, is a shareholder at RVE, a full-service engineering firm. Pyne is an executive vice president and director of corporate development. He is responsible for the strategic growth of the firm in all the market sectors and regions served by RVE; he also serves as principal-in-charge the infrastructure division.

Marek Swoboda, PhD biomedical engineering '05, CEO of RightAir, invented a simple, inexpensive backup ventilator that could help save lives in the fight against COVID-19. At the request of Penn Medicine, Swoboda created a "Y-vent," a Y-shaped mechanism made on a 3D printer with only \$10 worth of materials.

Sandy Sheller, MCAT '04, post-secondary certificate nursing '04, and the Sheller Family Foundation received the 2020 Secretary's Awards for Public-Philanthropic Partnerships from the Department of

CAREERS

Housing and Urban Development, in partnership with the Council on Foundations for its Color Me Back: Same Day Work and Pay Program. These awards recognize excellence in partnerships that transformed relationships between the public and private sectors and lead to measurable benefits to housing and community development, especially for low- and moderate-income families.

10s

Christina M. Dewland, BS criminal justice '13, joined Capehart Scatchard as an associate at the Mt. Laurel office. Dewland focuses her practice in litigation through the federal and state courts of New Jersey and Pennsylvania.

Nicole Fahringer, BS interior design '19, joined SOSH Architects, an award-winning architecture, interior design and master planning firm, as an interior designer. At Drexel, Fahringer participated in the company's co-op program and gained on-the-job experience in space planning, surveying and working on construction documents.

Lt. JG Elliot J. Farquhar, BS mechanical engineering '15, earned his "Dolphins," qualifying as a nuclear submarine warfare officer in the U.S. Navy. He serves on the Ohio-class submarine USS Florida (SGN 728) based in Kings Bay, Georgia.

Brielle R. Ferguson, PhD neuroscience '18, a postdoctoral fellow in the Huguenard Laboratory at Stanford University, Department of Neurology, was an organizer of the inaugural Black In Neuro Week (#BlackInNeuroWeek), a virtual celebration of Black excellence in neuroscience and related fields July 27 to August 2.

Adam Goodman, JD '13, works at State Farm handling insurance defense claims. He is active in the LGBT Bar Association.

Casey Kissel, MLAS lab animal science '11, is a clinical research veterinarian in the Gene Therapy Program at the University of Pennsylvania. She earned her veterinary degree at the University of Minnesota-Twin Cities and completed a clinical residency in comparative medicine at Johns Hopkins.

Christopher Mullen, JD '19, joined Klehr Harrison Harvey Branzburg LLP as an associate in real estate and finance.

Mina Soryal, cert. biomedical technology development '14, MS biomedical engineering '14, is director of product development/commercialization at ImCare Biotech. The FDA granted ImCare Biotech breakthrough device designation for their product Seravue® to support earlier diagnosis of liver cancer using a simple blood test.

John J. Luciani, BS civil engineering '82, president of First Capital Engineering, Inc., in York, Pennsylvania, is certified as a Professional Traffic Operations Engineer (PTOE).

BABY DRAGONS



**RUBY
MAY CANN**
7.22.20

Michelle Marchesano Cann, BS history and politics '07, cert. writing and publishing '07, and Dennis Cann, BS business administration '06, welcomed their second daughter Ruby May Cann on July 22, 2020.

Friends
We'll Miss

**This list represents alumni identified by the University's third-party information service as deceased between March 1 and July 31, 2020.*

1930s

Albina A. Tedesco, BS Commerce
Teacher '35

1940s

Richard M. Aronson, BS Mechanical
Engineering '49

Arthur T. Barlow, BS Business
Administration '48

George A. Burns, BS Business
Administration '49

Grace Lunger Cavileer, RN Nursing
'46

Margaret DiPasquale Cherniak, RN
Nursing '43

Hildegard Rossiger Cirelli, RN
Nursing '43

George A. Dix, BS Business
Administration '42, MBA '53

Lucille Henebry Dix, BS Commerce
Teacher '42

Sara Snyder Flowers, BS Home
Economics '44

James E. Frank, BS Business
Administration '47, MBA '71

Erika Dietrich Hauer, RN Nursing
'48

Helen Beadle Heisey, BS Home
Economics '44

Meyer Kolodner, BS Electrical
Engineering '47

Donald C. Kopp, BS Commerce and
Engineering '49, MBA Business
Administration '70

John G. Kopp, BS Mechanical
Engineering '48

William F. Kramer, BS Mechanical
Engineering '45

Frieda Bornemann Lenthe, BS
Home Economics '49

Constance Hambleton McKibbin,
Cert. Secretarial '45

Joyce Maisel Mehlinger, BS Home
Economics '46

Theresa Penza, RN Nursing '46

Jane Ecklin Pettigrew, BS Business
Administration '46

Joseph H. Proctor, BS Mechanical

Engineering '48

Leatrice Matthias Rogers, RN
Nursing '46

James J. Silimeo, BS Civil
Engineering '47

Lucille Redis Toub, RN Nursing '48

Edna Ward Warner, RN Nursing '41

Arthur Zeglen, MD Medicine '49

1950s

Ralph L. Adamson, BS Business
Administration '53, MBA '64

May Huber Ball, RN Nursing '52

Barbara Bartow, MLS Library
Science '55

Stephen H. Bauer, BS Electrical
Engineering '58, MBA Business
Administration '68

Loretta Schwenk Bayer, RN
Nursing '53

William N. Bayne, BS Mechanical
Engineering '53, MS '59

Joanne Kashner Beyer, BS Retail
Management '56

James E. Bitter, MD Medicine '59

George S. Black, Cert. Mechanical
Engineering '52, BS '53

George W. Booz, Cert. Electrical
Engineering '54, BS '56

William J. Boyd, MD Medicine '55

Joseph H. Bright, BS Business
Administration '58

Joseph G. Brotz, BS Business
Administration '58

Robert O. Brown, MS Mechanical
Engineering '55

Anthony J. Bruno, MD Medicine '57

John F. Cannon, BS Business
Administration '52

John H. Chamberlin, BS Civil
Engineering '59

Marjorie Powers Compton, Cert.
Library Science '52

Emil D. Conti, BS Business
Administration '50

Michael L. Crippen, BS Mechanical
Engineering '58

Jerome M. Crosson, BS Chemical
Engineering '57

Nancy Turner Deduk, MD Medicine
'54

Donald N. Dick, BS Electrical
Engineering '58, MS '62

John R. Diegidio, Cert. Civil
Engineering '53, BS '59

Nancy Russell Dieter, BS Home

INTRODUCING
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FOR ALUMNI AND STUDENTS

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- Explore job opportunities
- Browse helpful resources and upcoming programs

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Becoming a Better You

This spring, more than 350 alumni turned to self-care programs led by fellow Dragons to help navigate a new normal. — Lara Geragi



▶ Tejal V. Patel '04

◀ Tracey Morgado '90

In 2020, social distancing, at-home work and school, and the threat of COVID-19 thrust us into an unsettling new normal.

Self-care — the practice of protecting your wellbeing and happiness — is perhaps more important now than it's ever been. And so, Drexel Alumni has prioritized bringing self-care opportunities such as yoga, meditation and mindfulness practices to Dragons through convenient and complementary online programs.

From May to August, yoga instructors Tracey Morgado '90 and Alumni Board of Governors member Christina Flory '10 hosted a series of virtual yoga sessions for alumni. For Morgado, who has been teaching yoga for 23 years, it was a rewarding way to give back and to help her fellow Dragons relax and recharge.

"Especially now, being in tune with your body and mind is critical," she says. "People need to be able to escape to just be with themselves and breathe."

Morgado said teaching yoga for the first time virtually had its challenges, but it gave her more experience and confidence. "I always enjoy stepping out of my comfort zone."

Mindfulness and meditation expert Tejal V. Patel '04 hosted a webinar on how to build a family meditation practice, increase resilience and find balance. "The pandemic highlighted how ill-prepared and unaware we are of knowing how to help ourselves calmly navigate stress, big emotions and pressures," she says.

Bobby Dalton G. Roy '12 says he attended the webinar because the stress of working at the California Department of Education and pivoting to distance learning was manifesting physically and mentally.

"My cup was starting to feel empty; I needed to pour back into it before I could pour more from it," says Roy. "Given the situation and environment we find ourselves in, I found the program to be very relevant and meaningful."

Drexel Alumni plans to continue providing these resources to graduates by expanding its online health and wellness programming. Whether it's physical fitness, mental health or emotional wellbeing — if you are an expert in a field related to self-care and would like to volunteer to host an upcoming event or produce an Instagram takeover, contact alumni@drexel.edu to share your background and ideas.

Economics '50
Michael J. Dimartino, BS Biological Science '58
Aaron M. Dolin, BS Mechanical Engineering '58
Jeannine L. Earshaw, MLS Library Science '55
Beatrice Senofsy Enson, MD '53
John A. Fairbank, Cert. Mechanical Engineering '53, BS '55
Nancy King Fisher, RN Nursing '58
Walter C. Foulke, BS Chemical Engineering '54
Barry A. Galman, BS Mechanical Engineering '55
John T. Gerlach, BS Commerce and Engineering '55
Sarkis E. Giragosian, BS Mechanical Engineering '51, MBA Business Administration '60
Milton S. Good, MD Medicine '58
Jeannette Weitzel Green, BS Home Economics '51
Rudolph J. Griesbach, BS Electrical Engineering '59
Bernard H. Grindlinger, BS Business Administration '52
Robert C. Hajner, BS Mechanical Engineering '52
Albert W. Hall, BS Commerce and Engineering '53
Albert J. Hardwick, BS Electrical Engineering '59
Richard Harrington, BS Chemical Engineering '55
John L. Hausner, BS Mechanical Engineering '52
William J. Heger, Cert. Mechanical Engineering '58, BS '60
Rita Blaxland Hojnowski, BS Medical Laboratory Technology '55
Robert E. Holston, BS Mechanical Engineering '56, MS Aerospace Engineering '64, MS Electrical Engineering '73
Bart V. Iannetta, BS Physics and Atmospheric Science '59
Albert B. Ikeda, BS Mechanical Engineering '57
Walter W. Joseph, BS Mechanical Engineering '52
Sally Weiss Kane, BS Home Economics '59
Joseph R. Katz, BS Mechanical Engineering '55, MS Electrical

Engineering '59
Donald Ralph Kerstetter, BS Civil Engineering '54
Richard G. Krueger, Cert. Chemical Engineering '54, BS '56
Mary Ellen Kunkel, MD Medicine '52
William E. LaForge, BS Industrial Administration '59
John F. Laukaitis, BS Mechanical Engineering '50
John J. LeBeau, MD Medicine '58
Mary Ann Dunlap Lepera, RN Nursing '59
Frederick C. LeSturgeon, BS Commerce and Engineering '56, MBA Business Administration '64
Donald J. Loeper, MD Medicine '54
Alfred A. MacCart, BS Business Administration '53, MBA '65
Norma R. Mason, MD Medicine '53
Charles J. Maxwell, BS Mechanical Engineering '58
John McCallion, BS Chemical Engineering '51
Hugh R. McCurdy, BS Metallurgical Engineering '59
Patience Simpers McFarland, BS Home Economics '50
Ronald Clarke Miller, BS Mechanical Engineering '58
George William Mohn, BS Commerce and Engineering '58
Jeannette Cheuvreux Nolte, BS Home Economics '52
Manny Pak, BS Commerce and Engineering '58
Lois Davis Parry, BS Home Economics '58
Berj Philibossian, BS Commerce and Engineering '58, MBA Business Administration '67
Russell B. Puschak, MD Medicine '56
Richard N. Rau, BS Electrical Engineering '53
Albert C. Roemhild, BS Commerce and Engineering '57
Robert H. Roth, BS Mechanical Engineering '55
Barbara Peskin Ruderman, BS Medical Technology '59
Vivian Rosenfeld Schatz, MS Chemistry '57
Stella J. Scheckter, Cert. Library Science '52
August E. Schmidt, BS Mechanical

Engineering '51
Joseph Schneider, BS Civil Engineering '54
Kathleen Cheek Schwartz, MS Library Science '59
Robert C. Seidler, MD Medicine '58
Carolyn Kline Sellers, BS Home Economics '51
Michael D. Sheridan, BS Business Administration '58
George J. Silvestri, BS Mechanical Engineering '53, MS '56
Ralph T. Smith, BS Mechanical Engineering '59
Edward W. Smith, BS Electrical Engineering '53
Peter S. Strilko, MS Chemistry '59
Warren O. Strohmeier, BS Mechanical Engineering '51
Thomas H. Strudwick, BS Metallurgical Engineering '53
Raymond E. Subers, BS Business Administration '59
Donald R. Taylor, BS Electrical Engineering '50
Paul G. Tongue, BS Commerce and Engineering '57
John B. Trout, BS Civil Engineering '59
Leucia B. Venable, MLS Library Science '58
Ernest B. Waters, BS Chemical Engineering '55
Emma Seifrit Weigley, MS Dietetics '56
Stanley Joseph Weiss, BS Mechanical Engineering '59, MS '66
Nicolina Fazio Wilson, RN Nursing '55
Mary Zimmerman Yocum, RN Nursing '52

1960s
Albert W. Anderman, BS Electrical Engineering '65
Peter B. Baute, MD Medicine '60
Dean W. Beckwith, BS Business Administration '60
Carol Zadoronzy Bentley, BS Business Administration '64
John A. Berta, MBA Business Administration '67
Robert Bisciotti, MBA Business Administration '65
George W. Boisbrun, BS Mechanical

Engineering '63
David R. Brocklebank, BS Physics and Atmospheric Science '62
Edward Stephen Brotzman, BS Mechanical Engineering '66
Richard D. Brugger, MS Electrical Engineering '67
Van B. Bruner, BA Architecture '65
Barry C. Burkholder, BS Business Administration '62, MBA '70
Theodore H. Butcher, MBA Business Administration '69
William J. Campbell, BS Mechanical Engineering '65
John H. Carey, BS Commerce and Engineering '61
Don R. Carter, BS Electrical Engineering '60
Roberta William Chase, MS Library Science '68
John S. Chitwood, BS Electrical Engineering '68
Donald W. Chrisman, MS Engineering Management '63
Walter George Cox, BS Chemistry '64
Robert Crowell, BS Mechanical Engineering '64
Elwood A. Dance, BS Electrical Engineering '64
John H. Decoursey, BS Mechanical Engineering '64
Robert C. Donnelly, BS Mechanical Engineering '61
William J. Dougherty, MS Electrical Engineering '68
John T. Durant, BS Metallurgical Engineering '63
Edward F. Engelbert, BS Electrical Engineering '68
Earl F. Fielder, MS Chemistry '60
Ronald L. Forys, BS Civil Engineering '68
James Henry Greiner, BS Electrical Engineering '64
Barbara R. Griffith, MD Medicine '66
Richard F. Hamilton, MS Mechanical Engineering '66
Leon R. Henry, BS Electrical Engineering '63
Cornelius L. Hensel, MS Electrical Engineering '66
John M. Hickey, MBA Business Administration '68
Leonard A. Jankauskas, BS Mechanical Engineering '63

TRIBUTE

**BARRY C. BURKHOLDER**

BS business administration '62, MBA '70

Drexel Emeritus Trustee Barry C. Burkholder passed away on July 24, 2020, from complications of COVID-19 at age 80. He is survived by a loving family, including his wife Janet. Burkholder will be remembered as smart and generous, a steadfast leader, an avid golfer and a devoted family man. As a student in Drexel's LeBow College of Business, he earned both undergraduate and graduate degrees and participated in ROTC. After graduation, he served as an officer in the U.S. Army, eventually rising to captain.

In his professional life, Burkholder was president and CEO of Houston-based Bank United Corp. when he retired in 2001. His career in banking and business took him across the country and overseas to London, where he was chairman and managing director of Citibank Savings in the late '70s. Following his military service, Burkholder began his career at Ford Motor Company, in its financial planning area.

Burkholder was a thoughtful trustee, serving from 1998 to 2013 and chairing the University investment committee. He received the Golden Dragon Award in 2012, the Drexel University Distinguished Alumni Award in 1988, the 2007 A. J. Drexel Paul Alumni Achievement Award, and was inducted

into the Drexel 100 in 1998.

Due to the Burkholder family's generosity, the Drexel Athletics Hall of Fame established its first permanent home. The interactive Janet E. and Barry C. Burkholder Athletics Hall of Fame was unveiled in 2012 in the Recreation Center gallery.

**EDWARD B. BURKE III**

BS civil engineering '94

Edward Burke suddenly passed away on Sept. 12, 2020, at age 49. Formerly of Glendora, New Jersey, he was living in Cincinnati at the time of his death.

Burke leaves behind his children Kasey and Ryan, and his former wife, Melinda Stodart. He is also survived by his parents Donna and Edward B. Burke Jr., his four siblings, his grandmother and many nieces, nephews and cousins.

Burke was a lover of life and a successful collegiate baseball player. As a student, he was the captain of Drexel's baseball team. "He loved his Sigma Pi fraternity brothers at Drexel and they loved him until the day he died," says close friend Sean Gallagher '93.

He loved sports, cooking, travel, a good cocktail and he was always up for a lively conversation. More than anything, Burke loved his children. If it was coaching, a soccer game, swimming or taking them to MMA training, they were the light of his life.

Goldye Kent Johnson, MS Library Science '61

Albert Jordon, BS Electrical Engineering '65

Stanley B. Kita, BS Mechanical Engineering '62

Nancy Stark Klath, MLS Library and Information Science '69

Charles Kurtz, BS Business Administration '60

Joseph F. Lentz, BS Chemical Engineering '63

Ivan F. Lichty, MBA Business Administration '61

Bohdan Lukaszewsky, MS Electrical Engineering '63

Angelo J. Malizia, BS Electrical Engineering '69

Edward M. Martin, BS Mechanical Engineering '66

James L. Martin, BS Mechanical Engineering '67

James J. McDade, MS Electrical Engineering '60

Joan Rogers McKeon, MS Library Science '66

William F. Megargle, BS Chemical Engineering '64, MBA Business Administration '71

Dennis H. Membrino, BS Business Administration '68

Ann Freedman Mizgerd, MD '63

Bonnie L. O'Brien, MS Library Science '67

William J. O'Leary, MS Electrical Engineering '67

Corine Ruth Overkamp, MD Medicine '60

Robert S. Paranich, BS Electrical Engineering '60

Charles R. Peguese, MS Library Science '65

Nicholas Polivka, BS Business Administration '65

Mary L. Pratt, MD Medicine '60

Robert H. Pursel, BS Electrical Engineering '63

Robert J. Rainey, MBA Business Administration '64

Richard V. Reed, BS Electrical Engineering '61

Harrison D. Reed, BS Mechanical Engineering '68

Pauline Lothrop Rock, MD Medicine '66

Ernest R. Rubbo, BS Civil Engineering '63

Raymond M. Scannapieco, BS Mechanical/Industrial Engineering '64

Richard A. Schafebook, BS Mechanical Engineering '68

Joseph E. Schwegler, BS Electrical Engineering '62, MS '71

Ronney M. Scott, BS Mechanical Engineering '68

Gerald S. Segal, BS Business Administration '63

Joel Shusterman, BS Electrical Engineering '61

John E. Smallwood, BS Electrical Engineering '64

Lawrence E. Smith, BS Business Administration '66, MBA '73

Theodore M. Stefanik, MS Electrical Engineering '64

Bryan J. Stevens, BS Chemistry '67

Martha B. Stone, Cert. Library Science '63

Helen R. Strelkus, RN Nursing '62

Joseph M. Super, BS Business Administration '63

Wallace C. Swaverly, BS Commerce and Engineering '61

Austin K. Tarpey, BS '62 Electrical Engineering, MS '68

Carolyn Adams Tibbetts, MS Home Economics '67

Willard C. Titus, BS Business Administration '61

Betsy McCue Train, MS Design '67

Rosayne Reseter Tumilowicz, MS Library Science '68

Robert R. Vennell, BS Chemical Engineering '62

Ethel S. Weinberg, MD Medicine '61

George W. Westerman, BS Business Administration '62

Elizabeth O. Witt, MS Home Economics '66

Edward G. Wolf, MS Library Science '62

Thomas F. Wynne, BS Electrical Engineering '68

Jerold J. Yecies, MD Medicine '66

James Charles Zinman, BS Business Administration '67

1970s
James R. Addlesberger, BS Electrical Engineering '70

James R. Arasz, BS Architecture '76

Maryann Matuszewski Baker, MS Library Science '72



It can seem as if everything has changed. Two things haven't.

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THE CAMPAIGN FOR DREXEL

John D. Belson, MBA Business Administration '74
 Jane Smadbeck Brooks, MD '70
 Linda Flanagan Burak, RN Nursing '75
 James A. Castellan, BS Electrical Engineering '74
 Edward B. Chen, BS Mechanical Engineering '72
 Theodore Chiglo, AS Medical Laboratory Technology '76
 Alan Ciccirelli, MD Medicine '71
 Duane R. Cooper, BS Business Administration '77
 Frieda Denenmark, MD Medicine '77
 Donald D.T. Dodszeit, BS Electrical Engineering '72
 John J. Donnelly, BS Civil Engineering '72
 Doris R. Doran, BS Marketing '74
 Faye M. Etter, BS Home Economics '73, MS Interior Design '87

James J. Feighery, BS Mechanical/Industrial Engineering '71
 Mary L. Fleming, MS Mental Health Technology '77
 Donald J. Gosciniak, BS Chemistry '77, PhD '84
 Robert J. Gray, BS Business Administration '73
 Charles K. Greeby, BS Electrical Engineering '70
 Harry Glenn Hanson, MS Environmental Science '74
 John P. Hilferty, MBA Business Administration '79
 Donald J. Horsfall, BS Chemistry '70
 Fred D. Jacks, MD Medicine '76
 Eileen Mcmurchie MacBeth, MS Library Science '75
 Albert L. Meyer, BS Electrical Engineering '71
 Bruce A. Muckley, BS Operations Management '75

James Mukoyama, BS Business Administration '73
 Richard F. Pesot, BA Architecture '72
 Gordon W. Prescott, MBA Business Administration '79
 Julie Annette Ricking, MD '71
 Paul David Risdon, MS Library Science '72
 Joseph E. Rosina, BS Mechanical and Industrial Engineering '74
 Carol M. Sheaffer, MD Medicine '74
 Rolfe R. Shellenberger, MBA Business Administration '70
 Edward J. Sowinski, PhD Environmental Engineering '73
 Charles Bruce Spencer, BS Chemistry '72, MS Materials Engineering '85
 Virgil Thompson, MD Medicine '79
 Theodore W. Uroskie, MD Medicine '70
 Jack H. Ward, MBA Business

Administration '71
 James J. White, MBA Business Administration '70
 Mary E. Williams, BS Business Administration '76
 Genevieve C. Winiarski, MD Medicine '72

1980s
 Margaret Susan Cate, MS Information Studies '86
 James Michael Chiadis, MD Medicine '80
 Kent G. Dailey, MBA Business Administration '80
 Eugene M. DiMarco, MS Environmental Engineering '80
 Carlene Burton Eckroade, MS Library Science '88
 Frank Anthony Friedman, MS Library Science '80
 Andrew Steven Hegedus, MS Mechanical Engineering '87

Ann Murray Herring, BS Nursing '80
 Glenn A. Hofmann, BS Biological Science '82
 Henry J. Huber, BS Accounting '81
 David W. Jeffers, MBA Business Administration '82
 Eileen Patricia Kelly, BS Management Information Systems '86
 Craig A. Lapham, MD Medicine '84
 Leroy R. Loewenstern, Evening College '84
 Gerard J. Manna, BS Operations Management '82
 Nancy Sheppard Manzano, BS Accounting '89
 Steven Joseph Mather, BS Mechanical Engineering '87
 William J. Miller, MS Engineering Management '80
 Carl Richard Moe, BS Business Administration '85

William Carl Nelson, MD Medicine '80
 Audrey Murrell Roll, MS Library Science '80
 Amy Beth Rowan, MD Medicine '87
 Kathleen O'Connell Selby, BS Mechanical Engineering '85
 Ralf H. Simon, BS Electrical Engineering '80
 Margaret Grace Stineman, BS Biological Science '81, MD Medicine '83
 Susan Mary Sygenda, MS Communications '85
 Dorothy Ellis Thomas, MCAT Creative Arts '85
 Deborah Witherspoon, AS Nursing '86

1990s
 Charles William Bogert, MS Information Systems '99
 Patrick Kevin Curtin,

BS Marketing '94
 Michele Ferris, MPT Physical Therapy '99
 Donald Nelson Ford, MS Accounting '94
 Derek Richard Gibbons, BS Mechanical Engineering '92
 William Eugene Gibbons, BS Cardiovascular Perfusion Technology '95
 Rebecca E. Mondress-Baxter, MS Library and Information Science '91
 Lois Kathleen Musser, MBA '90
 Andrew Craig Phillips, BS Marketing/Finance '90
 John Kevin Wallace, BS Mechanical Engineering '91
 Harris L. Wolfe, BS Electrical Engineering '92

2000s
 Gregory Donald Blank, BS Electrical

Engineering '00
 Mary Jo Byrne, BS Behavioral Counseling Sciences '01
 Edward M. Jalowiecki, MCAT Creative Arts '01
 Robert Liston, BS Mechanical Engineering '04

2010s
 Brennan E. Lied, BS Criminal Justice '17
 Kate A. Mahoney, JD Law '16
 Clifford Owen Motley, MS Clinical Research Organization and Management '11
 John M. O'Driscoll, BS Materials Science and Engineering '12

Correction: In a previous issue of Drexel Magazine, Alfred Weingartner, BS electrical engineering '65, was incorrectly reported as deceased by the University's third-party information service.

Your Legacy. Their Future.

A charitable bequest is an excellent way for you to make educating future Drexel University students a part of your personal legacy.

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Drexel University
 Gift Planning

Unexpected challenges can quickly put students' educational goals out of reach. The Student Emergency Fund, made possible by support from Dragons everywhere, is a source of strength and resources for students like Joshua.

"Your donations have truly changed my life for the better... the people I met, new knowledge I acquired, and the experiences I will never forget. With my continued education at Drexel, I will be able to be successful in whatever venture I embark on in the future."

— Joshua Rodriguez '21

INVEST IN TOMORROW'S LEADERS. THEY'RE COUNTING ON YOU.

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THE FUTURE IS A PLACE WE MAKE.
 THE CAMPAIGN FOR DREXEL

Crossword

CLASS-IC LITERATURE

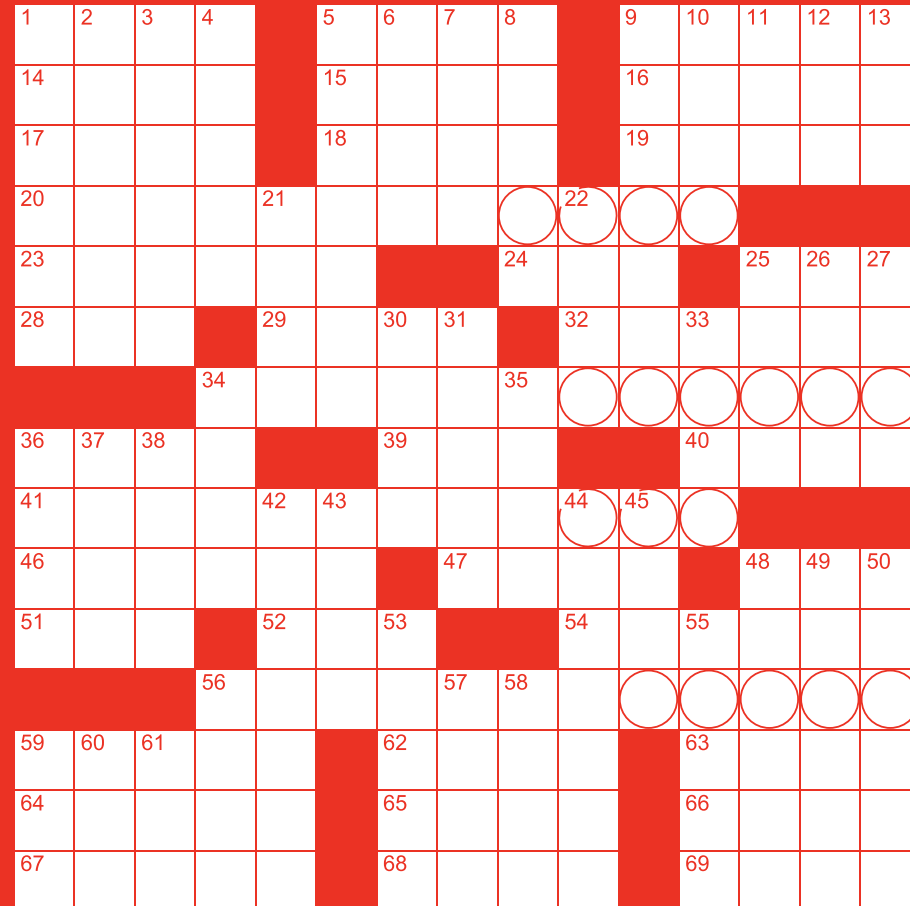
While so many group activities are on hiatus, now is the perfect time for some escape reading.

ACROSS

- 1 It may be signed at a summit
- 5 "For the ___ part ..."
- 9 Cat or mouse tale, say
- 14 Home of the Norwegian Academy of Music
- 15 Lab assistant not found in Mary Shelley's "Frankenstein"
- 16 Impressive display
- 17 Phaser setting on the USS Enterprise
- 18 Method of viewing bones
- 19 Extent
- 20 2013 Rhidian Brook novel set in post-World War II Europe
- 23 "Game of Thrones" actress Clarke
- 24 ___ trip (display of self-indulgence)
- 25 Object often placed in a bucket
- 28 Took part in a 5K, e.g.
- 29 Stretch across
- 32 Hot, as in the video game "NBA Jam"
- 34 1955 J.P. Donleavy novel about a redheaded, philandering law student named Sebastian Dangerfield
- 36 "The Peanut Butter Falcon" actor LaBeouf
- 39 "Foucault's Pendulum" author Umberto
- 40 Snaky sea slitherers
- 41 2000 Robert Jordan novel whose prologue is titled "Snow"
- 46 Mysterious to many
- 47 Magazine that featured Beyoncé on its January 2020 cover
- 48 Flipper for a 21-Down
- 51 "It wasn't bad but it didn't thrill me, either"
- 52 Important subject in Biology 101
- 54 Maroon 5 lead singer Adam
- 56 2019 Elinor Lipman novel that begins with the protagonist Daphne Maritch discarding her mother's high school yearbook
- 59 Mustache trimmer
- 62 Chrysler Building's architectural style
- 63 "Was it something I ___?"
- 64 Spy's name, perhaps
- 65 One starting college, usually
- 66 "Anything ___ you want to share?"
- 67 Source of syrup in a forest
- 68 Ye ___ Christmas Shoppe (Magic Kingdom store)
- 69 Planting in a flower bed

» **THINK YOU'VE GOT ALL THE ANSWERS?** If so, send your completed puzzle to the address at right to be entered into a drawing to win a great Drexel prize. You can also email an image of your completed puzzle to magazine@drexel.edu.

Drexel University
Office of University Communications
3141 Chestnut Street
Main Building, Suite 309
Philadelphia, PA 19104-2875



DOWN

- 1 Item hung on a dorm room wall
- 2 Mikey's breathing affliction in "The Goonies"
- 3 Make aware
- 4 Having a key, in music
- 5 Rock collection, maybe?
- 6 Fairy tale monster
- 7 Fly like a falcon
- 8 "Why don't you give it a shot!"
- 9 Deceptive action that's "pulled"
- 10 Curved structure seen in M.C. Escher's "Relativity"
- 11 Certain sib
- 12 Body part seen in a sitting position
- 13 Body part examined by an ophthalmologist
- 21 Flounder of "The Little Mermaid," e.g.
- 22 Extremely excited
- 25 One who may perform in an invisible box
- 26 Test for many a graduate student
- 27 Crossword-solving choices
- 30 Numbers on birthday cakes
- 31 Specialized area
- 33 Guitar neck strip
- 34 "Ciao!"
- 35 Song heard in December
- 36 Participated in a certain athletic meet
- 37 Take on, as for a job
- 38 "Give them an ___ and they'll take a mile"
- 42 Support, as in a presidential race
- 43 Nevada city that's home to the National Bowling Stadium
- 44 "There, I'm finished!"
- 45 Oboe student's item
- 48 Episode that may end on a cliffhanger
- 49 Cut into, surgically
- 50 Not optional
- 53 Build on
- 55 Decorative receptacles found in museums
- 56 One of many tallied by the winner of the Golden Boot award at the World Cup
- 57 Film spool
- 58 Like cakes and cupcakes
- 59 Animal that aptly collides with another animal of the same type to establish dominance
- 60 Pie ___ mode
- 61 Close, as some purses

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