

2019-2020 ANNUAL REPORT

Advancing Together



CASE WESTERN RESERVE
UNIVERSITY

EST. 1826

think
beyond
the
possible

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Table of Contents

Research	Innovation	Community	Year in Review
8 Increasing Evolutionary Understanding	20 Engineering Solutions for COVID-19	26 Actions to Achieve Justice	36 Notable Achievements
10 Creating Connections	22 Inspiring New Hope	28 Keeping Our Community Safe	39 Degrees and Campus Statistics
12 Restoring Historical Art	23 An Improvement in Care for All Ages	28 Adapting to the New (Mixed) Reality	40 Operating Revenues, Expenses and Gifts from Private Sources
14 Toward Better Care—and a Cure		29 Change of Course	42 Research and Technology Highlights
16 A Fair Chance		30 To Choose Freedom, or Safety?	
17 Lead’s Long-Lasting Impact		31 Providing Support Amid a Pandemic	
		32 Rapid Response	

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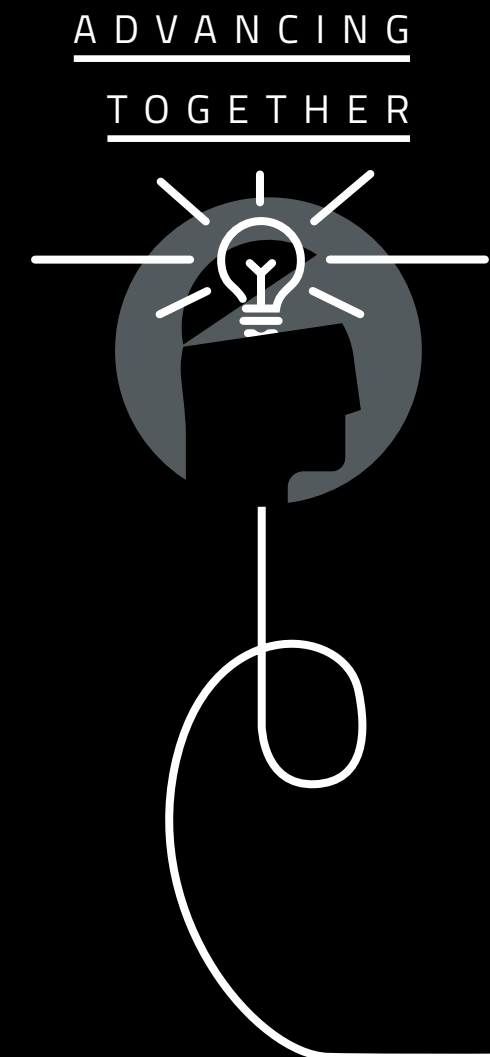
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Photo by Michael F. McElroy

"I DO [RESEARCH] BECAUSE I'M CURIOUS
AND LOVE SOLVING PROBLEMS.
I THINK 'WHAT ARE THE BIG PROBLEMS
AND WHAT PART CAN I PLAY TO
SOLVE THEM?' AND I THINK MAYBE
I CAN MAKE A DENT."

—Dominique Durand,
*Distinguished University Professor and the E.L. Linsedth
Professor of Biomedical Engineering*



Research

The unknown doesn't intimidate us at Case Western Reserve—it inspires. We see it as an opportunity—to understand, discover, solve and create. By tackling tough questions, our faculty, staff and students truly do *think beyond the possible*.

Increasing Evolutionary Understanding

Nearly a half century after a Case Western Reserve faculty member helped discover the fossil of humankind's earliest-known ancestor, Lucy, two more of the university's scholars have played pivotal roles in identifying the bones of a far older species.

College of Arts and Sciences Adjunct Professor Yohannes Haile-Selassie and Armington Professor Beverly Saylor led international teams involved in the discovery and dating of the cranium of *Australopithecus anamensis*, a species appearing to precede the previously discovered fossil by 600,000 years.

Haile-Selassie, a curator at the Cleveland Museum of Natural History, discovered the cranium after a local worker at the site in Ethiopia found a piece of its upper jaw. Saylor's team, in turn, conducted a range of analyses to determine that the species lived about 3.8 million years ago, in an area that had a lake—and, at times, lava.

Said Saylor: "Incredible exposures and the volcanic layers that episodically blanketed the land surface and lake floor allowed us to map out this varied landscape and how it changed over time."

12,600

fossil specimens found through the project, including about 230 from early humans dating back to more than 3.8 million years

10+

institutions partnering on the research

14

years conducting collaborative field research in the central Afar region of Ethiopia

Photomontage by Jennifer Taylor, courtesy of the Cleveland Museum of Natural History. Photography by Matt Crow and Dale Omori.

Creating Connections

Dustin Tyler wants to make humans more capable—and make technology more human. And the judges of a \$10 million global competition want to give him the chance.

His team's application is one of 77 selected to advance in the Avatar XPrize, an international contest in which participants work to create a system that can convey human presence to another location in real time.

A Case Western Reserve professor of biomedical engineering, Tyler already has led restoration of a sense of touch through a prosthetic hand—and, in turn, perception of pressure. The former allowed a husband to feel his wife's hand, while the latter gave a grandfather the chance to pick up his granddaughter safely. And, recently, his team's work allows an individual to control their prosthesis like it is their hand—just by thinking about it.

He's since formed the university's Human Fusions Institute, which aims to enable "the human mind to transcend the barriers of the body" via neural interfaces, and now is working to advance to the XPrize's semifinals, to be announced in April 2021.

No matter the outcome, the institute's efforts will continue. "Our capability is no longer limited to the barriers of our skin," Tyler said. "We can extend our sense of self through technology and have shared human experiences at an entirely new level."

\$20 million

Brenda A. and Robert M. Aiken Strategic Initiative fund dedicated to biomedical engineering, which partially funds the institute

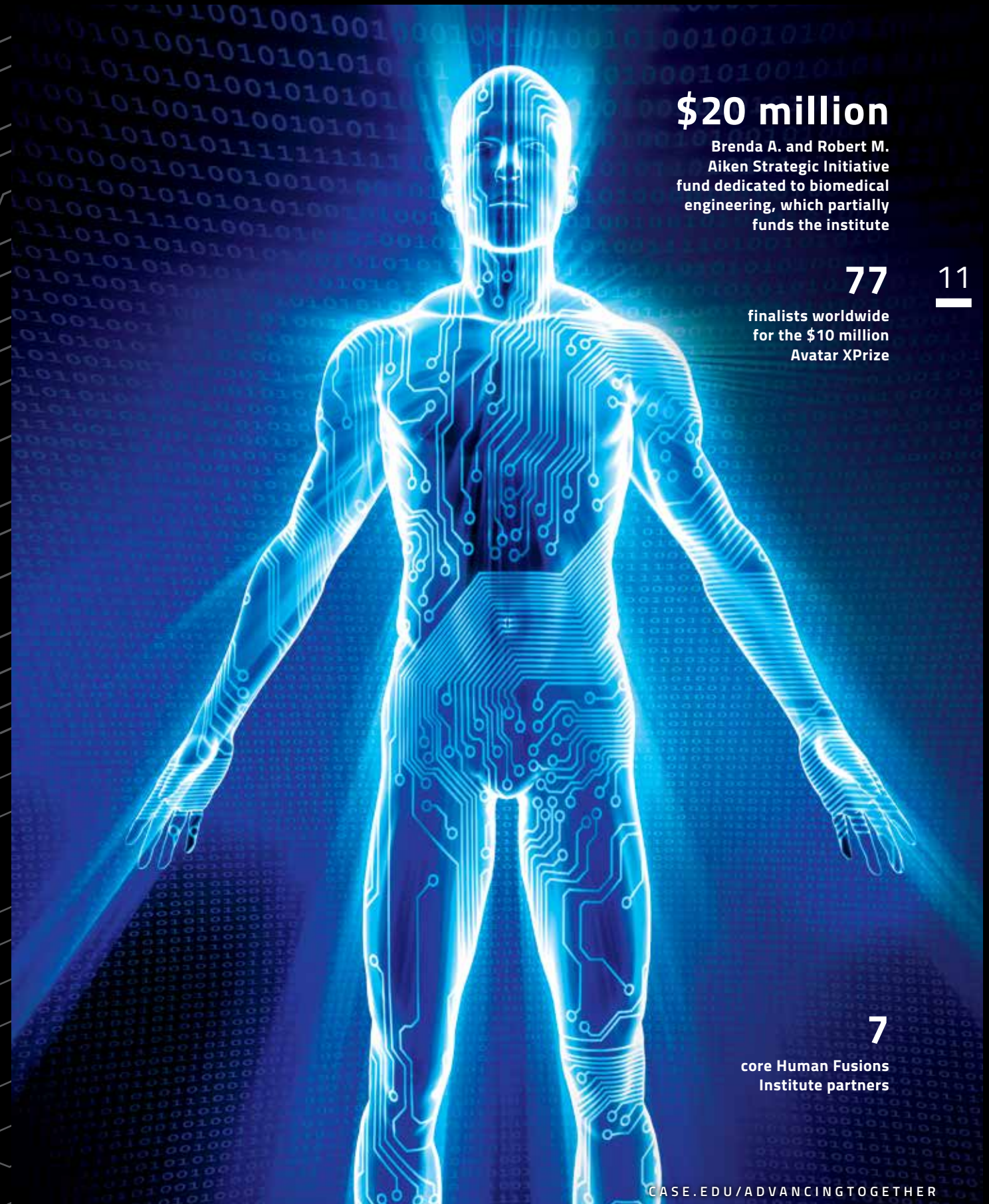
77

finalists worldwide for the \$10 million Avatar XPrize

11

7

core Human Fusions Institute partners



Restoring Historical Art

After research trips to Cyprus and Ethiopia in the spring, Elizabeth Bolman planned to deliver a lecture in Egypt about her two decades of work at four holy Coptic (Egyptian Christian) sites.

But like so much else in 2020, the COVID-19 pandemic upended her travels and turned her in-person appearance into an online presentation—except hers reached more than 700 people around the world.

Speaking from her Northeast Ohio home, Bolman detailed how the collaboration among Egyptian and U.S. organizations yielded new knowledge and broad appreciation of the small sect's cultural history and influence.

Their documentation and preservation work “revealed treasures that had not been seen for centuries and were therefore unknown to scholars of the larger medieval world,” explained Bolman, chair of the Department of Art History and Art, which this year received a \$500,000 grant from The Andrew W. Mellon Foundation for its art history doctoral program with Cleveland Museum of Art.

“Now, they are making significant contributions to the body of knowledge about medieval art—and adding four jewels of world heritage.”

“ART IS CENTRAL TO HISTORY—
NEARLY EVERY SOCIETY ON EARTH
CREATED NEW OBJECTS, BUILDINGS,
MONUMENTS, STATUES—IT’S A
FOUNDATIONAL PART OF THE EXPRESSION
OF POWER AND CULTURE. ...
ART IS NOT PERIPHERAL, AND THE
STUDY OF ART SHOULD NOT BE A
MARGINALIZED ACTIVITY.”

—Elizabeth Bolman



Elizabeth Bolman and colleagues inspect the Red Monastery, one of the four Egyptian holy Coptic sites on which she conducts preservation work. (Photo courtesy of Professor Bolman.)

Toward Better Care— and a Cure

When Northeast Ohio's leading health researchers came together to attack Alzheimer's, federal officials took notice.

Defeating the devastating disease requires more than specialists in brain health and aging; it demands experts in data, drug development, education and outreach too.

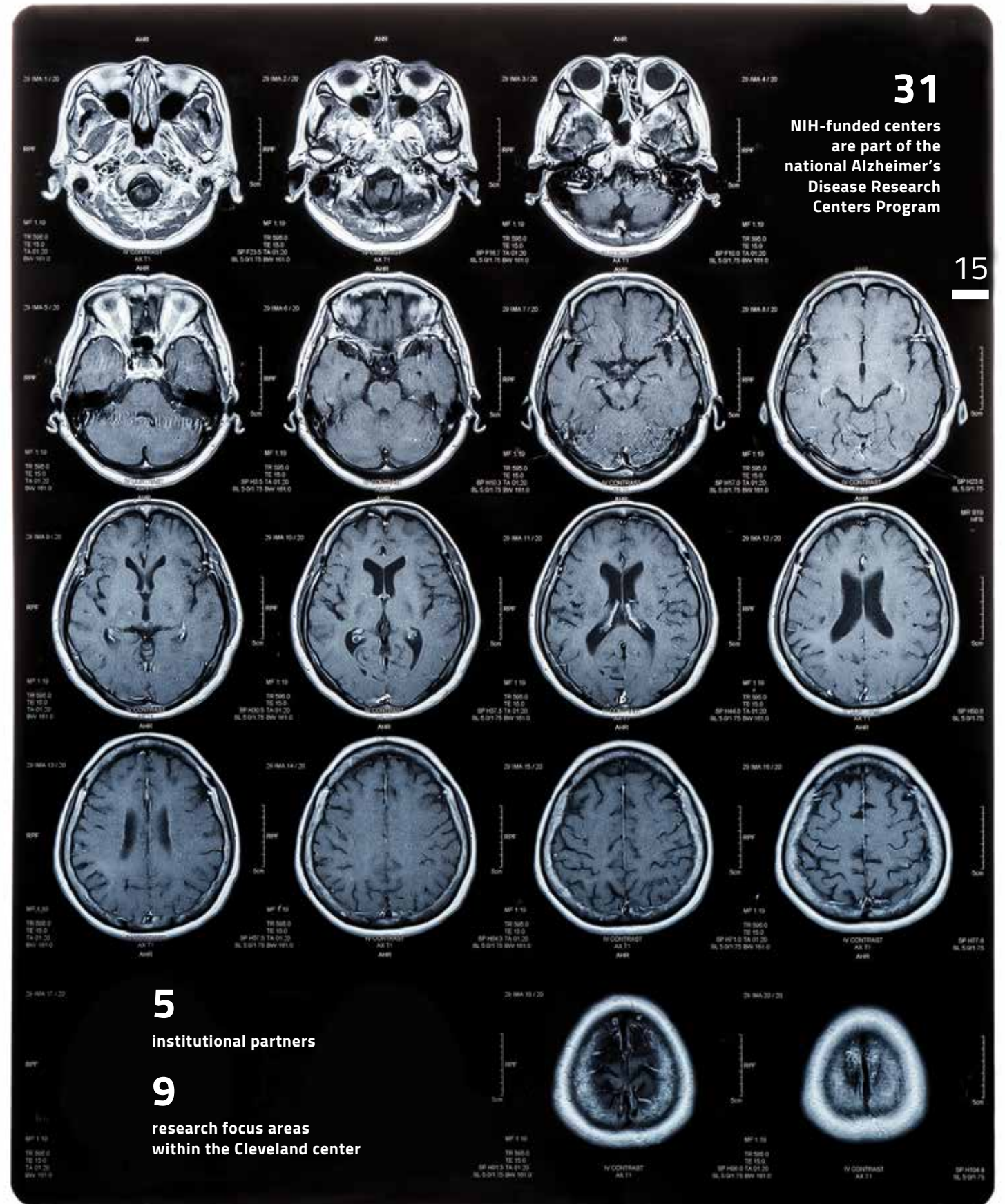
After all, the disease afflicts one of every 10 people in the U.S. aged 65 or older. And its devastation affects millions more—caregivers battling against relentless cognitive decline, adult children no longer recognized by their parents, and grandchildren who will never know family members as they really were.

But when clinicians and scientists from Case Western Reserve University, Cleveland Clinic, Louis Stokes Cleveland VA Medical Center, the MetroHealth System and University Hospitals collaborate, the potential for progress soars exponentially.

Leaders at the National Institute for Aging were impressed enough to award the team a \$4.2 million grant, and formal designation as an Alzheimer's Disease Research Center. It's the first in Ohio, and follows joint centers launched with universities like Harvard and Johns Hopkins.

"Alzheimer's cuts across all ethnicities and all socioeconomic classes," said Jonathan Haines, chair of the university's Department of Population and Quantitative Health Sciences and leader of the center's Data Management and Statistics Core. "[Northeast Ohio's] diverse urban and rural population, combined with detailed genetic and clinical information ... means this new Cleveland center is uniquely positioned to contribute significantly to the national research agenda."

NIH-funded centers
are part of the
national Alzheimer's
Disease Research
Centers Program



5

institutional partners

9

research focus areas
within the Cleveland center

A Fair Chance

Everyone wins when released prisoners get jobs.

They can contribute to the economy, pay their share of taxes and dramatically reduce the likelihood they will be incarcerated again.

But for decades, a single box on application forms served as a boulder-sized obstacle to employment.

It required disclosure of criminal convictions, which often ended consideration of the candidate before the process even began.

Since Hawaii first passed a law to “ban the box” in 1998, another 34 states have followed suit. But the approach never reached the federal level until last year, when Weatherhead School of Management’s Daniel Shoag helped convince Congress of its merits.

Research co-authored by the economics faculty member informed a bill to remove the question from government and government contractor hiring practices—and when academic critics argued against the measure, Shoag and his colleagues wrote directly to lawmakers. The “Fair Chance Act” became law late in 2019—and takes effect in December 2021.

As Shoag said, “This is a great example of how research can inform the legislative process.”

700,000

job seekers expected to benefit from the Fair Chance Act (*National Employment Law Project*)

30%

increase in a candidate’s chances of landing a public-sector job under Ban the Box policies

Children with elevated lead levels were:

27%

less likely to be on track for kindergarten

25-30%

more likely to enter the juvenile justice system

34%

more likely to be incarcerated as adults (age 18 to 23)

Lead’s Long-Lasting Impact

The immediate dangers of lead poisoning for children are well-documented. But university researchers’ deep dive into two decades of Northeast Ohio data now shows that effects extend far into adulthood.

A team from the Jack, Joseph and Morton Mandel School of Applied Social Sciences’ Center on Urban Poverty and Community Development found these so-called “downstream” consequences for affected individuals include increased involvement in the juvenile justice system, adult incarceration and homelessness.

In addition, the researchers—led by principal investigators Claudia Coulton, a Distinguished University Professor and co-director of the center, and Rob Fischer, an associate professor at the Mandel School—found stark racial and economic disparities among their sample.

Black children were disproportionately more likely to have lead poisoning than their white counterparts, and lead exposure is concentrated in areas of disinvested neighborhoods—those historically tied to segregation, redlining and subprime lending.

“It’s clear,” Coulton said. “Lead poisoning in early childhood can altogether shift the trajectory of a person’s life at key stages of development and leave lasting long-term consequences.”

By age 23, individuals with elevated blood-lead levels as children were more likely to have relied on public assistance programs, such as Temporary Assistance for Needy Families (53% more likely), homeless services (40% more likely) and Supplemental Nutrition Assistance Program (17% more likely)

ADVANCING
TOGETHER



"IT'S NOT JUST ABOUT CREATIVITY.
IT'S ABOUT BEING ABLE TO IDENTIFY
PROBLEMS THAT NEED SOLUTIONS,
AND KNOW HOW TO IMPLEMENT THEM
SUCCESSFULLY. WITHOUT THE PROCESS,
AN IDEA IS JUST AN IDEA."

— Fehmida Kapadia (GRS '12, biology),
adjunct professor in the Master of Engineering Management program

Innovation

Our faculty, staff and students know how to navigate change; in fact, they excel at it. In labs and classrooms on and off campus, they come together to develop creative solutions to today's pressing problems and tomorrow's emerging opportunities.

Engineering Solutions for COVID-19

When the pandemic's arrival in Ohio sent most classes remote, Case Western Reserve's entire campus grew eerily quiet.

Support and services continued for the limited number of students staying in university housing, and medical researchers adapted to new prevention protocols that allowed them to remain in labs. Otherwise all was silent—even the usually bustling Larry Sears and Sally Zlotnick Sears think[box] innovation center.

The seven-story, 50,000-square-foot building typically draws tens of thousands of visits per year from people eager to use its advanced equipment for projects, prototypes and even final products. But while COVID-19 closed its doors to the crowds, it ultimately created new opportunities.

Eager to contribute to health care's response, think[box] staff and the Case School of Engineering community quickly turned their focus to pandemic-related projects, building critical partnerships with health care systems and manufacturers and designing solutions to meet their needs.

Before long, their efforts yielded prototypes for 3D-printable face shields, structures to protect medical staff performing intubation, and even a device that decontaminates N95 masks in under a minute—proving our engineers can be both critical researchers and pandemic problem-solvers.

"It would [have been] easy to see this as someone else's job," said Ian Charnas (CWR '05), director of innovation and technology at Sears think[box], "but our university has the type of people who say, 'We can do this.'"

1 million

face shields produced in the first month of the pandemic

\$100,000

gift that launched the Miguel Zubizarreta (CWR '90) COVID-19 response fund



After Cleveland Clinic nurse Jane Hartman created the Highline—which allowed nurses to move IV pumps outside the door to limit their exposure—Ainsley Buckner (pictured) directed the production of IV hooks. With the help of staff and volunteers, 300 were 3-D printed for Cleveland Clinic in one weekend alone. (Photo by Matt Shiffler)

Inspiring New Hope

Six years ago, 10th grader Talha Ali was sitting in his high school auditorium in Pakistan, waiting for a lecture to start.

Moments later, armed men burst into the room, firing wildly. As Ali scrambled to his feet, he found himself face-to-face with one of the terrorists. The man shot Ali, point blank, in the head.



The Taliban attack took 150 lives that day. Somehow, Ali survived.

The bullet crushed half of his face and ejected bone and teeth, sending the teenager on an arduous journey of recovery—one that culminated in complex reconstructive surgery here in Cleveland.



Case Western Reserve School of Dental Medicine faculty Faisal Quereshy

and Fady Faddoul led the pro bono effort, which required a patchwork of fundraising, donations and waived fees.

Ali—now equipped with a new smile and a bright future—expressed gratitude, describing Quereshy and Faddoul as “the best of the best.”

“My treatment [at Case Western Reserve],” Ali said, “was incredible.”

\$50,000

raised by the Khyber Medical College Alumni Association of North America to pay for Ali’s travel, lodging and daily needs during his time in the U.S.

2,500

Major surgeries performed by faculty and residents of the Oral and Maxillofacial Surgery department each year—including managing trauma, cancer reconstruction, TMJ conditions and facial reconstructive procedures



An Improvement in Care for All Ages

As patients age, their health needs can become increasingly complex. A seemingly standard prescription, for example, can lead to dangerous medication interactions if issued without considering the patient’s health holistically.

In response, Case Western Reserve University’s Frances Payne Bolton School of Nursing has partnered with CVS Health’s MinuteClinic and the Institute for Healthcare Improvement to ensure older patients receive care that recognizes their specific needs.

Funded by a three-year, \$2.44 million John A. Hartford Foundation grant, nursing school researchers are working with more than 1,100 MinuteClinic locations to integrate a new decision-making framework. It emphasizes the “4Ms:” what matters to the patient, as well as their medication, mental activity and mobility.

“It’s starting here,” Professor and Project Lead Mary Dolansky said, “but it’s a movement that we believe will spread.”

1,100

CVS MinuteClinic locations nationwide implementing “Age-Friendly Care”

3,000

providers receiving training on this approach

10,000+

people turn 65 each day in the U.S.

ADVANCING
TOGETHER



"IN A TIME OF TREMENDOUS CHALLENGE
AND CHANGE, YOU HAVE RESPONDED
WITH GRACE AND COMPASSION.
YOU HAVE SUPPORTED ONE ANOTHER,
REACHED OUT TO OUR BROADER
COMMUNITY AND APPLIED YOUR UNIQUE
EXPERTISE TO HELP THOSE WHO NEED
US MOST. ... YOU HAVE SHOWN THAT IT IS
OUR PEOPLE WHO MAKE CASE WESTERN
RESERVE EXTRAORDINARY."

—President Emerita Barbara R. Snyder

Community

In a time marked by separation, we still managed to connect—
even if from a distance. Whether working to support frontline
health care staff or address racial injustice, Case Western Reserve's
people exemplified the power of partnership.

Actions to Achieve Justice

After George Floyd lost his life under the knee of a Minneapolis police officer in May 2020, his death became a rallying cry for racial justice across the nation—and at Case Western Reserve.

Ten days after protests began in Cleveland, then-President Barbara R. Snyder and Provost Ben Vinson III sponsored a Day of Dialogue that featured nearly a dozen virtual sessions covering such topics as university police and safety, health disparities, and campus climate. While the day's subjects varied, one theme consistently emerged: Talk is important, but action must follow.

In the ensuing months, the university hosted a second Day of Dialogue and launched a student-led task force that seeks to address a broad range of concerns, including issues of race on campus.

**"HOW DO WE BECOME A MORE
ANTI-RACIST INSTITUTION?
CHANGE THE NARRATIVE BY EDUCATING
OURSELVES AND EACH OTHER.
STAY HOPEFUL."**

— Naomi Sigg, Director, Office of Multicultural Affairs



7
committees on
the student-led
task force,
For a Better CWRU

192
students
volunteered to serve
on the task force

Zachery Cutner, 26, addresses
protestors at a rally in Cleveland
on May 30, following the
death of George Floyd.
(Photo by John Kuntz/Cleveland.com)

Keeping Our Community Safe

When Case Western Reserve announced a shift to remote instruction last spring, officials hoped students would return to classes within a few weeks.

Three days later, they advised it would continue throughout the semester.

The moment marked the first of many massive changes that our campus, country and world experienced in 2020. It also signaled the start of extraordinary responses among students, staff, faculty and alumni—all aimed at improving the lives of others.

In some of history's most anxious and uncertain moments, our community's creativity and compassion inspired us all.

Adapting to the New (Mixed) Reality

Anatomy Assistant Professor Susanne Wish-Baratz didn't have to worry about medical students' access to cadavers when classes went remote in the spring; after all, Case Western Reserve's curriculum for the subject is almost entirely digital.

With assistance from Microsoft, the university's Interactive Commons team secured enough of the company's HoloLens devices to provide them to all 185 students, with the software for HoloAnatomy already loaded.

Students were pleased with what Wish-Baratz called a "seamless transition." In a study conducted in spring (and published in September in *JAMA Network Open*), the overwhelming majority of students felt the virtual learning was as effective—if not more so—than in-person courses.

"With HoloAnatomy, you can literally see through structure if you lean in ... and then [you] come back out and the organ is still intact," said student Sanjana Madishetty. "You can't do that with a dissection, and you can't do it at home like this!"

81%
of students said sessions were equal to or better than in-person instruction

84%
believe future students can "effectively learn human anatomy" via a remote mixed-reality application

58%
preferred remote delivery to in-person classes

Professor Elliot Posner conducts a dual-delivery course—teaching students in person while others participate in his Introduction to International Politics class via Zoom. (Photo by Matt Shiffler)



Change of Course

A medical student created an elective when her last hospital rotation was canceled: Epidemiology of Pandemics and Global Response.

A famed alumnus of our acting program appeared on Zoom to support students after the cancellation of their culminating New York City showcase.

A professor brought global entrepreneurs into his virtual classroom—then opened the sessions to the public.

These examples were just a few of the many creative approaches our community brought to education last spring. Despite the multiple time zones and technological challenges involved, an end-of-semester survey found that nearly nine out of 10 students agreed or strongly agreed that their instructors did their best to adjust to the learning environment. More, three out of four said they were confident they had completed their courses successfully.

12,073

Zoom users

1.2 million

participants in Zoom meetings

182,833

Zoom meetings

65 million

minutes spent on Zoom

Case Western Reserve University statistics, March-June 2020

To Choose Freedom, or Safety?

The pandemic that upended our lives has also created an extraordinary conundrum: With a threat as contagious and lethal as COVID-19, can protection of collective well-being outweigh individual autonomy?

For two Case Western Reserve faculty, the controversial question requires consideration not only of law, but also ethics, education and, most of all, public health.

Writing in both a peer-reviewed academic journal and a mainstream media publication, law professor Max Mehlman and medical professor Michael Lederman make clear that legal precedents give the government the right to compel vaccinations, such as those for COVID-19. But they also acknowledge that officials also have abused this authority—as in the Tuskegee syphilis study—while others have spread misinformation regarding risks.

The result? A growing anti-vaccination movement leading to lower immunization rates—which, in turn, have sparked new outbreaks of once-defeated diseases such as measles.

While society and government can mandate immunization, Mehlman and Lederman argue, the best prescription includes twin cures: massive education efforts and appealing civil incentives.

“FREEDOM IS THE FOUNDING PRINCIPLE OF THIS COUNTRY, BUT YOU CAN’T ENDANGER OTHER PEOPLE. ... OUR CHOICES AFFECT EVERYONE AROUND US.”

—Max Mehlman



175+
medical, public health and
physician assistant students
conducted contract tracing
and managed COVID-19
hotlines at area health
facilities in March and April

Providing Support Amid a Pandemic

In the early days of the COVID-19 pandemic, a group of Case Western Reserve University School of Medicine students saw the strain put on frontline health workers. So they organized to help—volunteering to run errands, tutor children, walk dogs and more.

Other student efforts followed, many focused on the Cleveland community: sewing masks, securing personal protective equipment donations, and providing meals to people in need.

Faculty and staff members added their own contributions, with more than 1,000 donating \$300,000 in parking credits to the university's Student Emergency Fund, originally established by a medical school alumnus to provide urgent help. And when spring semester activities were canceled, student government leaders reallocated funds to support peers facing unanticipated expenses.

“I think the big thing that all of this proves is that none of us are alone, and that we can all help out in some small way,” said Hunter Stecko, then vice president of finance for Undergraduate Student Government who helped establish the fund for student peers. “I hope that even in the midst what seems to be one of the most confusing times in our living memory, this can still bring a little bit of brightness.”

Collected by the student-run MedSupplyDrive@cwru:



1,200
surgical masks



16,000
face shields



10,400
gloves



600
shoe covers



800 volunteer-sewn masks

8,000

face masks given to those experiencing homelessness and to staff at homeless shelters as part of an initiative by the Jack, Joseph and Morton Mandel School of Applied Social Sciences, Yellowcake Shop and Lutheran Metropolitan Ministry

1,127

masks sewn by law student Clare Shin—180 of which were specially made for children with hearing impairments

Rapid Response

Within days of the novel coronavirus reaching Ohio, more than 260 Case Western Reserve researchers came together to create a COVID-19 Task Force.

Within two months, members submitted nearly 50 research proposals to the task force, while also pursuing outside funding from sources such as the National Science Foundation (NSF), National Institutes of Health and private organizations. Plus, they connected with leading researchers from across Northeast Ohio to enhance and unify the region's efforts.

By summer, the task force had awarded \$500,000 in university funding to 18 research projects to pursue their studies. And over six months, 50 teams of researchers secured other funding to learn more about the development, control and biology of the novel coronavirus, as well as the emotional impacts, economic concerns and ethical issues surrounding the pandemic.

A few of the researchers' efforts include:

► Studying the Spread

Cleveland Clinic and Case Western Reserve researchers are analyzing COVID-19 patient data to better understand how the virus spreads and where various strains originate. They are sequencing the genome and using computational algorithms to mine patterns from the genetic sequences of the RNA of the novel coronavirus.

► 'Unprecedented' Trauma

In a 600-participant study of the emotional impact of the pandemic in the spring, 94% of respondents reported some levels of grief, and 86% experienced at least one trauma symptom—a level never seen before, according to researchers in the university's social work and nursing schools.



\$1,360

raised by the CWRU Engineers Without Borders chapter in five days to purchase 2,725 masks for a small town in the Dominican Republic

Associate professor Yanfang (Fanny) Ye, right, teaches a class before the start of the pandemic. Ye led a team responsible for the creation of two tools aimed to help combat COVID-19. (Photo by Annie O'Neill)

► Mapping Apps

A team led by computer and data sciences faculty member Yanfang (Fanny) Ye developed alpha-Satellite, an online risk-assessment tool and mobile app that gives users information about the relative risk of going to any location in the United States. In addition, a team from our Weatherhead School of Management, Case School of Engineering and School of Medicine won a global #HackFromHome competition for the ShareTrace app, which provides privacy-protecting contact tracing and personalized infection risk-management tools to reduce the spread of COVID-19.

► Advancing with Artificial Intelligence

In her second NSF COVID-19 award, Ye's team earned funding to develop AI approaches to detect coronavirus-themed malware. And in April, a team in our Center for Computational Imaging and Personalized Diagnostics led by biomedical engineering professor Anant Madabhushi began developing an AI computational tool to help medical staff decide which patients will need the most treatment for COVID-19—especially ventilators.

ADVANCING
TOGETHER



"IT IS OUR OBLIGATION TO CREATE
SILVER LININGS AT THIS CRITICAL
POINT IN TIME. WE HAVE BEEN THROUGH
A LOT, BUT WE HAVE ALSO BEEN GIVEN
THE OPPORTUNITY TO LEARN A LOT.
IT IS INCUMBENT ON US TO MAKE THE
WORLD A BETTER PLACE SO WE CAN LESSEN
THE IMPACT OF FUTURE CRISES AND
CONTINUE TO THRIVE, COME WHAT MAY."

—Interim President Scott Cowen

Year in Review

2019–20 brought incredible change and remarkable progress.
From new leadership to new research projects, major honors to major gifts,
there's even more to learn about Case Western Reserve's impactful year.

Notable Achievements

Some of our many faculty, staff, students, alumni, donors and partners who shoot for the moon

36



1st nurse-scientist named to the National Academy of Medicine's Emerging Leaders in Health and Medicine Scholars program: Professor **Ronald Hickman Jr.**



1 CWRU biologist awarded the National Science Foundation Early Career Development grant: **Sarah Diamond**



1 of 20 researchers nationally to receive a federal award for neurological research that is "ambitious, creative, and/or longer-term": genetics and genome science professor **Paul Tesar**

27% acceptance rate for the undergraduate Class of 2023—marking our most selective year ever



9th CWRU president, **Barbara R. Snyder**, named leader of the Association of American Universities—succeeded on an interim basis by former Tulane University President **Scott Cowen** and, beginning July 1, 2021, former University of Minnesota President **Eric W. Kaler**



7 National Academy of Inventors Fellows affiliated with CWRU—including the newest, **Pamela B. Davis**, professor and former dean of the School of Medicine

37



6 months into his Doctor of Management program, **Curtis Merriweather Jr.** earned an invitation to a White House celebration of Black entrepreneurs



1st Case School of Engineering faculty member to earn the U.S. Department of Energy's Early Career Research grant: chemical engineering's **Christine Duval**



9 faculty members securing Guggenheim Fellowships while at CWRU—including art history professor **Elina Gertsman**, a medievalist who earned hers in April 2020

2019-20 Giving Highlights

914 undergraduates received scholarship support from gifts

\$48.3 million raised for scholarships, fellowships, and student aid

\$12.5 million to the annual fund, which provides immediate student-focused support

14,261 donors, **7,460** of whom are alumni

\$1 million

U.S. Department of Justice grant for our county common pleas court and Mandel School researchers to launch a special court docket for cases involving high-risk domestic offenders

\$1 million gift from Medtronic—matched by an anonymous donor—to endow a professorship dedicated to biomedical discovery and innovation



3rd in Case Western Reserve history to be named a Gates-Cambridge Scholar: medical student **Nikhil Krishnan**



1st sociologist to become a National Academy of Sciences, Engineering, and Medicine Jefferson Science Fellow: Professor **Brian Gran**



\$5 million gift from alumnus **Kevin J. Kranzusch** to launch a new Department of Computer and Data Sciences

\$3 million

in scholarship support for students in nursing, dentistry and medicine, thanks to a gift from the **Ralph T. and Esther L. Warburton Foundation**



2 engineering faculty named recipients of the Presidential Early Career Award for Scientists and Engineers: **Jennifer Carter** and **Philip Feng**

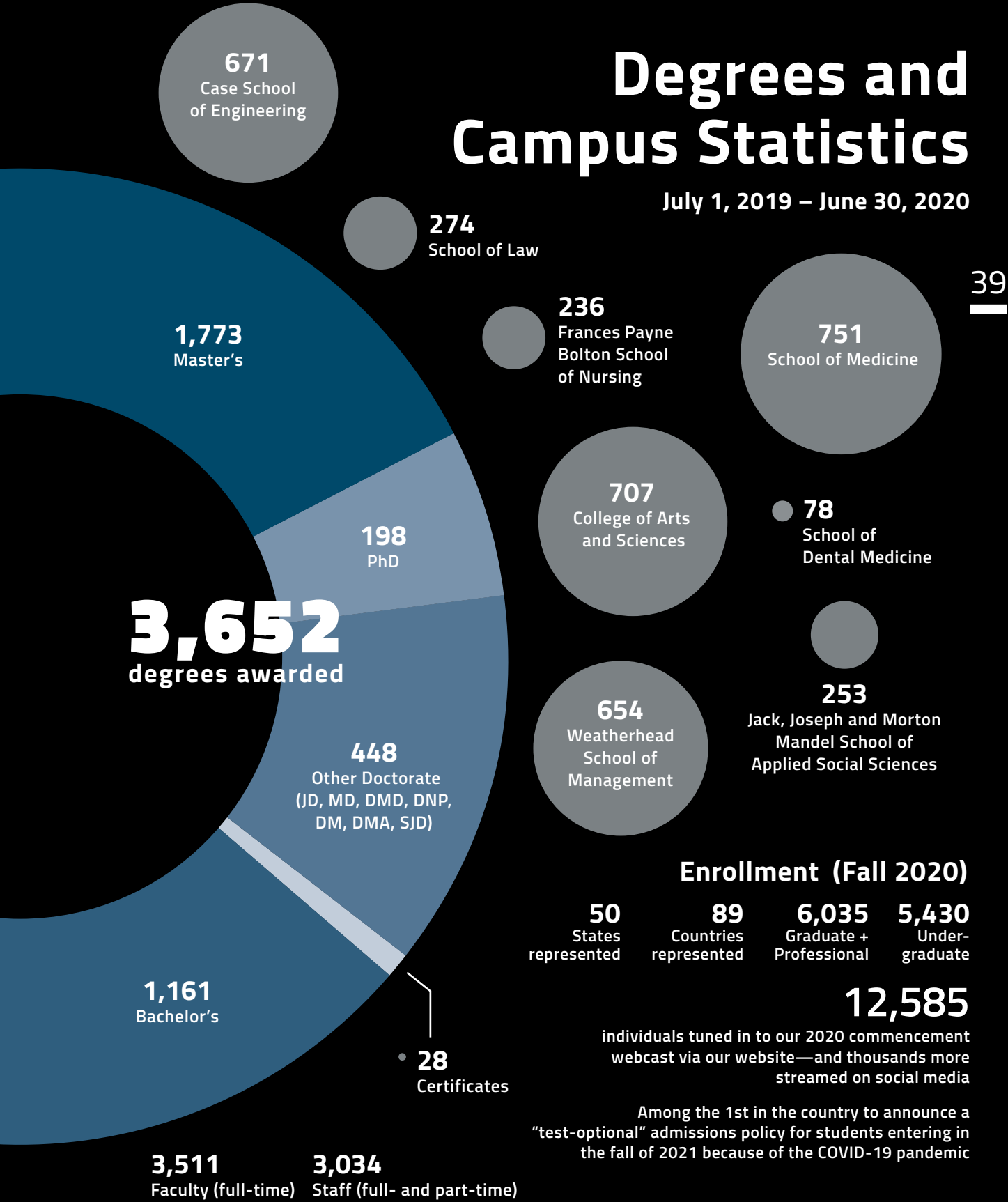
2,467 donors contributed **\$1.2 million** to the university's COVID-19 response efforts during our Day of Giving



Students prepare for the start of class with School of Law instructor Anat Alon-Beck in January 2020. (Photo by Annie O'Neill)

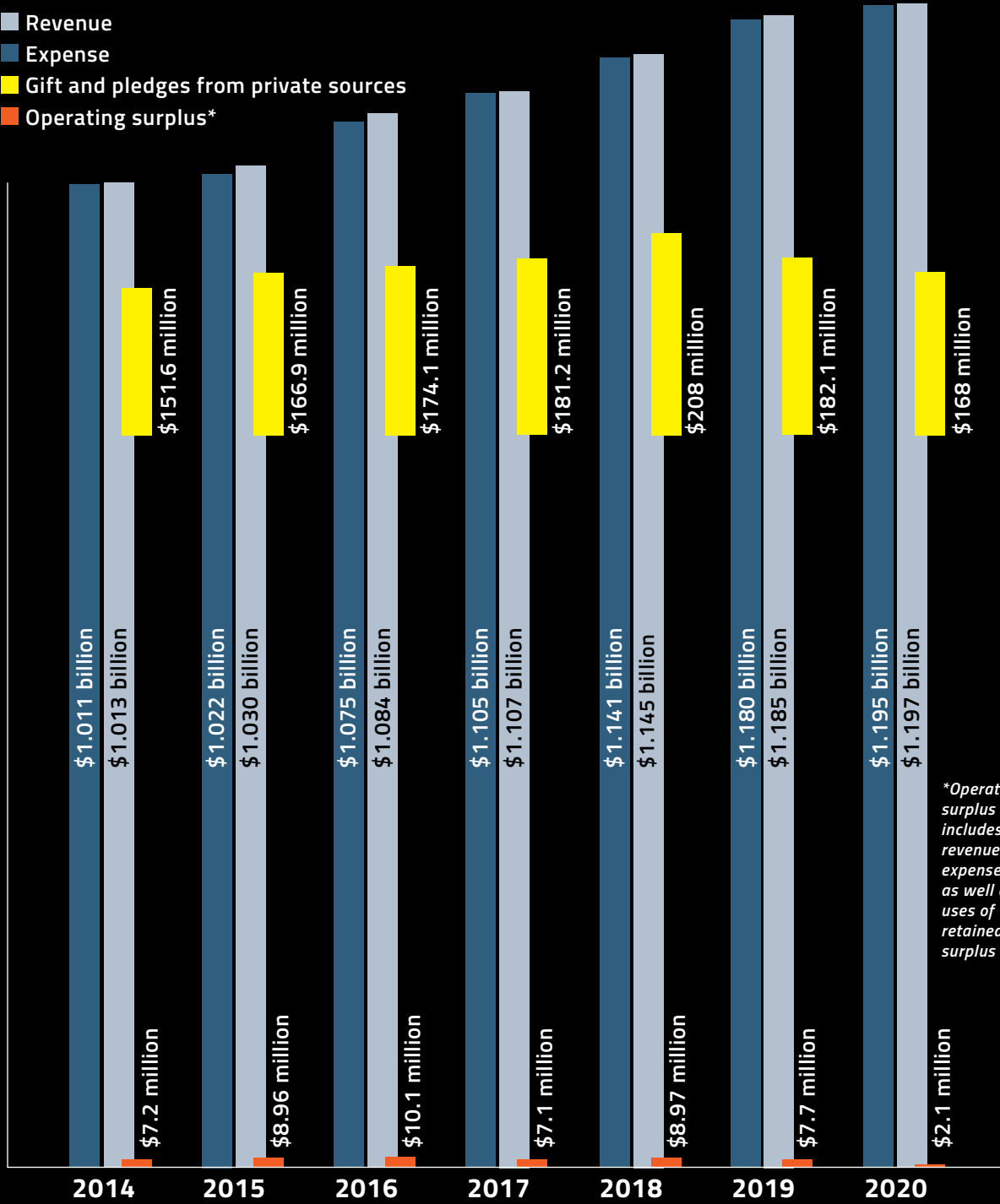
Degrees and Campus Statistics

July 1, 2019 – June 30, 2020



Operating Revenues, Expenses and Gifts from Private Sources

■ Revenue
■ Expense
■ Gift and pledges from private sources
■ Operating surplus*



*Operating surplus includes revenue less expenses as well as uses of retained surplus



Photo by Matt Shiffler

Research and Technology Highlights

Competitive Sponsored Research Projects: FY 2019 and 2020 Comparison



FY 2019 total: 1,287 projects, \$331.7M awarded

FY 2020 total: 1,494 projects, \$367.2M awarded

Technology Transfer, FY 2020

61 New Intellectual Property Deals with Industry

163 New Inventions

\$4.31M Licensing Revenues



**"WE BELIEVE IN VALUING HOW OUR CAMPUS,
OUR COMMUNITY, AND OUR WORLD TREAT AND
REFLECT ONE ANOTHER. WE EMBRACE ALL
CULTURES. ... WE PUT PEOPLE AT THE CENTER OF
OUR DECISIONS, AND WE PRIORITIZE DIVERSITY
OF THOUGHT, OF MIND AND OF BACKGROUND."**

—Provost Ben Vinson III

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