

UAB

GAZINE

THE UNIVERSITY OF ALABAMA AT BIRMINGHAM

2013-2023

A DECADE OF GROWTH

President Ray L. Watts celebrates
10 years of UAB achievements

SPRING 2023





10 YEARS

SUCCESS DOESN'T JUST HAPPEN. It takes vision, courage and collaboration. It takes leadership and teamwork. It takes determination. And it takes careful planning.

A decade ago, when Ray L. Watts, M.D., was named the seventh president of the University of Alabama at Birmingham, the time was ripe for more audacious goals, more aggressive investments and more dramatic change. In 2023, as Dr. Watts becomes the longest-serving president in UAB history, the results are incontrovertible: UAB is bigger by every measure, more diverse than nearly every other peer institution and more prestigious than ever. Guided by our strategic plan, Forging the Future, and fueled by the passion and commitment of our people, this remarkable institution has only greatness ahead.

This special edition of UAB Magazine commemorates the 10-year anniversary of Dr. Watts' presidency and highlights our aspirations in 2013, our achievements in the ensuing decade and our ambitions for the future. ■

Be a part of the best. Be a part of UAB.

#1 America's Best Large Employer and #1 Best Employer for Diversity among colleges and universities
Forbes, 2021

#1 Cybersecurity program in the U.S.
Fortune, 2023

**#1 Young U.S. University two years in a row
#10 and #12 Young University worldwide**
Young University Rankings Times Higher Education, 2018, 2019

#1 Master of Science in health administration
U.S. News & World Report, 2023

1st Health Promoting University in the nation
International Health Promoting Campuses Network

Top 8% of universities worldwide
Best Global Universities, U.S. News & World Report, 2022-2023

11 Best Online Programs
Best Online Colleges, U.S. News & World Report, 2023

UAB Online is #15 in the U.S.
America's Top Online Colleges, Newsweek, 2023

16 programs in Top 25
America's Best Graduate Schools list, U.S. News & World Report, 2023

17th among all public universities for federal research funding
NSF Higher Education Research and Development Survey, 2020

5 straight years Higher Education Excellence in Diversity Award and Diversity Champion
INSIGHT into Diversity magazine

8th largest hospital in the U.S.
Becker's Hospital Review, 2021

8 specialties ranked among top 50 programs of their kind
Best Hospitals, U.S. News & World Report, 2021-2022

Rated highest among Best Hospitals for Maternity Care
U.S. News & World Report, 2022-2023

Obstetrics and Gynecology is #5 in the nation
U.S. News & World Report, 2022-2023

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In early 2013, UAB was on the rise. Led by a new president, kickstarted by a collaborative strategic planning process and fueled by the innovation of its people, the institution began its most successful decade to date.

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Photo of President
Ray L. Watts by
Lexi Coon

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EXCELLENCE BEYOND HIGH EXPECTATIONS

IN THE 10 YEARS since the University of Alabama System Board of Trustees chose Ray Watts to serve as president, he has led UAB to unprecedented and monumental success alongside dedicated and talented UAB students, faculty and staff, as well as passionate alumni, donors and fans.

At its core, UAB exists to serve our state and improve lives through education, research, patient care and public service—a mission that deserves a leader whose standard is excellence.

After President Watts transformed the School of Medicine as dean and senior vice president of Medicine, the Board knew he could take the university and Health System to new heights as president. While we had high expectations, it would have been hard—if not impossible—to imagine the tremendous level of success UAB has achieved in the past 10 years.

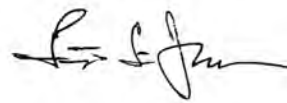
Under his leadership—and with the full support and partnership of our Board and System Office—UAB is realizing its endless potential in every area of its mission.

I hope you will enjoy this publication that highlights the often-astounding examples of growth UAB has delivered for its campus, city, state, country and beyond in the last 10 years, as well as President Watts' aspirations for the future.

As a son of Birmingham and graduate of UAB whose passion for improving lives is evident in everything he does, the successes of the last decade have only made him eager to achieve more. The University of Alabama System and our Board of Trustees look forward to many more years of working with President Watts as he and his extraordinary team continue to expand the institution's influence for the greater good.

On behalf of a grateful System Office and Board—and for the millions of people who benefit from his passion to improve lives—I sincerely thank and congratulate Ray on overseeing the most successful, influential decade in UAB's history.

Go, Blazers!



Finis St. John
Chancellor
University of Alabama System



A DECADE OF GROWTH

RESEARCH FUNDING

\$715M
FY2023

FY13: \$379M 89% INCREASE

3x CLINICAL TRIALS
EXPENDITURES
since 2013

Total Industry Awards
(including grants, funded
clinical trials and services)

240%
2013-2022
FY13: \$44.5M FY22: \$151.3M

INNOVATION

Harbert Institute for Innovation
and Entrepreneurship (HIIIE)

3.3 STARTUPS
LAUNCHED
YEARLY

+43% OVER HISTORIC
GROWTH RATE

Commercialization Revenue

\$5.24 M
PER YEAR

+106% OVER HISTORIC
GROWTH RATE

ECONOMIC IMPACT

\$12.1B
FY2022

FY08: \$4.6B 163% INCREASE

Total Revenues
+76% FY12-13: \$3.14B
FY21-22: \$5.52B

UAB Workforce
+26% 2013: 20,600+
2022: 27,900+

PATIENT CARE

Patient Visits
35%
2013: 1.29M+ 2022: 1.97M+

+13

HOSPITALS SINCE 2013

Affiliation or management agreements
improve care and access across Alabama

FACILITIES

\$1.1B+

SPENT ON NEW CONSTRUCTION
AND MAJOR RENOVATIONS SINCE 2013

ENROLLMENT GROWTH

TOTAL

17%

18,568
FALL 2013

21,639
FALL 2022

HONORS COLLEGE

196%

888
FALL 2013

2,631
FALL 2022

ONLINE-ONLY

73%

3,467
FALL 2013

5,984
FALL 2022

UNDERREPRESENTED

10%

34.7%
FALL 2013

44.4%
FALL 2022



ASPIRATIONS

CAPITALIZING ON OPPORTUNITIES: 2013

WHEN RAY L. WATTS, M.D., was named UAB's seventh president in February 2013, the institution, like others across the nation, was facing significant headwinds in its education, research and patient care missions. State appropriations to public universities and federal research budgets were declining. Online education models were proliferating. And the Affordable Care Act was reshaping the practice of medical care in the United States.

The world was still stumbling through the aftershocks of the Great Recession. Optimism was in short supply, yet Watts had it in abundance. Old sources of funding and models of growth were no longer reliable? Watts was always more interested in trying new things: His research specialty as a neurologist is experimental therapeutics. "The state and community want us to develop our ideas and capitalize on

(continued)



University Hall grand opening, 2019.

“We’re going to be a dynamic, forward-looking, out-of-the-box-thinking institution. We want to be the best we can be. We want to be exciting and innovative and creative in all parts of our mission.”
—PRESIDENT RAY L. WATTS, M.D.

(continued from Page 7)

opportunities to lead,” he said at the time. “UAB can be one of the great universities of the 21st century, and that is our vision.”

Ten years later, UAB has capitalized on those opportunities. The public phase of a fundraising campaign launched in 2013—the most ambitious plan the state had ever seen—raised more than \$1 billion. Enrollment and research funding have repeatedly smashed records. A drug called remdesivir, developed in part through some of that research funding, saved lives around the world during the COVID pandemic. Five years into Watts’ presidency, UAB was ranked the top young university (that is, under 50 years old) in the United States, and No. 10 worldwide, in the Times Higher Education World University Rankings. In 2021, Forbes named UAB America’s No. 1 Best Large Employer and its Best Employer for Diversity among colleges and universities. The

university’s commitment to health and wellness was manifested in 2020 when it became the first Health Promoting University in the United States, adopting the Okanagan Charter, which calls on postsecondary schools to lead health promotion action locally and globally. And Live HealthSmart Alabama, UAB’s inaugural Grand Challenge, is becoming a national model for community revitalization and health.

“The reason I took on the challenge of becoming president was to make sure that UAB was doing everything possible to help the people of Birmingham, the state of Alabama and surrounding areas be the best they can be,” Watts said. “Throughout my career, I developed an approach to achieve success and impact people in the most positive ways. Once I became president, the scale of that impact expanded, but the process remained the same.”

The Watts approach began with strategic planning—a tough but fair look at an organization’s strengths and its most promising opportunities. He emphasizes the value of collaboration and a team approach over individual success. With priorities set, internal investments follow to gather data and build momentum. Once you can demonstrate success, Watts says, it is time to share your vision with others. Public-private partnerships, he insists, are key to turbocharging initiatives. “People want to invest in the future—in solutions that will have a real impact on our health, education and our economy,” Watts said.

Watts had begun his tenure as School of Medicine dean with a strategic planning process that set the stage for a remarkable resurgence—vaulting UAB into an elite group of academic medical centers with massive NIH funding growth between 2013 and 2018. When he became president, Watts charged the leaders of every school and unit with developing their own strategic plans in order to find strengths and opportunities. The next step was to gather stakeholders from across campus for the university’s strategic plan.

“Our strategic plan, guided by our Shared Values, has been at the heart of all that we have accomplished over the past 10 years,” Watts said. ■

EDUCATION

BY LATE 2012, just before Watts was appointed president, UAB had lost \$100 million in state funding since a pre-Great Recession high water mark in 2008. In that year, state appropriations accounted for 74% of the academic budget of \$419 million. In 2012, the reduced budget of \$410 million was split much closer to 50/50, with 57% (\$235 million) from state appropriations and 43% (\$175 million) from tuition.

Clearly, enrollment had to increase substantially in order for UAB to continue to grow. The university also had to grapple with a surge of interest in online education among its current students and, even more, among prospective students. Online credit hour production had already nearly tripled over the past five years at UAB. Yet the competition from other institutions in this area was intense.



In his 2013 State of the University address, Watts said that the priority for UAB’s educational mission would be strategic enrollment growth with a specific focus on diversity. In his first three months as president, Watts announced partnerships with Birmingham City Schools to increase admissions through a new program called Blazing Start, and a joint admissions program with four Alabama community colleges.

Another focus would be the introduction of innovative academic programs instilling innovation and entrepreneurship. The Undergraduate Neuroscience Program, which had become a signature major attracting students from across the country, would be a model. The Department of Neurobiology, which houses the neuroscience major along with the Department of Psychology, became a joint department between the School of Medicine and the College of Arts and Sciences, giving students access to instruction from multiple scholars with various backgrounds.

“UAB will continue to add programs that will attract the best and brightest, not only from Alabama but across the country and around the world,” Watts said.

Online education also would be an important strategic priority going forward, Watts explained in his first State of the University address. Planning was underway to build on the 223% growth in online-only enrollment over the previous five years, and to “increase these numbers dramatically,” he said.

“A lot of interesting work right now is being done at the intersections between disciplines... When you can find new ways to bring faculty together, they do amazing things.”
—SENIOR VICE PRESIDENT AND PROVOST PAM BENOIT, PH.D.

FORGING THE FUTURE

EDUCATION OBJECTIVES

1

Strengthen and expand innovative academic programs to enhance UAB’s national and global reputation.

2

Ensure student success through holistic development that addresses diverse needs.

3

Create a signature core curriculum focused on modeling and developing socially conscious global citizens and leaders.

4

Engage students, faculty, staff and community members in experiential learning.

5

Foster access, inclusive excellence and equity in teaching, learning and mentorship development programs.

See how UAB has succeeded in reaching these goals beginning on page 16.

RESEARCH, INNOVATION & ECONOMIC DEVELOPMENT

FORGING THE FUTURE

RESEARCH OBJECTIVES

1

Enhance UAB's institutional culture of collaboration and innovation.

2

Drive research and innovation across the enterprise.

3

Implement a campuswide effort to select and meet "grand challenges."

4

Improve society through processes and products.

See how UAB has succeeded in reaching these goals beginning on page 24.

IN THE AFTERMATH OF THE GREAT Recession, the federal government had instituted spending cuts across the board of 8% and more. This translated into reductions at the National Institutes of Health of \$2.5 billion. UAB, which had always been so successful at attracting NIH funding, was projecting funding losses of \$20 million or more, including at least 200 grant-supported jobs and some \$5 million in faculty salaries. In this climate, the competition for research funding would be more intense than ever.

At the same time, research was becoming more interdisciplinary and more expensive. A 2015 report from the National Research Council noted that, in the 1960s, just over 50% of research publications in the science and engineering fields were written by two or more authors. By 2000, that number was 80%, and by 2013 it was 90%.

The promise of gene sequencing was undeniable, but also highly data-intensive. Storing a single genome demanded roughly 100 gigabytes, or the equivalent information in 100,000 photos. The cost to sequence a human genome had already fallen dramatically by 2013, from the \$100 million cost of the original Human Genome Project to \$10,000 in that year (and less than \$1,000 in 2022). But storing and analyzing these massive files, not to mention transferring them over computer networks and ensuring the security of the data, would require a massive investment for any institution that wanted to stay on the cutting edge.

In little more than a year under Watts' leadership, the School of Medicine had invested millions to launch a Comprehensive Transplant Institute and Comprehensive Cardiovascular Center, recruited internationally renowned researchers across

“

Many places aren't investing. They are hunkered down, waiting to see what the NIH and state and federal government are going to do ... But [Dr. Watts] has said, 'We're not going to wait.'”

—FRANCES LUND, PH.D.
DIRECTOR, UAB HEERSINK SCHOOL OF MEDICINE IMMUNOLOGY INSTITUTE

many different departments, announced plans to open a new regional medical campus in Montgomery, and boosted scholarships to medical students, among many other accomplishments.

In his 2013 State of the University address, Watts noted the importance of the new Harbert Institute for Innovation and Entrepreneurship, which was charged with expanding on the commercialization success of the UAB Research Foundation. At that point, 58 startups had been spun off from UAB research, with \$68 million in licensing revenues.

Watts approaches the ideas streaming into his office from faculty like a venture capitalist. Throughout his career, he has kept his eye out for research with the potential to become new treatments—and focused on speeding their transition from the lab to the clinic. When he was School of Medicine dean, Watts rewarded promising proposals with “acceleration funds” to jump-start studies



Distinguished Professor of Biology Steven N. Austad, Ph.D., in his lab.

and get the preliminary results needed to earn larger federal funding and other outside support. “Once we commit our own resources, then we can go out to talk with others,” Watts said. “People want to invest in great things, but they want to know that you have invested, too.”

The ultimate expression of those “great things” would come from the UAB Grand Challenge, an initiative designed to rally the entire campus around a bold goal.

\$10K

COST OF SEQUENCING A SINGLE GENOME IN 2013; TODAY IT IS LESS THAN \$1,000

PATIENT CARE

FORGING THE FUTURE

PATIENT CARE OBJECTIVES

1

Improve patient access and satisfaction through integration of clinical services across UAB's health care delivery entities.

2

Invest in signature treatments that will be delivered through recognized flagship programs.

3

Develop infrastructure to ensure statewide access to telehealth services.

4

Integrate engagement throughout the university.

See how UAB has succeeded in reaching these goals beginning on page 34.



A UAB Medicine team cares for a patient with COVID-19 in December 2020.

THE UNCERTAINTIES OF HEALTH CARE reform and debates over Medicare expansion following the passage of the Affordable Care Act in 2010 were the major challenges facing UAB's patient care mission in 2013. UAB was recording more than a million patient visits per year, including \$118 million in uncompensated care in 2012—Watts said in his first State of the University address—and offering services unique in Alabama, including trauma care, cancer care and comprehensive eye care.

But larger economic forces were straining community hospitals around the state, leading to closures and potentially life-threatening gaps in care for many Alabamians.

In his previous posts at UAB, first as president of the University of Alabama Health Services Foundation and then as dean of the School of Medicine and senior vice president, Watts had worked closely with UAB Health System CEO Will Ferniany, Ph.D., to develop the AMC21 strategic plan.

The plan's aim to position UAB as the preferred academic medical center of the 21st century focused on integrating previously separate research and educational strategic planning with clinical care so that they could synergize and strengthen the overall mission. Among its goals were adding 100 net research faculty, reinvigorating strategic research priority areas, engaging other UAB schools in research collaborations and making UAB a leader in primary care. Writing in the School of Medicine magazine in 2012, Watts noted: "For the first time, UAB has an integrated, comprehensive road map for research, education, our clinical programs and primary care. We have created an unprecedented partnership to bridge gaps and create common goals."

COMMUNITY ENGAGEMENT

BIRMINGHAM WAS CLEARLY on the cusp of big things in the early 2010s. At the turn of the decade, Railroad Park opened midway between downtown skyscrapers and UAB's Southside campus. In April 2013, Regions Field opened as the new home for the Birmingham Barons. The baseball team's move from the suburbs (made possible by a land swap between the city and UAB) was symbolic of the city's renaissance, and UAB's master plan purposely set out to guide university expansion toward Railroad Park and Regions Field.

UAB has always had a close connection to the city it calls home. In 2014, a UAB admissions campaign used the tagline "Let the City Be Your Classroom," capturing a generation's desire to become part of a community.

Within a few weeks of his becoming president, Watts and then Birmingham Mayor William Bell signed a memorandum of understanding to partner on projects. "The success and vitality of UAB is inextricably linked to the success and vitality of Birmingham," Watts said at the time. "We want to make sure that the breadth and depth of UAB's expertise are brought to bear to help our community." The partnerships that emerged through that MOU paved the way for Live HealthSmart Alabama, UAB's first Grand Challenge project, among other key initiatives.

Other challenges were also becoming clear, including a growing recognition of food insecurity. These needs would spark Blazer Kitchen, which started as a small food pantry but has evolved into a signature effort supported by students, staff and faculty.

"Inclusive excellence is not simply something we aim to do; it is who we are as an institution."

**—PAULETTE DILWORTH, PH.D.
VICE PRESIDENT FOR DIVERSITY,
EQUITY AND INCLUSION**



A student volunteers in North Titusville as part of the Live HealthSmart initiative.

FORGING THE FUTURE

COMMUNITY ENGAGEMENT OBJECTIVES

1

Expand access to community engagement resources.

2

Develop mutually beneficial partnerships.

3

Broaden scholarship in the field of community engagement.

4

Integrate engagement throughout the university.

See how UAB has succeeded in reaching these goals beginning on page 44.

ACHIEVEMENTS

SETTING AND SURPASSING GOALS: 2013-2023

WHEN UAB LAUNCHED ITS STRATEGIC PLANNING PROCESS in 2013, it did so with a clear vision of the ways in which it intended to transform. Achieving its goals was the path to becoming “One university inspiring and empowering the creation of knowledge that changes the world.”

The vision was paired with a mission and shared values that provided a common language for collaboration and strategic goals to build on UAB’s strong foundation through innovation, investment and improved infrastructure.

A decade later, the university stands at new heights in each area of its mission. We have become one of the nation’s most vibrant, diverse and sustainable campuses, equally attractive to first-generation and highly competitive students. They are drawn here by a faculty that works across disciplinary lines to develop and deliver a bold core curriculum, a compelling honors experience and novel programs—in the classroom, laboratories and online—that integrate service-learning at home and abroad.

UAB’s research enterprise is formidable and growing. The culture of collaboration is generating year-after-year increases in extramural funding and enticing early-career and established scientists and scholars to choose UAB. Our clinicians are bridging gaps to improve access to high-quality primary and specialty care within our community and throughout the state—in person and online. And the connections between UAB, Birmingham and the state of Alabama grow stronger with each passing year, as we pursue new ways to engage with our community and unlock the potential of its residents. ■





Education



CHALLENGES ARISE, OPPORTUNITIES EMERGE

INNOVATION AND INTERDISCIPLINARY COLLABORATION are hallmarks of UAB that are reflected in its research, service and educational programs. The latter created exclusive opportunities for students and enhanced UAB's national and global reputation, even in its youth.

With the strategic plan, UAB sought to leverage its existing strengths and continue to develop new programs that would appeal to the students it hoped to attract, says Senior Vice President for Academic Affairs and Provost Pam Benoit, Ph.D.

One target is joint programming—bridging disciplines to find an intersection where UAB is uniquely suited to deliver first-class education. “This is really important,” Benoit said. “We want to integrate courses and programs across disciplinary fields where great work is happening.”

UAB, which had launched successful programs such as biomedical engineering, medical sociology and music technology, explored new frontiers in recent years. From that emerged new undergraduate degrees in bioinformatics, cancer biology, genetics and genomic sciences, immunology, and neuroscience offered jointly by the College of Arts and Sciences and the Heersink School of Medicine.

“These are built around the strengths in health and other fields in which we excel, and they will prepare students for future careers,” Benoit said.

The landscape of higher education is ever-evolving. Challenges and opportunities emerge within disciplines and institutions, and external forces also combine to shape the future of the academy and its institutions, including UAB.

In the past decade, the rising costs of providing higher education and increased regional and global competition for students and research funding are among the financial hurdles to increasing needed investment, spurring innovation and expanding infrastructure.

Likewise, cultural tensions and demographic cliffs, such as declining numbers of high school graduates, present obstacles to sustaining and increasing enrollment, retention and graduation.

To compete and thrive, UAB must capitalize on its unique strengths and attract a diverse body of teachers and learners, eager to make a lasting impact in their field or on their community—or the world—and prepare them to lead, Benoit says.

The education pillar of UAB's strategic plan, Forging the Future, outlines the strategies for achieving those objectives.

“

First- and second-year experiences are essential building blocks that shape the overall student experience—both inside the classroom and out.”

—BRADLEY BARNES, PH.D.
VICE PROVOST FOR ENROLLMENT MANAGEMENT



FOCUS ON THE WHOLE STUDENT

THERE IS A STORY FOR EVERY STUDENT, and, for each one, a path to success.

UAB's national reputation as a leading research institution and academic medical center helps it attract high-achieving students. And, as a public institution in Alabama, located in one of the state's largest metropolitan areas, it also represents one of the best educational opportunities for first-generation and underrepresented students throughout the state to seize new opportunities through academic achievement.

For most students, the transition to college is a bit intimidating as they grapple with new faces, new places and the academic rigor required to succeed. They share a common need for support and services that enable them to balance the demands of university life with their personal well-being.

During the past decade, UAB has implemented a number of initiatives to expedite that transition and provide a firm foundation to help students of diverse backgrounds thrive. The result is historic growth coupled with improved outcomes.

Since 2012, total enrollment at UAB has increased 17%, to 21,639 in fall 2022 from 17,999, according to data provided by the Office of Institutional Effectiveness and Analysis. That represents 15% growth in undergraduate enrollment and 28% increase in graduate enrollment during the past decade.

The number of first-generation students has risen to 3,787, an increase of 34% during the same period. As a result, the percentage of underrepresented students has grown to 44.4% in 2022 from 34.7% in 2012, an increase of nearly 10% despite the rise in total enrollment.

None of this has come at the expense of academic quality. In 10 years, the average ACT score

for entering freshmen has risen to 26.55 from 24.53 and the average high school GPA has increased to 3.79 from 3.53.

To reach these goals, UAB has expanded its academic offerings, in person and online, and created innovative programs to attract students from all corners of the globe. But a whole host of other services also have been essential to its growth.

One foundation for success is an emphasis on the first-year experience. This includes special welcoming activities and course-specific requirements to help students integrate into the campus community.

Through Blazer Beginnings, the new-student orientation program, freshmen complete a two-day program during which they meet with faculty and academic advisers, register for classes, discuss academic expectations, become familiar with campus organizations and much more. A requirement for first-year entering freshmen to live on campus, absent limiting circumstances, helps facilitate that bond and foster a campus community.

One telling measure of success is the retention rate, which measures the percentage of first-time undergraduate students who return to the same institution the following fall. The National Student Clearinghouse establishes the overall rate at 75%. In 2012-13, 79.9% of UAB's first-year students returned to campus; by 2021-22, the rate had risen to 83.9%.

UAB also introduced a second-year experience program to provide additional resources for sophomores to enhance their academic progress.

The National Student Clearinghouse in its 2022 publication, *Completing College*, reported the national six-year completion rate reached 62.2%, and in Alabama it rose slightly to reach 60.1%. By the academic year 2021-22, UAB's six-year graduation rate had risen more than 14 percentage points to 62.4% from 48.2% in 2012-13.

USE EXPERIENCES TO ENGAGE STUDENTS

SERVICE LEARNING is as much about who UAB students are as it is who we want them to become: socially conscious global citizens and leaders.

UAB connects students and faculty to community and nonprofit partners, through service opportunities embedded in coursework, to provide hands-on learning during civic engagement that supports the local and global communities.

For more than 20 years, UAB Student Affairs has organized Into the Streets—annual days of service that inspire the student body to participate in community service projects around the Birmingham area, helping propel UAB to the President's Higher Education Community Service Honor Roll multiple times.

In recent years, UAB has expanded opportunities to include MLK Day of Service, the annual UAB Habitat for Humanity Home Build, daily operations in Blazer Kitchen and other contributions through classes and UAB's community engagement platform, BlazerPulse.

A decision to integrate service-learning into the curriculum has expanded UAB's reach further into the community by engaging students, faculty, staff and community members in experiential learning.

"We have a very robust service-learning portfolio that enables students in all areas to work with many organizations in our community," said Provost Pam Benoit. "The courses organized around service-learning are consistent with our goal of the City as Classroom and make the students feel they are part of the community."

The UAB Service Learning and Undergraduate Research Expo, held every semester, showcases the research done by UAB students and highlights excellence in research, creative activity, scholarship and the community engagement of undergraduate students.





EXPAND ONLINE LEARNING



“Our eLearning curriculum offers innovative, engaging, reliable and secure resources capable of supporting the diverse needs of faculty and students on and off campus.”
—PAM BENOIT, PH.D.

A CHANGING WORLD also led to changes in the way education is delivered: online.

While the halt to in-person instruction during the COVID-19 pandemic caught many campuses unprepared, UAB earned national recognition for innovative technology solutions that made its courses accessible. “We had the programming in place — we were able to literally flip a switch and implement that,” said Pam Paustian, Ph.D., associate provost for Academic and Learning Technologies.

UAB had been steadily increasing its online offerings for more than a decade, and UAB’s Strategic Investment Fund provided resources to strategic priorities, including instructional design and support services to faculty and resources for essential marketing, says Provost Pam Benoit.

“There is value in in-person education,” Benoit said. “But online education gives us another tool to reach students. Our faculty now see the clear positives in offering online programs.”

In the past 10 years, the number of online programs has grown to 54 in 2022 from a mere four in 2012. Fully online undergraduate and graduate degrees are available, as are minor courses of study and certificates.

Many of those have completed the Quality Matters peer-review process, meeting the gold-standard for online courses and programs. A number of programs in the Collat School of Business, College of Arts and Sciences, and the schools of Engineering and Education were among the nation’s best online programs ranked by U.S. News in 2022. In November, UAB’s online learning entity, UAB Online, was ranked No. 15 by Newsweek on its 2023 list of America’s Top Online Colleges.

“We’re honored to be recognized among the nation’s top institutions for academic excellence in online undergraduate or graduate programs,” Benoit said of the ranking.



GROW THE HONORS EXPERIENCE

FOR NEARLY 40 YEARS, UAB has been home to a renowned University Honors Program (UHP) that drew on interdisciplinary faculty to provide a unique and engaging arts and sciences curriculum for select students. What began in the early 1980s with students and faculty meeting in the Spencer Honors House, a converted church on the fringe of campus, has become the centerpiece of a full Honors College, led by Shannon Blanton, Ph.D., who was named the inaugural dean in 2014.

The Honors College was created to serve a growing number of high-achieving students and provide a top-rate honors experience for intellectually curious and engaged students from all seven undergraduate colleges and schools. It offers a mixture of challenging courses and academic enrichment, including undergraduate research, international study, internships and service-learning.

The success cannot be overstated: Enrollment in the UHP in 2012, the year before the college was created, was 583; by 2022, the expansion had led to enrollment of 2,631 in 2022—an increase of 351%.

In 2021, a new Honors Hall opened to accommodate the growing student body in the renovated former Snoozy’s bookstore—a two-story, 11,000-square-foot structure that added new classrooms, study rooms, space for gathering, and offices for faculty and staff.

351%
INCREASE IN
HONORS PROGRAM
ENROLLMENT FROM
2012-2022

BY THE NUMBERS

Three key measurables of the success of UAB’s educational programing:

17%
total enrollment
increase since 2012

83.9%
returning first-year
students, 2021-2022
(National average is 75%)

UAB ONLINE
#15
Newsweek Top
Online Colleges, 2023



CREATE A SIGNATURE CORE CURRICULUM

BLAZER CORE

UAB's new curriculum places community and connection at the heart of undergraduate education. From their first week of study, students become part of a community of innovative thinkers, writers and researchers.

IN THE SIMPLEST TERMS, a core curriculum identifies a common set of courses that provide a foundational academic experience for undergraduate students. It exists to develop fundamental skills, broaden intellectual perspectives, and encourage critical thinking and problem-solving that are critical for success in college and in their future careers and communities.

During the strategic planning process, it became evident that UAB's core curriculum, which had changed little since it was established in the 1960s, must change to provide competencies critical for the 21st century and better equip students to meet their lifelong goals.

Provost Pam Benoit convened a committee in 2017, led by Alison Chapman, Ph.D., professor and chair in the Department of English, and Suzanne Judd, Ph.D., professor of biostatistics in the UAB School of Public Health, to draft a new core. The committee conducted surveys and focus groups among faculty and students to seek input and direction and articulate a set of guiding principles.



The result is a broad array of courses, slated to launch in fall 2023, intended to help students develop critical-thinking, decision-making and communication skills that will enable them to discuss new ideas, question biases and assumptions, and engage in their communities to solve real-world problems. More than 100 courses have been submitted for consideration and are being reviewed for inclusion, Benoit says.

Benoit noted two unique features that set UAB's core curriculum apart from the rest.

"The first is the concept of City as Classroom," she said. This initiative will immerse students across all disciplines in undergraduate research, experiential learning or other high-impact practices that enable them to see the role of knowledge in addressing the challenges and opportunities in Greater Birmingham.

"Through this, we are integrating education into the environment the students find themselves in," Benoit said.

The second is flags. "Students earn flags for coursework and activities that cultivate specific competencies—skills, perspectives and habits of mind—that reflect the goals of the core and ideals of UAB," Benoit said. Examples include wellness, sustainability, justice, global citizenship and community engagement. "Faculty can

build high-impact activities into the course requirements," she added.

When Chris Minnix, Ph.D., was named director of UAB's Signature Core Curriculum, he said he hopes to use Birmingham as a text for teachers to use and students to explore—through case studies or field research—to learn about the city as a local and globalizing space.

"The Blazer Core Curriculum is far more than a list of courses and requirements," Minnix said. "From the earliest stages of their college study, students in our innovative core curriculum encounter courses and programs that prepare them to lead professional and civic lives that serve the betterment of people, places and the planet.

"Blazer Core students have greater choice and flexibility in mapping out their core curriculum, which allows them to pursue courses, ideas and experiences that they are passionate about, as well as to discover new passions and interests," Minnix said.

"We asked stakeholders from across campus to take a close look at the trends and challenges facing higher education and academic medical centers as we move into the future," said UAB President Ray Watts. "The new curriculum capitalizes on UAB's unique strengths and helps us further invest in our students' growth and development."

COVID Moment

UAB faculty devised new paths to advance education and professional development for students, ensuring they received an exceptional educational experience during the pandemic.

Classes quickly moved fully online in March 2020 when UAB shifted to remote business operations, and UAB IT helped outfit more than 150 classrooms with cameras, microphones and other equipment to enable hybrid learning for the fall 2020 and spring 2021 semesters.

UAB's Center for Teaching and Learning helped faculty transition to remote instruction by offering workshops and creating a remote-work technology toolkit, and UAB eLearning offered basic course-building, design and delivery support to instructors. The CTL also helped convert the triannual UAB Expo to a remote format to showcase excellence in research, creativity and scholarship.

UAB Libraries remained at the heart of the university, providing course-related research instruction, both synchronously and asynchronously, and thesis and dissertation defenses in the Graduate School also took to the screen.



Research, Innovation & Economic Development



FROM CONCEPT TO CLINIC

OVER THE PAST 10 YEARS, UAB's research funding has risen by 89%, from \$379 million in fiscal year 2013 to \$715 million in fiscal year 2022. That puts the institution in the top 1% of all public, private and international organizations funded by the National Institutes of Health. But the real story, says UAB President Ray Watts, is not the money—it is the impact. "The goal is not just to have more research dollars, but to have more research accomplishments that we know will positively impact the lives of many people."

Tackling the major health problems facing Birmingham, Alabama and beyond requires bringing together bright minds from a range of disciplines. This is why UAB has created an increasing number of comprehensive centers and institutes in recent years, combining cutting-edge research, education and training that leads directly to breakthroughs that impact patient care in the areas of greatest need.

The Comprehensive Diabetes Center, founded in 2008, includes more than 200 faculty members from 10 UAB schools. The center's director, Anath Shalev, M.D., is an international expert on beta cells, the pancreatic cells that are impaired in Type 1 and Type 2 diabetes. In a landmark 2018 publication in *Nature Medicine*, Shalev and her team reported exciting results from the first human trial of an inexpensive blood pressure drug that improved beta cell function and insulin production in adults with Type 1 diabetes. Shalev is developing a more targeted drug with the potential to reverse the effects of diabetes, working in partnership with experts at Southern Research; she recently

“The goal is not just to have more research dollars, but to have more research accomplishments that we know will positively impact the lives of many people.” —RAY WATTS, M.D.

founded a startup company to accelerate the timeline to human clinical trials.

The Comprehensive Transplant Institute, founded in 2011, brings together internationally renowned surgeons, physicians and researchers at one of the busiest transplant centers in the nation. Nationwide, the number of patients needing transplants far exceeds the available organs, particularly for kidneys.

Approximately 1,200 Alabamians are currently awaiting kidney transplant, and nationwide some 240 Americans on dialysis die every day. Xenotransplantation—transplants of organs from genetically modified animals—could save lives on a massive scale. On January 20, 2022, Jayme Locke, M.D., director of the Comprehensive Transplant Institute, and her team reported the first transplant of genetically modified pig kidneys inside the abdomen of a person experiencing brain death. This is a potentially monumental step forward for the future of kidney transplantation and a major milestone for xenotransplantation, Locke says.

Other specialized centers focus on high-priority or emerging threats, such as the Antiviral Drug Discovery and Development Center (AD3C) in the Heersink School of Medicine. Funded by a \$37.5 million grant in 2014 and led by Richard Whitley, M.D., Distinguished Professor of Pediatrics and an internationally renowned expert on viral disease, this national research consortium is dedicated to studying viral infections with limited or no treatment options. The AD3C's research was crucial to the development of remdesivir, an antiviral that was the first drug FDA-approved to treat patients with COVID-19. Remdesivir was a major part of treatment efforts before COVID vaccines were developed, and later research has shown that remdesivir is effective at treating patients early in the course of disease. The AD3C connection led to UAB's being chosen as a site for an NIH-sponsored global clinical trial of remdesivir in March 2020.

THE UAB IMMUNOLOGY INSTITUTE

was created in 2021 as a hub for interdisciplinary study of vaccines and other treatments, as well as basic research. Led by Frances Lund, Ph.D., Charles H. McCauley Professor in Microbiology, it has a key goal of building a repository of healthy immune samples open to all UAB researchers.



BUILDING AN INNOVATION ECOSYSTEM

PARALLEL WITH UAB'S DRAMATIC RISE

in research funding over the past 10 years has been its success in commercializing that research.

In 2013, the existing UAB Research Foundation (UABRF) became the Institute for Innovation and Entrepreneurship, with the goal of fostering an entrepreneurial community and innovative ecosystem at UAB and providing the infrastructure required for students, staff

and faculty to commercialize discoveries. In 2015, the institute became the Bill L. Harbert Institute for Innovation and Entrepreneurship, or HIIE. For the past eight years, the HIIE has had a positive bottom line, putting it among the top 20 percent of such offices nationally. To date, the UABRF/HIIE has received more than 2,800 intellectual property disclosures, facilitated the issue of more than 600 U.S. patents and assisted with the creation of nearly 75 companies based on UAB technologies, generating more than \$100 million in total revenue. In 2022 alone, the HIIE had \$5.6 million in revenues, 106 intellectual property disclosures, 39 licenses and eight patents.

UAB research is attracting attention in labs and far beyond. In 2017, the lab of UAB engineering researcher Dean Sicking, Ph.D., and UAB formed a partnership with Seattle-based company VICIS to deliver safer football helmets. VICIS' mission is to develop new football helmet technology that can significantly reduce impact forces and the risk of concussion. That made it a perfect match for the expertise of UAB researchers and physicians who have advanced a multidisciplinary effort against traumatic brain injuries that reaches from basic science labs to large clinical studies. Initiatives include the UAB Sports Medicine Concussion Clinic at Children's of Alabama, UAB's Vestibular and Oculomotor Research Laboratory, which conducts research to identify markers of concussion in athletes, and the UAB School of Engineering, where football helmets can be tested in a one-of-a-kind lab that simulates



It's exciting to see research born in the university spin out and grow in Birmingham."

**—KATHY NUGENT, PH.D.
EXECUTIVE DIRECTOR, UAB HARBERT
INSTITUTE OF INNOVATION
AND ENTREPRENEURSHIP**

football collisions using principles similar to the ones behind crash-test simulators for vehicles.

Also in 2017, the lab of Yogesh Vohra, Ph.D., professor and University Scholar in the Department of Physics, was part of a \$20 million grant from the National Science Foundation designed to build expertise, research and industrial capacity in plasma physics across Alabama. Plasma is the most abundant form of matter in the universe, found in the sun, neon signs, TV screens, welders' torches and space rockets. Vohra's lab is using microwave-generated plasmas

to create thin diamond films with myriad potential uses, including super-hard coatings and diamond-encapsulated sensors for extreme environments.

UAB faculty, students and staff have proved to have no trouble generating viable business opportunities with their ideas, either. In 2021, the Birmingham-based venture capital firm First Avenue Ventures launched a multimillion-dollar life science fund with a focus on early-stage drugs, therapies and devices developed at UAB and in Birmingham. The fund and the HIIE coordinate to drive momentum in the city's emerging life-science ecosystem. The first investment for First Avenue Ventures was ResBiotic, founded by physician scientist Charitharth Vivek Lal, M.D., an associate professor in the UAB Division of Neonatology. The investment will support ResBiotic's commercialization of probiotics to cure chronic lung disease.

The fund "offers a critical resource for early-stage companies in the UAB pipeline," said Kathy Nugent, Ph.D., executive director of the HIIE and chair of Clinical and Diagnostic Sciences in the School of Health Professions. "Having these resources focused on early-stage life science will help bridge the gap for companies spinning out of the lab."

In 2021, the UAB spinoff company In8Bio (originally Incysus), a clinical-stage biopharmaceutical company focused on discovery, development and commercialization of novel anti-cancer therapies, filed an initial public offering that raised \$44 million. Many more such promising startups are launching from UAB research. As of November 2022, nine companies were recently approved and poised to launch, with three more in the approval process.

"It's exciting to see research born in the university spin out and grow in Birmingham, as our ecosystem is poised for cultivating innovative concepts," Nugent said.

BY THE NUMBERS

Between Oct. 1, 2012, and Sept. 30, 2022, UAB research has generated revenue for the university in excess of \$52.5 million. Over the past 10 years, the Bill L. Harbert Institute for Innovation and Entrepreneurship has generated the following eye-popping statistics:

900
inventions disclosed

238
U.S. patents issued

128
copyrights, software & research tools commercialized

428
licenses executed

33
startups launched



LEADING THE WAY IN CLINICAL TRIALS

WHEN THE PUBLIC THINKS of the benefits of an academic medical center, one of the first things that probably comes to mind is the availability of clinical trials. There are more opportunities to take part in these potentially lifesaving studies at UAB than ever before. Since 2013, UAB clinical trials expenditures have more than tripled, says Robert Kimberly, M.D., senior associate dean for Clinical and Translational Research in the Heersink School of Medicine and director of the UAB Center for Clinical and Translational Science. “Clinical studies and trials bring new treatments to the patients we serve,” Kimberly said.

“It is our responsibility that everyone has the opportunity to participate in clinical trials and see the benefit.”

—ROBERT KIMBERLY, M.D.
SENIOR ASSOCIATE DEAN,
UAB HEERSINK SCHOOL OF MEDICINE



Dr. Jayme Locke and team publish breakthrough xenotransplant study.

The CCTS, which was established in 2008 with a Clinical and Translational Science Award from the National Center for Advancing Translational Sciences, facilitates clinical trials at UAB. (It is one of more than 50 CTSA in the United States and the only one in Alabama.) In 2013, the CCTS began a systematic plan to enlarge the institution's trials portfolio, Kimberly says. Two years later, Jason Nichols, O.D., Ph.D., a successful trialist specializing in ocular surface diseases, was named associate vice president for Research Engagement and Partnerships at UAB. The newly created role was designed “to really look at our industry portfolio and focus on improving our processes to make them more efficient,” Nichols explained.

In 2016, UAB launched the Clinical Trials Initiative, led by Kimberly, Nichols and Mark Marchant, director of the Clinical Trials Administrative Office. The initiative's goal was to further increase UAB's national visibility, streamline processes, expand the number of active trialists, and prepare a new generation of investigators and staff to propel UAB's tradition of trials success.

There are several factors behind the success of the Clinical Trials Initiative. One is a dramatic increase in industry-sponsored trials at UAB. Between fiscal years 2015 and 2019, awards for industry-supported clinical trials at UAB rose 42%.

3x

SINCE 2013, CLINICAL TRIALS EXPENDITURES AT UAB HAVE MORE THAN TRIPLED

Another factor is a focus on streamlining processes. In 2018, UAB's Clinical Trials Administration Committee was created at the direction of UAB President Ray Watts. “CTAC draws people from each school, both investigators and administrators,” Kimberly said. “The goal is to identify areas where we need to focus attention, such as new processes or policies from the NIH and other funders, or sources of inefficiency internally. When we do see a speed bump, the committee develops detailed action points to solve the problem.” It is important that the CTAC “was created from the president's cabinet, with the president's signature,” Kimberly said. “That demonstrated to everyone—from investigators to patients—that this is an institutional commitment.”

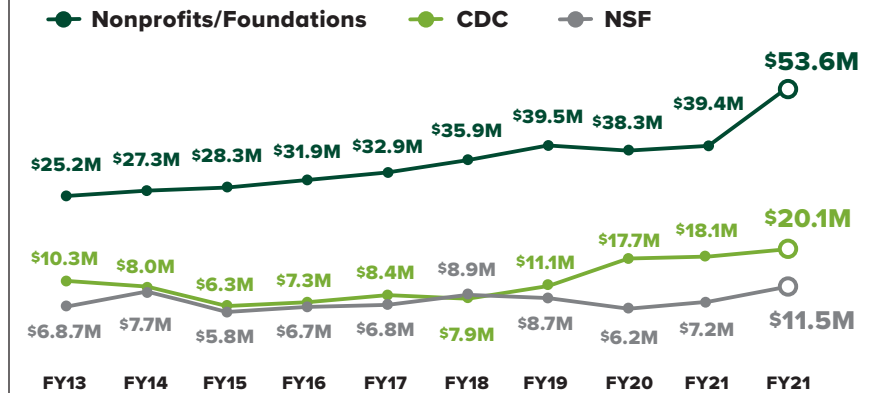
The relentless competition for clinical trials means “we need to continually look for ways to innovate,” said Marchant, the CTAO director. Sometimes, UAB has to turn down trials because its veteran investigators do not have the bandwidth to take on more, Kimberly notes. The added volume also drives a constant need to recruit and train staff to keep the trials running.

One of the chief duties for Dana Rizk, M.D., medical director of the CTAO, is “to prepare the next generation of researchers,” she said. Rizk worked with CCTS staff to extend its Clinical Investigator Training Program, which helps faculty who are new to clinical trials. Another CCTS training initiative, the Research Training Program, is a six-week bootcamp for staff that covers everything from research ethics and budgeting techniques to institutional review board protocols and strategies for increasing recruitment and retention in trials.

The CCTS has also expanded access to clinical trials throughout the Deep South through its CCTS Partner Network, launched in 2015, which comprises 11 academic research institutions in Alabama, Mississippi and Louisiana. One aspect of the Partner Network is its ability to enhance recruitment efforts that could not be completed at UAB alone. “It is our responsibility that everyone has the opportunity to participate in clinical trials and see the benefit,” Kimberly said.

“UAB's CCTS is translating observations in the laboratory, clinic and community into interventions that improve the health of our citizens and our society overall,” Watts said. “We are proud of the contributions our CCTS and its Partner Network are making to bring more new treatments to more patients more quickly than ever before.”

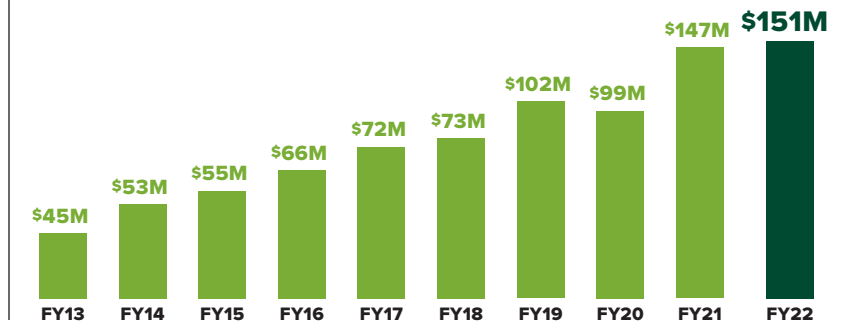
INCREASING OTHER KEY ELEMENTS OF THE RESEARCH PORTFOLIO



DIVERSIFYING RESEARCH GROWTH

As UAB set a record with \$715 million in research funding in 2022, the substantial share from the National Institutes of Health—\$388 million—accounted for a lower proportion of overall awards than in previous years. “UAB is experiencing growth in other sectors, and that is what we want,” said Christopher Brown, Ph.D., vice president for Research. Since 2013, awards from nonprofits and foundations, the National Science Foundation, and the Centers for Disease Control and Prevention have all increased significantly (see above). Total industry awards, which include grants, funded trials and services, have more than tripled since 2013 (see below). In 2022, clinical trial expenditures exceeded \$105 million for the first time.

TOTAL INDUSTRY AWARDS FY2013-2022





CONNECTIONS THAT HEAL

HOW CAN RESEARCH experiences help address health equity in the Deep South? A partnership among Tuskegee University, the Morehouse School of Medicine in Atlanta and the O’Neal Comprehensive Cancer Center at UAB has established a national model.

In 2021, the MSM-TU-UAB OCCC Partnership received an \$18 million renewal grant from the National Cancer Institute as part of a program pairing elite cancer centers with minority-serving institutions across the country for cancer research, education and outreach.

“The goal of this Partnership is to address the disparities in cancer happening now in our backyard—and to create the next generation of investigators with the skills to find new solutions for these problems,” said Upender Manne, Ph.D., lead principal investigator for the Partnership at UAB and professor and director of Translational Anatomic Pathology in the Heersink School of Medicine’s Department of Pathology.

Partnership investigators, particularly from the minority-serving institutions, can access the cancer center’s state-of-the-art technology and facilities, including genomics and imaging equipment, at discounted internal rates. They also can find support with pre-pilot and pilot grants that allow them to explore new ideas and gather data needed for major external funding.

The proof is in the results. Before the Partnership began, there were 19 cancer research faculty at

Morehouse School of Medicine; now there are 30, including a director and four section leaders. At Tuskegee University, there was a single faculty member focused on cancer research; now there are 17, and four adjunct faculty members as well. And at the O’Neal Comprehensive Cancer Center, there are now more than 65 investigators associated with cancer health disparities, up from about 35.

“We have received \$80 million in grants for the Partnership, and we have generated more than \$150 million in additional grants to investigators who are associated with the Partnership,” Manne said. In addition to more than 400 scientific publications, that funding has enabled the development of several potential anti-cancer compounds each at Tuskegee, Morehouse and UAB, he adds. “They are really looking promising to move to the next level of conducting clinical trials.”

Not every budding scientist is intuitively drawn to cancer work, or even imagines a life for themselves in the lab. The Partnership’s education efforts extend from middle and high school students at Tuskegee, undergraduates (also at Tuskegee), and graduate students and medical students at Morehouse and UAB, all the way to postdoctoral fellows and early-stage investigators. Each level has a yearlong program that gives participants a hands-on

view of cancer research, an introduction to the problems of health disparities and interaction with working scientists.

While the Partnership develops more investigators interested in cancer health disparities research, and more potential treatments, it also is impacting affected communities today. “Although research is important, it is not enough to eliminate cancer disparities alone,” said Isabel Scarinci, Ph.D., multiple principal investigator for the Partnership at UAB and senior adviser for globalization and cancer at the O’Neal Comprehensive Cancer Center. “We need to get these evidence-based approaches to the ones experiencing the highest burden of disease and train the next generation to continue this mission.”

Outreach efforts from the Partnership have reached thousands in the communities around Morehouse and Tuskegee and have connected more than 500 African American patients with cancer to cutting-edge clinical trials at UAB.

“UAB has long been at the forefront of the focus on health disparities, and this Partnership has truly empowered research productivity at all three institutions,” said UAB President Ray L. Watts, M.D. “We are proud of the work of Dr. Manne and his team, and this will continue to be a major focus of our efforts.”

RESEARCH COMPUTING POWER

Over the past 10 years, genomic studies and the explosion of other data-intensive disciplines have made computing power a key component of every major academic medical center. During UAB’s strategic planning process, President Watts established investments in UAB’s IT infrastructure as a priority. In 2015, UAB’s new vice president for

Information Technology, Curt Carver, Ph.D., with the support of additional campus resources, began a series of aggressive investments. In 2016, the university’s high-performance computing cluster, Cheaha, became the fastest supercomputer in the state; upgrades the following year made it one of the fastest in the Southeast. The improvements continued, with

additional processing power and greatly expanded storage, directed by Ralph Zottola, Ph.D., who joined UAB in 2018 as assistant vice president for Research Computing. Even during the COVID pandemic, UAB IT Research Computing saw marked growth in the use of its services. More than 1,700 users are registered for research computing services, a nearly fivefold

increase in the past five years. In 2021, the supercomputer moved to the new \$26.5 million Technology Innovation Center, powered by a cost-efficient Tesla Powerpack battery system to increase system reliability and decrease UAB’s carbon footprint. In fiscal year 2021 alone, Cheaha supported more than \$213 million in research expenditures.

5x

INCREASE IN USERS OF RESEARCH COMPUTING SERVICES IN THE PAST FIVE YEARS

BY THE NUMBERS

384+

trainees in the Morehouse School of Medicine/ Tuskegee University/O’Neal Comprehensive Cancer Center at UAB Partnership

82

undergraduate students

216

graduate students

86

early-stage investigators/ postdoctoral fellows

100+

middle and high school students exposed to cancer research at Tuskegee University

80

additional undergraduate students from other institutions serving underrepresented persons received hands-on research experience at UAB through the PRSTP



MOVING AHEAD, TOGETHER

IN AN ERA DOMINATED BY TEAM

science, where top papers may list hundreds of co-authors, a researcher's ability and willingness to collaborate has never been more important. One of UAB's cherished values has always been its reputation as an "institution without walls," where the quality of ideas is more important than traditional disciplinary boundaries. "When we recruit leaders at the most senior level, we recruit them together and make sure they are, No. 1, talented, obviously, but No. 2, collaborative," President Ray Watts said. "If they are not collaborative and understand that we can do so much more together, then this is not the right place for them."

A strategic recruitment initiative led by ETTY (Tika) Benveniste, Ph.D., the Heersink School of Medicine's senior vice dean for Basic Sciences, began in 2018 with a search for new investigators interested in collaborative neuroscience research.

"We knew we needed to create some critical mass and focus on new areas," Benveniste said. "So we reached out to all of our 27 departments in the Heersink School of



Medicine and asked them—do you have any interest in hiring in this space, and if so, how many people are you thinking about recruiting over the next five years?"

The effort led to a search committee with much broader perspectives and interests than a single department could muster, Benveniste says. "We crafted an ad that incorporated the different areas we knew were important to all the departments involved. We said, in effect, 'We're making a full-blown commitment to research and there will be opportunity to work across a number of departments.'" Because of the success of the initial round, a second round of neuroscience recruitment was initiated in 2021 and is currently ongoing. To date, 13 faculty have been successfully recruited in the departments of Medicine; Pathology; Neurobiology; Cell, Developmental and Integrative Biology; Neurology; Radiology; and Psychiatry and Behavioral Neurobiology.

“
When we recruit leaders
at the most senior level, we
recruit them together and
make sure they are,
No. 1, talented, obviously,
but No. 2, collaborative.”
—RAY WATTS, M.D.

A cancer recruitment initiative started in 2021 as a collaboration between the O'Neal Comprehensive Cancer Center and the Heersink School of Medicine. Eight faculty have joined UAB as a result in the departments of Medicine, Genetics, Radiology and Neurosurgery.

The latest recruitment initiative, started in April 2022, is a collaboration between the UAB Comprehensive Diabetes Center, the Heersink School of Medicine and several departments. Recruitment is ongoing.

Philanthropic giving as part of the \$1 billion Campaign for UAB was instrumental in recruiting and retaining talented faculty, Watts says, but money alone is not enough to attract world-class researchers. One of UAB's greatest attributes, born out of its

beginnings as an upstart institution in an often underestimated part of the country, is its insistence on collaboration and congeniality. "It is one of our differentiating factors," Benveniste said. "In many very prominent academic medical centers, you have a lot of big egos who can't be bothered to reach out to a new assistant professor. We firmly believe in the value of mentoring and find tremendous gratification in doing it. The people who are drawn here recognize the importance of being at an institution without the traditional walls and barriers and want to be a part of that culture."

Ben Larimer, Ph.D., an assistant professor in the Department of Radiology and associate scientist at the O'Neal Comprehensive Cancer Center, was recruited to UAB from Harvard Medical School as part of the strategic cancer recruitment effort. He was impressed with the equipment and facilities the Cancer Center has to offer, including its state-of-the-art Cyclotron Facility. "But it's as much the people as it is the physical tools," he said. "The culture of the department and the collaborative environment at UAB are really refreshing. The first question when you have a new idea is not, 'Who gets credit for it?' but 'How can I help?' And that is contagious. It makes every day fun."

COVID Moment

UAB's Fungal Reference Laboratory, led by Department of Pathology Assistant Professor Sixto Leal, M.D., Ph.D., is primarily responsible for rapid detection of and testing for infectious agents for UAB Hospital and other UAB Medicine system facilities. As COVID-19 raced into Alabama in early March 2020, Leal and his team created their own COVID-19 PCR test for the disease when no commercial systems were available. Their test was one of the first in the country to obtain emergency use authorization from the FDA, and it exhibited the highest sensitivity in a nationwide comparison study. That test allowed UAB Hospital and regional hospitals in Alabama to reopen for regular care. Leal's team was able to increase its throughput rapidly as well, from 150 tests per day to more than 11,300 tests per day. That volume was critical to the most high-profile project yet for Leal's lab and the entire Department of Pathology: They provided the pooled COVID testing used in Alabama's UAB-led GuideSafe campaign, which allowed thousands of college students to return to classes statewide. Leal's lab was also the first in Alabama to establish viral genome sequencing, enabling the identification of all major viral variants of concern.

RESOURCES FUEL RESEARCH

In 2014, UAB Medicine and the Heersink School of Medicine created the Academic Enrichment Fund, a strategic commitment from the clinical enterprise of UAB Medicine to direct revenues back into the School of Medicine. The fund was designed to meet specified target goals to grow nationally competitive academic research programs, recruit between 40

and 55 funded investigators, and retain outstanding current faculty, as well as a source of capital to invest in pilot studies and seed funding. By 2019, the AEF had contributed \$42 million and has been "instrumental in recruitment and really in almost everything we have done," said ETTY (Tika) Benveniste, Ph.D., the Heersink School of Medicine's senior vice dean for Basic Sciences.

65:1

RETURN ON INVESTMENT
FROM PILOT FUNDING
AWARDED TO RESEARCHERS
BY UAB CCTS

Several programs across UAB provide seed funding to jump-start new areas of research and foster new collaborations, including the Interdisciplinary Team Grants program in the College of Arts and Sciences and the Multi-PI Program in the Heersink School of Medicine.

Researchers in any school can apply for pilot funding offered through

the UAB Center for Clinical and Translational Science. The average CCTS Pilot principal investigator garners \$1.7 million in extramural support and produces 19 publications in the four years after their pilot award, which translates to a financial return on investment of 65:1.



Patient Care



A DESTINATION FOR HIGHLY SATISFYING HEALTH CARE

PATIENT SATISFACTION is one of the most important parts of how UAB measures the quality of care and patients' perceptions of their overall experience. There has never been more choice available in health care, which is why Forging the Future, UAB's strategic plan, called for achieving "national recognition as a place where patients experience highly satisfying healthcare services." In 2016, UAB Medicine became the first health care provider in Alabama to make patients' feedback about their UAB physicians available online as part of its dedication to transparency and accountability. At the time of launch, more than 81% of eligible physicians (those with at least 30 patient-submitted surveys) had a rating of four stars or above on the five-star scale. In 2018, UAB Hospital was one of only three in Alabama to be recognized with an Outstanding Patient Experience Award from Healthgrades.

One major element of the plan developed by UAB Medicine's Office of Patient Experience and Engagement is to celebrate providers who score the highest ratings across several domains, including "listened carefully," "demonstrated care and concern," and "included patient in healthcare decisions." Between 2020 and 2022 alone, more than 270,000 patients used UAB's real-time patient listening platform to provide feedback about their clinic visits, with "friendly" being the most commonly used word to describe the experience. In November 2022, UAB Medicine celebrated the 366 highest-scoring providers as part of its fourth annual Ambulatory Provider Recognition Event. Those providers score an average of 95% or higher in care satisfaction based on patient feedback—a testament to their service, sacrifice and commitment to patients.

BY THE NUMBERS

Growth in patient care metrics at UAB, FY2012-FY2021.

PATIENT VISITS

↑ 35%
1.29 million to 1.97 million

DISCHARGES

↑ 14%
48,090 to 55,005

TOTAL INPATIENT DAYS OF CARE

↑ 29%
317,534 to 409,203

DAILY AVERAGE NUMBER OF PATIENTS

↑ 29%
868 to 1,121



TELEHEALTH FULFILLS ITS POTENTIAL

HELP IS ALWAYS THERE

UAB'S tele-ICU operations center (above) allows for 24-hour coverage for patients in hospitals such as Whitfield Regional Hospital in Demopolis, a member of the UAB Health System.

UAB'S STRATEGIC PLAN set out a clear vision for helping to address Alabama's chronic struggle with patient access: Develop infrastructure to ensure statewide access to telehealth services.

In 2016, UAB nephrologist Eric Wallace, M.D., became the first physician in the United States to replace a comprehensive face-to-face visit for a home dialysis patient with a telehealth visit. The visit, part of a pilot study partnership between the Heersink School of Medicine and the Alabama Department of Public Health, allowed Ellen McGowen, 63, to be seen at her local Colbert County Health Department instead of making the 230-mile roundtrip visit to Birmingham.

That same year, UAB Medicine named Bart Kelly as its executive director of Telehealth; in 2017, Wallace became the system's first medical director for Telehealth. One challenge facing Wallace and Kelly was the lack of health insurance parity laws in Alabama (reimbursing providers for telehealth visits at the same rate as in-person visits). Lack of reliable internet access in rural areas, especially

for lower-income patients—precisely the population who would most benefit from telehealth—was another obstacle. Nevertheless, the telehealth team was able to establish partnerships focused on stroke and critical partnerships statewide, and Wallace had developed a workflow for delivering telehealth.

Then came COVID. Suddenly, everyone needed telehealth services, and “over the past two and a half years, we’ve seen how valuable and effective telemedicine has become,” Wallace said. As UAB Hospital prepared for its first wave of COVID cases in March 2020, it was imperative to limit in-person, nonessential visits. By the next month, 74% of all ambulatory (outpatient) visits at

“
Over the past two and a half years, we’ve seen how valuable and effective telemedicine has become.”
—ERIC WALLACE, M.D.,
MEDICAL DIRECTOR,
UAB TELEHEALTH

UAB were using telehealth, and Wallace's team had trained 2,200 UAB providers in how to use these unfamiliar tools and workflows. Between March 2020 and March 2022, UAB providers completed more than a half-million telehealth visits.

Telemedicine improved the safety and efficiency of treatment for patients with COVID in all health care settings, but particularly in rural hospitals. Before the pandemic, these hospitals would often transfer their sickest patients to larger medical centers better equipped to manage highly complex patients. But as ICU beds filled up during COVID, many sick patients

were able to remain in their local hospitals, close to family, thanks to subspecialist care from UAB physicians provided by telehealth. UAB's tele-consult services provide safe and efficient care through remote exams, subspecialty support and intensivist interventions with care for infectious diseases, critical care, stroke, general neurology and nephrology. For example, if a patient needs to be intubated, a specialist at UAB can assist the hospital's on-site team with high-risk ventilator management.

Telehealth also allowed providers and students at UAB schools to continue to help patients. As part of a major expansion and renovation to its building, opened in 2018, the School of Nursing had added a TeleCare telehealth training unit for students. During the pandemic, faculty and students were able to use that space to provide primary care for patients at a local addiction recovery facility. The clinic was staffed by faculty from the School of Nursing and Heersink School of Medicine, along with undergraduate students working to complete their spring psychiatric mental health clinical hours.

Slow or nonexistent internet access remains a significant obstacle to leveraging the strengths of telehealth to help all Alabamians. In summer 2020, Alabama Governor Kay Ivey appointed Wallace and Curt Carver Jr., Ph.D., vice president for Information Technology and chief information officer at UAB, to serve on the Broadband Working Group, providing input and guidance on investing up to \$300 million in CARES Act funding to the state for technology and infrastructure expenditures.

UAB providers continue to innovate in telehealth. The UAB tele-ICU operations center allows for 24-hour coverage for patients in hospitals such as Whitfield Regional Hospital in Demopolis, a member of the UAB Health System. Meanwhile, internist Andrew Land, M.D., is spearheading development of eConsults—electronic interprofessional consultations to improve

access to care and reserve in-person access for those who really need it. And with remote patient monitoring, providers at UAB are able to check on patients with congestive heart failure, hypertension and diabetes “to manage chronic disease and prevent patients from getting sick,” Wallace said.

UAB E-MEDICINE: FAST, SAFE, CONVENIENT

In 2014, UAB Medicine became the state's first medical provider to offer online diagnosis and treatment of common conditions such as colds and allergies. The service, known as UAB eMedicine (uabmedicine.com), was designed for adults in the Birmingham area. As in-person access to providers was limited during the COVID pandemic, eMedicine proved its effectiveness at connecting patients to care. And that has continued. When the world came to Birmingham in 2022 for The World Games and limited access to certain parts of UAB's campus, eMedicine offered a way for employees and all other patients to access medical care. Then a “triple-demic” of COVID, flu and RSV struck in November 2022. “With a surge in flu cases along with other respiratory illnesses, our online urgent care offerings provide a fast, safe and convenient way for patients to quickly get the medical help they need,” Wallace said.



IMPROVING CARE THROUGH COLLABORATION

UAB CONTINUES to create partnerships across the state and innovate to extend the reach of its expertise and resources to help improve Alabamians' access to quality health care.

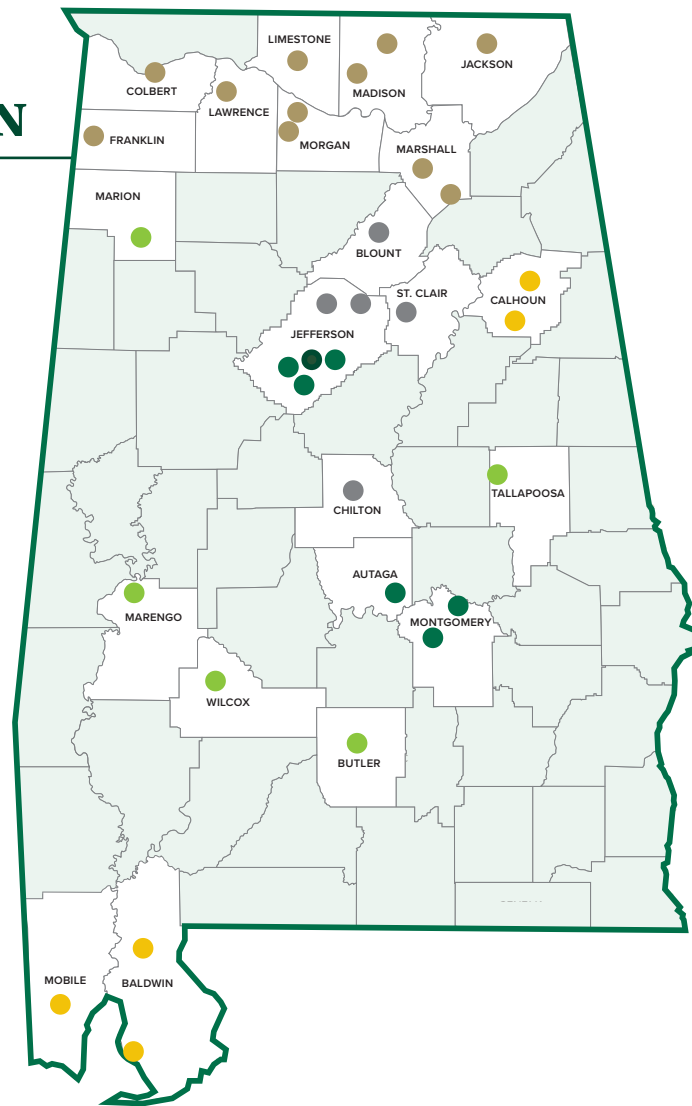
PARTNERSHIPS IMPROVING CARE

At a critical time when the health care industry is becoming increasingly complex and care options for many patients are dwindling, UAB continues to launch innovative partnerships through affiliate and management agreements, health authorities, and a strategic alliance that have drastically improved Alabama's health care ecosystem.

In 2022, Northwest Regional Health, a hospital in Winfield, Alabama, entered into a management agreement to become a member of the UAB Health System, the latest of 13 hospitals across the state to partner with UAB through affiliation or management agreements since 2013.

"With rural hospitals closing across the nation and many threatened in Alabama, we made it a priority to help rural hospitals survive," said UAB Medicine CEO Reid Jones. "We can leverage our knowledge to create efficiencies and processes that keep hospitals open and—most important—improve the health of patients across the state."

In January 2020, the UAB Health System and Ascension St. Vincent's announced a strategic alliance to increase access to high-quality, innovative medical care and enhance their ability to help patients receive the right care in the right setting at the same time. UAB Health System and Ascension St. Vincent's have a long history of collaboration, including neonatal and anesthesia services.



OWNED

- UAB Hospital

AFFILIATES

- Baptist Health (Montgomery) (3)
- Cooper Green
- Medical West
- UAB Callahan

MEMBERS

- J. Paul Jones (Camden)
- Northwest Regional Health (Winfield)
- Regional Medical Center Central Alabama (Greenville)
- Russell Medical Center (Alex City)
- Whitfield Regional (Demopolis)

ASSOCIATES

- Infirmary Health System (Mobile) (3)
- Regional Medical Center (Anniston) (2)

MOU

- Huntsville Hospital Health System (11)

STRATEGIC ALLIANCE

- St. Vincent's Birmingham
- St. Vincent's Blount
- St. Vincent's Chilton
- St. Vincent's East
- St. Vincent's St. Clair

In April 2020, Jefferson County and the UAB Health System created the Cooper Green Mercy Health Services Authority to provide high-quality health care to all residents of Jefferson County, regardless of their ability to pay. Under the agreement, Cooper Green Mercy Health Services Authority became an affiliate of the UAB Health System, maintaining its status as a full-service ambulatory care facility that has primary and specialty-care clinics, urgent care, physical, occupational and speech therapy, laboratory services, imaging, and pharmacy.

The existing Cooper Green facility, originally called Mercy Hospital when it opened in 1972, will be replaced with a state-of-the-art medical clinic, built on the site of the former Cooper Green parking deck. The new five-story building will be 207,000 square feet, including plans for a magnetic resonance imaging machine, a separate phlebotomy and injection clinic to streamline lab visits and improve the process of vaccinations, and clinic areas designed to support team-based, multidisciplinary care. Construction began in early 2023.

EXPANDED ACCESS TO TREATMENTS AND STUDIES

Federal grant funding is allowing UAB to test innovative approaches to address disparities in health equity by improving access to quality care in rural communities. In 2021, UAB was awarded a grant of up to \$5 million from the Centers for Medicare & Medicaid Services as part of the CMS Innovation Center's Community Health Access and Rural Transformation Model, or CHART. UAB is one of four entities nationwide to receive the funding. The grant will help test whether improving access to telehealth services and access to adequate transportation for those living in rural areas can maintain or improve care quality and lower health care costs.

Another recent example is a \$3.6 million study supported by the National Institute on Minority Health and Health Disparities, which is evaluating innovative approaches to help adults with Type 2 diabetes. The study focuses on patients experiencing transportation barriers, issues with health services access and food insecurity. The approaches being studied include health coaching, food delivery and remote patient-monitoring, to see which will help patients manage diabetes and also be sustainable for health systems to implement.

“With rural hospitals closing across the nation and many threatened in Alabama, we made it a priority to help rural hospitals survive.”

—REID JONES, CEO OF UAB MEDICINE

CONNECTIVITY

The AMC21 Strategic Plan, launched in 2011 after an unprecedented collaboration between the School of Medicine (under then-dean Ray Watts, M.D.) and the UAB Health System, established a road map for UAB to become the preferred academic medical center of the 21st century.

The plan developed strategic initiatives across four pillars: **Quality, Satisfaction, Finance and Advancement of Knowledge.**

The pillars in turn rested on a foundation of **Alignment and Integration, Innovation, and Reaching for Excellence.** As part of the AMC Reload plan update in 2016, this shared leadership and vision for growth was extended to include the president of the Health Services Foundation faculty practice plan. Within this strengthened alignment, UAB established the Joint Operating Leadership Council, with the medical school dean (as chair), the CEO of UAB Medicine, the president and chief physician executive of the Health Services Foundation and four department chairs. Another key change is the implementation of the Academic Enrichment Fund, which invests clinical revenues to support strategic institutional priorities in the Heersink School of Medicine.



SHAPING THE FUTURE OF CANCER CARE

ADAPTIVE RADIATION

The Varian Ethos linear accelerator (above) scans patients while they are on the treatment table to fine-tune established treatment plans based on changes in patient anatomy due to weight loss or other factors.

FROM ITS FOUNDATION as one of the original eight National Cancer Institute-designated comprehensive cancer centers in 1971 (and still the only one in Alabama and in a four-state region), the O’Neal Comprehensive Cancer Center at UAB has been able to offer patients access to cutting-edge treatments that are available at only a small number of locations nationwide. (In June 2022, the National Cancer Institute renewed the OCCC’s Cancer Center Core Support Grant for five years and \$27.4 million.)

Today, “many patients on clinical trials are experiencing remarkable, disease-altering effects on cancers that were uniformly lethal just yesterday,” said Barry Sleckman, M.D., Ph.D., director of the O’Neal Comprehensive Cancer Center. “For this reason, offering cancer patients clinical trial opportunities is really the standard of care for cancer.” Despite this, only 3% to 5% of adult cancer patients in the United States participate in trials, according to a 2019 paper in the journal *Oncology*. One of the motivations for the \$30 million gift from O’Neal Industries, Inc., to name the O’Neal

Comprehensive Cancer Center in 2018 was to expand research efforts that could bring additional clinical trials opportunities to UAB and Alabama.

Many of these clinical trials are for new forms of immunotherapy, which has radically changed the treatment outcomes for many patients with cancer. One form of immunotherapy, CAR-T therapy, for example, trains immune cells called T cells how to fight cancer. This form of treatment can be helpful for patients with various cancer types even when other types of treatments are no longer available—so much so that CAR-T therapy has joined surgery, chemotherapy and radiation as one of the pillars of cancer care. “The UAB-BMT and Cell Therapy Program is the only state-of-the-art program in Alabama to offer CAR-T therapy for patients with some cancers,” said Amitkumar Mehta, M.D., associate scientist in the O’Neal Comprehensive Cancer Center at UAB, assistant professor in the UAB Division of Hematology and Oncology, director of the CAR-T Program, and medical director of the Clinical Trial Office. The program is certified for all commercial FDA-approved CAR-T products. The program also supports next-generation cell therapy treatment through clinical trials. The CAR-T team is a highly specialized and experienced team that supports the patients who are on this treatment.

Another new treatment modality offered at UAB is proton therapy. In March 2020, the Proton International at UAB facility opened as the state’s first proton therapy center. Proton therapy replaces the photon beams used to attack cancer cells in traditional X-ray radiation therapy with protons, which reduce the dose to the healthy surrounding tissue and nearby organs, leading to fewer side effects, better long-term outcomes and improved quality of life in many patients. The center can treat a variety of cancers, including brain and neurological, breast, head and neck, liver, lung, pancreatic, pediatric,

and prostate cancer. In August 2022, the center celebrated treating its 500th patient.

“If you are diagnosed with cancer and aren’t sure what to do next, it’s OK,” Sleckman said. “You don’t have to know exactly what to do. You need to know where to start.”

That has never been easier at UAB, which has streamlined the process with the introduction of the cancer service line, designed to improve the access and coordination of clinical cancer care. It begins with a single phone number for patients, providers and referring physicians to call, where they can speak with a live person instead of an automated system, whose responsibility is to route them to the correct specialists.

“The cancer service line is the glue that holds together cancer care across the entire system,” said Jordan DeMoss, vice president of Clinical Operations for UAB Medicine. “Every cancer patient needs to have the same approach to accessing our system, regardless of what type of cancer they have. It’s care without walls.”

This enables the focus to be specifically on the cancer treatment itself, and not on the various departments and divisions that provide clinical care. Through the cancer service line, obtaining medical records, setting up appointments and testing, and communicating information to the patient are done in a more convenient and timely manner.

“Our research endeavors here are highly dependent on the clinical enterprise. So it made sense to integrate the two under the umbrella of the O’Neal Comprehensive Cancer Center,” said Warner Huh, M.D., senior medical officer for the cancer service line. “In addition to making the entire process easier and less stressful for patients,” Huh says it also is extremely beneficial for physicians. “We want to have the systems in place to support this, so the providers can focus on taking care of the patients and not on coordinating care with other professionals.”

BY THE NUMBERS

The O’Neal Comprehensive Cancer Center has been continuously funded by the National Cancer Institute for 50 years and counting. Here is a look at the care that the Cancer Center provided in 2021 alone:

439

participants in clinical trials

9,700

new cancer patients seen

8,000

surgeries performed

41,500

total infusion therapy treatments

241

bone marrow transplant/
 CAR-T cell therapies



ADVANCING ORAL HEALTH FOR THE UNDERSERVED

IN MANY PARTS OF ALABAMA, there are simply not enough dentists to go around. The American Dental Association ranks Alabama last in the country for access to dental care; 71% of the state's counties are experiencing a dental care shortage. In September 2022, the School of Dentistry announced plans to bring a new satellite dentistry clinic to Dothan to recruit, educate, train and retain dentists. The clinic, supported by a \$3.4 million state appropriation, will be able to conduct more than 10,000 patient visits annually and will be staffed by School of Dentistry faculty, residents and dental students. "Through this clinic, we hope to help alleviate some of the burden caused by the rural dentistry shortage across the state of Alabama," said Russell S. Taichman, DMD, dean of the School of Dentistry. In addition to providing care, the clinic's location will give students vital exposure to practicing in a rural setting, Taichman adds.

Across the country, UAB has set the standard on how to translate advances in dental care and research into everyday practice. In 2012, a seven-year, \$66.8-million grant from the National Institute of Dental and Craniofacial Research—at the time, the largest grant in UAB history—established the National Dental Practice-Based Research Network. The network links clinical researchers at UAB and other institutions to practicing dentists. "These partnerships allow working dental offices to participate in the evaluation of existing and novel strategies for improving oral health for their patients," said Gregg Gilbert, DDS, director of the National Network and professor and chair of the School of Dentistry's Department of Clinical and Community Sciences.

One particularly promising area of research is driven by the fact that "a certain segment of the population will come to a dentist's office for care but not go to a doctor," Gilbert said. The National Network has demonstrated that this opens up a new way to engage patients in care. The network's

“It is our hope that the [Dothan] clinic will serve as a model and show that this innovative solution identified by UAB’s School of Dentistry could work for other areas of the state.”

—FINIS ST. JOHN, UNIVERSITY OF ALABAMA SYSTEM CHANCELLOR

studies have proved the feasibility of blood glucose and blood pressure screening as part of regular dental practice and helped identify patients with an interest in quitting smoking, among a host of other findings in the hundreds of peer-reviewed scientific publications that have emerged from the network. The network's success led to a further seven-year, \$22.4 million grant renewal in 2019.

School of Dentistry faculty are engaging students and community members in their work as well. In October 2022, the school received a five-year, \$1.5 million grant from the Health Resources and Services Administration to extend a cross-disciplinary approach to educate dental students and train non-dental professionals on how to care for vulnerable individuals with medically complex and/or behavioral health care needs, including those with heart problems or diabetes, or who are undergoing treatment for substance use disorders. The project will also establish a mentoring program for pre-dental students from rural areas of Alabama by connecting faculty to prospective dental students. Students from rural areas are more likely to serve in a small town upon graduation.

Another new School of Dentistry program provides a mechanism to recruit and develop qualified students from backgrounds typically underrepresented in dentistry. Blaze to DMD is an 11-month pathway to a four-year DMD degree. The program, a partnership between the School of Health Professions, the Heersink School of Medicine and the School of Dentistry, offers conditional acceptance for selected students enrolled in the UAB Master's in Biomedical & Health Sciences Program who commit to pursuing a DMD degree at UAB.

"The admissions committee kept seeing these applicants who we were excited about and thought were close to being ready for dental school, but weren't quite there yet," said



President Watts announcing plans to bring a new satellite dentistry clinic to Dothan at an event in September 2022.

Carly Timmons McKenzie, Ph.D., the School of Dentistry's dean of Admissions. "We wanted a way to give them the opportunity and time to develop and be truly prepared for dental school."

Patients at the School of Dentistry benefit from a major renovation that opened in 2019. The Comprehensive Care Clinic, where third- and fourth-year students provide general, cosmetic and operative dentistry services to patients under the supervision of faculty, experience a complete renovation that included both aesthetic updates and advanced technological upgrades.

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INDIVIDUAL OPERATORY ROOMS IN THE NEWLY REMODELED GENERAL DENTISTRY CLINIC AT THE SCHOOL OF DENTISTRY

COVID Moment

Even in normal times, UAB Hospital runs at more than 90% occupancy. During the pandemic-related surges from 2020 to 2022, the facility—one of the largest hospitals in the country—was chronically in danger of running out of space. But the constant need for maximizing efficiency had already provided an invaluable tool for managing the strain. In 2019, UAB Medicine opened the Center for Patient Flow, with the goal of centralizing the entire process of patient placement and to recognize and develop new efficiencies. The center acts as an air traffic control hub, analyzing, coordinating and tracking the entry, transport and placement of all patients at UAB Hospital. The center's staff are in communication with 52 nursing units around the clock, managing some 300 inpatients daily and nearly 2,000 transfer calls per month. In its first year of operation, the center had contributed to a significant increase in transfer volume, a decrease in room turnaround time from Environmental Services and a decrease in the number of times that UAB was forced to decline new patients due to reaching capacity.



Community Engagement



MAKING OUR MISSION WORK FOR THE COMMUNITY

ONE THING HAS ALWAYS BEEN CERTAIN: When UAB faculty, staff and students mobilize for the common good, they have a substantial impact.

But for many years, two questions persisted: How much? And is it enough?

Community service has long been considered one of the pillars of UAB's mission, but until 2016 there had never been a sustained and concerted attempt to quantify its contributions to the community and the scope of its capabilities. Also evident was a need to better integrate

opportunities into all aspects of the mission and ensure UAB was making an impact in areas of interest to faculty, staff and students.

During the strategic planning process, a campuswide community engagement task force inventoried UAB's outreach programs, surveyed employees and students about their service activities, and met with community partners to discuss their goals and needs and identify any obstacles to working with UAB. Results of those surveys and focus groups informed the objectives of the university's strategic plan.

“Whatever ranking you choose—heart disease, obesity, diabetes, stroke—we are 49th or 48th. We want to change this position.”

**—MONA FOUAD, M.D.
FOUNDING DIRECTOR, UAB MHERC**

A GRAND CHALLENGE

A centerpiece of this objective is UAB's Grand Challenge, an ambitious goal to have a substantial, lasting impact on the well-being of Alabamians through cross-sector and multidisciplinary collaboration. The initial competition generated 75 entries from teams across campus. The winning proposal, Healthy Alabama 2030: Live HealthSmart, outlined a comprehensive plan for advocating and implementing changes to policy, systems and the built environment that promote health and wellness throughout Alabama.

The project, led by Professor Mona Fouad, M.D., a nationally recognized leader in health disparities research, received a three-year, \$2.7 million award from the university to elevate Alabama's dismal position in national health rankings by fostering healthy eating, disease prevention, physical activity and education.

“Whatever ranking you choose—heart disease, obesity, diabetes, stroke—we are 49th or 48th. We want to change this position,” Fouad said at the time.

Since its launch, Live HealthSmart has partnered to transform neighborhoods by tackling policies, systems and infrastructure, from mobile stores to sidewalks, to streetlights, that promote wellness, education and economic opportunities. More than 100 corporate and community partners now support these efforts in Kingston, Titusville, East Lake, Bush Hills and north Birmingham neighborhoods.

Based on its success, the project has received additional funding for two years, beginning in 2023, for a total \$5 million investment. The next step is to expand this model to other communities to make Alabama a model of healthy living. *(continued)*



\$1M

**A YEAR FOR FIVE
YEARS INVESTED BY UAB
IN LIVE HEALTHSMART**



COVID Moment

As the pandemic unfolded, the Centers for Disease Control and Prevention warned that existing health disparities combined with work circumstances, mobility and other factors put members of some racial and ethnic minority populations at higher risk for COVID-19 infection, severe illness and death. Because of longstanding relationships in the community—through decades of research, interventions and capacity-building—the UAB Minority Health & Health Disparities Research Center and Live HealthSmart Alabama were able to provide testing and vaccines in minority communities.

Walk-up and drive-through testing sites provided access for those who lacked transportation or couldn't afford to pay for testing. And, in partnership with the UAB Health System and the Community Foundation of Greater Birmingham, Live HealthSmart Alabama brought mobile COVID testing to churches and other gathering places. More than 7,833 residents were tested, and more than 1,084 COVID-19 vaccines were administered through these efforts.

Meanwhile, nearly 200 undergraduate, graduate and medical students at UAB (along with numerous employees) participated in contact-tracing efforts led by the School of Public Health as part of a contract with the Alabama Department of Public Health.

PERSONALIZED MEDICINE

Two more large-scale projects underway at UAB target improved health through community-based research designed to shed new light on ways to promote health and manage disease through personalized care, also known as precision medicine.

Precision medicine is an emerging approach to disease treatment and prevention that considers differences in lifestyles, environments and biological makeup, including genes.

The Alabama Genomic Health Initiative (AGHI) is one of the nation's first statewide efforts to harness the power of genomic analysis in helping identify those who are at risk for diseases. Launched in 2017, the program is a collaboration between UAB and HudsonAlpha Institute for Biotechnology funded by the state of Alabama. The goal is to provide genomic testing, interpretation and counseling free of charge to residents in each of Alabama's 67 counties. More than 8,500 Alabamians have enrolled since 2018 with the goal of enrolling 10,000 persons over five years.

Bruce Korf, M.D., Ph.D., chief genomics officer at UAB, is a leader of the AGHI initiative and its national counterpart, All of Us. UAB is the lead institution for the Southern All of Us Network, which includes 12 universities or medical facilities in Alabama, Mississippi and Louisiana. It is part of the National Institutes of Health's bold effort to gather data from more than 1 million U.S. residents, with the ultimate goal of accelerating research and improving health.

"Our involvement in All of Us will build on our experience in recruitment and engagement of the population gained from AGHI," Korf said in announcing the effort in 2017. "It provides a chance for individuals in our region to participate in an exciting national initiative that is intended to provide new insights into the prevention, diagnosis and management of diseases across the nation."

The Southern Network has enrolled more than 30,000 since 2018 with the goal of enrolling 93,000 persons over five years.

"That data will reflect the diversity of our region and nation—all backgrounds and walks of life—so that the knowledge we gain benefits everyone," said UAB President Ray Watts. "The program will use leading-edge informatics and genomics to accelerate discoveries that may open new doors in the prevention and treatment of a host of diseases."



FINDING WAYS TO SERVE

UAB NEEDED A CENTRAL HUB TO reduce barriers to community engagement and connect university expertise and effort internally and with community needs and partners, says Amy Hutson Chatham, Ph.D., director for the UAB-AmeriCorps VISTA Statewide Program and assistant dean for Undergraduate Education in the UAB School of Public Health. Chatham, then director of Service Learning and Undergraduate Research, was a member of the task force and the original steering committee that implemented the centerpiece of the new community engagement strategy, BlazerPulse.

"People who head nonprofits want more from UAB," Chatham said. "Their experience is positive, and they want to connect deeply and more often. For UAB, these experiential opportunities support service-learning and clinical requirements and reinforce our goal of the city as a classroom.

"UAB does amazing things in community engagement and always has, but we needed to quantify and qualify it to be able to grow it," Chatham said.



BLAZERPULSE

The online platform helps identify, organize, promote and quantify activities ranging from volunteer projects to service-learning, community-based research and institutional outreach. Built on the givepulse.com platform, BlazerPulse enables users to create and manage volunteer communities and track, measure and share their impact. Its integration with Engage, a site used by Student Affairs to organize student volunteer efforts, and Scholars@UAB, a site to help connect faculty and promote collaboration, simplifies access and reporting.

Initially more than 40 close community partners were trained and assisted with posting their opportunities to the platform, and the soft launch coincided with the annual MLK Day of Service on Jan. 21, 2019. The number of community partners using BlazerPulse to attract and document volunteer efforts has risen to 110 in 2022.

Soon after its launch, all designated service-learning courses were added to BlazerPulse, joining institutional volunteer opportunities such as Blazer Kitchen, the campus food pantry, and the Habitat for Humanity home build led by the UAB Benevolent Fund.

In the ensuing three-plus years, nearly 6,000 Blazers have completed more than 125,000 hours of community service—all tracked in BlazerPulse, says Lauren Cotant, associate director for Student Involvement and Leadership in the Office of Student Affairs and the current leader of the steering committee.

"By integrating BlazerPulse with Engage and Scholars@UAB, we have been able to create a centralized starting point to work with UAB faculty, staff and students instead of each unit operating in silos," Cotant said.

In addition, UAB is able to quantify the economic value of the volunteer time for service tracked through the platform. Since 2019, Blazers have supplied labor worth \$1.97 million to support community partners, Cotant notes.

Although some of the data is available directly on the BlazerPulse site, Cotant says UAB Institutional Effectiveness and Analysis is leading development of a new dashboard that will allow an even deeper dive for key performance indicators.

6.5%

**OF UAB EMPLOYEES
 GIVE 1% OR ONE
 HOUR OF THEIR
 MONTHLY PAY**



COLLABORATING TO SERVE

EVEN WHEN THERE'S A WAY TO SERVE, there must be a will to connect.

"BlazerPulse is a good fit for UAB," said Lisa Higginbotham, who directs the employee-driven Benevolent Fund and also was a member of the task force and steering committee.

"It helps shape how we engage with students, employees and agencies throughout the community," Higginbotham said. "It also gives nonprofits a more seamless avenue to connect to much-needed resources at UAB and track their progress, and it lets us know we have impacts in areas where our campus community has interests."

Higginbotham, a UAB alumna with degrees in social work and public administration, had a prolific career in nonprofit management across Alabama before joining UAB. She has a unique understanding of the needs of the community organizations and the goals and resources of the university.

"Nonprofits struggle with resources such as staffing and those for research. BlazerPulse helps provide data to grow their programs, obtain grants and build their capacity to serve the community," she said.

The expanding relationships with community partners are mutually beneficial in many ways, Higginbotham says. "UAB employees recognize UAB is a significant part of Birmingham and surrounding areas, and they know building up the community helps strengthen UAB."

COMMUNITY PARTNERS

The Benevolent Fund, for example, directs employee contributions to community organizations, directly and through the United Way. UAB, consistently ranked among the top 10 corporate supporters for United Way, ranked No. 6 in 2022—pandemic notwithstanding. Collectively, UAB employees have donated slightly more than \$45 million to local nonprofits through the Benevolent Fund since 1985, according to university records.

Several institutional initiatives also have benefited from expanded connectivity and collaboration.

Blazer Kitchen, a campus food pantry that provides fresh, nutritious foods to students, employees and patients, is the greatest campus beneficiary of volunteer hours logged in BlazerPulse to date: 9,938. The pantry—financially supported by donations in cash and items—relies largely on volunteers to stock and help distribute food and household items in its two primary campus locations.

(continued)

“Blazer Kitchen provides so much help to those closest to us in our UAB community.”

—LISA HIGGINBOTHAM
BENEVOLENT FUND MANAGER



Blazer Kitchen has distributed enough food for more than 575,000 meals since 2017. UAB volunteers help unload and stock supplies and assist shoppers at both UAB locations.

23%
OF UAB EMPLOYEES
MADE MONTHLY
RECURRING GIFTS
TO THE BENEVOLENT
FUND IN 2020



9.5K
 MEALS DELIVERED
 EACH MONTH
 VIA BLAZER KITCHEN

“Blazer Kitchen provides so much help to those closest to us in our UAB community by allowing students and staff to come and shop for grocery items and toiletry items that they may not be able to afford between paychecks,” Higginbotham said. She also noted that Blazer Kitchen works with clinics in the medical center to help provide for UAB Medicine patients who may lack the means to purchase sufficient food.

Support for Blazer Kitchen has enabled it to move from a smaller space in Medical Towers to a freestanding building on 11th Avenue South with three times the room for food storage and distribution and designated parking for shoppers. Between this site and the pantry in Hill Student Center, Blazer Kitchen has distributed enough food for more than 575,000 meals since it opened in 2017, the equivalent of more than 9,500 meals each month.

Another outgrowth of community-building has been home-building. In 2014, the first Blazer-built Habitat for Humanity home was constructed in Pratt City. Since then, the UAB community has built six more homes—one each year—in Clay, Pratt City, Wylam,

Crestwood, Eastlake and, after a two-year pandemic hiatus, Ensley in 2022. The cost of construction, averaging \$50,000, is funded by donations to the UAB Benevolent Fund.

The annual project, usually in the fall, is a tremendous undertaking and has attracted sustained, organized support from academic and business units—in addition to student organizations and athletic teams. All told, some 3,781 volunteers have invested 17,180 hours building homes for seven deserving families with an economic impact just shy of \$395,000, Higginbotham says.

Nonprofit organizations supported through these grants and relationships with UAB entities often are able to parlay those into larger competitive grants (which some use to award funds to support UAB research and service) and improve the quality of life for Alabamians. Longstanding partners range from the Breast Cancer Research Foundation of Alabama to the animal-assisted therapy group Hand in Paw and the Cahaba Riverkeepers, which defends the ecological integrity of the Cahaba River and its watershed.



WELCOME HOME:
 UAB employees help with framing a Habitat home; Dr. Watts and volunteers celebrate Ames Farrell at his home dedication ceremony in 2019.



PROMISING STUDENTS

In 2020, the City of Birmingham launched Birmingham Promise, a plan to provide every graduating senior at Birmingham City Schools with an opportunity to get financial help to attend any public two-year or four-year college in Alabama. UAB immediately became the city’s first academic partner, offering a scholarship to cover tuition for up to four years at UAB for full-time students

who remain academically eligible. “We are committed to supporting access to educational opportunities for Birmingham students, for they will be our city’s future leaders and workforce,” President Ray Watts said when announcing the partnership. “The program directly aligns with the core principles of the University of Alabama System, which is committed to improving the lives

and educational opportunities of all residents of Alabama.” The first 67 Birmingham Promise students enrolled in fall 2020, and another 115 have joined in the subsequent semesters, according to program data at the end of 2022. UAB anticipates that the first graduates will participate in the spring 2024 commencement ceremonies.

BY THE NUMBERS

Since 2014, community building has also meant home building for UAB employees and students. UAB has built one home each year since the first project in Pratt City, Alabama, with the exception of a two-year hiatus during the COVID-19 pandemic.

\$50K
 cost of construction
 funded by donations to the
 UAB Benevolent Fund

3,781
 volunteers

17,180
 hours building homes

\$395K
 economic impact

7
 homes built for
 local families



ART FOR THE PUBLIC
 UAB art and theater students produce exceptional work to share with audiences via public exhibitions and performances.



ELEVATING THE ARTS

UAB HAS LONG BEEN A CHAMPION

for, and leader in, the arts. Providing balance to the science- and medicine-focused research and clinical enterprise, UAB's arts platforms enrich the experiences of the campus and surrounding communities.

INSPIRE AND HEAL

Institutional investments in the arts, via the College of Arts and Sciences' departments of Art and Art History, Music, and Theatre, and through community-focused organizations and venues including the Alys Stephens Center and ArtPlay, have helped grow and elevate these platforms in myriad ways: in student enrollment, in audience attendance and in programming.

Its corollary is the Arts in Medicine program, which offers arts experiences to patients, families, and staff in UAB hospitals and clinics to promote healing. These range from bedside and workshop activities to performance and visual art installations in public spaces.

Since 2013, UAB Arts in Medicine has served more than 118,000 patients, family members, and staff at UAB and more than 45,000 people at partner sites, including Children's of Alabama, CARES, and St. Vincent's East.

CHALLENGE AND EMBOLDEN

Perhaps the most significant achievement across the UAB Arts landscape in the past decade was the creation of the Abrams-Engel Institute for the Visual Arts, which opened in January 2014. The 26,000-square-foot AEIVA building,

anchoring a new cultural corridor with the Alys Stephens Center, was designed to house academic classrooms and laboratories for instruction, offices for students and faculty of the Department of Art and Art History, and a series of professional art galleries for exhibitions.

The building, designed by renowned Los Angeles-based architect Randall Stout, was named for lead donors Judy and Hal Abrams and the late Ruth and Marvin Engel. Additional major donors included Gail and Jeffrey Bayer, the Ronne and Donald Hess Foundation, and Carol and the late Jack Odess.

Since its opening, AEIVA has hosted major exhibitions of works by Andy Warhol, Willie Cole, Jessica Angel, Titus Kaphar, David Levinthal and Alabama's own Thornton Dial. It houses works from UAB's permanent collection that include Polaroids and prints by Andy Warhol, a Pablo Picasso lithograph, and much more.

EDUCATE AND ENCOURAGE

But UAB has additional community outreach opportunities in the form of its academic departments. In the Department of Music, which has long served the public with its faculty, student and professional concerts and recitals, a new PRISM concert now brings all its disciplines to one stage, from voice to percussion, from choirs to the jazz ensemble. And the renowned UAB Gospel Choir, which has included members from the community since its inception in 1985, continued to perform locally, nationally and even internationally.

The Department of Theatre introduced a new degree in Musical Theatre, which proved to be wildly popular with prospective students and helped expand the already robust programming the department has been known for for four decades. And the Department of Art and Art History also saw growth in a new master's degree in cultural heritage, while highlighting the outstanding work of its students through its Bloom Studio, Juried Student Annual exhibitions and Bachelor of Fine Arts exhibitions.

At UAB, the arts are more than education and entertainment—the arts are places of acceptance and belonging, healing, growth, and catharsis, offering an emotional outlet, providing diverse learning opportunities, and embracing inclusion and equity.

2021 ANNIVERSARIES

Three of UAB's most influential arts platforms celebrated milestone anniversaries in 2021.

UAB Department of Theatre: 50 years

Alys Stephens Center for the Performing Arts: 25 years

ArtPlay: 10 years



ART FOR THE SOUL
 Music therapists support UAB Medicine patients and their families, while AEIVA provides visiting artists like Jessica Angel a full-building canvas for projects like her "Facing the Hyperstructure" in 2017.



Economic Impact



IMPACT SOARS TO \$12.1 BILLION

WHEN RAY WATTS WAS NAMED PRESIDENT OF UAB IN 2013, the institution's annual economic impact was an estimated \$4.6 billion, as outlined in a 2008 report. By 2016, it had reached \$7.15 billion.

A decade into his presidency, the institution's economic impact had grown sharply, to \$12.1 billion in 2022—representing a \$7.5 billion, 163% increase since the 2008 report.

According to the 2022 report by Tripp Umbach, "UAB is the most significant single contributor to the Alabama economy and the leading generator of jobs." UAB is Alabama's largest single employer and now directly employs almost 28,000 people—up from 23,000 in 2016—and supports and sustains more than 107,600 jobs statewide—up from 64,000 just six years ago. One in every 20 jobs within the state of Alabama either is held directly by a UAB employee or is supported as a result of UAB's presence.

“Our economic impact continues to grow across all areas of our mission thanks to our talented students, faculty, staff and supporters.” —RAY WATTS, M.D.

Watts announced results of the new economic impact study during his presentation to the University of Alabama System Board of Trustees at their Feb. 3, 2023, meeting at UAB Hill Student Center.

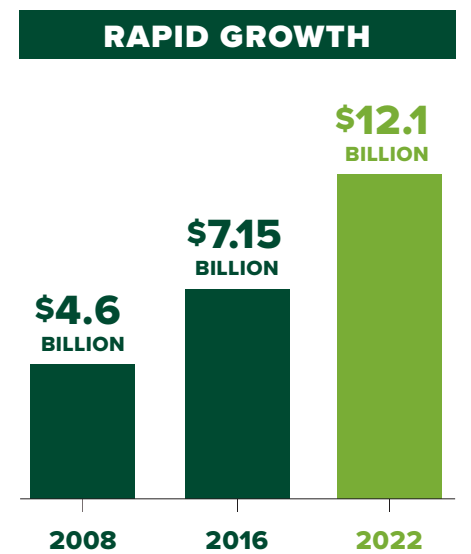
"We are proud that our positive impact in Alabama and on Alabamians continues to grow with the active partnership and support of the University of Alabama System Office and Board of Trustees," Watts said. "We exist to improve lives, and this report is evidence of our growing impact."

UA System Chancellor Finis St. John says the report demonstrates a tremendous positive return on investment for public officials, business leaders and individuals looking to fund initiatives that make a difference.

"The University of Alabama System campuses continue to serve our state well, and UAB's new economic impact study is further proof that dollars invested in our institutions deliver a tremendous positive return on investment for our state," St. John said. "According to the report, UAB generates \$39.35 in economic impact returned to the state for every \$1 in state funding the institution receives. That return is up from \$25 in 2016."

UAB's academic enterprise generated \$5.5 billion in statewide economic impact, while the UAB Medicine enterprise generated \$6.4 billion. UAB's charitable giving and volunteerism was estimated to deliver \$115.4 million in statewide impact, up from \$80.5 million in 2016. And UAB affiliate Southern Research generated \$221.8 million in statewide economic impact, supported and sustained 1,514 jobs, and generated \$206.2 million in state and local taxes.

"Our economic impact continues to grow across all areas of our mission thanks to our talented students, faculty, staff and supporters," Watts said. "While important, economic impact is only one way we contribute to our city, state and beyond. As much as we focus on that impact, we will continue to focus on the positive impact we can have on people across our education, research, patient care and community service missions."





Athletics



President Watts and Coach Bill Clark celebrate UAB Football's first-ever bowl win, at the Boca Raton Bowl in 2019.

THE CATALYST

THE STRATEGIC PLANNING PROCESS

President Ray Watts launched in 2013 has guided UAB to record-breaking student enrollment, employment, economic impact, community service, research funding and discoveries, and patient care.

But those unprecedented gains did not come without growing pains and reflection that would ultimately fuel UAB's success—in Athletics and across every pillar of the institution's mission.

"One of the most pivotal moments in my career was the experience—from 2014 to today—of my decision to discontinue and then reinstate UAB Football, Bowling and Rifle, and the positive impact of the lessons I learned," Watts said. "That

decision was early in my presidency and not made with the kind of robust dialogue and shared governance that has since propelled our institution to unprecedented success. As difficult as that time was for the UAB community, we came out stronger."

Since then, Watts' commitment to shared governance has been celebrated by Student Government Association presidents and Faculty Senate chairs, among others.

Mike Sloane, Ph.D., who joined the UAB faculty in 1982 and served as chair of the Faculty Senate during the height of the COVID pandemic, witnessed the decision and the return and often praises Watts' collaborative leadership.

During his 2021 presentation to the University of Alabama System Board of Trustees, Sloane said, "I have seen a group of leaders that cooperate to make data-driven decisions and seek input from all parties in order to establish conditions for the healthiest, safest and

most productive environments for students, staff, faculty and patients UAB's culture of shared governance has been established and is blossoming."

The unprecedented dialogue, teamwork and community support for reinstatement convinced Watts that excellence was possible in the programs, and it showed the value of shared governance.

"Since then, the collective brainpower, innovation and resolve across UAB, Birmingham and beyond are continuing to fuel our success," Watts said.

Among other milestones since 2015, the Department of Athletics received more than \$71 million in new philanthropic and community support, reinstated UAB Football, Bowling and Rifle, built or renovated 25 facilities, and won seven conference championships and three bowl games. Blazer athletes' graduation rate increased from 75% to 94% over the same time period, and the American Athletic Conference invited UAB to join its league beginning July 1, 2023—a move that increases the visibility and competitiveness of UAB Athletics on a national stage.

"I am tremendously proud of the positive momentum in Athletics and across UAB fueled by a shared commitment to teamwork and excellence," Watts said. "I am eternally grateful to everyone who has shared in this effort and who now shares in our success. From those who laid the foundations at UAB and in UAB Athletics to those who are here now and everyone in between, I sincerely thank all who have played a part."

“

The successes that have come from shared governance and collaborations since then speak for themselves, and our positive momentum continues to accelerate.”

—RAY WATTS, M.D.

ATHLETICS BY THE NUMBERS SINCE 2015

25
new or renovated facilities, including new Protective Stadium

7
conference championships

\$71M+
raised

1
move to the AAC

3
bowl wins

↑19%
graduation rate to 94%



Diversity



LIVING OUR VALUES

DIVERSITY HELPS NO ONE UNLESS

we can center their benefits by bringing diverse people together to harness their creative potential. But that's the role that inclusion plays. Inclusion releases talent and activates a cooperative and collaborative system to harvest that talent. Becoming more diverse is just the first step in a two-step transformation— inclusion is the critical second step.

At UAB, diversity and inclusion are core institutional values, and the role of leadership is a critical component in driving organizational culture change to institutionalize diversity, equity and inclusion. For the past 10 years, UAB has continued to assert its status as a premier academic health center through research, teaching, community engagement and service, becoming an increasingly more diverse and inclusive institution along the way. UAB Vice President for Diversity, Equity and Inclusion Paulette Dilworth says President Watts has led UAB's progress by engaging and encouraging those around him: students, faculty, staff and alumni, invigorating the Blazer spirit.

As is often the case, nearly every critical and significant program, initiative and structure advancing diversity, equity and inclusion at UAB have been rooted in the active and persistent energy of the campus community. Whether it be the establishment of the reimagined Office of Diversity, Equity and Inclusion, the founding of the UAB Institute for Human Rights, the growth of student multicultural programs and services, the increase in community-based partnerships, the infusion of employee affinity groups, or the call for a comprehensive assessment of campus climate and the development of transparent strategic diversity action plans, UAB's progress is

“President Watts has been the biggest champion of our efforts to increase diversity and inclusion at UAB.”
—PAULETTE DILWORTH, PH.D.

dependent upon and fueled by a broad team of insightful, talented and enthusiastic campus partners and advocates.

Other measures of UAB's success include significant grants and awards to increase representation of students of color in STEM Ph.D. programs and advance faculty in STEM fields, including the Louis Stokes Alliances Participation Program (NSF); the Bridge to the Doctorate Program (NSF); the Comprehensive Minority Faculty and Student Diversity Program, funded by UAB to support recruitment of faculty and students from minoritized populations; and the ADVANCE Grant (NSF) partnership among UAB, the University of Alabama in Huntsville, and several historically Black colleges and universities.

In just the past few years, UAB has been named the Best College for LGBTQ Students (PrideIndex, 2019), was ranked as a national leader in racial and gender diversity in leadership (American Association of University Women, 2022), awarded the first President's Leadership Award (UAB Commission on the Status of Women, 2021), awarded the first John Lewis "Good and Necessary Trouble" Endowed Scholarship (ODEI, 2021), launched the Racial Equity and Justice Task Force (2021) and saw the African American historical collection added to UAB Libraries.

We are proud of our achievements and certain that the knowledge, skills and sense of urgency that infuse this community will continue to build upon UAB's legacy and lead to even more significant achievements in equity and inclusion.



BY THE NUMBERS

45%
of students are from underrepresented groups

59%
of the UAB workforce are women

38%
of the President's Cabinet are women

21.3%
of the student body are African Americans

25.6%
of students are from other U.S. states or other countries



Campus Master Plan



A 10-YEAR TRANSFORMATION

TO SUPPORT HIS AMBITIOUS GOALS

for the institution, enhancements to the form and function of UAB's physical campus have been a priority for Ray Watts during his tenure as president.

Unprecedented growth and a stunning visual transformation quickly followed.

In 2015, UAB began an inclusive process to update the university's master plan to strategically guide the physical shape and functionality of the campus—the first such comprehensive update since 2001.

UAB's Facilities Division engaged members of the campus and Birmingham communities to get broad input that would help guide the physical development of the campus to best support the institution's education, research, patient care, community service and economic development missions.

The result was a new, comprehensive Campus Master Plan to guide an overall vision for campus development and serve as a foundation for strategic growth.

While that growth included expanding UAB's footprint—the university and health system now encompass more than 100 city blocks, up from 85 in 2010—a development focus has been to increase density instead of outward expansion.

In the past 10 years, there have been four new academic building construction projects completed or begun (Collat School of Business, University Hall, School of Nursing, Science and Engineering Complex) to go along with four major academic building renovations (Learning Resource Center,

Honors College, Education and Engineering Complex, and the Physical Education Building). Prior to 2013, there had been nine new academic building construction or renovation projects in the previous 25 years.

In total since 2013, 17 new major university construction projects have been completed or are under construction with almost 1.1 million gross square feet of facilities added to UAB's footprint. When the 10 major renovations are included in the total, more than \$1.1 billion has been spent by the institution to advance learning and aggressively expand its research portfolio, related funding and economic impact. Across UAB's academic campus, six major new buildings are planned over the next five years, which will add an additional 625,000 square feet of space, according to Lance Higgins, director and administrative liaison in UAB Facilities. Ten major renovations also are planned for the next five years.

Impactful growth continues in the health sector as well, with \$525 million spent on new construction, renovations, medical technology and real estate acquisitions over the past 10 years. Since 2013, 34 new major construction projects for the UAB Health

System have been completed or are under construction, with 2.5 million gross square feet of facilities added. For UAB Medicine, Chief Facilities Officer and vice president of UAB Medicine Arpan Lindi says that 10 major new buildings are planned in the next five years, along with 10 major renovations. The new buildings will add an additional 1.6 million square feet of space.

"These state-of-the-art facilities advance the aims of our strategic plan, make UAB more competitive globally, and bring better health and quality of life to the people of Alabama and beyond," Watts said. "Our Facilities Division has also focused on details big and small that enhance the beauty of campus, a tremendous source of pride for our students, faculty and staff who call UAB home, and something our campus community and visitors can enjoy."

Large tree canopies, safe pedestrian crossings, bike lanes and sidewalks have added character to campus. It has also created linear parks that make the campus more accessible by alternative modes of transportation and help tie the campus together with the surrounding city.

(continued)

“These state-of-the-art facilities advance the aims of our strategic plan, make UAB more competitive globally, and bring better health and quality of life to the people of Alabama and beyond.” —RAY WATTS, M.D.



CHAMPIONING SUSTAINABLE STEWARDSHIP

As campus has grown during the last decade, UAB's commitment to sustainability and its shared value of stewardship has helped UAB stay green along the way, matching its physical footprint to its Blazer spirit.

The Sustainability Strategic Plan, adopted by the Office of Sustainability in 2019, aims to establish a clean energy standard of 20% renewable energy sourcing by 2025, plus reduce greenhouse gas emissions, improve resiliency and increase overall energy efficiency. The strategy is linked closely to the university's larger Campus Master Plan, which officially was implemented in 2021. UAB already has invested more than \$375 million in total construction toward achieving these objectives.

One of the largest facets of the Campus Master Plan is its dedication to promoting sustainability—a decision that aligns with both the shared value of stewardship and the Sustainability Strategic Plan.



TREASURING OUR TREES

UAB continues to earn the biannual Tree Campus USA Award from the National Arbor Day Foundation for its work to nurture more than 4,400 healthy trees and engage students and employees in conservation—UAB also was honored in 2020 and 2022 with a Tree Campus Healthcare designation, which recognizes health institutions that encourage community wellness through tree education and investment.

To preserve growth while accommodating campus construction, the UAB Facilities Division evaluates trees and estimates their worth: If a tree or group of trees must be removed during construction, new trees equal to the value of those removed must be planted at the site or the equivalent dollar amount added to the Lynne and Tim Sullivan Tree Fund, which helps to maintain tree diversity, replace damaged or diseased trees, and add to the tree population on campus: UAB's trees have provided \$126 million in soil-erosion control, recycled at least \$152 million worth of water, and provided \$125 million worth of air-pollution control.

UHALL BIOSWALE

The University Hall bioswale captures stormwater runoff to improve infiltration and filter pollution. University Hall is UAB's first LEED-certified building—part of UAB's commitment to design, construct and maintain buildings in ways that make buildings safe, useful and sustainable.



LEFT: The Southern live oaks in the Mini Park are some of the oldest and most valuable trees on campus.

BELOW, LEFT: Inside the UAB Gardens sits a beehive habitat for honeybees, a threatened population in the U.S. UAB was named a Bee Campus USA by Bee City USA in 2021, which recognizes, supports and encourages pollinator conservation in towns, cities and counties across the country.



SUSTAINABLE UPGRADES

As part of UAB's commitment to construct and maintain buildings in ways that make them safe, useful and sustainable, UAB uses the Leadership in Energy and Environmental Design (LEED) rating system to benchmark construction of new and renovated structures, with the aim of having all new construction LEED-certified at Silver level or higher. Some of UAB's newest structures have earned a LEED certification, including University Hall, McMahan Hall and Honors Hall.

UAB also is committed to reducing its transportation footprint: One example is the 10th Avenue road diet, completed in 2019, which made the 10 city blocks along 10th between 8th and 18th streets more bike- and pedestrian-friendly through painted bicycle lanes and crosswalks and a narrowing of the four-lane road to three. The project was included in the Campus Master Plan as part of its mobility improvement and streetscape focus, which also included prioritizing an upgrade of the Blazer Express transit system—a new bus fleet rolled out in 2020. More than 20 electric car-charging sites also are available on campus, and a thriving Green Labs program saves UAB hundreds of thousands per year in lab energy costs.

UAB also continues work to expand its District Steam and Chilled Water System, connecting older buildings with their own individual heating and cooling operations to the centralized system. New buildings, such as University Hall, are connected during construction.

BUILDING A COMMUNITY

Did you know there is a corner of campus built entirely off-grid? The UAB Sustainable Community at the corner of 11th Avenue South and 17th Street features the UAB Solar House and a monarch butterfly waystation.

The Solar House was built in 2017 as part of the U.S. Department of Energy Solar Decathlon; its rooftop solar panels and backyard microgrid run all the usual residential appliances and amenities at the same level as a comparable modern house on a conventional power grid. Adjacent to the Solar House is a butterfly waystation, opened in winter 2020. UAB is certified as a Monarch Waystation—an intentional space to provide food and shelter for monarch butterflies as they migrate annually. Another waystation is located near Honors Hall, built as part of a collaboration between UAB Sustainability and the Science and Technology Honors Program.

Also nearby are the UAB Gardens along 12th Avenue South at 17th Street, which house a collection of plots that grow produce for UAB's on-campus food pantry, Blazer Kitchen, and a beehive habitat for honeybees.



Advancement



Collat School of Business grand opening, 2018.

A DECADE OF DEVELOPMENT

IN FEBRUARY 2013, THE PHILANTHROPIC LANDSCAPE for UAB looked very different.

The public phase of The Campaign for UAB—the largest in the school’s history—had not yet begun. UAB’s endowment book value was \$284 million, and its market value was \$363 million.

The next 10 years would mark a period of explosive philanthropic growth. The Campaign for UAB was a resounding success, with more than \$1 billion raised. Today, UAB’s endowment book value is more than \$560 million, and the market value is over \$700 million. UAB has achieved many fundraising milestones—largest gift received by the university (a record broken two times in 10 years), the largest gift from an alumnus, the second university in the state to raise \$1 billion in a campaign and many more.

Today, UAB is still a relatively young university at 53 years old; but its philanthropic efforts have made a difference in our community, country and world. In Watts’ remarks following the campaign’s close, he noted: “The spirit of collaboration and working toward a shared vision, which has driven our success over five decades, is stronger than ever today and propels us toward an even bolder future—for UAB, Birmingham and Alabama.” That is as true today as it was five years ago.

THE CAMPAIGN FOR UAB

Watts’ presidential tenure began only months before the start of the public phase of The Campaign for UAB. By the campaign’s end in 2018, more than 103,000 alumni, faculty, staff, students and friends had given more than \$1 billion to support students, facilities, faculty, programs, and research and innovation.

For five consecutive years, UAB Advancement raised more than \$100 million annually. More than 100 new faculty endowments, including chairs, professorships and scholarships, were created, as well as 211 endowed scholarships to support our students. Chad Hagwood became the first UAB alumnus to give \$1 million.

UAB also received several transformational naming gifts during the campaign. Charles and Patsy Collat pledged \$25 million to name the school and the Collat Scholars Program in the fall of 2013, the first named school at UAB. The O’Neal family and O’Neal Industries shareholders gave \$30 million—then the largest gift in the school’s history—to name the O’Neal Comprehensive Cancer Center at UAB.

More than \$75 million was raised for new facilities and renovations, which provided UAB’s rapidly growing student and faculty population with high-tech spaces for teaching, learning and community engagement. UAB Advancement raised more than \$62 million for student support and \$239 million for faculty. Additionally, approximately \$393 million was raised for programmatic support and \$231 million for research and innovation.

ALUMNI GIVING

In 2022, UAB Advancement achieved another milestone, this time in alumni giving. UAB alumni made 43,102 gifts totaling \$25.6 million—the largest total in the school’s history and double the previous year. That number was driven by the largest gift from an alumnus in UAB’s history—\$10 million from J. Frank Barefield Jr. to name the UAB J. Frank Barefield, Jr. Entrepreneurship Program in the Collat School of Business and the UAB J. Frank Barefield, Jr. Department of Criminal Justice in the College of Arts and Sciences.

(continued)



BY THE NUMBERS

\$706 MILLION

endowment market value as of November 2021

\$511 MILLION

endowment book value as of November 2021

\$95 MILLION

largest gift in UAB’s history, given by Marnix E. Heersink, M.D.



COMMUNITY ENGAGEMENT

Community engagement has always been at the core of UAB's identity; in fact, it is one of the university's four mission pillars. That mindset also extends to fundraising, and the last 10 years have seen multiple initiatives and efforts to strengthen the city and state that UAB calls home.

In 2020, UAB became the first university to partner with Birmingham Promise, which provides tuition assistance for Birmingham City Schools graduates to attend a public college or university in the state. The UAB Birmingham Promise Scholarship provides up to four years of tuition for qualifying students. UAB also worked with other community partners to provide free housing and other educational services for many of the students. At the news release announcing the partnership, Watts said, "UAB is not just in Birmingham, but for Birmingham. We are committed to supporting access to education opportunities for Birmingham students, for they will be our city's future leaders and workforce." To date, 181 students from Birmingham City Schools have benefited from the Birmingham Promise's partnership with UAB.

Live HealthSmart Alabama is another community-focused project that started in Birmingham and has the potential to impact the entire state. The winner of the 2018 UAB Grand Challenge, Live HealthSmart Alabama is a comprehensive program dedicated to improving health outcomes in Alabama. Working with community partners, the first phase of Live HealthSmart Alabama has made improvements in five target neighborhoods, including health-monitoring with a mobile wellness van, fresh food mobile markets, new sidewalks and bus shelters, painted murals, improved outdoor lighting, and more. Business and community partners were essential to the success of the program.



Marnix and Mary Heersink's \$95 million gift will transform UAB.

MARNIX E. HEERSINK SCHOOL OF MEDICINE

In September 2021, longtime UAB supporter Marnix E. Heersink, M.D., gave \$95 million to rename the School of Medicine. The gift will fuel improvements and innovations in patient care, medical training and research, and innovation enterprises, particularly in focus areas such as precision medicine and pharmacogenomics, cancer biology,

neurosciences, health disparities, and immunology. It also established two new institutes: The Marnix E. Heersink Institute for Biomedical Innovation and the Mary Heersink Institute for Global Health. When the gift was made, it was the largest in the state of Alabama, and it remains the largest in UAB and the University of Alabama System's history.

“
 The spirit of collaboration and working toward a shared vision, which has driven our success over five decades, is stronger than ever today and propels us toward an even bolder future—for UAB, Birmingham and Alabama.”
 —RAY WATTS, M.D.

ARTS

In January 2014, UAB opened the Abrams-Engel Institute for the Visual Arts (AEIVA). AEIVA is a center for UAB and the Birmingham community to engage with contemporary art and artists. The 26,000-square-foot building was named for lead donors Hal Abrams and the late Judy Abrams and the late Ruth and Marvin Engel. Additional major donors include Gail and Jeffrey Bayer, the Ronne and Donald Hess Foundation, and Carol and the late Jack Odess.

ATHLETICS

Over the last 10 years, athletics has remained a priority for UAB leadership and UAB Advancement, and fundraising efforts have benefited athletic programs across campus. Highlights of the last 10 years include: soccer facility in fall 2015; football operations center, the largest philanthropic total toward a facility in UAB's history, in August 2017; track and field facility in June 2018; and basketball practice facility in April 2022.



COVID Moment

When the COVID-19 pandemic hit Alabama in March 2020, UAB put out a call for philanthropic support. Many answered that call—corporations, foundations, individuals, faith-based organizations, as well as many of UAB's own students, faculty, staff and alumni.

The impact of that support was felt across the UAB community.

More than \$1.2 million was raised within 20 days for COVID-19 research. More than \$139,000 was raised to provide meals to frontline health care workers while they cared for sick patients or assisted with COVID-19 testing and vaccinations. Other fundraising efforts included \$105,000 for a student emergency fund, \$75,000 for financial assistance for the care of children of essential workers and \$200,000 from Hyundai Hope on Wheels to support a drive-through testing clinic.

Additionally, businesses, civic groups and even individuals donated tens of thousands of pieces of personal protective equipment for essential workers.



UAB ALTEC STYSLINGER GENOMIC MEDICINE AND DATA SCIENCES BUILDING

AMBITIONS

PLANNING FOR THE FUTURE: 2023 AND BEYOND

WHAT DO THE NEXT 10 YEARS HOLD for UAB? In January 2022, President Ray L. Watts appointed a Strategic Planning Council to begin the process of refreshing the Forging the Future strategic plan that has guided UAB's growth for the past five years. The council is reviewing data, conducting an environmental scan, examining initiatives at peer institutions, and reviewing mission pillars and foundations, with a goal of sharing and discussing the refreshed strategic plan with stakeholders in spring 2023.

At the same time, Watts and leaders in the Heersink School of Medicine and the UAB Health System are developing an updated clinical strategic plan.

While these plans are still evolving, Watts explains that growth will continue to lead the agenda. "We are focused on growth, because that is how we continue to advance across all our missions," Watts said. "When we advance our research, for example, that brings with it advances in economic opportunities, better health care and better productivity." ■



PEOPLE WILL POWER EXPONENTIAL GROWTH

“THE GROWTH THAT UAB HAS EXPERIENCED throughout the history of this institution, thanks to our students, faculty, staff and supporters, has been incredible,” Watts said. “UAB has always had visionary leaders. Joe Volker [UAB’s first president] came and saw what a research institution and medical center could mean for Birmingham. But I don’t think he could have dreamed that we would achieve all that we have achieved. That includes research growth, but also the growing diversity of our academic and arts offerings.”

Progress is not linear, but exponential, Watts emphasizes. “Our research funding has grown by 50% in the past five years,” he said. His “partly audacious” growth goal, Watts added, “is to reach a billion dollars in extramural funding in the next five to seven years.” (Research funding was \$715 billion in fiscal year 2022.)

Reaching that goal will require “keeping our current faculty funded and then recruiting additional funded investigators,” Watts said. “Recruitment is going to be a big part of the Heersink School of Medicine research strategic plan, and we have all of our schools looking at their research funding and encouraging them to grow.”

A MASTER PLAN FOR EXPANSION

GROWTH IN UAB’S EDUCATION, research and health care missions necessarily means an expansion of the physical campus as well. UAB’s significant investment in marketing its award-winning, innovative programs—including its growing list of fully online degrees and certificates—promises to expand the university’s name to prospective students in new markets who are looking for a world-class, affordable and highly valuable education.

The Campus Master Plan, which was approved by the University of Alabama System Board of Trustees in 2021, is dedicated to building one of the most vibrant, state-of-the-art and sustainable urban campuses in the nation. The plan includes more than \$666 million in total construction over the next five years, including several major new construction projects and renovations. These include the Student Organization Facility, scheduled for completion in 2023; a new Child Development Center that will increase on-campus childcare enrollment by 100%; the Science and Engineering Complex, being built on the site of the former Education Building on 14th Street South between University Boulevard and 10th Avenue South; and the Altec Styslinger Genomic Medicine and Data Sciences Building, aiming for completion in 2024.

The UAB Medicine Master Plan, meanwhile, anticipates more than \$850 million in total construction over the next five years. That includes the new Inpatient Rehabilitation Facility replacing Spain Rehabilitation Center, with projected occupancy in spring 2025, and six other major construction projects along with 10 major renovations. Over the past five years, UAB Medicine has invested more than \$185 million in advanced medical technology, with an additional investment of more than \$100 million planned over the next five years.

TRANSFORMING SOUTHERN RESEARCH

IN ADDITION TO GROWTH, another focus for the coming years is continuing to transform UAB affiliate Southern Research and accelerating both scientific endeavors and economic development in Birmingham. Southern Research is investing \$108 million to modernize its Southside campus, including a biotech innovation center that will anchor an urban

“We want to be the biotech commercialization hub for the Southeast United States.”

—RAY WATTS, M.D.

research park. The expansion will double lab space to study infectious diseases, expand capacity to research chronic diseases, and add 150 new scientific and professional jobs. In particular, UAB and Southern Research are collaborating on biotech commercialization opportunities, combining UAB’s research expertise and the drug discovery and development capabilities of Southern Research. “We want to be the biotech commercialization hub for the Southeast United States,” Watts said. A pilot biotech incubator will open soon in renovated space on the

research park. The expansion will double lab space to study infectious diseases, expand capacity to research chronic diseases, and add 150 new scientific and professional jobs. In particular, UAB and Southern Research are collaborating on biotech commercialization

Southern Research campus, Watts says. “Then a larger, permanent biotech incubator will open in a new building” that Southern Research has planned. Eventually, land between and around UAB and Southern Research could form an urban biotech research park, with support from both institutions. Biotech startups in particular will benefit from the toxicology and medicinal chemistry resources available from Southern Research, which holds millions of dollars in contracts to do such work from major pharmaceutical companies and other industry sponsors.

Another collaboration in development is a new genomics diagnostics lab, a joint venture to develop novel genomics tests inspired by UAB’s success in rapidly developing inexpensive tests in the early days of COVID pandemic.



MORE DISCOVERIES, MORE JOBS: Expansion at the Southern Research campus will double lab space to study infectious diseases and add 150 new scientific and professional jobs.

EQUITABLE ECONOMIC DEVELOPMENT

GROWTH IS COUNTERPRODUCTIVE IF IT IS NOT INCLUSIVE, Watts said: “UAB is committed to equitable economic development.” The university is a leader in Prosper Birmingham, a public-private partnership designed to create a more vibrant, racially and gender-inclusive economy in the city.

For a current Prosper initiative, “we decided to focus on health care, through a program to train lay navigators,” Watts says. UAB research has shown the remarkable potential of trained laypeople in connecting underserved populations to care. In addition to their work as lay navigators, participants will receive paid time for training to earn additional credentials as phlebotomists, pharmacy technicians, medical assistants and other in-demand jobs at UAB and across the region. Participants who get hired at UAB can continue their upward career mobility by taking classes at no cost through the university’s Educational Assistance program for employees.

“UAB is now more engaged in community revitalization and community development” than ever before, Watts said. As the Live HealthSmart Alabama program has demonstrated its effectiveness at improving the lives of people in its initial four pilot neighborhoods in Birmingham, “this grand challenge is getting grander,” he added. “We have become engaged in answering the questions of how you mitigate blight, how you revitalize a neighborhood and build homes that are affordable.” UAB’s Blazer Home program, funded through grants from the UAB Educational Foundation, launched in 2018 as a pilot

project for UAB employees to receive awards of up to \$8,000 for use as a down payment or toward closing costs for new purchases or renovations on a home in designated incentive zones around UAB’s campus. A new iteration of the program will likely focus on North Titusville, one of the Live HealthSmart

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Alabama demonstration zones, with larger awards that will be focused on employees who are first-time homeowners. The program will include seminars and workshops on building a financial legacy led by UAB’s Regions Institute for Financial Education.

“Talk about a grand challenge: We are taking on not just health issues but the root causes of poverty,” Watts said. “That is what attracted the UAB Grand Challenge committee about the Live HealthSmart Alabama project. We wanted to tackle a major societal problem that a big, complex university with a lot of different talents could take on. No one organization, or one city, has the resources or people power to do this. But as a partnership, we can, and what we learn will be transferrable to other cities, other states, throughout the country and around the world. Every part of our mission is related to this.

“From the beginning, my goal has been to make sure we use all of UAB’s tremendous people power and abilities to have the biggest possible impact on our community, city, state and country. That is what we have done and what we will continue to do. Our impact will be as big as we make it.”



Birmingham Mayor Randall Woodfin speaks at a Live HealthSmart Alabama event in Kingston, 2021.

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