HOUSTON

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Last year, we announced the University of Houston's bold, new vision to become a Top 50 public university. We knew that achieving this goal would not be easy. No. It would challenge us to stretch to a higher level … to think in ways that we've never thought before – and that's exactly why we made it our vision. Aiming to become a Top 50 university calls us to greater excellence, not for our glory, but for the greater good of those whom we serve. When we rise, our students, communities and world can soar. Innovations and new ventures are birthed, and our societal and economic impact is amplified.

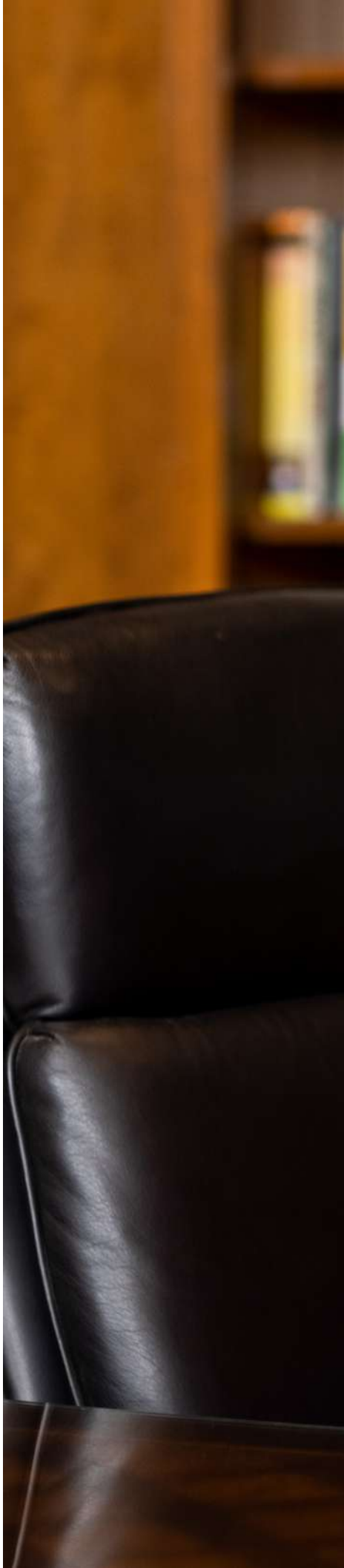
Breaking boundaries is not new to UH. The University has experienced explosive growth in the last decade. We achieved Carnegie Tier One status earlier than forecast, reached record-breaking enrollments, exceeded a $1 billion fundraising goal ahead of schedule, increased graduation rates and academic program rankings, established Houston's first medical school in more than 40 years and reclaimed our athletic excellence. History shows: Becoming a Top 50 public university is not an insurmountable challenge. It's our destiny.

In this publication, you'll find a glimpse of what our journey to the top entails and the transformative efforts we're taking to get there. We delve into the multifaceted strategy to further bolster our students' success, our ambitious plan to recruit 100 new faculty and the dynamic road ahead for UH Athletics. You'll also learn how we're embracing society's big challenges, including the energy transition, health equity and health care delivery reform to help move our communities and nation forward. Our ambitious vision has sparked creativity and life-changing new endeavors, and the beautiful stories in this publication capture its powerful impact.

Becoming a top 50 public university is beyond a lofty goal. It's the fulfillment of our duty to transform lives and communities. I invite you to read the following pages, get inspired and join us on our journey to the next level. Together, we rise. Together, we soar.

Let's go!

Renu Khator
President, University of Houston



Student Success

REACHING

the Destination

What makes one university better than the others? There are many ways to answer, but one factor always remains at the soul of the question: How well does it equip students to succeed in school and in life?

"A forward-thinking university reaches out to ensure all students have the resources and develop the skills they need to work very hard and succeed – not just in the complicated business of earning degrees but also in the task of building careers and contributing their unique talents to the world," said Paula Myrick Short, University of Houston senior vice president for academic affairs and provost.

Short points to experiential and field-based learning opportunities, mentored research, service learning and learning abroad as the kinds of experiences that allow UH students to build their skills and help define where they want to go with their careers.

"No-excuse priority" is how UH President Renu Khator refers to a decade-long quest to increase every measurable factor that defines student success at UH.

The goal is twofold: First, assure students and families that UH is their partner in making degree completion possible – on time and within budget. And second, prepare students for the professional life after graduation. That requires more than landing a job. It means helping students build the skills to confidently traverse the path from career dreams to real-life futures.

Alina Dominguez ('21)

With Students at Every Step

First impressions endure. That's why it is critical that all incoming students start college fully understanding and ready for what is ahead. UH's Enrollment Ready! helps students self-guide through the early tasks of being a student: Computer software correct and updated? Transfer credits reported? Courses selected and class registration responsibilities complete?

Once enrolled, students and their families can continue to rely on various UH programs as they journey through the college process.

Alina Dominguez ('21) credits UH student success programs with not only her success as a college student but also a sharpened vision of her professional path, even as it veered away from her original plan of a political science career.

"The UHin4 program set me up to succeed. I was able to see my professional path sharpen into focus with a communications major and public relations concentration, while I kept political science as my minor," she said. She credits the fixed-rate tuition plan with keeping her motivated to graduate in four years. Combined with proactive advising, UHin4 helped keep her goals within reach.

The UHin4 program that helped Dominguez keeps undergraduates on schedule to earn a degree on time and on budget with academic maps and priority class enrollment. Participants have a higher four-year graduation rate by 6 to 15 percentage points, and it has contributed to UH improving its overall four-year graduation rate.

More support came from LAUNCH (Learning Advancements for Undergraduate Cougars of Houston), which offers peer tutoring and success workshops. "Everyone has a strong suit in their studies, but when I needed a little extra hand in math, I called upon LAUNCH," Dominguez said.

As her college years progressed, University Career Services offered guidance. "They really helped with my résumé and with my internships. I worked with Career Services to find new opportunities and to get my career underway," she said. Currently settling into a new job with the global energy and chemical company Sasol, Dominguez is moving forward in her public relations career.

Gaining Momentum

Dominguez is one of many students who are benefiting from that decade-long focus on increasing positive student outcomes. From 2012 to 2020, the four-year graduation rate at UH increased 114%, and the six-year graduation rate increased 35%.

> *"The UHin4 program set me up to succeed."*
>
> *– Alina Dominguez ('21)*

Despite predictions of a pandemic lag, UH enrolled 47,031 students for fall 2021. And in December 2021, UH conferred 5,390 degrees for summer and fall, of which 3,922 were earned by undergraduate students. At the front of their classrooms are professors who reflect the diversity of the student body. During the last six years, the number of Black and Hispanic tenure and tenure-track faculty members increased by 40% and women faculty members by 26%.

Behind those numbers are students nurturing dreams and starting careers. Many make the grade despite obstacles that would be unsurmountable without involvement and support from both the University and their peers.

"Student success is our core mission, and we are relentlessly passionate about it."

– Renu Khator
UH President's Fall Address 2021

Deliberate, Compassionate Bridge Building

"Our wide-ranging efforts to increase student success start before a student even arrives on campus," said Teri Elkins Longacre, vice provost and dean of undergraduate student success. "From data-informed, proactive advising to programs such as UHin4 that remove barriers to timely degree completion, we are continually evaluating and addressing every step that promotes or hinders student success."

Providing academic maps helps ensure that students enroll in courses each semester that apply to their chosen degree program. Advising technology that charts out coursework, suggests tutoring and supplemental instruction as needed and notifies an adviser if a student shows signs of trouble also plays a key role in delivering successful outcomes.

How is UH surpassing so many student success milestones? "With the right synergy," is the short answer from Dan Maxwell, interim vice president for student affairs and enrollment services.

"We want to ensure every single student can access the tangible academic and emotional support they need to feel comfortable here and work confidently throughout their journey toward completing their studies," Maxwell said. His team connects with students from the moment they show interest in UH all the way until they graduate – even longer for master's and doctoral students.

The ingredients for helping students succeed comes in many forms, such as the student-led Cub Camp, new student orientation, University Career Services, Cougar Cupboard, tutoring centers, mental health services and more. Cougar Promise covers tuition and mandatory fees for low-income students and reduces costs for eligible students. Families are invited to be involved, too.

"We engage the parents. We truly understand that parents are allies in student success. A new program called Campus ESP shares official communication with parents," said Donell Young, associate vice president for student affairs and dean of students.

Bridging the Transition

Junior music major Timothy Turnley learned about UH in high school from teachers who are UH alumni. His band teacher stressed the outstanding quality of the UH music education program (among the best in the country, according to Turnley), while his English teacher praised the academics and offered advice for college life and living in Houston.

Timothy Turnley

From his UH music professors, he learns about the intricacies of percussion instruments and the discipline and scheduling traits necessary for musicians. His professors, he said, are teachers, mentors, counselors, career advisers and endless sources of knowledge about the music scene – local, around the world and through time.

"Most of my and my fellow music students' inspiration comes from our professors at UH," Turnley said. "They help us bridge the transition from our parent-led life into our self-led life."

For Diamond Family Scholars like Marcela Molina, life serves up extra struggles.

"The Diamond Scholarship helps recent high school graduates who were in foster care, a ward of the state or orphaned. I was two of those," she said.

Both of her parents died early – her mother when Molina was 13, her father just three months before she turned 18. Before that load of grief and turmoil landed, leaving her a ward of the state, Molina had started silently dreaming of college.

"In poor upbringings, nobody talks about education. I have cousins [in Honduras] who haven't completed first grade. The mindset is to just work. I felt hopeless, trapped in poverty and struggle," said Molina, born in Houston as the youngest of four.

"Becoming a Diamond Scholar was our one opportunity to make it."

– Marcela Molina

It all changed with the Diamond Family Scholars Program . Molina's expenses would be covered, and she and other Diamond Scholars would form something like a family.

"I'd never met another orphan, but now I've found friends with similar stories. People like us go through lives with nobody really seeing us," Molina said. "Becoming a Diamond Scholar was our one opportunity to make it."

These days, Molina dreams of being a psychologist and providing the hope missing in her youth. Such goals have the power to change lives.

Success That Sticks

So, at the deepest core, what really explains UH's significant and unprecedented progress in student success and national rankings?

Some observers point to the many benchmarks achieved. Others say it's about rigorous and relevant academics, research opportunities or job preparation. For others, the jewel is athletics or the social scene.

If you ask Maxwell how to measure UH's growing success, he will tell you it's all those things and more. It's the "stickiness."

"No matter the needs or background, it is our job to find the best 'sticky' points – those things that make an individual student feel at home, right here, and be eager to stay loyal to the University of Houston," he said. "Think of it as always being where we belong for as long as we need to be. We like our Cougars to feel 'sticky' with the University. We want them to work very hard, earn their degree, then soar in their chosen path in life. And we want them to always remain Cougars deep at heart."

Marcela Molina

FUELING DREAMS

As the University of Houston works to become a Top 50 public institution and a first-choice institution for the nation's most talented students, it's upping the ante. Attracting the best and brightest means growing the University's cache of need- and merit-based scholarships. Just as UH Athletics scouts for the best players in their respective sport, admissions officers are scouring the country for high-achieving students. And just like Athletics, landing talented scholars means offering an attractive package of benefits.

"Scholarships are life-changing offers that provide future opportunities for talented students," said Mara Affre, associate vice president for enrollment services. "UH needs to be competitive with other institutions regarding the scholarships we have to offer. The gift of education keeps giving for generations."

Adam Lipnicki ('20)

Kayla Hühn

Tier One

Attracting Talent Nationwide

Scholarship support is almost always a significant and defining factor in a talented student choosing UH. Erin Kiley ('20) knows firsthand the power of a talent scholarship. "I wanted a university that would recognize what I accomplished because I put so much time into my studies and into staying involved," explained Kiley, who was a summa cum laude high school graduate from Indiana.

When it came time for her to seriously think about college, Kiley told her parents she was looking for a university located in a large city with a strong focus on academics and an honors college. Her father headed to the bookstore to research the perfect college for his daughter. Among his stack of purchases was the 2016 edition of "INSIDE HONORS: Ratings and Reviews of Sixty Public University Honors Programs." There it was in black and white – the nationally-ranked UH Honors College.

"He told me about the Tier One Scholarship," recalled Kiley, "and both my parents said, 'We think you should apply to UH because it would be a good fit.'" Turns out, UH was the perfect fit. The Tier One Scholarship provided her full tuition and a learning abroad experience in Italy, and it also made her realize she had a knack for numbers and analytics – an unexpected revelation that would pay off once she graduated.

Recognizing Potential

Out of the $1.24 billion dollars raised during UH's "Here, We Go" capital campaign, $215 million was dedicated to scholarships. However, the need continues to grow, especially in Houston, where 23.1% of undergraduate students and 19.6% of graduate students are living in poverty. UH aims to raise another $300 million to support the recruitment and retention of the best and the brightest so these promising students can reach their true potential without financial impediments. Some colleges are more successful than others at advancing social mobility, and UH is among the best. UH is ranked No. 39 in the nation for social mobility by U.S. News & World Report.

Increasing the number of talent scholarships at UH will provide talented and motivated but economically disadvantaged students with more pathways to attaining higher education, ultimately leading to positive changes in Greater Houston.

"Scholarships give students the financial freedom to explore learning, develop skills and meet education and career goals despite financial barriers," said Eloise Brice, vice president for University Advancement. "We can continue to help the most driven individuals begin their success story here at the University of Houston, solidifying UH as a first-choice institution."

Lifting Burdens

The Tier One Scholarship came at just the right time for Kayla Hühn, a UH sophomore from Friendswood, Texas.

"UH believed in me even before I believed in myself."

– Erin Kiley ('20)

Her mother was undergoing chemotherapy for breast cancer as she was finishing high school and looking at colleges. "I didn't want my parents to be burdened with having to pay for college on top of paying for my mother's treatments," shared Hühn.

She researched various scholarships, applied for UH's Tier One program and was overjoyed when she received the "big red packet" in the mail with news that she received the scholarship and had been accepted into the UH Honors College.

Hühn, a double major in Spanish and English with a concentration in linguistics, is a standout among her peers. In addition to being a Tier One scholar, she's a recipient of the Bessie Monroe Ebaugh and Houston Livestock Show and Rodeo scholarships. She plans to learn abroad in Spain to study the Catalan language and wants to be a Fulbright Scholar.

Her extracurricular activities include being an ambassador for University Advancement and a member of the Spirit of Houston Cougar Marching Band – she relishes in the excitement of playing her mellophone at the halftime shows during the football games. Hühn also pays it forward as an Honors Mentor Executive, welcoming incoming freshmen to the Honors College.

"I had always thought I'd have to work through college to pay for it, but with these scholarships, the burden is lifted off my shoulders, and I am free to explore what I love to do," Hühn added.

Priceless Outcomes

Since graduating in May 2020, Erin Kiley has made the "big city" of Houston her home, working as a business associate at ExxonMobil in a career field she loves.

"UH believed in me even before I believed in myself," Kiley recalled with emotion. "I wish I could go back to high school Erin and tell her, 'UH believes in you so much that they are willing to write you a check for you to have these amazing experiences.' That to me … is priceless."

Erin Kiley ('20)

University of Houston College of Medicine

On the Rise

BOLD, NEW

Investments in Research

Achieving national research competitiveness can be exceedingly challenging, as the goal is an ever-moving target. It takes new thinking around hiring and retention in the veritable long game of faculty recruitment and development. And the University of Houston has done just that – a new, revolutionary faculty hiring initiative has launched with the goal of expanding UH's dynamic research enterprise. Bringing immense talent and expertise to the city of Houston, this bold move to catapult UH's national research competitiveness is capturing attention around the globe.

Over the next four years, UH will recruit 100 new faculty as part of its new Presidential Frontier Faculty program. This major investment in UH's future will bring some of the top, rising-star researchers to Houston to focus on society's biggest challenges related to health, energy, sustainability and security.

These researchers will help integrate the efforts of multiple colleges through joint appointments, and they will focus on finding transferrable solutions to today's problems, in partnership with industry and government. The program supports the active transfer of technology to the marketplace and academic knowledge to policymakers, ensuring that UH's discoveries have a measurable societal impact.

"It is the first time in UH's history that we have launched a strategic faculty hiring program that will undoubtedly change the course of the University moving forward," said Paula Myrick Short, senior vice president for academic affairs and provost. "This program is truly visionary and could not have been done without the support, engagement and commitment of our leadership and our campus community to making UH a top-ranked institution."

Studying the effects of aerosols on storms

"It is the first time in UH's history that we have launched a strategic faculty hiring program that will undoubtedly change the course of the University moving forward."

– Paula Myrick Short

Designing an Integrated Research Partnership

As part of UH's new strategic plan, the program demonstrates an intentional expansion of UH's research enterprise – by design. Presidential Frontier Faculty will focus on critical research areas determined by University leadership that align with institutional priorities. To support these new faculty, UH has committed significant funds to launch and boost several core facilities for research across campus. These core facilities will have the state-of-the-art equipment and instruments needed to sustain operations for UH's current and growing research community. And this has all been made possible through a strategic partnership between Short and Amr Elnashai, UH vice president for research.

"The Presidential Frontier Faculty program represents a level of faculty hiring coordination and integration that has not been done here or elsewhere," said Elnashai about the leadership visioning for the future of UH research and program implementation. "The concept of university-wide faculty recruitment to address global challenges across college boundaries has been embraced by the deans and has created genuine excitement among our existing researchers."

Located in one of the hottest testbeds for public impact research in the country, UH is quickly becoming a destination for researchers who crave access to Houston's energy and health care industries, as well as sustainable environmental efforts and manufacturing hub.

A New Research Era Begins

With the first cohort of Presidential Frontier Faculty starting in fall 2022, UH will focus on hiring faculty with a high potential for funding and collaboration in areas of great societal value. There will be a keen focus on recruiting researchers working on the development of medical devices, understanding substance abuse, exploring carbon capture and energy storage, examining climate change and modeling, securing the supply chain and detecting threats in digital networks.

"The quality of applicants is outstanding," said Elnashai, who is personally reviewing every applicant along with Short to ensure complete alignment with the UH strategic plan. "Our approach is unique and could well be the future model for hiring research-focused faculty around the country."

SURGE OF SUPPORT

Leveling the Playing Field of State Funding

Austin may be a popular tourist destination for some, but when it comes to advancing the University of Houston, the 170-mile trip to the State Capitol is all about business. University leaders – President Renu Khator and members of her leadership team, UH System Regents, community supporters and others – prioritize nurturing relationships with state lawmakers and decision-makers whose support is critical for UH to realize its ambitions.

During his seven years as vice president for governmental relations at UH, Jason Smith has seen a significant surge in legislative support for UH thanks to its steady ascent in academic and athletic prestige. "Back then, we were seen as an 'up and coming' research university. Now we're consistently mentioned in the same breath as University of Texas at Austin and Texas A&M. It's not hyperbole – it really is what legislators are saying."

There is still one glaring difference, however, between UH and those two other flagship Texas institutions: funding. The UT and A&M Systems are the sole beneficiaries of the Permanent University Fund (PUF), a state-owned investment fund that's been collecting royalties from oil and gas leases for over 130 years. With a net asset value of more than $24 billion, PUF has distributed billions to the two university systems.

But what about the dozens of other public higher education institutions in Texas?

Fighting for Funding Reform

Once the third rail of Texas politics, PUF is now the target of a reform aimed at making higher education funding more equitable. In 2015, then Rep. Sylvester Turner authored a bill to add the University of Houston to PUF. Two years later, Rep. Carol Alvarado proposed the "Permanent University Fund II" to benefit the UH System and the Texas Tech University System. In last year's 87th legislative session, two Lubbock lawmakers filed similar pieces of legislation to reallocate one-third of PUF to emerging research universities. While none of the proposed legislation passed, the fact that legislators are more empowered to challenge the funding disparity is a striking show of support for UH, according to Smith.

Then this happened during the last session: For the first time in its history, UH received a $50 million appropriation for institutional enhancements. UT and A&M have received similar funding for years, but never UH. "It's recognition that we need more resources to continue on our trajectory toward achieving our goal of being ranked among the nation's Top 50 public universities," said Raymond Bartlett, senior vice president for administration and finance. "It's a game-changer."

Transformational Investment

Not only will the new funding advance student success and research initiatives in Houston, it also laid the foundation for a more sustainable funding

source in the future. During the next legislative session in 2023, UH intends to ask the state for a $1 billion permanent endowment that would provide the University, depending on investment returns, an additional $40 million to $50 million a year.

"There's a lot of support for this in Austin, and I think we're in a great position," Smith said. Even Gov. Greg Abbott expressed support for the endowment and consistently applauds the remarkable transformation of UH under the leadership of President Renu Khator.

"She has done more to advance a university than any other person I've ever met," said Abbott last year during an event on the UH campus.

The University also received extensive legislative funding in 2021 to support four major capital construction projects, including a new medical research facility in the proposed TMC3 facility at the Texas Medical Center and a fourth academic building for UH at Sugar Land. At UH, two new facilities are in the planning stages – a building for the Hobby School of Public Affairs and a new building to house innovation and entrepreneurial-related programs.

Substantial legislative support is evident, indeed, for the University of Houston in Austin, leaving Coogs hungry for even more progress in the future.

"We have momentum and tremendous support," Smith said, "But we plan to keep our foot on the gas."

The John M. O'Quinn Law Building

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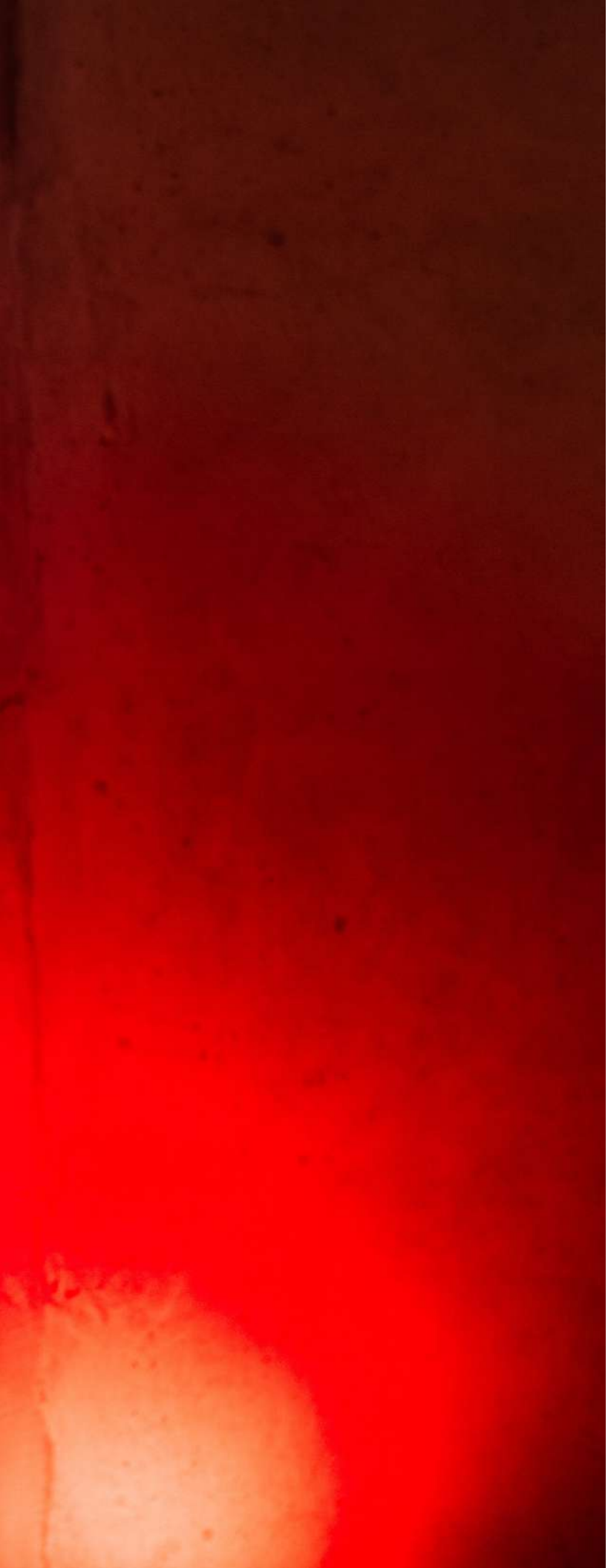


Athletics

Time to

DOUBLE DOWN

One-on-One with Athletics Director Chris Pezman

Major college athletics programs are entering a new era as student athletes are now able to earn money off their name, image and likeness.

The University of Houston's invitation to the Big 12 Conference will, for the first time in 26 years, mark the Coogs return to a major collegiate athletic conference and a new chapter for Cougar Athletics.

During the past two years, college athletics has been impacted by unforeseen conference realignment, revenue battered by the COVID-19 pandemic, college athletes voicing their concerns about racial injustice and equality, and the unanimous Supreme Court decision that paved the way for student-athletes to be compensated outside of education-related benefits.

UH Vice President for Intercollegiate Athletics Chris Pezman recently discussed how Cougar Athletics is adapting to changes upending the current collegiate model.

Chris Pezman

The University moved fast with its announcement of LIFTOFF, its name, image and likeness (NIL) platform for Cougar athletes, a partnership with the C.T. Bauer College of Business and Opendorse. What were some of the challenges of getting this program launched?

The program came together quickly and seamlessly with the support of our partners and Paul Pavlou, dean of the C.T. Bauer College of Business. They have provided support and access for our student athletes to learn about the space and to start preparing themselves for the NIL landscape.

What's been a little unusual is the external component of it – where the kids are out in the marketplace and how that works. It's unique, and it's evolving so quickly, literally day-to-day and week-to-week. But the foundations of it, the intent, it's all for the right reasons.

So far, it's been a huge advantage for us. With the success that we've had in football and basketball, we have some kids that are getting sponsorship deals. The partnership with Opendorse has allowed us to put together a database that gives us insights into what is happening in the NIL marketplace in real-time for our student athletes.

UH is expected to join the Big 12 in 2023. Will the Coogs have an opportunity to play The University of Texas at Austin and University of Oklahoma in conference play before they head to the SEC?

We're still working on when we'll enter the Big 12. It won't be any sooner than 2023 or any later than 2024. It's evolving. If Texas and OU are still in the Big 12 by the time we join, that'll be great. Regardless, our programs will be ready to compete in the Big 12.

Is there anything that alumni, donors and supporters of UH might not know about how the conference move will help the University overall?

Holistically for the University, it creates more exposure. And in a greater sense, Athletics provides even more opportunities for our student athletes to compete at the highest levels.

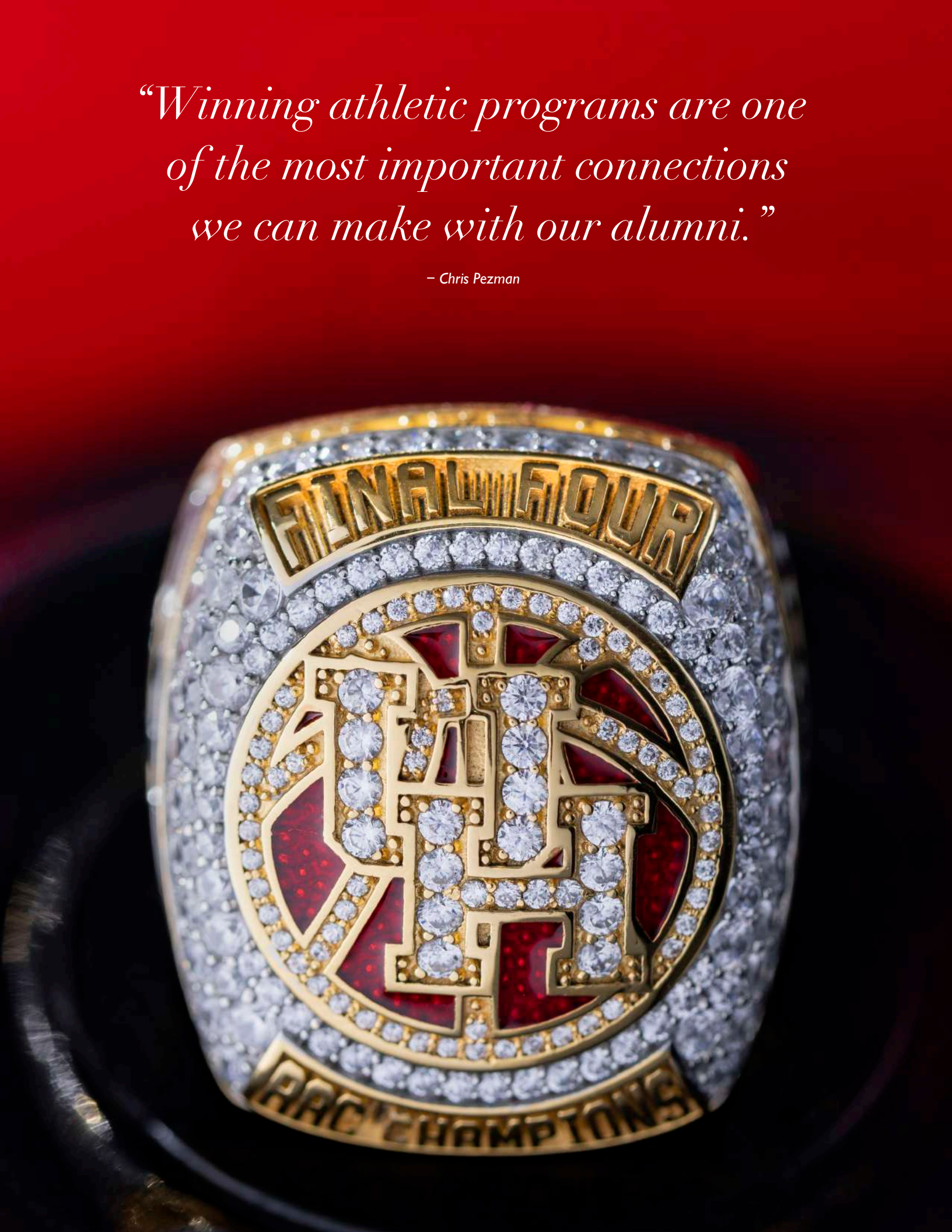
When you get more visibility, it increases the number of applications, which can increase the quality of the students that you have on campus. It's provided an immediate boost for recruiting across all sports. When we say it touches everything within our department, there's never a truer statement.

We are in the middle of reevaluating what we need to look like as we make that transition – the type of student athletes that we're bringing in, the resources – and making sure we will be able to compete at the highest level.

We must continue to win, and we must figure out ways to make sure we continue to be competitively successful. Winning athletic programs are one of the most important connections we can make with our alumni. The move to the Big 12 will let our alumni stay within the state and make road trips to schools where we have natural and exciting rivalries, like Waco, Fort Worth and Lubbock.

"Winning athletic programs are one of the most important connections we can make with our alumni."

– Chris Pezman



Over the past decade, UH Athletics has had great success, especially in football and basketball. What is driving the momentum?

Success begets more success. Look at what happened this past fall with our football program. We were building towards that when Dana Holgorsen came here and the way he's developed the program. And go back to what Coach Kelvin Sampson's basketball team has done over the last couple of years between UH's Final Four run and Sweet 16.

The profile that came with the elevation of those programs has permeated into every other sport. We saw it this last year with our volleyball program, our soccer program, a historic season for our Olympic sports.

I'm really excited about what Dave Rehr is doing with our volleyball program. Diego Bocanegra is stepping away from intercollegiate athletics, but he's left the women's soccer program in solid shape. The people who are interested in leading our soccer program are impressive. With the excitement of the Big 12, the success that we've had and the resources we have put into these programs, it attracts a different caliber of coaching candidates.

UH has invested nearly $300 million in facilities over the past eight years. With the move to the Big 12, are we going to see additional or renovated facilities?

Very timely question, we'll be officially announcing our football operations center soon – a standalone facility for the football program. By moving football out of the Athletics Alumni Center, we'll be able to elevate our other programs.

Track, volleyball, soccer and other Olympic sports will have greater access to the facility and its amenities, like the 20,000-square-foot weight room. Everybody assumes that college athletics is just about football and basketball. Those sports help other programs significantly, and we're really excited about what is coming for all our programs.

Did you attend the 2022 NCAA Convention, and if so, what was on the mind of your colleagues in college athletics?

I did not because of COVID-related issues. But I've been in touch with some who did attend.

Over the last 18 months, intercollegiate athletics has seen seismic changes. When I got into this business 20 or 30 years ago, it was totally different from today.

NIL, frankly, was common sense and should have happened a long time ago, but it's different from what everybody's used to. Everybody's trying to figure out what that should look like.

And then there's the legislation that will restructure the NCAA so college athletic departments and conferences can streamline their operations. There's the potential expansion of the college football playoff and what comes with that.

We've been talking a lot about the transfer portal in college football and basketball. You're seeing that play out real-time right now, where kids can opt-in and change schools right away and be immediately eligible. Should that have happened a long time ago? Absolutely. Do we need to better refine it? Absolutely.

So, I think the pendulum has swung in one direction, and we're trying to figure out what the equilibrium is with the transfer portal. Everybody's talking about all those things because they're big blocks, and it's changing the way we operate.

How do you see college athletics evolving, and what must UH do moving forward to maintain its competitive edge?

The opportunity to join the Big 12 changes our dynamic significantly. It gives us a different tenor in those conversations, a different tone, and it has put us in a very favorable position.

What also helps us immensely is being in Houston – the resources the city offers that cannot be found in smaller college towns. There's a lot of inherent resources that we have being in a major market that will play out very favorably for us as we move ahead.

I'll add, a lot of people might think that UH has made it. They're thinking 'The Big 12 accepted the school, and it's going to be competing there at some point soon. And they're on their way, so mission accomplished.'

Well, this is when you double down. This is when we should really make our biggest push.

There's not a windfall of massive resources that comes with the move to the Big 12. We have to make those resources happen, and we are in a position to do even more so now because our alums and supporters are enjoying the success we're having.

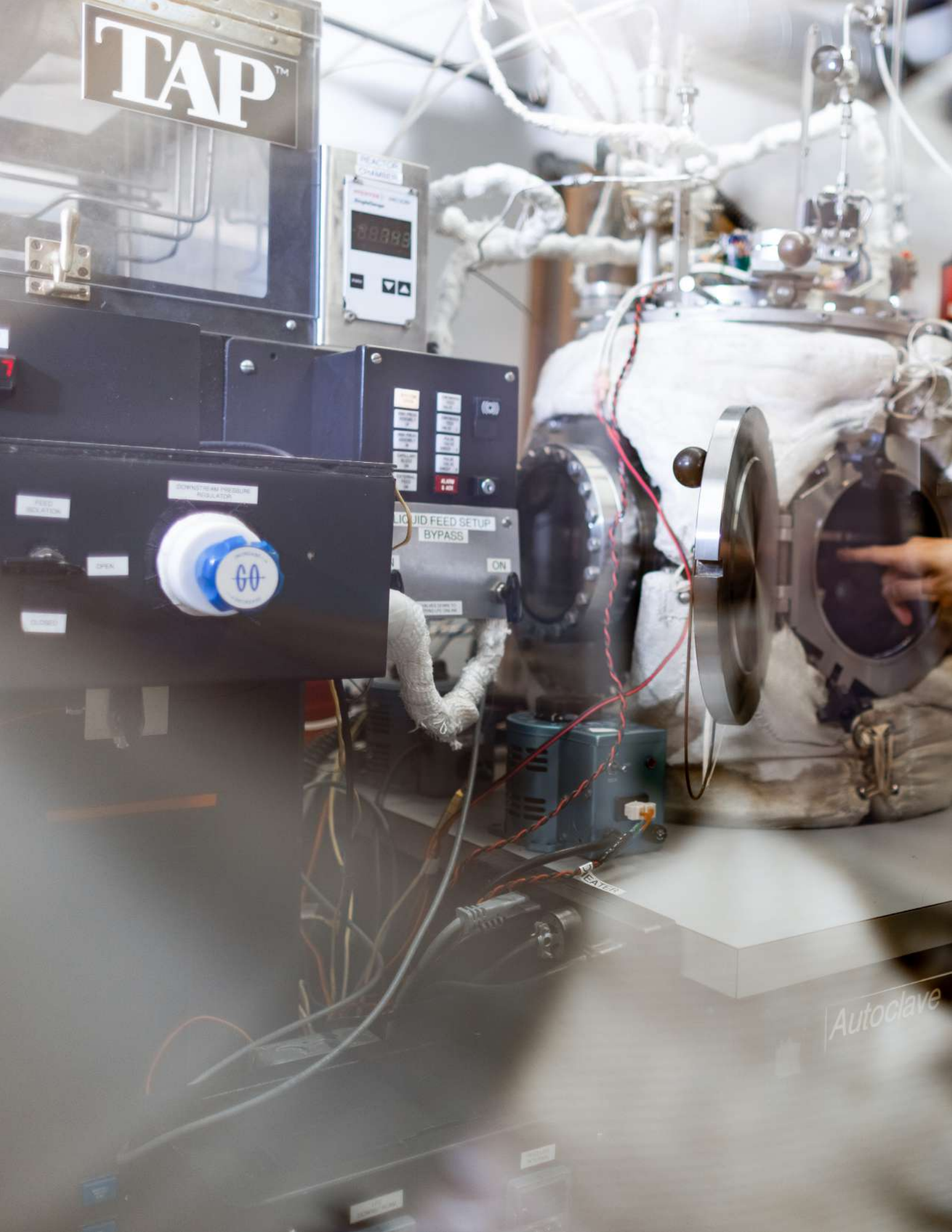
We need their help more now, more than ever, because we're leveling up. Because we have to figure out how to close that gap with the schools that we're competing against. They've been getting tens of millions of dollars every year for decades. We must figure out a way to close that gap between now and then, and that's where we need help.

That means butts in seats, and it means giving fans, alums, donors and friends reasons to sing our praises. But yes, more than ever, this is where we need our University alums and supporters to step up and assist us to close that gap with our new conference mates.

Is there a question that I haven't asked you that you think I should have about the current state of UH Athletics and college sports?

There's just so much volatility in this space right now. And what it looks like today and then in two years remains to be seen. But I'm really excited about where we're positioned. We're very fortunate for the leadership that we have with the Board of Regents, President Renu Khator and the administration and how supportive they are of athletics.

We must continue to be great stewards of their confidence. We can't take that for granted. But what really gets me excited is the success that our kids have had socially and academically. We've set academic records over the last 18 months – the number of student athletes who have graduated, the number of kids with a 3.0 GPA and hours passed.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Problem Solvers

All Roads Lead to UH Population

HEALTH

Interdisciplinary Effort to Improve Well-Being

Medical research is clear: Health care accounts for only 20% of your health, and your genetics claim another 10%. The other – a whopping 70% of your health – is determined by socioeconomic factors (income, education, food), health behaviors (smoking, drinking, exercising) and environments (clean air, housing, community safety).

The numbers add up to one inexorable fact: Health is a social, not just a medical, matter.

That's the key to the urgent and growing field of population health, and the newly launched university-wide initiative, UH Population Health.

"The goal of population health is to achieve health equity, so that every person can reach their full potential," said Bettina Beech, chief population health officer at the University of Houston, who is out to change attitudes about well-being while she institutionalizes UH Population Health. "People tend to think about health through a disease-oriented 'pathogenic' lens. Population health suggests we consider it through a 'salutogenic' lens. A pathogenic approach examines viruses and bacteria that cause illness. The salutogenic approach examines the origins of and assets for health."

In other words, pay attention to your well-being now, or you will surely have to pay attention to your illness later. Through a collaborative approach to reduce health disparities and health care costs by addressing the full range of factors that affect health, the new initiative aims to repair what Beech calls a "broken approach to health." The U.S. spends more on health care than any other developed nation in the world, yet it has some of the poorest health outcomes among wealthy countries.

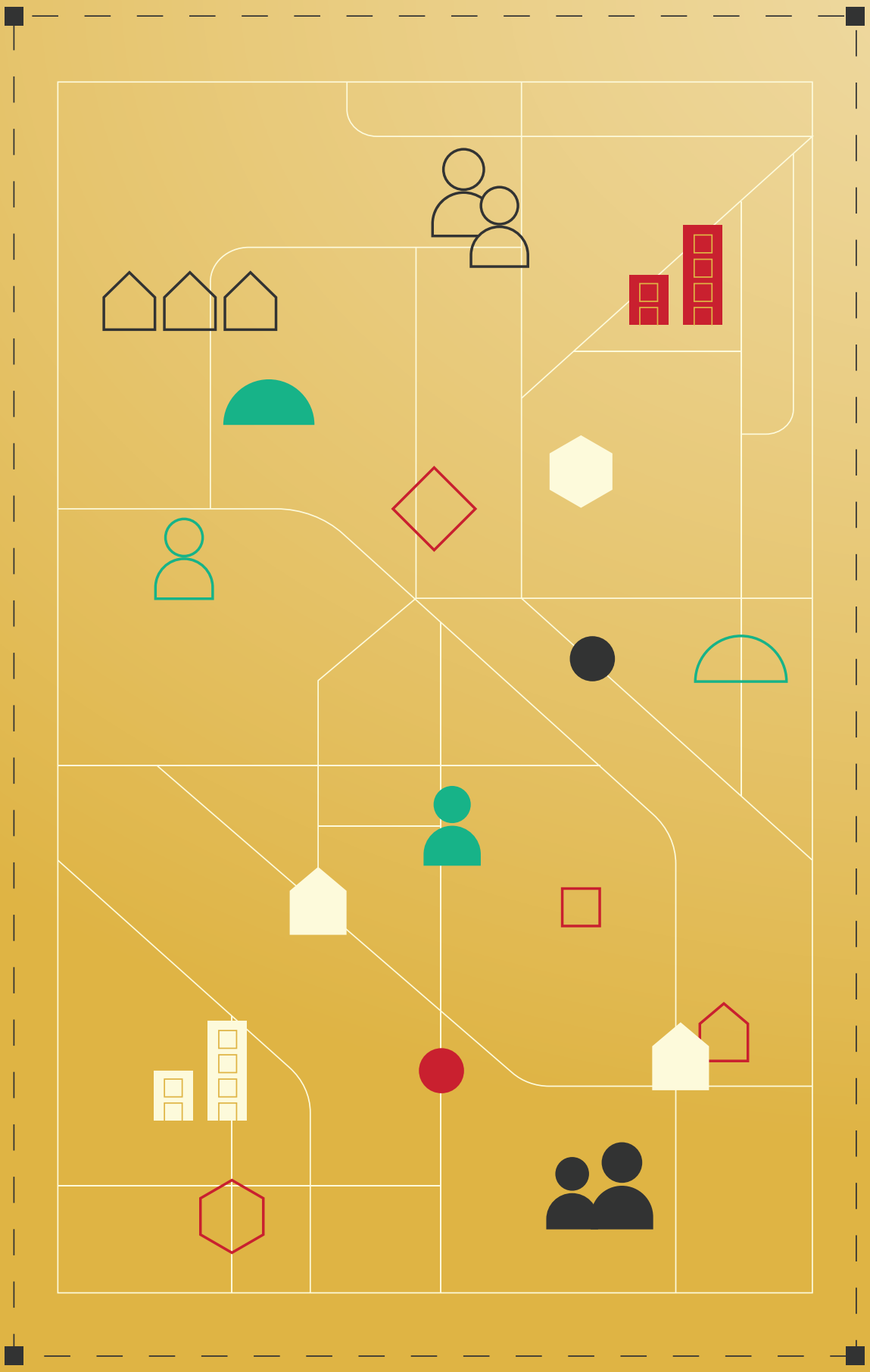
"When we consider that health is determined by far more than health care, we can clearly see the importance of investing in factors beyond that," said Beech, who points to education as a prime example. "Access to high-quality education can create opportunities for better health."

There is nowhere better to carry out a population health movement than the University of Houston, in one of the nation's most diverse cities with populations in need of improved health.

A Deeper Dive

While the concept of population health may seem new, Beech is equal to the task of fine-tuning your perspective. The former dean of the John D. Bower School of Population Health at The University of Mississippi Medical Center will steer the UH Population Health university-wide initiative to change the way whole populations view their own health.

"One way to think of population health is to make sure you don't skip over the first word, 'population,' on your way to thinking about health," Beech said.



A fine example of a population's health in the aggregate may be the research done by National Geographic Fellow Dan Buettner, who found five places in the world where people are the healthiest and live the longest: Okinawa, Japan; Sardinia, Italy; Nicoya, Costa Rica; Ikaria, Greece; and Loma Linda, California. While each population has its own culture, there are commonalities among the groups, including physical movement and destressing activities. The study begs the question: How can health equity of that magnitude be achieved in Houston, the state of Texas and beyond?

UH Population Health intends to find out.

"UH is creating a space for internal and external thought leaders to come together, co-create, test and launch scalable solutions to advance well-being across population groups," Beech said.

Because population health research spans numerous health determinants, so too does UH Population Health.

Unlike any other academic population health program in the country, UH is taking a multifaceted, university-wide approach to one of the nation's biggest challenges.

"Our goal is for UH undergraduate students to gain experience in population health, in the way it aligns with their major, so that our graduates carry this knowledge into the workforce and become agents of change," said Paula Myrick Short, UH senior vice president for academic affairs and provost.

Now Is the Time

Now more than ever, a population health perspective is critically important – globally, chronic disease rates are through the roof.

Factors that support a high quality of life and the root causes of preventable chronic conditions will frame some of the research questions to be addressed by UH Population Health. But that research must have a place to go – and partnerships with policymakers who take action will be nurtured and enhanced.

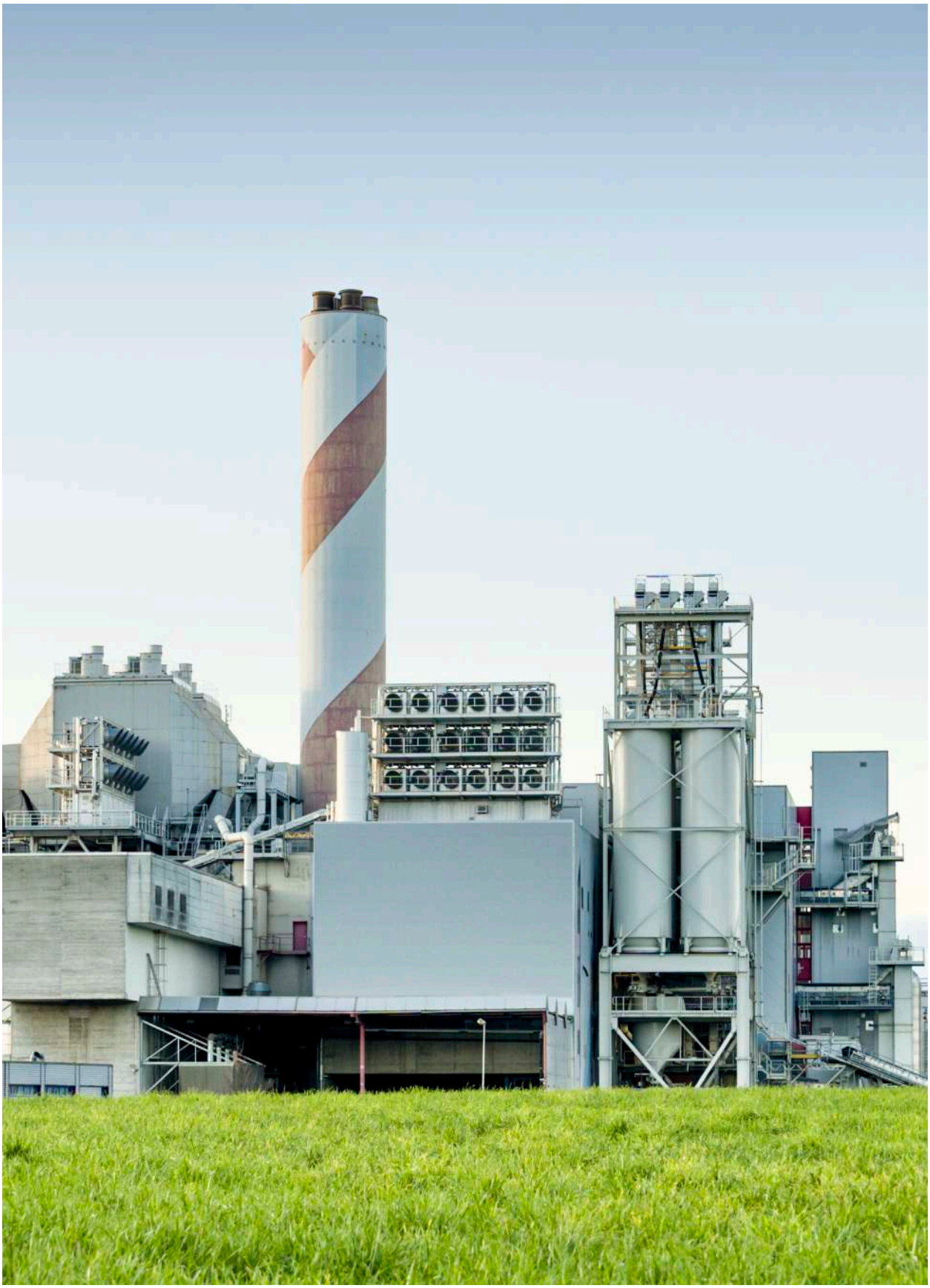
"UH Population Health stands at the precipice of leaving an indelible mark on our community and world."

– Bettina Beech

UH is currently working on 27 population health research grants totaling nearly $37 million, and Beech is seeking to further increase the population health research portfolio across the campus. UH's National Institutes of Health-funded projects aim to ensure the technology of machine learning benefits everyone and to bolster the pipeline of diverse health faculty researchers in the field of obesity health disparities. And, a pending CDC-funded national initiative addresses COVID-19 health disparities among high-risk populations.

"Improving our health will take a unified effort, which will include these kinds of partnerships," Beech said. "Combined with the University's 16 academic colleges and schools covering the array of disciplines that influence health, UH Population Health stands at the precipice of leaving an indelible mark on our community and world."

Bettina Beech



Gaining

TRACTION

UH Looks to Put Its Stamp on Energy Transition

For most of the 20th century, the city of Houston was recognized as the "Energy Capital of the World." Now in the early 21st century, Houston is vying for a new title: the "Energy Transition Capital of the World."

With much of the world moving to low carbon sources of energy and looking to find solutions to solve the challenge of climate change, the University of Houston has an opportunity to help the city maintain its status as the preeminent global leader in all things energy while influencing the direction of this transition.

"The quest for affordable, reliable and sustainable energy underlies the energy transition, and UH believes that being the research, education and innovation higher education powerhouse in the energy capital of the world requires us to help lead the efforts to ensure a just and sustainable energy paradigm," UH Chief Energy Officer Ramanan Krishnamoorti said.

Rising above these challenging times, UH and UH Energy continue to move forward with the mission of training the energy sector's workforce, providing strategic and technical leadership, along with pursuing research that will help power the needed innovations for the low-carbon energy sector of the future.

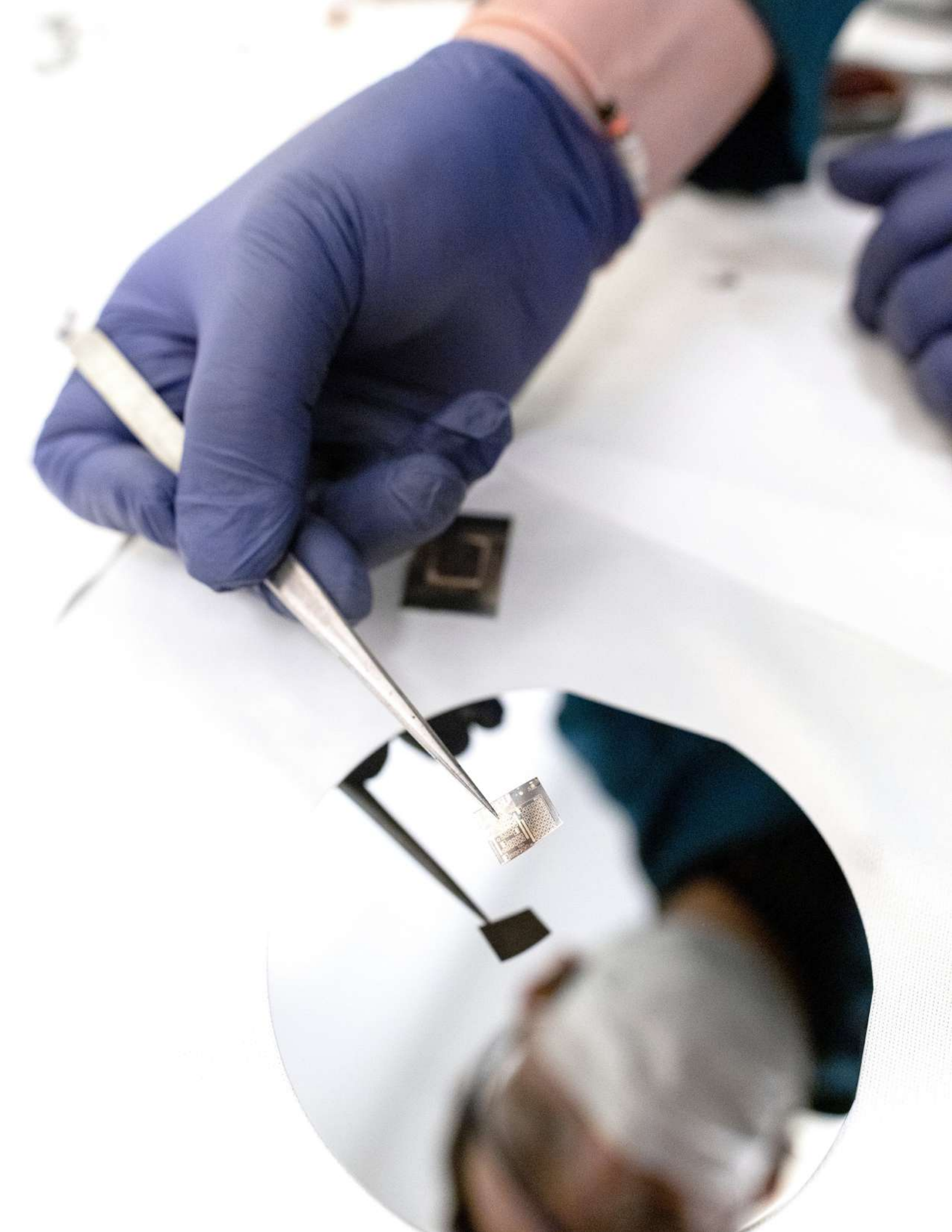
With the energy transition gaining traction, UH Energy is leveraging its most valuable resources: the UH students who are preparing themselves for careers in the energy sector and the faculty across UH's colleges who are making promising research breakthroughs that will eventually form the backbone of the low-carbon energy sector.

Prioritizing Professional Growth

When it comes to preparing students for the professional world, UH Energy draws on its long-standing strategic energy sector partnerships. Executives like Greg Yeo, ExxonMobil Chemical Company's former chief engineer, take time during webinars to offer insights on interviewing and leadership skills and opportunities for students to demonstrate their determination and grit.

To keep the skills of current and future energy professionals sharp, a micro-credentialing education initiative launched during the 2020-21 academic year. In 2022, UH Energy will offer programs in carbon capture, utilization and storage, environmental, social and corporate governance, and the emerging hydrogen economy.

The energy industry needs an interdisciplinary approach when it comes to the transition to a low-carbon economy, and UH will always provide a nonpartisan environment for debate on this



issue, Krishnamoorti said. In that spirit, the UH Energy Symposium Series examines current and critical issues facing the energy sector. An ongoing online seminar series between UH and EVolve Houston highlights research by UH faculty and subject matter experts on developing trends, research, policies and benefits associated with electric vehicle adoption.

Conducting Innovation Worldwide

The University is also fostering the discoveries and innovations of its students and faculty. This past year, doctoral students of Venkat Selvamanickam, M.D. Anderson Chair Professor of Mechanical Engineering in UH's Cullen College of Engineering, were one of 10 groups to win the first stage of a prestigious three-part U.S. Department of Energy (DOE) competition. The winning teams will receive up to $4.5 million to spur the development of new materials that enhance superconductivity.

UH Energy is leaning in and leading the way toward a low-carbon future.

The Super Cool Conductor, a very thin wire that is mostly made of ceramic materials, is a rare-earth, high-temperature superconductor that could be used for long-distance power transmission and upgrading copper cables in major metropolitan areas. It can be manufactured at half the cost of copper and cooled with liquid nitrogen or cryocooling for applications such as long-duration energy storage. "This is huge for us because we are the only superconductor technology among the 10 prize winners at this stage," Selvamanickam said.

UH Energy has established a global reputation in carbon management. A $5 million project in partnership with Oil India Limited, India's national oil company, uses carbon dioxide captured from petrochemical plants to boost oil recovery in the Indian state of Assam. The project will enter its fourth and final stage in 2022, said Ganesh Thakur, distinguished professor of petroleum engineering and director of UH Energy Industry Partnerships and project leader.

"The project has a focus on carbon capture and storage and oil production, which is of paramount importance to the energy industry," Thakur said. "It's even more important to a country like India, which wants to be energy independent and has a serious problem with emissions."

The Center for Carbon Management in Energy at UH, established in 2019 as a research hub to identify the key challenges and solutions necessary for a lower carbon future, doubled its membership in 2020-21. The center awarded $275,000 in research grants for projects that ranged from converting carbon into fuel and other useful products to a proposed new wireless monitoring system for carbon capture storage.

The center also established a commercialization consortium with the Southern States Energy Board to promote the rapid deployment of carbon capture storage in the U.S. and globally. It is funded by a five-year, $3.5 million grant from the DOE's Office of Fossil Energy.

Globally, the conversation surrounding energy production and distribution is changing, but UH Energy is leaning in and leading the way toward a low-carbon future.

"We want to have an impact on the energy transition," Krishnamoorti said. "With our faculty and students in the energy capital of the world, we have an opportunity over the next 24 months to put UH's stamp on the energy transition."

Passion for

CARING

Three New UH Health Clinics Are Improving Lives

Reflecting on her career as a public health educator, Olivette Brown, 60, takes pride in the time she spent advocating for the health of low-income women and children in public support programs and as a substance abuse and alcohol prevention youth counselor. Now, in an unfortunate twist of irony, it's Brown who needs critical support as she battles a myriad of chronic health issues of her own.

"It's been quite a challenging journey," said Brown, an ordained minister and resident of Third Ward. "But then I found Dr. Reed at the University of Houston."

As Brown's family physician at the newly established UH Health Family Care Center, Dr. Brian Reed helps manage her diabetes, high blood pressure and more. Whenever she's "in trouble," including nights and weekends, Brown said she can always reach Reed, who she affectionately calls "old school" because of his gentle bedside manner, compassion and attention to detail.

"He never rushes you," she said. "He's truly a gift from the Lord."

Working as a team, Reed helped Brown shed 57 pounds and get her blood sugar under control. The mother of two and grandmother of three feels better than she has in years.

"Ms. Brown needs the help. That's why I'm in this profession," said Reed, who is also chair of the clinical sciences department at the UH College of Medicine. "She knows she can rely on me."

Staffed by faculty physicians from the medical school, the Family Care Center on the UH campus offers affordable, comprehensive primary care and behavioral health services to anyone, regardless of income, residency status, employment, health insurance coverage or ability to pay. A sliding fee scale is available according to household size and income.

Houston's Third Ward, home to UH, is designated as a Medically Underserved Area by the federal government because of the lack of medical providers and high rates of infant mortality, poverty and elderly populations.

Bolstering health resources in underserved areas across Houston, such as Third Ward, is the University's mission in action. UH has opened three new health clinics since September 2021.

"Where you live or how much money you make shouldn't impact health, but sadly, it does. Health care is a basic human right, and we are committed to providing high-value, patient-centric health services," said Dr. Stephen Spann, vice president for medical affairs at UH and founding dean of the UH College of Medicine.

Olivette Brown and Dr. Brian Reed

Direct Primary Care

In Southwest Houston, where nearly one in three people live below the federal poverty level, the uninsured rate is five times higher than the rest of the nation. To expand access to care for the uninsured, the medical school opened a direct primary care clinic on the campus of Memorial Hermann Southwest Hospital last fall.

Instead of working through insurance companies, patients receive broad spectrum primary care services for a flat membership fee of $60 per month.

"It was a no-brainer," said Roberto, a patient who was in desperate need of a primary care doctor to help manage his diabetes.

"My rates kept going up, and when doctors stopped taking my insurance plan, my diabetes just took off," he said. "I'm so happy I found this UH clinic."

The clinic is the medical school's first in a planned network of direct primary care clinics to be established in underserved areas across Houston. Dr. Omar Matuk-Villazon, chief medical officer at the UH College of Medicine, said they operate based on an old-fashioned yet timeless idea – building a long-term relationship between the patient and the care team.

"We want to treat our patients the way we would treat our own families. It might sound like rhetoric, but it's true," he said with a grin.

Nurse-Managed Clinic for the Homeless

Strategies for improving access to health care can vary depending on the populations being targeted. The UH College of Nursing is quite literally taking health care to Houston's homeless through its new nurse-managed health clinic in Midtown. Opened in fall 2021, the clinic is housed in the Abraham Station of St. Paul's United Methodist Church.

"It's an ideal location," said clinic director Shainy Varghese, UH associate professor and nurse practitioner.

"We want to treat our patients the way we would treat our own families."

– Dr. Omar Matuk-Villazon

Services provided include treatment for acute and chronic illnesses, wellness checkups and immunizations. Telehealth is used for referrals to needed resources and mental health care.

"On average, 250 homeless individuals go to the Abraham Station every day to receive lunch or clothing through the Emergency Aid Coalition, so we're meeting them where they already are," Varghese said.

Faculty and alumni from the College of Nursing help staff the clinic. UH health profession students receive an invaluable education on how to work with vulnerable populations in an interprofessional setting.

"We all have a desire to serve, and the church has been a trusted member of this neighborhood for decades," said Kathryn Tart, founding dean of the UH College of Nursing. "Dr. Varghese and the team have worked closely with the community to meet a need for primary health care for those who struggle because of basic needs. Together, we are improving the health of those who need it most."

One patient at a time.

One relationship at a time.

The University of Houston is proving its commitment to improving health and health care … for everyone.

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