Since arriving on campus last September, President Taylor Eighmy has outlined a bold vision for UTSA as an urban-serving, Hispanic-thriving discovery enterprise (utsa.edu/strategicplan). Provost and Vice President for Academic Affairs Kimberly Andrews Espy arrived last month and has already made an impact with her leadership and insight.

Both are senior researchers [Dr. Espy is a translational clinical neuroscientist, Dr. Eighmy is a civil and environmental engineer] and experienced research administrators from Carnegie R1 (research intensive) universities. In Espy’s former role as a senior vice president for research and chief research officer at the University of Arizona, she led the university’s interdisciplinary research centers and institutes, central core research facilities and four university museums in addition to research development, corporate engagement, and global research alliances. Arizona’s research activity increased by $34 million under her leadership, and the innovative public-private partnership with Banner Health was established. Eighmy was formerly the vice chancellor for research and engagement at the University of Tennessee-Knoxville, and helped secure, with colleagues from Oak Ridge National Laboratory, the Institute for Advanced Composites Manufacturing Innovation, a $259 million public-private partnership supported by the U.S. Department of Energy. At Texas Tech University as senior vice president for research, he was instrumental in realizing National Research University status for his institution.
WHY IS RESEARCH IMPORTANT TO AN ACADEMIC INSTITUTION?

Dr. Taylor Eighmy: As a former chief research officer, this question resonates with me at many levels, from foundational to specific. Foremost, one of the foundations of public higher education is the role that doctoral-granting research universities play in generating new knowledge to benefit the world, including knowledge that allows us to solve our societal grand challenges. More specifically, discovery and new knowledge is brought into the classroom to enrich learning. What really excites me is that here at UTSA, undergraduates actively participating in mentored research is growing and will become a component of our experiential learning push. Lastly, we have an important obligation to society to translate our discovery into knowledge that is available to the public, either through the stories we tell or the intellectual property we develop that is commercialized as new innovations. All of these components are part of our institutional DNA.

Dr. Kimberly Andrews Espy: I too am a former chief research officer, and research is about discovery – advancing our frontiers whether it’s discovering a new technology to advance our well-being, discerning a new understanding for an age-old problem, or realizing a novel application for social benefit. This spirit of discovery is not limited only to research. As Provost, I am particularly excited how discovery permeates the student experience.

Our students come to UTSA to explore who they are and will become. They will learn inside and outside of the classroom to uncover their career path. At a research university, students are engaging in this discovery from classroom to career, guided by faculty who are on the frontiers of knowledge, learning directly what will be published in textbooks five years from now.

WHAT MAKES UTSA’s RESEARCH ENTERPRISE DISTINCTIVE?

TE: We are a relatively young university that is still evolving and growing. That said, our enterprise is robust and already impactful in many areas: cybersecurity, brain health, tissue engineering and biomedicine, infectious diseases, material sciences, teacher preparation, and bicultural and bilingual studies are some excellent examples. For such a young university, to have these areas of distinction speaks to the quality of our faculty and our collective efforts to become the best.

We can also focus on becoming more excellent across all our disciplines: the creative arts, social sciences, and STEM.

KAE: President Eighmy highlights some outstanding spires of excellence. What strikes me about UTSA’s research enterprise – regardless of area – is the deep connection to our communities, businesses, city and state. These research strengths are grounded in, and contribute to, our economy and region in a positive feedback loop. That’s what great research universities of the 21st century do. As a multicultural discovery enterprise, UTSA is equipping our students with the tools needed to thrive in this modern knowledge economy.

WHY IS IT IMPORTANT FOR THE INSTITUTION TO ATTAIN NRUF* ELIGIBILITY AND THE R1 CARNEGIE CLASSIFICATION?

TE: If you look forward ten years, we will be a bigger university with multiple campuses, a larger faculty, and a larger graduate student population. The growth of our research enterprise will have this same trajectory. There are way points along this trajectory: NRUF status, Carnegie R1 designation, and further specialization of our areas or focus and development of the excellence of our knowledge enterprise. We can use NRUF and Carnegie designations as way points as we chart our course forward. This course is one of continuous distinction and impact.

KAE: And for our students, these distinctive milestones drive home the quality of the academic preparation and student experience at UTSA. Cutting-edge instructional techniques, faculty engaged with students, out-of-classroom experiences in our communities, pursuing new ideas in the lab or library, involvement in innovative technology and entrepreneurship, immersion in diverse culture abroad – all these elements drive the transformation of classroom learning to career readiness.

[*National Research University Fund (NRUF) was established by the Texas Legislature “to provide a dedicated, independent, and equitable source of funding to enable emerging research universities in this state to achieve national prominence as major research universities.”]

http://research.utsa.edu/nruf
WHAT IS OUR PATHWAY TO BE RECOGNIZED AS A LEADING RESEARCH INSTITUTION?

TE: The world is pretty competitive and getting more so, especially in the new ideas space, availability of transformative funding, the cost of investment talent development, and the availability of strategic partnerships. Our best ways to differentiate ourselves and to drive the density of excellence that makes us the go-to discovery enterprise is to focus on our present and future areas of strength so that we achieve the excellence density function. We can do that in many ways: how we attract students, how we develop and support our faculty, how we invest in state-of-the-art infrastructure, how we cluster hire, and how we strategically partner.

KAE: UTSA is fortunate to be in San Antonio, a rich, vibrant city with a distinctive history, multicultural roots, economic growth mindset, and strong business and government assets. This alignment of excellence density with these community assets is an unparalleled opportunity. UTSA will employ strategies and tactics to drive these connections even deeper.

WHAT ARE THE ROLES OF THE DOWNTOWN AND MAIN CAMPUSES IN RESEARCH?

TE: Rather than being location specific, I think we need to optimize our discovery enterprise as it involves people, places, and ideation. The best knowledge generation comes when you have that excellence density function and you involve many disciplines that come together to generate that new knowledge as new disciplines. That is the leading edge of this go-to concept. Tissue regeneration is one such example of a new discipline that can be go-to for UTSA and our strategic partners here in San Antonio. As such, our campuses must be designed to foster a transdisciplinary approach. Transdisciplinarity also involves all disciplines: creative arts, social sciences, STEM. As an example, some of the hottest new transdisciplinary areas nationally involve the visual arts, digital media, data science, and information management.

KAE: So much of today’s academic activity does not have boundaries – classroom instruction can be online and on-demand, or out in the field, laboratory or community. Faculty work side by side with colleagues a world away with the click of a mouse. Our campuses allow us greater opportunity and creativity in aligning our diverse academic and research programs with the needs and assets in our communities. Examples include flexible degree programs for professionals who work downtown, as well as intensive laboratory experiences for our STEM students in our renowned microscopy facilities or those of our partners, such as UT Health San Antonio, Southwest Research Institute, Texas Biomedical Research Institute, just to name a few. UTSA will leverage this diversity to benefit our students and our region.

GIVEN YOUR BACKGROUND AS A RESEARCHER AND AN EXPERIENCED RESEARCH ADMINISTRATOR, WHAT MAKES A GOOD RESEARCHER?

TE: Passion, curiosity, altruism.

KAE: Unbridled drive to understand, commitment to the work/pursuit of the answer, dedication to sharing the results with others, further driving the cycle of discovery.

HOW DID YOU START ON YOUR RESEARCH JOURNEY? WHAT WAS YOUR “AHA” MOMENT?

TE: I loved science and had the great privilege to do undergraduate research with a faculty mentor at Tufts University many years ago. That set me on my own course to where I am today.

KAE: As an undergrad at Rice, I had great faculty who were committed to discovery in a city that had so many different opportunities— it was infectious.

HOW DOES THE RECENT ORGANIZATIONAL CHANGE, THE CREATION OF THE “RESEARCH, ECONOMIC DEVELOPMENT, AND KNOWLEDGE ENTERPRISE” OFFICE, IMPACT AND HELP ADVANCE RESEARCH ON CAMPUS?

TE: This is part of our maturation of our research enterprise. We need to take our current discovery enterprise and expand its impact and benefit through leveraging its impact on economic development, social benefit, prosperity. Many of our new aspirant peers have evolved into this mode. Now is the time for us to do so too.

KAE: As Provost, I look forward to driving this discovery model deeper into our academic programs and student experience, in collaboration with San Antonio business, community, and governmental partners. UTSA is on the move!