THE STATE OF THE SYSTEM ADDRESS

by Chancellor Francisco G. Cigarroa, M.D.

AS PREPARED FOR THE UNIVERSITY OF TEXAS SYSTEM BOARD OF REGENTS
AUGUST 2010

hairman McHugh and members of the Board, I stand before you as I did last year, honored by this incredible charge you have placed upon me as Chancellor of The University of Texas System, our state's greatest treasure, and today, I am proud to offer a report on the State of the U.T. System.

Pablo Casals, the great Spanish cellist, was one of the most celebrated musicians of the 20th century. He was born six years before The University of Texas held its first classes, lived long enough to play for President Kennedy at the White House, and 10 years later, to perform for the United Nations General Assembly. From the time he was 13 years old, he had the same daily routine. He took a walk. He did his scales. He played two of my favorite Bach concertos. And then, he began to practice. When he was 93 years old, he was asked why, at his age, he continued to practice every day. He replied, "I'm beginning to notice some improvement."

Maestro Casals' response is testament to the idea that no matter how great the achievement, how much we excel, how hard we work — doing better is always necessary. Each day across the U.T. System, faculty and staff come to work and create bold and innovative opportunities to advance higher education. And while many of the fruits of our labor may be realized immediately, others will materialize over time and will be felt by our next generation of colleagues and students. Either way, this makes our service to U.T. worthy of our best efforts.

When I presented my vision statement a year ago, I spoke of the importance of our role in safeguarding certain principles that The University of Texas was founded upon — principles

that are grounded in knowledge, wisdom and grace, linking generation to generation. At the same time, I posed the question "What is ours to do?" in using the power of the U.T. System to serve as a catalyst for positive change.

Our unwavering commitment to serve as the vanguards of traditions in higher education, while embracing innovation is, after all, what best defines us. We have a responsibility to our 202,000 students and to our 84,000 faculty and staff — that they be empowered through the U.T. System to reach their full potential, especially in the face of significant challenges our nation and state have experienced, including economic uncertainty and an unprecedented budgetary shortfall in the state of Texas of up

to \$18 billion or more. It is exactly at this present moment that we have no option but to be stellar in order to transcend the issues of our times. Higher education is the

Higher education is the hope of our country, our constant bellwether for greatness in times of uncertainty and opportunity.

hope of our country, our constant bellwether for greatness in times of uncertainty and opportunity. Each time a student or faculty member harnesses the power of ideas and knowledge through the U.T. System, whether it is in literature, art, mathematics or science, that individual is moving to a place in a different realm, beyond words, while being the very testament of our success. This is our script.

We determine our course and control our destiny through careful and strategic planning, coupled with accountability — not just to the

past, but to the future. That is why today, I am so proud of what we have accomplished. The U.T. System has experienced remarkable advancements this past year, including the successful recruitment from among our nation's best faculty and post-doctoral students; the awarding of more than 41,000 degrees; outranking state and national peers in producing more graduates in the STEM fields of science, technology, engineering and math; seeing an increase in research expenditures, now totaling \$2.3 billion, placing the U.T. System among the top public and private university systems; and providing more than six and a half million patient visits per year, through the healing hands of our physicians and health care professionals. Despite these accomplishments, we must stay ever vigilant of what remains to be done. Our role is that important. Today, as I review progress in advancing our vision, I will also articulate what we will be accountable for this coming year. Let me first address how we are working to best strengthen the college environment to culture excellence.

One of our major accomplishments has been attracting the best faculty, the very cornerstones of our institutions. Through our Science and Technology Acquisition and Retention program, or STARs, The University of Texas System has continued to recruit and retain world-class professors and researchers, adding to the caliber of our faculty, and, ultimately, to the strength of our students. Not only has this program allowed students to study alongside the best of the best, but the initial \$64 million invested by the U.T. System Board of Regents toward these efforts at the academic and health institutions has generated a preliminary return of \$345 million in grants.

And while return on investment is critical, there is a gifted individual and a wonderful story behind each STARs recipient. Among them is Russell Hulse, co-winner of the Nobel Prize

in physics in 1993. Dr. Hulse came to The University of Texas at Dallas from Princeton and is advancing science education in public schools and raising U.T. Dallas' stature as a premiere research university. Dr. James LeDuc left his position as one of the nation's top infectious disease experts at the Centers for Disease Control and Prevention in Atlanta, to lead the program on global health at the Institute for Human Infections and Immunity at The University of Texas Medical Branch at Galveston. Dr. Omar Ghattas, a geophysicist and mechanical engineer at The University of Texas at Austin, is helping our world better understand ocean dynamics and subsurface contaminant transports. Les Shephard joined us from Sandia National Laboratories to become head of The University of Texas at San Antonio's Texas Sustainable Energy Research Institute. These accomplished educators are only a few examples of our STARs faculty, many of whom are members of the National Academies or Nobel laureates. Those who are not, certainly have the potential to reach these ranks.

In fact, the U.T. System's academies faculty now include six Nobel laureates, one Shaw laureate, two Pulitzer Prize recipients, one Abel Prize recipient, IOI members of the National Academies, 27 members of the American Law Institute, and 57 members of the American Academy of Nursing. Learning under the leadership of a high-caliber faculty is among the greatest legacies we can leave to our students.

Besides strengthening our faculty, we have also made great strides in strengthening our student body. Last year, I spoke of our duty and responsibility to ensure that we capture our state's diversity in constructing channels of outreach. The UTeach program, conceived at U.T. Austin, was cited this year by President Barack Obama as a national model. The expansion of UTeach across the nation will mean more than 4,500 undergraduates in

the STEM fields will be prepared to become math and science teachers by 2015. Looking further at the multiplier effect, more than 20 million students' lives will be touched during the course of many new STEM teachers' careers.

I remain fully committed to ensuring that we better prepare students to enter our university system. I am very excited we have made progress in the community college initiative, which was designed to increase the number of transfer students from two-year colleges to four-year universities. Approximately 20 percent of eligible community college students matriculate to universities, but since the initiation of our collaborative efforts in fall 2008 with the Texas A&M University System and the Texas Association of Community Colleges, and, the development of the new Transfer 101 website, we have seen an 11 percent increase in transfer students entering U.T. System universities.

I am particularly proud of the actions and commitment demonstrated by our university leadership in increasing graduation successes. In response to the Board of Regents' mandate on graduation rates, five U.T. institutions have increased their six-year graduation rates by an average of 5.2 percentage points, and each of the 15 improved the time it took for seniors to complete their degrees. During this same five-year period, the number of freshmen who returned for their sophomore year improved. I am also pleased to report that student access is increasing, with undergraduate enrollment up 8 percent and the number of baccalaureate degrees up by almost 18 percent over the past five years. The fact that our baccalaureate degree production outpaced enrollments speaks not only to our progress in graduation performance, but to productivity and efficiency gains as well.

And, while we are seeing improvement in our trend lines, there is still much work to be done towards realizing the excellence that we must achieve toward student success. We will continue to develop metrics to properly evaluate our strategies and performance. We will find innovative solutions to help students succeed. We will not rationalize poor

Students learn best from an active, engaged and rich campus experience that is based on direct exposure to incredible faculty, and faceto-face interactions.

performance. We will continue to close the performance gaps, allowing more students to realize their aspirations toward a better life.

We will also support greater student success through a balance of face-to-face and remote learning opportunities. I am a great proponent of using technology to enhance the learning experience, but we must use it wisely. No matter how much technology advances, students learn best from an active, engaged and rich campus experience that is based on direct exposure to incredible faculty, and face-to-face interactions. At the same time, U.T. campuses must be recognized as institutions of the first class, not only in the classroom, but also in each of their online courses.

We are making strides in using technology to our advantage. For example, we are refining and advancing our role in distance education, transitioning the U.T. TeleCampus from the U.T. System Administration offices in Austin, to the campuses. Each academic year, our institutions offer more than 2,400 online courses, and that number is growing. Our newest offering, the Bachelor's Accelerated Completion Program, or BAC, allows students who have completed 60 or more semester credit hours to accelerate their ability to earn a U.T. degree in several disciplines. With more than 3.4 million adults in Texas who have some

college credit but no degree, this new BAC program, offered totally online, is a wonderful new service in meeting the needs of Texans.

As we remain focused on strengthening the college environment through investments in faculty and students, I am pleased to report that following significant dialogue with our presidents and Board, the U.T. System will place special emphasis on five transformational strategic initiatives, of equal importance, that can make our state and nation stronger. These initiatives will take a tremendous commitment from all of us to be realized in the years ahead.

The first initiative is focused on improving the health of Texas through advancements in medical education, research and clinical care. Students in medical schools across the country still work within a framework developed at the beginning of the 20th century, though the practice of medicine has changed dramatically over time. I strongly believe the structure of medical education must be responsive to these changes in order to ensure that our students preserve the physician-patient relationship — which is vital to healing — in spite of the changing landscape of medical care. With this in mind, through our Innovations in Medical Education grants, substantive awards have been given to medical faculty for the development of new ideas to improve medical education. With new investments recently approved by the Board of Regents, the U.T. System will have the ability to be a national leader in curriculum reform.

We have also created a partnership this year with U.T. Southwestern Medical Center at Dallas, the Seton Family of Hospitals, and the U.T. System to expand medical education in Austin. Not only will the partnership double the number of residents needed in Central Texas, it will also enhance current medical research projects by the Austin community and facilitate collaborative research by faculty members at U.T. Austin and at U.T. Southwestern, as well

as at our other campuses. This is an important and transformational step. This is right for Austin. It is right for the U.T. System, and it is consistent with U.T. Austin's vision to be the very best university in the country.

Through The University of Texas Health Science Center at San Antonio and its Regional Academic Health Centers, or RAHCs, we will expand the delivery of health care and education in South Texas. We will increase the number of medical students studying at the RAHCs and work with South Texas hospitals to establish the five core residency programs requisite for any future comprehensive academic health center, as defined in Senate Bill 98, which amended the Texas Education Code to include the operation of a health science center in South Texas. This is right for South Texas, it is right for the U.T. System, and it will advance excellence for all our universities in South Texas. These endeavors to enhance health professional education are essential, but let me emphasize that they cannot be done at the expense of reallocating resources from our existing institutions.

It is also the right time to garner the power of our health science centers in order to improve health everywhere. Without good health, after all, an individual's dreams and gifts are at risk. It is that simple, and it is that vital. Our academic health centers and hospitals all appear in national rankings, including U.T. M.D. Anderson Cancer Center, which again has received a number one ranking, and we thank you for your leadership, President Mendelsohn. The state of Texas needs an academic health center that is recognized among the top five in the country, and we intend to help one or more of our institutions achieve that distinction. Our medical research capacity is highly regarded. Four years ago, the National Institutes of Health established the Clinical Translational Science Awards, or CTSAs, to encourage innovative approaches that "reduce the time it takes for

laboratory discoveries to become treatments." The U.T. System is one of only two systems of higher education to have four CTSA institutions. And, along with the U.T. Health Science Center at San Antonio and M.D. Anderson, we now boast three National Cancer Institute-designated institutions, with the recent addition of U.T. Southwestern Medical Center at Dallas. Research strength has afforded us generous funding from the Cancer Prevention and Research Institute of Texas (CPRIT). In the first year of CPRIT awards, U.T. academic and health institutions received more than \$100 million, approximately 46 percent of the \$216 million in funds granted.

Our greatness also emerges from our institutions' abilities to change the world through the impact their research has on society.

When we look at the power of what our institutions generate through support from CPRIT or CTSA grants, and their ability to accelerate discoveries from the lab to the bedside, I am reminded of the privilege of

interacting with our presidents to identify new circumstances that lend themselves to capitalizing on innovations. Our greatness also emerges from our institutions' abilities to change the world through the impact their research has on society. Consequently, we have reorganized U.T. System staff to further emphasize our institutions' efforts to translate new discoveries and inventions to the benefit of mankind. In a recent ranking of 132 top research universities and their strength in research patents, The University of Texas System ranked 3rd in 2010, surpassed only by MIT and The University of California System, according to the *Universities Patent Scorecard*.™ While we are a national leader in research and commercialization, we will continue on a path of continuous improvement, conducting groundbreaking research and translating

discoveries to the marketplace.

Another strategic initiative shall be to enhance educational opportunities in South Texas and along the border with Mexico. Our Texas-Mexico border is almost two-thirds of the entire U.S.-Mexico border, with more than 55,000 U.T. students in this region. Those of us who grew up along these lands understand its magic, its opportunities and challenges and why, in many respects, it is a laboratory of our state's future. These are difficult times in our beloved border communities. Because of the U.T. System's commanding presence in this region, we are uniquely positioned to play a major role in working toward a better future there. Last year, our Board of Regents stated that we have a responsibility to plant a larger flag in South Texas. We have subsequently formed a leadership team to create a more specific plan to advance our border initiative, and we are addressing the major areas of engineering, health, and STEM fields, as well as energy and the environment. Tom Lea, a great artist and writer from El Paso once said.

"....I live on the east side of our mountain. It is the sunrise side, not the sunset side. It is the side to see the day that is coming, not the side to see the day that is gone. The best day is the day coming ..."

Using the resources of the U.T. System, let us ensure that "the best day" for our border communities, "is the day that is coming."

Another initiative addresses the U.T. System's capacity and responsibility to become a global leader in energy research. In many ways, we owe our existence, and certainly our climb to excellence, to energy, and this area is most worthy of our focus. There is a reason the famed Texas oil rig, Santa Rita Number One, has a place of honor on the U.T. Austin campus. Energy means much more than oil now, but because of our history and our expertise, which is spread across multiple U.T. campuses, we have

a responsibility to take the lead in ensuring that the world has the reliable sources of energy it needs in ways that are safe, cost effective, and available to all. U.T. Austin is poised to harness the full intellectual assets of the U.T. System, working to develop game-changing technological opportunities in energy. The creation of The University of Texas System Energy Leadership Council is a major step in bringing our expertise to bear on this national issue.

The University of Texas at Austin is our state's flagship university, and its standing and reputation influence those of every other institution within the U.T. System. Current state funding formulas are predominantly focused on enrollment growth and do not work in U.T. Austin's favor. Compared with its national peers, U.T. Austin ranks near the lower quartile, nationally, in tuition and state support per student. I am committed to working with President Bill Powers and our Legislature to identify new funding streams necessary to promote excellence, while remaining affordable. Certain junctures in time demand that our vision be focused on certain opportunities, and it is the right time for U.T. Austin to be the best university in the nation.

We also remain committed to another strategic initiative, facilitating the success of our four emerging research institutions as they develop toward Tier One status. The greatest contribution the U.T. System Board of Regents has made occurred through the historic \$3 billion Competitiveness Initiative, designed to create state-of-the-art facilities, and recruit worldclass faculty. Additional resources have been made available. Last September, the state, through its Texas Research Incentive Program, offered \$50 million in matching grants to the state's seven emerging institutions. U.T.'s four aspirants secured almost \$20 million. In response, the Board of Regents created its own \$10 million Research Incentive Program last year, and again this year, to provide matching funds to continue

to leverage private gifts directed toward research and faculty recruitment. We will be watching the progress of our four institutions, and we will develop metrics to measure their success.

In addition, I will follow the progress of our campuses focused on educating students in historically underserved regions. I will work closely with the leadership of U.T. Brownsville/Texas Southmost College, U.T. Pan American, U.T. Permian Basin, and U.T. Tyler to advance their missions in becoming stellar universities, with a strong focus on undergraduate education and addressing the specific needs of their region and our state.

It is important to note that all of the initiatives I have presented today will require new computing capabilities to achieve success. Over the past six years, we have worked to build almost six million square feet of state-of-the-art classrooms and labs. As we near completion of the 44 construction projects outlined in the Competitiveness Initiative, it is time to turn our attention from buildings to computing ensuring that all our campuses have access to the unrivaled, high-performance computing power so necessary to our leadership in teaching and research. Consequently, we have convened a special committee to conduct a needs assessment. Whether looking at protein structures, developing new drugs, tracking changes in our atmosphere or studying genomics, high-performance computing is no longer just desirable; it is required for our scientific work and our ability to recruit world-class faculty and researchers.

These various strategic initiatives — advancing medical education, research and clinical care to improve health across Texas and our nation; enhancing educational opportunities in South Texas; establishing global leadership in energy research; advancing excellence at U.T. Austin; and facilitating the ascendancy of our emerging research universities — while not in any particular

order of ranking — are all responsive to the times. Historical events challenge our university system to answer the complexities facing our country, which in turn define our responsibilities and create the script for our vision.

Our state faces serious budgetary challenges, and we must do our part to help. We made five percent cuts in our budget supported through general revenue, as requested by the state's leadership. Higher education has borne a disproportionate share: 4I percent of the aggregate of the acrossthe-board state budget reductions for the current fiscal year. Yet, we likely will be asked to do more.

No organizations contribute

more to social and economic

security, health and quality

of life than our universities.

7

We must, however, guard against the prospect of cuts so deep they endanger the very spirit of our institutions. Simple across-the-board cuts will not move our institutions forward. We must be bold enough to prioritize in light of financial restrictions. And so, we must ensure we spend our dollars wisely and well.

We have redoubled our efforts to reduce costs whenever possible, without sacrificing quality. This effort is not new to us. For example, we have saved more than \$800 million through cooperative contracting and purchasing, shared services, debt management and energy reduction. Under the able leadership of our presidents and chief business officers, we will continue to reduce costs, without sacrificing quality, and we will seek opportunities to enhance revenue in a mission-aligned way.

Many competing interests for scarce appropriated funds could diminish our hopes for institutional advancements. State appropriations, federal funding and other traditional revenue sources are not keeping pace with our mission-critical needs, but, we realize it is our responsibility to be at the helm, controlling our destiny. And, we are succeeding. We are grateful to the Board of Regents for providing transformative investments to help maximize philanthropy on the campuses. Recent examples include \$20 million in matching funds for our emerging research institutions, and a pledge of \$30 million in Permanent University Funds to match \$60 million in philanthropic support to construct U.T. Austin's new Engineering Education and Research Center, critical to implementing the vision we heard from Dean Greg Fenves last February. This year, I will place a greater emphasis on our philanthropic efforts, and we will look forward to working with each institution to determine the critical role philanthropy will

> play as a predictable, sustainable funding stream in the it. More than ever before, our friends and alumni will our institutional missions.

> With a legislative session that will be a challenge for all, our

list of priorities will be tightly focused and aimed at protecting funding to our institutions. This funding is an investment in our future, not an expense. We will look forward to presenting our legislative priorities, for the 82nd Legislative Session, to the Board of Regents in November.

In order for Texas to have world-class institutions, the responsibility must be shared by all. We will need every Regent, our alumni, friends and advocates to be our spokespersons. No organizations contribute more to social and economic advancements, safety and security, health and quality of life than our universities.

This year, I will have the privilege of serving on a congressionally requested commission, led by the National Academies, to consider the future of research universities. I will, both at

years ahead and to develop plans and strategies to secure philanthropic investments by play a major role in advancing

Continued

the state and federal level, articulate our need for support.

The initiatives I have presented today will define much of our work for the coming year, yet they are merely steps we will take to achieve our vision. Though the times are challenging, I remain resolute in my commitment to working with you in focusing on vital decisions made not only with our present student body in mind, but also with generations to come. The members of this Board are excellent stewards of a great legacy. The future that stretches out before us is the product of the work we accomplish today, and tomorrow. I am grateful for the Board's relentless commitment, and I am delighted to report that the state of the System is strong.

Last year, I concluded by reflecting on a sonnet by W.S. Merwin, who was just appointed as our country's poet laureate. This year, I go back further in time, to the I9th century, for the words I seek. English poet William Ernest Henley wrote in a verse of "Invictus."

It matters not how strait the gate,

How charged with punishments the scroll.

I am the master of my fate:

I am the captain of my soul.

As Chancellor, I can assure you that it matters not what challenges we face in this next year, I shall not waiver from our vision of greatness for the U.T. System. We shall be masters of its excellence, and captains of its incredible spirit.