Part 1

“In the joy of high adventure, in the hope of high achievement, in the faith of high endeavor, for this fair day we have worked and prayed and waited. … [W]e have asked for strength, and with the strength a vision, and with the vision courage. … [T]he Rice Institute, which was to be, in this its modest beginning, now has come to be.”

And with these words, President Edgar Odell Lovett 100 years ago welcomed the first class of 59 women and men and the 10 faculty members of the Rice Institute. Today, we gather to celebrate the realization of that hope, the rewarding of that faith and courage, and the continuation of that joy.

We join today to reflect on a century of adventure and achievement, to honor our founders and forbearers whose vision and hard work resulted in the extraordinary university we know today, and to speak of our vision and ambitions for the future.

Our path was set by the confluence of the legacies of three extraordinary men: a great man of commerce, a civic leader and a visionary academic. William Marsh Rice was the quintessential businessman of his time, a man of commercial acumen and philanthropic spirit. In the year 1891, the William Marsh Rice Institute for the Advancement of Literature, Science and Art was formally incorporated with a modest initial endowment. After Rice’s untimely death in 1900, the substantial assets that Rice had bequeathed to his institute were rescued by his lawyer and the first chairman of the board of trustees, Capt. James A. Baker. The trustees then began in earnest to define what this new institute would be.

Their vision was reflected in the choice of Rice’s first president, Edgar Odell Lovett, on the recommendation of Princeton’s president, Woodrow Wilson. And let me add how fitting it is, and how grateful we are, that Princeton’s current president, Shirley Tilghman, is with us on the platform today. President Lovett then traveled the world for more than nine months, visiting the great universities, studying both academic programs and architecture.

When Lovett stood on this very spot a century ago, not far from the edge of a growing city with just 80,000 people, he could take pride at the launch of a new university that aspired to be among the best and set, in his words, no upper limit to its endeavors. As William Ward Watkin, the architect who supervised the construction of the first buildings, stated at Lovett’s retirement, out of “the marsh and swamps of this campus,” he built a university of “beauty and fineness.”

Imagine yourselves here as Lovett spoke: Around you was mostly a vast empty plain with four lonely structures. There was the Administration Building, now named Lovett Hall. A bit in the distance was the Mechanical Laboratory and its campanile, and across the campus the residential hall and institute commons. Between then and now lies a century of ambition and achievement. All around us we see the architectural embodiment of growing intellectual ambition.
Imagine in your mind’s eye that century of building our campus: first beginning near where you sit and then moving outward to a second quadrangle and then a third quadrangle and then beyond, and even jumping across University Boulevard to where the BioScience Research Collaborative now stands — eventually 80 buildings over the course of a century, creating a campus of architectural distinction and harmony. The architecture is now complemented by recent campus art, culminating in our Centennial Pavilion, the Turrell Skyspace, which symbolizes not only our continued commitment to the beauty Lovett emphasized, but also our limitless aspirations. Truly, this is a campus that reflects our commitment to learning, to discovery, to beauty, to the nurturing of human potential and to a university that was from its foundation envisioned as a gift to the people of Houston.

President Lovett served for another 34 years after the opening, with more than half that time occurring during two world wars and the Great Depression. And still the Rice Institute moved forward, expanding its community and growing its endeavor. As we approached our second half century, we changed our name from “Institute” to “University” to reflect that growth and broader ambition.

At the time of our semicentennial, Rice, while on a strong trajectory, had not yet achieved its aspiration to be among the great research universities of the world. That was the challenge faced by President Kenneth Pitzer as he was inaugurated in our 50th year. As the new president then put it, he aimed for an institution that resembled Stanford without a medical school to a Westerner and Princeton with girls to an Easterner.

President Pitzer led Rice into five decades of advancement as a research university. We realized that not charging tuition was not about a commitment to price, but a commitment to an ideal of opportunity — that we should be open to all, regardless of their financial means. That steadfast commitment continues to lie at the core of who we are. And we also sued to remove a stain of racial exclusion that was both fundamentally unfair and deeply inconsistent with our commitment to serving the people of Houston, of Texas and the nation.

As Rice continued its progress toward becoming a more balanced university envisaged by Lovett, new schools sprouted in the 1970s, including the Shepherd School of Music, the Jones School of Business, what is now the Glasscock School of Continuing Studies, and the creation of separate schools of Social Sciences and the Humanities. Our ascendancy into the top ranks of American higher education was recognized in 1985 when Rice became one of the 60 elite research universities in the Association of American Universities. Great milestones included the G7 summit in 1990, the establishment of the Baker Institute in 1993 and the awarding of Nobel Prizes to Professors Curl and Smalley in 1996 for the discovery of the buckyball, which opened up new possibilities for materials and medicine. And in 2003, the Rice Owls emerged as national champions from the College Baseball World Series. Out of our Sallyport have passed more than 65,000 graduates — 46,000 of whom are the living Rice alumni community of today, a global community that magnifies every day the contributions that we make as a university.

Throughout our first century, we have become an ever greater university, driven to provide opportunity for our students and knowledge for the world. And here I want to pause and acknowledge the remarkable leaders present today who guided us to ascending achievement: our past chairmen, Charles Duncan and Bill Barnett, and our current chairman, Jim Crownover, who between them steered this university for the last three decades, and my extraordinary predecessors, Presidents George Rupp and Malcolm Gillis.

**PART 2**

When we look around at the Rice of today, it is very different of course from that of 100 years ago, or 50 years ago or even 10 years ago. We are larger; we are more diverse; we are more engaged with our city; we are more international; and we are more committed than ever to contributing to our world through research and service. The era of the ivory tower is long over. We do not come to the university to shake the cares of society, but to engage those cares in a different way. The university of today is porous, with a constant flow of people and ideas and contributions and relationships.

We are very much the university that Lovett imagined and hoped for, and yet we are in many ways so much more. Today our university is counted among the very best in the United States. Whereas President Lovett traveled around the world to visit the great universities, today we receive visiting academic leaders from across the globe who wish to study and emulate Rice’s success.
Much of our first century has been dedicated to catching up to our brethren — other leading American universities that in many cases are older, bigger, wealthier. We became more complex, added schools, improved the quality of our student body and faculty, raised our aspirations and grew.

But while we were becoming more competitive with other universities and in some ways more like them, we were also becoming quite distinctive. Even with our recent growth, we remain a distinctively small research university whose aspirations span the range of academic endeavor. Our emphasis on and commitment to undergraduate education are extraordinary. Our sense of being a single community, and the fostering of interdisciplinary relationships and conversations, are rare. Our college system, which creates strong communities across the undergraduate classes, has become the envy of others who seek to emulate it. The dedication of our staff to our faculty, students and the university, and our dedication to them, are defining attributes.

As higher education both becomes ever more competitive and faces ever more daunting challenges, we must now lead with confidence in our own values and our own identity, as they have evolved over a century. Our strength as a university lies in part in choosing a different path from others, a different configuration for the university not just of today, but of tomorrow.

Twenty years ago, Clark Kerr, the legendary president of the University of California and chancellor of Berkeley, wrote about two competing visions of the university — one in which the university is large and highly specialized in its parts, the other in which it is small and has a commonality of interests, or as he put it, “the best of Berkeley and the best of Swarthmore.” He expressed some pessimism that these visions were compatible.

Rice has aspired to be the place where these visions become joined, compatible and synergistic, and we have succeeded. We must draw upon our strengths and turn perceived disadvantages into distinctive advantages. We can be, we must be, a leader in defining what a university can achieve and contribute both in education and knowledge.

Fifty years ago, President Pitzer undertook a substantial expansion of the university. We have now completed the first major expansion of our student body since then. Our 30 percent growth has by almost every measure been a success: We have remained true to our commitment to make our education affordable and have attracted an extraordinary and diverse population along every dimension as our applications doubled. We do not intend to grow our undergraduate student body more in the coming decade, because we choose to remain a distinctively small university. Our size fosters an intimate sense of community and the special relationships between faculty and students that have defined the experience for so many of our graduates.

Our intellectual ambitions, however, are not scaled to our size. We aim for excellence and impact on a global standard. Thus our path to success, more than most universities, lies in our ability to collaborate with others and thereby leverage our potential. We are too small to be arrogant. We must in a new time find new ways to build deeper and broader relationships with the remarkable institutions that surround us — the museums, the medical institutions, the Johnson Space Center and the great enterprises of Houston. We must also reach out across the world and build not merely bridges, but strong and deep bonds.

That spirit of collaboration must be focused internally as well as externally. Our success in areas like nanotechnology is built not upon the endeavors of a single department, but upon the support, engagement and connection across a large swath of the university. We must infuse this collaborative spirit deep into our processes and personality if we are to continue our success. Ossified structures that impede our collaborations must be adapted or swept away, and we must be innovative in developing new relationships. Our size is an advantage when it allows us to be both collaborative in spirit and nimble in action. In the arts, biomedicine, neuroscience and other endeavors, we have extraordinary potential, but only if we seize the opportunities that exist through deeper engagement.

I believe our university’s personality reflects not only our history, but also our location. We have renewed our sense of connection and commitment to our home city of Houston, both as our students experience it and as our researchers contribute to it. Even a century ago, President Lovett realized that Houston partakes of both the warm hospitality of the South and the dynamic and adventurous spirit of the West. Houston is an entrepreneurial city, and we are an entrepreneurial university. That spirit, which has some of its origins in our early strength in engineering, now finds its place in every corner of our university.
The entrepreneurial imperative incorporates the desire to lead, to create, to innovate and to build. It is reflected in faculty who lead our students abroad to test in the field medical devices they have designed; in the student-taught courses in our colleges; in the policy explorations of our Baker student fellows; in engineering and architecture students getting together to design a house that not only uses zero energy, but is actually affordable; in the creation and dissemination of digital educational materials for both college and now one million K–12 students; in building a research consortium with medical institutions to advance tissue regeneration that will save limbs and lives; in creating a multitude of student organizations, from Engineers Without Borders to our Emergency Medical Service; in the convening of conferences of experts to study biblical texts and to disseminate results; and so much more. We must nurture and support that spirit, both individually and collectively, among both students and faculty. President Lovett spoke of the pleasures of teaching and the privileges of research. But today we must do that and more. An entrepreneurial university empowers our students and embarks them on a life of difference and impact, regardless of their chosen disciplines and professions.

**PART 3**

I want for a moment to speak more broadly about the role of the university and how it ought to define our mission at Rice and our path forward. It has been 2,500 years since the founding of Plato’s Academy, 2,000 years since the founding of the ancient religious universities in India and Egypt, more than 900 since the founding of the University of Bologna, now the oldest university in continuous existence, almost 380 years since the establishment of the first American institution of higher education. The modern research university emerged in the 19th century and set the stage for the explosion of knowledge that universities have produced.

When we look back at the last century, we see knowledge that has emerged from our universities and transformed our world: the fundamental structure of matter, the biological building blocks of life, the electronics that have revolutionized our ability to communicate, connect, analyze and understand. The early embers of the great ideas of our age, such as universal human rights, were fanned in the great universities. Powerful ideals, such as equality of opportunity, were given content and understanding by the work done in universities, and our graduates were inspired to pursue them. There is hardly an aspect of modern life that has not been greatly influenced and enhanced by the work done in universities. Indeed, one former university president declared the university to be the most significant creation of the second millennium.

And yet, at the beginning of this third millennium, the historic idea of the university is facing both challenge and attack. The very word “university,” coined at the founding of Bologna nine centuries ago, embodies a sense of both oneness and universality — that we are a single entity that encompasses the totality of academic endeavor. As resources are constrained, there are calls to focus our endeavors, to limit ourselves to what we already do well. Great universities, universities many times our size, are choosing to eliminate scholarly endeavors, to focus on their specific strengths, to do what is practical.

There is no doubt that we, like they, must focus and be strategic, but I believe we must do so in a different way. We must seize upon those truly important endeavors that require us to bring together participants from across our campus to work together, to understand our world more deeply, and to help solve its problems of today and in the future. Our strength lies significantly in our ability to draw upon and integrate different disciplines and perspectives as we seek to contribute, in pursuance of our mission, to the betterment of our world. We know that technology alone does not solve problems, but rather science and technology complemented by a comprehensive understanding of how to achieve innovation and change in the context of human culture and institutions.

President Lovett spoke of the faith he asked of those assembled at the first matriculation: “They must believe in the value of human reason; they must be enthusiastic for their fellow-men. They must believe that it is possible to learn and also that it is possible to teach.”

I believe that universities are built upon an additional faith — a faith in the power of knowledge and discovery and creativity to improve the lives of people everywhere and build a better future. That faith must be buttressed by a recognition that universities remain distinctive institutions that contribute to our society in ways no other institutions can or do. Our commitment must be to advance the frontiers of knowledge, understanding and creativity and to produce graduates trained and inspired to make great contributions as if the world depended upon it, for it surely does.
The challenges of our world lie before us: to address our interconnected global needs for food, energy, water and a safe environment; to improve human health here and around the world; to harness the extraordinary flow of information for our benefit through better understanding and decision-making; to raise the human spirit through the study of culture and creativity; and to bring peace and prosperity to the peoples of our planet.

These are large and daunting challenges, but that ultimately is what universities are for. Confronted by these challenges, universities must not be bastions of cynicism but citadels of optimism. Optimism, that if we work to understand the nature of religious tolerance, we can bring harmony. That if we work to understand conflict between nations, we can bring peace. That if we work to understand the origins of disease, we can bring health. That if we work to understand the sources of famine, we can bring nourishment. That if we work to understand the fundamentals of matter and energy, we can bring prosperity and a higher standard of life to people all over our world.

Like other great universities, Rice must be cosmopolitan and international in their truest sense. We embrace a community of faculty, staff and students who come from all over the world. While committed to a strong, supportive and deep relationship with our great city, our ambitions to learn and to contribute reach beyond the borders of our state and country. Our commitment is to all humanity, and we seek the advancement of knowledge for their benefit.

And yet, at the same time, we are a distinctively American university steeped in American ideals — ideals of human equality and potential, of political rights and participation, of free inquiry and free expression, of religious freedom and tolerance, of diversity and inclusion, of creativity and innovation, and of the possibilities of hard work and economic opportunity. These ideals are reflected deeply not merely in the values we convey, but in how we choose to carry out our mission.

Universities have been and remain unusual institutions. We are separate and apart and yet open and engaged. The periphery of our campus, consisting of hedges and vegetation punctured frequently by paths and open gates, incorporates this idea. It is an avowedly porous border, and not a barrier, that both separates us from the surrounding city and yet welcomes those who wish to enjoy our contemplative spaces and intellectual engagements, as it also beckons the Rice community to engage with and contribute to our city.

In our rapidly changing world, and recognizing that the knowledge we generate can sometimes be quickly developed to benefit others, universities must change some of their ways and be prepared to act with urgency. That is not something we are traditionally known for; indeed, it is fair to say that we are known for our slowness. But universities at their best are both fast and slow. That slowness, that willingness to put reflection and analysis and deep understanding above achieving quick conclusions or results, is an essential part of our ability to contribute in ways that are different and important. Our defining commitment to fundamental research — research that over centuries has proven its worth — depends on patience and on that faith that the expansion of understanding leads to unforeseen benefits to mankind.

We take, for example, immense pride in the role that Rice played in putting men into space, but the voyage to the moon did not start with a historic speech in Rice Stadium. It started with Copernicus and Kepler and Galileo and Newton. The lesson of putting a man on the moon is not only that a focused and concentrated effort involving government and universities and industry can achieve remarkable progress, but that centuries of inspiring teaching and curiosity-driven discovery can make possible things that could not even have been imagined.

These dichotomies challenge us — to be separate and apart, yet open and engaged. To be fast and yet also to be slow. To embrace an unthrottled cosmopolitanism and still strive to be distinctively American. And yet, these are the attributes that make the modern university a vital and irreplaceable contributor to human society. The ivory tower image of the university has been replaced by our shimmering beacon on Main Street, but we must maintain our unusual qualities and commitments if we are to contribute in the century ahead as we have in the past.

We must make no mistake; we are in disruptive times for higher education. Our most basic concept of the university, as a defined space that brings teachers and students into physical proximity, is in the process of being upended. We now have more students registered for Rice online courses than graduates over our entire century. Not since the invention of the printing press has the dissemination of knowledge been so changed as in the last quarter century, and it will change again as much in the decades ahead. These changes have the potential to undermine the sense of community that has been a hallmark of our colleges and universities and of Rice in particular. But if we embrace these changes and determine how they can be used to enhance the strengths of the physical university while extending some of its benefits to a virtual global community, Rice will seize a new opportunity to lead as we enter our next century.
We must embark upon a reimagining of university education in ways that take advantage of new technologies of learning, while increasing our commitment here on our campus to the personal relationship between teacher and student. We must dedicate ourselves anew to our teaching mission and yet be guided by the ancient Confucian understanding of education: Tell me and I will forget; show me and I may remember; involve me and I will understand. More than ever, we will seize the opportunity to involve our students and be more effective teachers.

As we commemorate the end of our first century today, it is not easy to discern what lies ahead for our second. Think of the circumstances and undiscerned future as President Lovett spoke a century ago. Mass production of the automobile was a new phenomenon, and the first commercial airplane flight was just over a year away. The sun never set on the British Empire, and World War I lay around the corner. Oil had been discovered in Texas a decade earlier, but no one knew what that would mean for our city or our world. And Houston’s first air conditioning, dare I add, was still a decade away.

We have every reason to expect that the political, societal and technological changes of the next century will be just as dramatic as the last, if indeed not more so. We cannot now see those changes. What we can commit to and what we can believe in is the power of the university, of Rice University, to make that a better future through teaching and learning and discovering and creating.

A century ago, a group of students, faculty, university staff and citizens of Houston sat just where you sit now to witness the launching of the first institution of higher education in the city of Houston. Rice set forth with a vision of greatness, with a commitment to both importance and excellence, but with little objective reason to think that such a new university could really join the great universities of America. And yet, this endeavor was begun and sustained with confidence and commitment, with optimism and faith, even in the darkest and most difficult of times.

As we enter our second century, we do so with no less confidence, no less commitment, no less optimism and no less willingness to work hard to achieve our highest aspirations. We are already more than Lovett imagined; today we embark upon the course that will lead us to be ever so much more than we might even be able to imagine today.

Fifty years ago, President Kennedy said at Rice that we must above all be bold if we’re to achieve the ambition of putting a man on the moon. As we enter our second century and face the opportunities ahead, we must be bold; we must be entrepreneurial; we must be collaborative; we must be fast and slow; we must be international yet distinctively American; we must be the great research university that preserved its dedication to its students; we must be Rice.