

The University of Texas at Dallas: Its Origins and First 50 Years 1969–2019

Adrian Kinnane

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ACKNOWLEDGMENTS

hile researching this history I discovered, first, that UT Dallas is a most welcoming place; and second, that it gets things done. There is a momentum in the University's culture that, notwithstanding its appreciation of scholarly reflection, assumes everyone on campus is moving forward with some particular contribution, whether it be at the forefronts of science and engineering, on some new vista in the humanities, or in the effective administration of a complex institution. Now, this history, too, is done.

I am grateful to the many persons who set aside time for interviews so that I might learn of their experiences at UT Dallas. They were all generous and informative, providing materials and information I might not otherwise have accessed. Thomas J. Allen, University Archivist, and his staff provided ready assistance, as did Chad Thomas, Director of Student Media, and Teri Brooks and Paul Bottoni in the Office of Communications. Provost Inga Holl Musselman and her staff, especially Jill Cohn, were supportive throughout. Professor Murray Leaf of the School of Economic, Political & Policy Studies graciously shared his files and current research on the subjects of UT Dallas history and academic freedom.

At History Associates Inc., Ken Durr was a skillful editor. Jamie Rife assisted during the project's design and printing phases. In Washington, D.C., Jo Brooks gave the entire manuscript a careful read, offering corrections and advice. Also, Gretchen Pruett offered a timely and thorough proofreading.

Hank Isaac of 495Digital LLC, created a look for the book that well reflects UT Dallas's energy and dynamism. The University's astounding growth in just 50 years was difficult enough to capture in words; Hank did it expertly in his design.

Finally, I would like to acknowledge the enthusiastic commitment to this project on the part of Hobson Wildenthal, the long-serving former provost of UT Dallas. His deep pride in the school, as well as his appreciation and admiration for his colleagues and their contributions to the University's progress, were always at the forefront of our discussions of the UTD story. He was the first reader, and in academic jargon a very "close reader," of this book. I enjoyed and deeply appreciate his attention and engagement.

> Adrian Kinnane Senior Historian, History Associates, Inc.

FOREWORD

s president of The University of Texas at Dallas, it is my pleasure to invite you to join me in enjoying this improbable and inspiring story of our university's first 50 years. In my almost four years as president, I have learned much about the history, culture, and people of UT Dallas. However, I am still enough of a newcomer to be able to praise with objectivity the many triumphs of our university and its community, since UT Dallas's arc of success was well in place by the time of my arrival.

It is difficult for us who have encountered UT Dallas for the first time during the last few years to comprehend fully how rapidly and impressively the university has evolved. Simple quantitative facts, such as the increase in freshman enrollment from 100 in the first class of 1990 to more than 4,000 today, the doubling of UT Dallas total enrollment between 2006 and today to more than 29,500, and the expansion of the physical plant from 3.3 to 7.1 million square feet since 2010, tell only part of the story. Equally profound have been the revolutionary changes in the university's "look and feel" that result from over 7,000 students, including McDermott, Terry, and National Merit Scholars, living on a beautiful campus transformed by Margaret McDermott's landscape project.

UT Dallas is a spectacular success story on an international scale. As will be conveyed in this book, this success entailed overcoming many challenges. It also entailed the pursuit of a truly audacious vision, which, against all odds, has been realized. So many deserve our utmost gratitude, the devoted faculty and staff, the dedicated and loyal students, those who led the university from within, and those who supported it from without, across five decades of reaching for the stars, both figuratively and literally. The story starts with a visionary decision and bold actions by the founders, Eugene and Margaret Milam McDermott, Erik and Margaret Fond Jonsson, and Cecil and Ida Green; three couples united in their philanthropic impulses by personal friendships and shared business interests. They funded the creation of the Graduate Research Center of the Southwest, which later became known as the Southwest Center for Advanced Studies (SCAS). Their motive was to remedy the dearth of high-level research and graduate education in the sciences in North Texas and surrounding regions. Enlightened private philanthropy would become a constant theme in the history of UT Dallas.

In 1969, the SCAS was donated by the founders to the public, specifically to The University of Texas System. This was met with opposition from other institutions and their supporters, who feared that the fledgling UT Dallas might become a competitor for resources. True, in a way, but those early detractors missed the point! Today, UT Dallas does far more to attract talented faculty, staff and students, and research dollars *to* Texas, which *enhances* the region, including our respected sister universities.

Today's UT Dallas is a top-ten destination for National Merit Scholars who come from all corners of the United States. We are among the 131 "Carnegie R1" universities of very high research activity. And, we have become an entrepreneurial powerhouse, contributing mightily to the booming Dallas/Fort Worth economy. In short, we have realized the vision of our founders!

The book that you hold in your hands (or gaze at on a computer screen) tells the story of UT Dallas's stunning evolution from the early 1960s to the present. Enjoy the read. Marvel at the journey!

Richard C. Benson

Dr. Richard C. Benson President, The University of Texas at Dallas

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The Founders

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(L to R) Ida and Cecil Green, Margaret and Erik Jonsson, Margaret and Eugene McDermott. The creation of GRCSW/SCAS and its ultimate donation to the state of Texas was an act of private philanthropy, in partnership with their wives, by the three men who had founded Geophysical Service Inc. in 1941 and then, with Patrick Haggerty, Texas Instruments in 1951. TI created the wealth, but it was the couples, not the company, who provided the funds for what became UT Dallas.

he lives of the University's founders–Erik Jonsson, Eugene McDermott, and Cecil H. Green–were rooted deeply in America's transition from an older economy of entrepreneurial individualism to a new era of large corporations and "big science." All three were born in the great manufacturing cities of their age–Green, in 1900 in Manchester, England, the heart of the Industrial Revolution; and McDermott and Jonsson in Brooklyn, New York, in 1899 and 1901, respectively. All three earned engineering degrees, Green at the Massachusetts Institute of Technology, McDermott at Stevens Institute of Technology and Columbia University, and Jonsson at Rensselaer Polytechnic Institute.

All three then went to work for large companies— General Electric and Raytheon (Green), Goodyear Rubber and Western Electric (McDermott), and the Aluminum Company of America, or Alcoa (Jonsson) before their paths joined in 1930 in an oil exploration company, Geophysical Service Incorporated (GSI), that used dynamite to create shock waves beneath the Earth's service in order to record the patterns on seismographs. McDermott pioneered the development of this technology for petroleum prospecting. On December 6, 1941, the three men purchased GSI. The next day, Japanese forces attacked Pearl Harbor. The United States was at war.

Concepts useful for oil exploration also applied to the detection of enemy submarines. Soon, military contracts came to dominate GSI's business, a trend that continued after the end of the war. In January1952, the three partners, together with new partner Pat Haggerty, established Texas Instruments. TI's development of the silicon transistor in 1954 and the first integrated circuit, by Jack Kilby, in 1958 were groundbreaking electronics achievements. By 1958 TI was Dallas's largest employer. The path from bootstrap, turn-of-thecentury industrialism to highly organized electronics research could be mapped onto the life trajectories of UTD's founders, and onto the deeper history of the University itself.

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CHAPTER 1 A New Venture (1961-1979)

he University of Texas at Dallas began in the early 1960s as a small, tightly focused research organization which became known as the Southwest Center for Advanced Studies. SCAS's founders aimed to use federal funding to attract and support science and technology research in the Dallas area. When such funding began to shrink, the founders looked for a university connection to sustain its mission. The result in 1969 was UTD. However, the political process by which the new university was created imposed significant restrictions on its scope and future development,

including prohibitions on the admission of freshmen and sophomores, on the creation of programs that would compete with other universities in the area, and in particular on the establishment of a school of engineering. As an "upper level" undergraduate and graduate school, UTD maintained the high standards established at SCAS and recruited talented scholars attracted by the University's convenience, novelty and potential. Transforming SCAS into a successful university would prove a long-term experiment. At its ten-year mark in 1979, UTD remained a new venture whose success was far from assured.



Erik Jonsson addresses the audience at the dedication of the Founders Building, 1964. The stage party includes, from the left, Margaret and Eugene McDermott, and on the front row, Mrs. Lloyd Berkner and Dr. Berkner, and Texas Governor John Connally. Ida and Cecil Green are obscured on the back row, behind the Berkners. To the right of Mr. Jonsson, Margaret Jonsson sits next to the empty chair. Other personages identified are Stanley Marcus in the back row (right) and Earl Cullum on the back row (left), flanking Mr. Jonsson. 8



A mid-1960s aerial view of the Founders Building and surrounding land. Along with the scientists and staff, it constituted the Southwest Center for Advanced Studies (SCAS) that was given in 1969 to the State of Texas to become a component of The University of Texas System. The gift was advertised at that time as having a value of \$14 million.

High Tech Origins: SCAS

The University of Texas at Dallas was officially established on June 13, 1969, when Governor Preston Smith signed House Bill 303 in a ceremony at the fledgling university's only building. The surrounding wheat fields came nearly up to the platform erected for the dignitaries south of the Founders Building, several hundred yards north of Campbell Road. Two days earlier crews had cut back the crop to prevent fires and keep interlopers from hiding in the stalks. Governor Smith cautiously described HB303 as "an insurance policy on the future growth and future greatness of Texas." It was a sensible sentiment to be sure, but one that did not capture the high aspirations for this new community of scholars that were held by the men whose philanthropic vision lay at the origins of the new institution.1

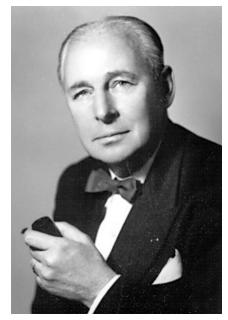
The new university's origins dated back to 1961, when Erik Jonsson, Cecil Green, and Eugene

McDermott, the founding partners of Texas Instruments, decided to create a privately funded research institute to address the needs of the expanding high-technology businesses of North Texas for highly trained scientists and engineers. The institute had an awkward name, the Graduate Research Center of the Southwest, and its identity was further complicated by the later creation of an academic arm, the Southwest Center for Advanced Studies. GRCSW/SCAS was intended to conduct basic research in targeted scientific areas, with the center's scientists working with established universities in Texas to promote the Dallas region's overall scientific development and help meet its needs for graduate-level and postdoctoral training.

GRCSW/SCAS received its charter on Valentine's Day 1961 and settled temporarily in Southern Methodist University's Fondren Science Building while new quarters arose on a wide plain in Richardson, a rural suburb about 15 miles northwest of downtown Dallas. The initial plans for the research

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Lloyd Berkner, a notable leader of national and international scientific initiatives, who was appointed as the first president of GRCSW/SCAS by the founders and assigned the responsibility for recruiting the leaders of its scientific divisions.

"MIT of the Southwest" – Texas Instruments internal news bulletin of November 5, 1964, announcing the creation of the Graduate Research Center of the Southwest and emphasizing the high ambitions the founders had for their creation.

center were ambitious, including the possibility of a nuclear reactor. That meant setting aside about 1,200 acres for "a surrounding safety zone," as Cecil Green recalled. The trio purchased the requisite acreage but, according to Green, "soon after [we] changed our minds about the reactor."² No matter, the extra space would one day come in handy.

Three and a half tumultuous years later, in October 1964, an audience of prominent Dallas leaders, including Texas Governor John Connally, joined the founders for the dedication of what became known as the "Founders Building" and the formal start of the activities of GRCSW/SCAS. The founders' vision was not modest, as evidenced by coverage of the event in the Texas Instruments newsletter, announcing the creation of an "MIT of the Southwest."

The center's research agenda included space science, geoscience, molecular biology, and mathematics/mathematical physics. A distinguished group of scientists had been assembled to staff the center by Lloyd V. Berkner, the center's first president. An internationally recognized scientist with expertise in measuring properties of the ionosphere and a Fellow of the American Academy of Arts and Sciences, Berkner had also served on President Dwight Eisenhower's Scientific Advisory Committee. It was Berkner who had first proposed the capstone of that administration's international scientific efforts, the International Geophysical Year.

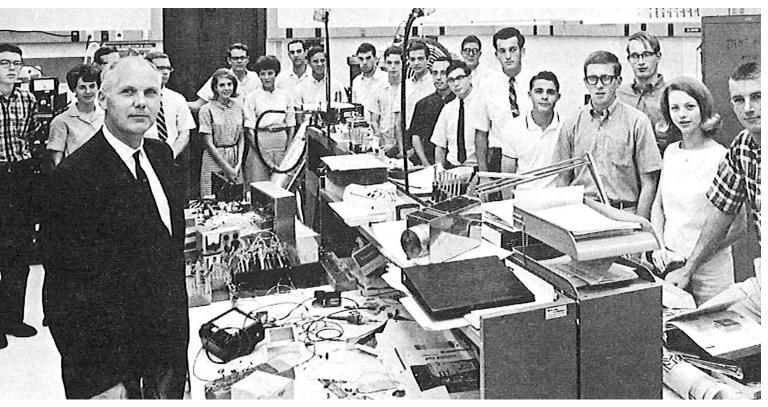
Francis "Frank" Johnson, who led the GRCSW/ SCAS Atmospheric and Space Sciences Division, specialized in space atmospherics and helped establish the institution's credentials as a grantee with the National Aeronautics and Space Administration (NASA). He designed instruments that NASA astronauts would eventually deploy to test atmospheric pressure on the moon. Anton Hales, who led the Geosciences Division, was well-known for his work at the Bernard Price Institute of Geophysical Research in South Africa. The Division of Biology was led first by Carsten Bresch, who came from Germany to accept the position, and then by Royston Clowes, both pioneers in the dynamic new field of molecular biology.

Ivor Robinson, an expert on Einstein's general theory of relativity, led the Math Division and recruited experienced colleagues such as physicist Wolfgang Rindler to the Mathematics and Mathematical Sciences Division at SCAS. Robinson, along with the University of Texas at Austin's Englebert Schucking, helped start the biannual Texas Symposium on Relativistic Astrophysics in 1963, which introduced concepts such as black holes, pulsars, and quasars into public discourse. Schucking had been at the University of Hamburg in Germany in 1960 where he met astronomer and mathematician Istvan Ozsváth, who had just earned his Ph.D. there. There were few relativity experts at the time, so when Schucking encouraged Ozsváth to join Robinson and Rindler, SCAS became a significant player in the field of relativity research.

With the help of these and other notable transplants, GRCSW/SCAS took root in Dallas's fertile, high-tech soil. Working together in the isolated Founders Building when not conducting research in the field, the institute's faculty, students, and staff created their own intensely active professional and



Geophysical scientist Anton Hales (L) and molecular biologist Royston Clowes were among the many internationally distinguished scholars attracted to GRCSW/SCAS.



Atmospheric and space science students meet with Frank Johnson (in suit) as they begin their summer assignments in 1965. Johnson served as Interim President of The University of Texas at Dallas from its creation until the appointment of Bryce Jordan in 1971.

social community while carving out significant reputations in the larger scientific world.

But expanding and enlarging the organization's activities proved more difficult than the founders had expected. The Vietnam War and President Johnson's Great Society programs diverted federal dollars, while the public became disillusioned by "Big Science" which appeared to lubricate the war machine and harm the environment. Suspicion of the relationship between science and the military had led to the Mansfield Amendment to the 1969 Military Authorization Act, which prohibited the funding of any research that did not have a direct relationship to a specific military function.

The postwar tide of federal support for science was ebbing rapidly. Federal funding of scientific

research declined 30 percent between 1968 and 1970. By then, most scientists had accepted the fact that federal support would never return to the high levels of the 1958-1967 decade. At an American Academy of Sciences meeting in late April 1970, Ivan Bennett, Jr., director of the New York University Medical Center, lamented a "long, lingering sigh of retreat" from science research and training by the federal government. Texas Instruments co-founder Patrick Haggerty, also in attendance, was more sanguine about what he called an "inevitable" cooling of support after a period of high enthusiasm.³

Grant applicants noted that funding now ran into fewer channels, most of it going to the nation's 25 largest universities. NASA remained a solid

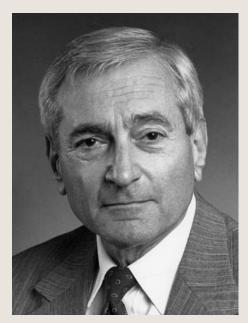


The members of the SCAS community worked together, ate together, and played together. All eyes are on the ball as Ph.D. candidate (Molecular and Cell Biology) Celma Arajuo Hausmann launches a serve in the late 1960s.

On the Map: The First Texas Symposium on Relativistic Astrophysics

B vlate 1963, SCAS had attracted many talented researchers, including Wolfgang Rindler, Ivor Robinson, and Istvan Ozsváth, but the center was still new and struggling for recognition. One day in summer 1963, Robinson, Ozsváth, Rindler, SCAS Provost Lauriston "Larry" Marshall, and UT Austin physicist Englebert Schucking were lounging in a swimming pool when Marshall suggested organizing a symposium in Dallas. All agreed, but what would they call it? Schucking suggested the name, "Relativistic Astrophysics." Robinson asked what that meant, to which Schucking replied, "Anything we want it to." Rindler's definition was daunting: "the application of Einstein's general relativity theory to the motion of the entire universe."

By November 22, when President John F. Kennedy visited Dallas, a few hundred had signed up for the December 16-18 meeting. The president's motorcade set off from Love Field for the Trade Mart, where the SCAS faculty were among luncheon attendees awaiting the president's speech, but the president never arrived. It fell to Erik Jonsson, who was hosting the lunch, to deliver the searing news

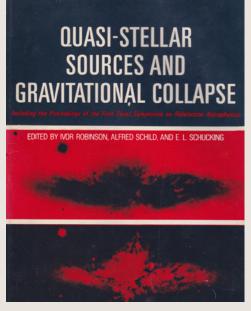


Wolfgang Rindler, an early member of the Mathematics/Relativity Division, whose accomplishments in research and teaching made him an exemplar of the UT Dallas faculty from 1969 until his retirement in 2014.

of the assassination. Kennedy's speech would have included an opening comment that he was "pleased to have this opportunity to salute the Graduate Research Center of the Southwest."

Dallas's reputation as a safe place to visit was already in jeopardy, for the previous month a jeering mob had accosted U.S. Ambassador to the United Nations Adlai Stevenson as he left a Dallas speaking engagement, hitting him on the head with a picket sign, spitting on him, and rocking his car. Cancellations for the Texas Symposium trickled in, but Dallas Mayor Earle Cabell wrote to each one, assuring them they would be safe and welcome. In the end, 291 participants from several countries made the trip.

The Symposium proved a great success, and organizers planned another one for the following year in Austin. And when that, too, succeeded, they set a schedule of biannual meetings in locations around the world. The Texas Symposium helped put SCAS, and eventually UT Dallas, on the map while also helping the stricken city of Dallas to start restoring its tarnished image.



Symposium proceedings were published in 1965 as *Quasi-Stellar Sources and Gravitational Collapse* (U. of Chicago Press), edited by Ivor Robinson (UT Dallas), Alfred Schild (UT Austin), and E. L. Schucking (UT Austin).

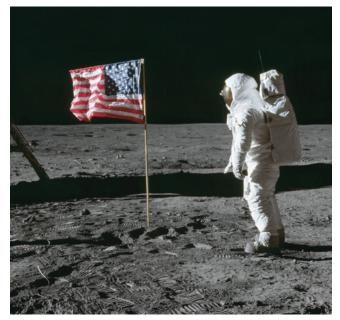
source for SCAS's Atmospheric and Space Sciences Division, but GRCSW's other divisions-Geosciences, Mathematics and Mathematical Physics, and Biology-were scrambling for funds. The organization looked toward consortium arrangements with local universities that could preserve its autonomy while building shared sources of financial support. GRCSW/SCAS had "umbrella" accreditation under the University of Texas at Austin and its charter allowed it to grant degrees-one source of funds. But it had not yet chosen to do so. Apart from the added administrative burden, at the time it would have been disadvantageous for GRCSW/SCAS to compete with its academic neighbors. UT Austin, Southern Methodist University, Texas Christian, and other universities in the United States and abroad awarded graduate degrees to students whose research was directed by GRCSW/SCAS scientists. And those scientists often held joint appointments at those universities.

Nevertheless, nearby institutions harbored suspicions of GRCSW/SCAS's possibly larger academic ambitions, as was evident in May 1964 when the Dallas Times Herald published an analysis titled, "The Think Factory," declaring that GRCSW/ SCAS's assumption of widespread acceptance among existing universities in Texas had been premature. Faced with fears that GRCSW/SCAS might raid them to recruit faculty or lure away graduate students, the newspaper noted, GRCSW/SCAS found itself "making peace" with local universities while it collaborated with them. To complicate matters even further, GRCSW/SCAS had entered the higher education arena in the midst of great change: Texas was in the process of expanding and reorganizing its various public colleges, community colleges, and universities. The ranks of World War II veterans earning degrees on the GI Bill had moved through; now their children, the "baby boomers," were reaching college age. Texas saw a corresponding "boom," especially in its community or "junior" college system. Eighteen community college districts were established in Texas during the 1960s and 1970s.

These two-year schools emphasized vocational training, but the awarding of potentially transferable

credits alarmed the four-year or "senior" academic institutions, which also were expanding rapidly and competing for resources. Texas joined Florida and several other states in a new experiment, making community colleges "feeder" schools for "upperlevel" colleges. By 1980, Texas had established ten of these upper-level colleges, although the experiment had yet to prove itself a success.⁴

Between 1960 and 1980, Texas created thirty new public senior colleges, college systems, or branch campuses, including the ten upper-level schools.⁵ These joined older, established institutions like the University of Texas (UT) System, with its main campus in Austin, and the Texas A&M University (TAMU) System with its flagship campus in College Station. By mid-decade, officials in Austin were trying to impose order on this expansion. In 1965, the legislature passed HB1, creating an 18-member Texas College and University System Coordinating Board (its name changed in 1987 to the Texas Higher Education Coordinating Board). In his September 20 charge to the Board, Governor John Connally warned that it faced "an institutionalized system, with each college or university grasping for its own ends without regard to the needs of the people of the whole state, and



NASA's Apollo 11 astronauts Edwin E. Aldrin (in photo) and Neil A. Armstrong gathered moon samples in July 1969 while pilot Michael Collins remained in lunar orbit with the Command and Service Module *Columbia*.



In March 1970 NASA sent some of the "moon rocks" to UT Dallas for analysis by James Carter (standing) and Charles E. Helsley. When Helsley went to the local post office to pick up the samples NASA had sent by registered mail, a clerk commiserated on the procedural difficulties. "You'd think that things that come in this way were moon rocks," he said. "In this case," Helsley replied, "they are."



Gifford Johnson, former president of Ling-Temco-Vaught, replaced Berkner as president of SCAS and played a key role in its transition into the UT System.

perhaps without being aware of those needs." This scramble for size and space, Connally believed, was leading to disorder and mediocrity rather than excellence, and he urged the Board to be non-partisan and objective in its decisions regarding the future of higher education in Texas.

Among those with the most to lose under the new system were the locally-funded community colleges that were increasingly seeking to become four-year schools—partly for prestige and partly to get state funding. "A second-rate senior college," Connally said, "is no adequate substitute for a first-rate junior college."⁶ But existing four-year schools and graduate programs were also under new scrutiny, for the Coordinating Board exercised final authority about degree programs, start-ups, expansions, and other major matters concerning the state's existing 22 public four-year colleges and 31 community colleges, as well as all such schools in the future. The Board would prove keen on avoiding duplication of effort, seeing open competition not as a means to improvement but as a wasteful and inefficient process. Its charge would prove a hard one to execute, placing the Board "squarely in the no-man's land of crossfire between the Texas legislature and the state's several university systems," as Robert Berdahl, former UT Austin President and Chancellor of the University of California, Berkeley, observed years later.⁷

Months before September 1, 1965, the date the Coordinating Board bill took effect, State Senator Don Kennard introduced, and the legislature passed, SB407, which transferred Arlington State College in Fort Worth from the TAMU System to the UT System. Kennard invited GRCSW/SCAS President Lloyd Berkner to the April 23 ceremony at UT Arlington. Berkner declined. He had been working earnestly, if unfruitfully, to negotiate a cooperative graduate program with Texas A&M, and many in the TAMU system were sensitive about the loss of Arlington State to the "rival" UT System. GRCSW/SCAS had not been involved in the transfer, but it might give offense to A&M to see Berkner celebrating the UT System's gain. Besides, as Kennard might not have realized, Berkner was no longer president of GRCSW/SCAS.

In March 1965, that responsibility had been transferred to a seasoned Dallas business executive, Gifford K. Johnson, a former member of the Connally-appointed study commission that had recommended establishment of the Coordinating Board. The change in leadership was no reflection on Berkner, whose health could not keep pace with his enthusiasm, and who served on the GRCSW/ SCAS board of trustees until his death from a heart attack in June 1967. Rather, it underscored GRCSW/ SCAS's growing need for private funds and the hope that Johnson could boost private donations.

Johnson's message to the GRCSW/SCAS trustees was clear: if he could not work things out with TAMU he would open conversations with UT. That summer, GRCSW/SCAS sold \$2.3 million worth of TI stock and some land to stay afloat. In November, Johnson gave up on TAMU and approached the UT System's Chancellor Harry Ransom and UT Austin's President Norman Hackerman. Long and delicate negotiations began. Meanwhile, GRCSW/SCAS scientists continued to do what they had come to Dallas for-research, including the successful placing of an experiment aboard a NASA Pioneer 6 satellite and winning a National Institutes of Health grant to support work in molecular genetics.

SCAS Becomes UTD: The "Arlington Compromise"

In part to make GRCSW/SCAS's teaching mission clearer, as well as to simplify communications, the

organization decided to drop the GRCSW from its name and present itself as SCAS, the Southwest Center for Advanced Studies, beginning January 1967. Negotiations with UT Austin and the UT System continued, gathering momentum as all parties agreed on the general desirability of expanding higher education in the Dallas region. On July 26, 1968, the UT System's Board of Regents met in Midland, Texas, and voted unanimously to establish a sub-system that would include a new, fouryear school called the University of Texas Center for Advanced Studies, UTCAS. As envisioned, the new university would collaborate with UT Arlington and UT Southwestern Medical School in Dallas, an institution that civic leaders also sought to strengthen. The concept of a centrally administered UT System tripartite university complex, rejected by Arlington proponents, offers a tantalizing vision of an alternative history. Could the Dallas-Fort Worth metroplex have long since been enjoying the benefits of a nationally powerful research and teaching complex had this vision been realized? Perhaps the fifty-year saga of UT Dallas and UT Arlington each striving to reach Tier One status, independently of each other and of UT Southwestern, would have had a shorter and happier resolution.

SCAS agreed to give the UT System 250 acres of land (325 acres, as it turned out) and buildings and equipment valued at \$11 million. SCAS would also transfer nearly \$4 million in research contracts and grants to UTCAS. SCAS faculty, numbering about 50, would be retained in the UT System according to its usual rules for rank and tenure for faculty, with ample time allowed for them to make decisions about staying or leaving. SCAS's remaining assets, including about 900 acres surrounding the Founders Building in suburban Richardson, would be held by a new entity, the Excellence in Education Foundation, to further the original purposes of GRCSW/SCAS in the region. In August 1968, Chancellor Harry Ransom presented this large and, from SCAS's point of view, generous proposal to the Coordinating Board.⁸

After a few months of deliberations, the Coordinating Board advanced its own, less



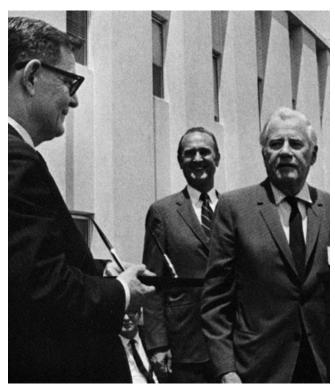
State Senator Don Kennard during one of his famous filibusters. Kennard, whose district included the University of Texas at Arlington, opposed the creation of UTD.

ambitious recommendations in December 1968. These did not include a new four-year university but a federation of existing North Texas colleges and an upper-level "commuter" college (juniors, seniors, and graduate students to the master's degree level only), with its own board of regents, that would open in 1973. The Board recommended transferring SCAS to the University of Texas System as a research institute "of the highest order," but not as a "primary degree-granting unit." The Board, in other words, nixed the UTCAS idea and countered with a proposal supporting the idea of encouraging community colleges to be feeder schools to a new "upper-level" college. "Almost every recommendation we make involves some controversy," coordinating Board Chair John Gray acknowledged, but he remained determined to prevent "jungle warfare among the institutions for state appropriations."9

That was hard to do so long as the UT System wanted to use SCAS as a base upon which to build a major four-year and graduate research university



On June 13, 1969, Governor Preston Smith signed House Bill 303, which created UTD but also limited its scope and development for decades.



After transferring the SCAS land title to the UT System, Eugene McDermott (R), presented UT Chancellor Harry Ransom (L) with the pen set used by Governor Smith to sign HB303. SCAS President Gifford Johnson looked on.

in Dallas. The idea had already drawn vociferous opposition from outspoken Senator Kennard, who characterized SCAS as a "white elephant" that moneyed interests in Dallas were trying to unload on the taxpayers. He saw SCAS as a threat to his newly transferred UT Arlington, which he wanted to place at the center, not the periphery, of Dallas's higher education future. UT Board of Regents Chair Frank Erwin countered that if SCAS was a white elephant, "I'd like a herd of them," and reminded the State Affairs Committee that SCAS's offer was conditional on SCAS becoming the core of a four-year university, not a limited, upper-level school.¹⁰

Eugene McDermott, who was at the time also serving on the Coordinating Board, believed the matter would have to be hashed out in the legislature.¹¹ Erik Jonsson agreed, telling SCAS's Board of Governors, "We've got a political job to do."¹² John Connally, the force behind the Coordinating Board's creation in 1965, "must be wondering what went wrong," mused the *Dallas Times Herald*'s Ernest Stromberger as he recalled the former governor's zeal to remove politics from higher education planning. Stromberger speculated that Connally had perhaps done his job "too well" by appointing to the Coordinating Board as well as to the Systems' governing boards strong-willed persons disinclined to compromise.¹³

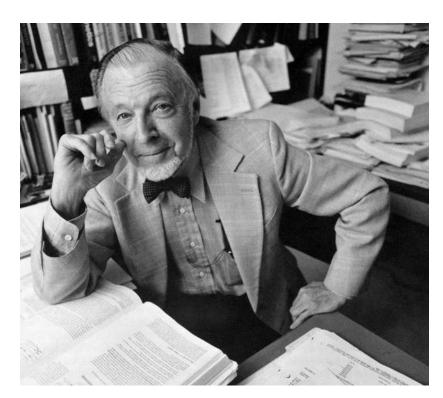
In January 1969 Representative C. F. "Jack" Blanton of Dallas introduced HB303 to the 61st Legislature providing for the establishment of The University of Texas at Dallas. SCAS President Gifford Johnson secured the support of numerous Dallas civic leaders, including Morris Hite, president of the Dallas Chamber of Commerce, to make SCAS a major part of the proposed new university. But Kennard's sustained drumbeat of protest, including a record-setting "every Wednesday" filibuster campaign against any House bill up for debate in the Senate, had its effect. So also did the new Coordinating Board's desire to cement its authority by pushing the purported "efficiencies" of an upperlevel commuter school.

When HB303 reached Governor Smith's desk, Smith threatened to veto it unless it included the

Coordinating Board's recommendation. Their backs to the wall, SCAS's trustees yielded to political reality. The final legislation, signed by the governor at the Founder's Building on Friday, June 13, 1969, reflected what came to be known as "the Arlington compromise." SCAS would join the UT System as the University of Texas at Dallas (UTD), on 325 acres of land it donated to the state for that purpose. But it would be an upper-level college only, with no freshmen or sophomores allowed. Even juniors and seniors were barred from entering for another six years. Graduate students could continue, or enroll immediately, in SCAS's existing programs. New programs, however, would require the approval of the UT Regents and the Coordinating Board, which was standard procedure for all schools in the System.

Gifford Johnson had predicted such an outcome. "It would seem to me," he had written to all SCAS faculty and staff six months earlier, "that the final legislative decision will fall between the plan proposed by the Coordinating Board and the original and more unrestricted University of Texas System proposal. It appears likely that SCAS will, in some form, become a part of the UT System within the year."¹⁴ After it did, Gifford Johnson returned to private industry, although he continued to serve on the Board of Trustees of the EEF. Frank Johnson, head of SCAS's Division of Atmospheric and Space Sciences, became interim UTD president while the search for a permanent head began. In 1972, Representative Blanton tried once more to make UTD a four-year school and Senator Kennard mounted yet another round of marathon filibustering. This second effort, also titled HB303, died in the Senate, buried in a backlog of other unfinished business at the end of the session.

The University of Texas at Dallas was off and running. Its advocates were hopeful but worried that their creation had been deliberately handicapped and its future limited. They were right. The handicaps were significant and would affect the development of UTD for at least the next two decades. At the same time, the imposed restrictions in HB303 were not fatal, perhaps not even



Claud S. (Stan) Rupert, an early member of SCAS's Biology Division. As a UT Dallas faculty member after 1969, Rupert continued his research on DNA repair, laying the foundations for discoveries that won his graduate student Aziz Sancar the Nobel Prize in 2016. Rupert also served UTD as department head, dean, and interim vice president for academic affairs. He retired in 1992.

permanent, and the bill had succeeded in preserving SCAS as a fertile core for the future nurture of scholars and scholarship.

If the founders' vision of a "community of scholars" had conjured up images of peaceful inquiry, calm reflection, and spreading enlightenment, the realities of UTD's formation had revealed knottier truths. The tensions surrounding the University's birth did not abate after its arrival; on the contrary, they were only heightened as this new community of scholars mulled over what kinds of scholars it would employ, teach, and admit, and even what kind of community—or communities—it would become. The UT Regents, the Higher Education Coordinating Board, and the Texas Legislature remained influential principals in that dialogue.

For all that, the daily stresses and strains attending UTD's beginnings did not belie scholarship's higher ideals; indeed, they reinforced their necessity. The lessons learned through the SCASto-UTD transition drove the new university not into cynicism but in the opposite direction, straight into the hard work of reorienting, reframing, and rebuilding itself. The University enlisted the useful ideal of a "community of scholars" to guide its

decisions, necessarily contested, about who would participate, what they would do, and how they would do it. In that still fresh and visionary form, then, as much as in any grudgingly signed piece of sausage-made legislation, the University of Texas at Dallas came into the world. Said biologist Claud "Stan" Rupert, who had arrived at SCAS in mid-1964 from Johns Hopkins University to a half-finished Founders Building, "Like all newborns, it [UTD] arrived bare, slippery, and squalling. It didn't have anything. Where were the classrooms? Where were the teaching laboratories? Where was the library? Where would the students have lunch? There was no housing near the campus of any kind. We were just out here, labelled, rubber-stamped 'university.' It was slippery because there was nothing to get a hold of."15

One reason for this was that almost no SCAS scientist had moved to Dallas to design curricula or teach classes. Indeed, recalled Stan Rupert many years later, "This is what they came here to leave. None of them had ever had anything to do with starting a university or university administration." Faced with this new mandate, some left, but most carried on, their attitudes ranging from resignation to enthusiasm. The restriction to upper level status and the delay on junior and senior undergraduate enrollment to 1975 were, to many of the former SCAS faculty, welcomed as bulwarks against being "swamped" or "inundated" by large classes of undergraduates and expanded teaching demands. Many of these specialists were much removed from areas even within their own fields-quantum physics from relativity theory, for example, or either of these from the highly technical NASA space science projects-in addition to having never taught a single course.

To be sure, there were others, such as physicist Wolfgang Rindler, who loved teaching. Even during the SCAS days he had taught televised classes on Cecil Green's pet creation, TAGER (The Association of Graduate Education and Research). "If I didn't teach, I miss it," he said, going on to earn the UT System's Chancellor's Council Outstanding Teacher Award in 1990-1991. Rindler's expertise usually aligned best with graduate level courses, though he enjoyed teaching undergraduate physics labs as well as upper level courses on topics such as thermodynamics and relativity.¹⁶

Classes Start

Early in September 1969, SCAS staff, now UTD employees, plastered a makeshift UT Dallas sign over the SCAS sign at the school's Campbell Road entrance. Student enrollment at that point numbered just 62, all graduate or postdoctoral students. There were 29 in geosciences, 26 in physics, and seven in biology. But plans for growth were underway-a proposal for four new graduate programs in Chemistry, Environmental Sciences, Mathematical Sciences, and Management and Administrative Sciences was forwarded to the Regents for approval, adding to the twelve programs already in place. Additionally, a plan was under discussion for about two dozen new undergraduate programs in the physical sciences, management, social-behavioral sciences, humanities, and fine arts.¹⁷

The Excellence in Education Foundation (EEF), holder of the remaining funds and assets of the former SCAS, had made generous donations of cash and land for the University's physical plant.

The remaining (major) EEF assets were pledged to support the new university in the future, but also, to support other higher-education initiatives in the area. The Texas legislature did its part by authorizing the sale of tuition revenue bonds to finance new buildings, including a north annex to the Founders Building and an adjacent structure eventually christened Berkner Hall. Construction of a library, theater, and additional classrooms and office space would soon be under way. Recruitment of additional faculty and administrators also began, including selection of a leader to take the reins from interim President Frank Johnson. The search for a new president, however, began during a conflicted and disruptive time for colleges and universities in America, and indeed for the nation itself.

The anxieties surrounding the urban rioting of mid-decade, the 1968 assassinations of Martin Luther King, Jr., and Robert F. Kennedy, and escalating protests against the Vietnam War deepened into soul-searching angst after May 4, 1970, when National Guardsmen killed four students at Kent State University in Ohio, and after police fire felled two more students at Jackson State College in Mississippi just 11 days later. What was going wrong on American campuses? On June 13, 1970, a year to the day after Governor Clements signed HB303 into law, President Nixon established the President's Commission on Campus Unrest, known as the Scranton Commission for its chair, former Pennsylvania governor William P. Scranton, to find out.

The Scranton Commission Report, issued in late September, noted that divisions in American society "as deep as any since the Civil War" had found expression in campus protests focusing on the Vietnam War, racial discrimination, and the mission of the universities themselves. It asserted "a deep continuity between all Americans, young and old, that is being obscured in our growing polarization." The Scranton Commission believed universities could help—with courses more relevant to the problems of society and the personal lives of students. "They seek a community of companions and scholars but find an impersonal multiversity," the Report noted. It recommended sweeping

The UNIVERSITY. Sa FX

Several additional bureaucratic steps in August and September of 1969 were required to finalize the establishment of UT Dallas. Staff took matters into their own hands by covering up the old SCAS sign with the new name.

We, the undersigned members of the committee appointed by the Board of Regents of The University of Texas System, pursuant to a resolution duly adopted by the Board of Regents at its meeting on August 1, 1969, a copy of such resolution being attached hereto as Exhibit "A", do hereby unanimously approve that certain Agreement Implementing the Establishment of The University of Texas at Dallas, dated August 1, 1969, between the Southwest Center for Advanced Studies, a Texas nonprofit corporation, and the Board of Regents of The University of Texas System in the form which has been exhibited to us, and do hereby unanimously approve each and every at necessary, appropriate or requested in order to carry out and perform the obligations and acts to be performed by the Board of Regents of The Univer-sity of Texas System pursuant to said agreement in order to consummate and complete said gift, donation, transfers, and assignments from the Southwest Center for Advanced Studies to the Board of Regents of The University of Texas System.

Signed this _28th day of August, 1969.

Frank C. Erwin, Chairman, Board Regend of Williams Board of Regents Namon Harry Dr. Harry H. Ransom Chancellor

Executive Vice-Chancellor for Fiscal Affairs

CERTIFICATE

FRANK C. ERWIN, JR., Chairman, and BETTY ANNE THEDFORD, Secretary, of the Board of Regents of The University of Texas System, do hereby certify, in connection with the consummation of the Agreement Implementing Establishment of The University of Texas at Dallas, dated August 1, 1969, by and between the Board of Regents of The University of Texas System ("UTS") and Southwest Center for Advanced Studies ("SCAS"), that:

1. A meeting of the Board of Regents of The University of Texas System was duly held at Austin, Texas, on August 1, 1969; that at said meeting the resolutions attached hereto and made a part hereof were duly enacted; that said resolutions remain in full force and effect and have not been amended, superseded, or rescinded.

2. All of the five members of the committee appointed by said resolutions, namely, Frank C. Erwin, Jr., Dan C. Williams, H. H. Ransom, Charles A. LeMaistre, and E. D. Walker, whose unanimous prior approval was required for all instruments necessary for and on behalf of the Board of Regents of The University of Texas System to effectuate an orderly transfer of the gifts, donations, government contracts, and grants from SCAS to UTS, have duly and unanimously approved each and every instrument, act, and thing relating to said gift, donation, and transfer, and a true copy of the approval of said committee members, dated August 28, 1969, is attached hereto and made a part hereof.

DATED at Austin, Texas September 10, 1969.

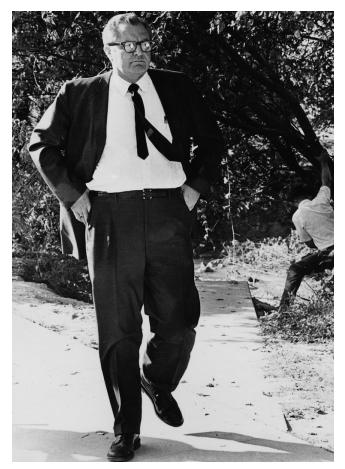
Board of Regents of University of Texas

reforms, including a return to the basic functions of teaching, learning, research, and scholarship, and a renewed emphasis on academic freedom. "In this time of rapid cultural, social, and technological change, the expansion of knowledge through free inquiry and debate is more important to society than ever before. Yet today, both external and internal threats to academic freedom have increased as the nation has become more sharply divided." The Scranton Commission decried university management that crimped the values of faculty, reduced students to mere tutelage, and effectively subordinated the academic mission to political purposes.¹⁸

At UT Austin, for instance, Regents Chair Frank C. Erwin, Jr., had been dubbed "Emperor of the University of Texas" for the personal control he exerted through his powerful connections in Texas politics. Erwin advocated a "top down" model of authority that kept final control in the hands of senior administrative officers. Many believed that his heavy-handed response to student protest on the Austin campus had contributed to an exodus of talented senior faculty and a decline in that university's national prestige.¹⁹ To many, UTD represented a golden opportunity to start from scratch and put into practice reform ideas that would have met resistance at more established colleges. But it proved difficult to recruit a president with the requisite combination of administrative experience and, it was thought, prestigious scientific research background to come to Dallas to raise this "bare, slippery, and squalling baby" of a university. Robert Alberty, a chemist and dean of the Massachusetts Institute of Technology's School of Science, took a look but decided to stay at MIT.

Gordon J. F. MacDonald looked like the ideal candidate. He had earned his Ph.D. in geology at Harvard in 1954, and then served on the faculties at MIT and the University of California at UCLA and at Santa Barbara. He was a member of a small, highly influential, and prestigious group of science advisors to the U.S. Government known as "the JASONS." MacDonald also was an early advocate of environmental science and of the importance of understanding climate change. His professional interests and stature matched well UTD's leadership needs. And as if such cake needed icing, MacDonald also enjoyed the support of Dallas's civic and business establishment.

When officials from the UT System opened discussions with MacDonald about the UTD presidency, he was serving on President Nixon's recently established Council on Environmental Quality. He had visited both UT Austin and the UTD campus in recent months for scientific reasons as well as to offer his opinions about land use at the Richardson site. But there had been no explicit talk of the presidency. When the Regents made an offer in May, MacDonald accepted, and in September was named President-Designate. All agreed to keep the proceedings quiet. MacDonald was a busy man, and perhaps he had to tie up some loose ends before dealing with a public announcement.



Frank Erwin, legendary leader of the Board of Regents of The University of Texas System. Erwin was a strong proponent of bringing SCAS into the System, but many of his promises to UTD's flounders were thwarted by opposition in the Texas Legislature and the Texas Higher Education Coordinating Board.

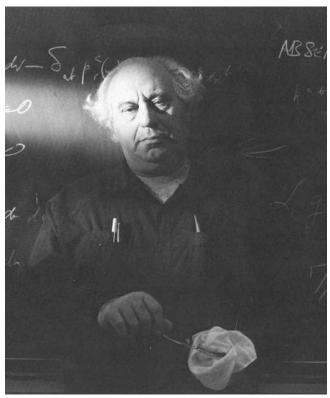
But when several months went by with little contact from MacDonald, the Regents began to have doubts. These crystallized as second thoughts, then as regret. When Frank Erwin heard that MacDonald had interviewed at another university, he suspected the applicant of using the UTD offer merely as a bargaining chip. The order thundered forth from Austin to withdraw the offer. MacDonald did not accept this turn of events quietly. Acting more like someone who had been fired than someone from whom an offer had been withdrawn, he threatened legal action. But he never sued, and the offer-or the firing-sank discreetly into the interstices of the UT System grapevine. MacDonald continued a distinguished career in science advising and consulting. If he appeared to care deeply about being fired, his zeal for the opportunity he had lost was otherwise never much in evidence.²⁰

Bryce Jordan's misgivings, on the other hand—if he had any—were expressed by his mother as she and Jordan's wife, Jonelle, drove with Jordan to survey the Richardson campus where he would soon be president. They turned off Campbell Road at a sign where peeling paint made it unclear whether something called SCAS or another thing called UTD lay ahead. They followed a dirt track toward the Founders Building. Dismayed by the desolate fields and the austerity of the building's utilitarian concrete slabs, the elder Mrs. Jordan exclaimed, "Bryce, what have they done to you?"²¹

Jordan was a UT Austin alumnus who had earned a doctorate in musicology at the University of North Carolina, then returned to his undergraduate alma mater to chair the music department. Moving into administration, he had served as interim president of UT from 1970-1971 at the time of enormous upheaval over Vietnam War protests, the Kent State University shootings, and the Regents' firing of John R. Silber, the controversial and ambitious dean of the College of Arts and Sciences. When the controversy subsided, Jordan had been offered, and accepted, the presidency of North Texas State University (later the University of North Texas) in Denton. In fact, he and Jonelle had gone so far as to choose the room colors in their new residence. They



Bryce Jordan was appointed President of UT Dallas in 1971. Before and after his presidency of UT Dallas, Jordan held key roles at UT Austin and in the UT System. His career culminated as president of Pennsylvania State University.



Ivor Robinson, founder of the Mathematics/Relativity Division, whose intellect and rhetorical power made him a key member of SCAS and UT Dallas until his retirement in 2000.

were figuring out where the swimming pool would be when Bryce got a call from UT System Chancellor Mickey LeMaistre telling him of the situation at UT Dallas. Would he kindly surrender the North Texas presidency, exit Denton, and respond to the System's pressing needs in Richardson?

Jordan hesitated. The North Texas job fitted him very well, he thought. But he was also a team player. He acceded to the Regents' request and met with the UTD search committee-Gifford K. Johnson, Stewart C. Fallis, a business executive now working for UTD, and nine prominent SCAS scientists, including committee chair Ivor Robinson.²² Toward the end of the interview, which had gone well enough, Jordan addressed the elephant in the room. "Why in the world," he asked, "would you scientists want this musicologist to be president of your university?" Chairman Robinson's answer stuck in Jordan's mind for the rest of his life. "Dr. Jordan, you don't know a thing about what we do, and we like it that way."23 Jordan let Robinson's Delphic declaration lie where it fell. He accepted the Regents' subsequent offer in March 1971 and in July came to UTD, relieving the acting Frank Johnson to become UTD's first president.

Jordan set out to develop what he called the "soft side" of the University—its arts and humanities and social sciences. (Some social scientists objected to the "hard" versus "soft" distinction between their work and that of the traditional sciences, but it persisted nonetheless.) This was more than a matter of personal inclination or background. Jordan believed that a university should be well-rounded in its pursuits. If UTD's scientific credentials were world-class, why shouldn't its social science, arts, and humanities offerings aim for the same level of excellence? He also held that UTD's funding would increasingly depend on expanding its undergraduate enrollment, and that the numbers in that regard clearly favored non-science majors.

Jordan actively supported a second effort still underway in Austin to make UTD a four-year school. Indeed, just ten days after his March 12 appointment as UTD president, Jordan testified before the Legislature's House State Affairs Committee that, in his estimation, upper-level colleges had not been particularly successful. Their low faculty-student ratios made them expensive to operate, and they often found it necessary to provide lower-level courses anyway for students who failed to meet prerequisites or who changed their majors after admission.²⁴ UTD's new president, then, was not certain that he would spend his entire term presiding over a solely upper-level institution. It even looked as though he would prefer not to. But no matter. Even after the state Senate's overstuffed calendar smothered the House's four-year bill, Jordan stayed the course in supporting the University's "soft" side along with the "hard" specialties for which it was more widely known, and in which he enjoyed expanding his own knowledge.

Jordan also supported the University's non-traditional emphasis on subject areas over traditional departments and disciplines, which higher education skeptics accused of stifling innovation and creativity. It ought to be easier than it usually was, they reasoned, for scholars from diverse backgrounds to get together to study issues of shared interest. But strict disciplinary boundaries and incentives worked against such cooperative efforts. UTD was structured, therefore, to encourage such work. On April 21, 1972, just two days before UTD's first accreditation site visit by the Southern Association of Colleges and Schools/Commission on Colleges (SACS/COC), the Coordinating Board approved UTD's academic plan for four new graduate-level degree programs, and for 23 bachelor's degree programs beginning in 1975. These would include a wide variety of subjects, from languages, geography, and history to nutrition, occupational therapy, physics, math, and pharmacy. All undergraduates would take a four-semester interdisciplinary seminar aimed at tying seemingly disparate areas together. Not all of the proposed programs got through the Coordinating Board. Pharmacy and a proposal for a law school were eventually dropped, as were dietetics and nutrition, occupational therapy, and German and Russian. But with a plan in place and a president and nascent staff at the helm, efforts centered on recruiting a faculty commensurate with UTD's high ambitions.

UTD Colors and Logos

Product marketing, branding, copyright, and intellectual property have become much more complicated in the half-century since the summer of 1971, when UTD President Bryce Jordan and Executive Assistant Donna Beth McCormick sat down to decide UTD's school colors and logo. For that matter, so has campus governance. No university president today would take unilateral action on a matter now seen as requiring input from multiple stakeholders and experts.

In 1971, Jordan received a letter from the University of California at Irvine, itself a new university only six years old, and admired the simplicity of the logo on the letterhead – U C I. He sketched out a similar design – U T D. As McCormick recalled in 2012, "Dr. Jordan, who had always been a bit of a doodler, hand-drew a box with the letters, 'U' and 'T' in it, then doodled another box with a 'D' in it, immediately to the right of the first." Said Jordan, "I wanted it to have the UT in it for sure—that's a prestigious pair of initials for the Dallas/Fort Worth area—and wanted to have a D there as well."

That left the colors. The UT System's were orange and white. But another color could be added as distinctive of UTD, so McCormick added green to Jordan's selection of orange and white. When the president asked why, she answered, "Because I like green." Horace Herron, a local advertising artist, drew up the logo known as "the bug." In December 1980, the UT Regents got around to approving the UTD logo, its choice of colors, and, while they were at it, the "Comets" as a name for the University's teams. Further decisions about the mascot would await another day, and a far longer process.





Bryce Jordan (right) with, from left, Mary Ann Campbell (Jordan's secretary), Donna Beth McCormick, and Jonelle Jordan.

Building the Campus, Hiring New Faculty

The expansion of the campus from the original Founders Building was carefully planned, ironically in the light of history, for an enrollment of only a few thousand students. In preparation for the arrival of junior- and senior-level undergraduates, construction crews kept the earth moving. In February 1973, the UT Regents gave a luncheon to honor UTD founders Jonsson, Green, and McDermott, and announced the naming of three new UTD buildings then under construction—the J. Erik Jonsson Academic Center, the Eugene McDermott Library, and the Cecil H. Green Hall.

Concurrently, work was under way on a new chemistry building, named in honor of Lloyd Berkner, a small building for physical instruction, a lecture hall converted into a theater, and Hoblitzelle Hall. Hoblitzelle Hall, was named in honor of the movie theater executive and noted philanthropist Karl Hoblitzelle. Funds from the Dallas-based Hoblitzelle Foundation had created the Texas Research Foundation (TRF) in 1946 to support agricultural research, and when TRF dissolved in 1972, it donated nearly 300 acres to the new University of Texas at Dallas. In the 1980s, UTD sold portions of this land to provide funds for capital construction projects, including the first engineering building.

Conventional construction at an unconventional research facility sometimes had unusual repercussions. As bulldozers roared near the Founders Building, paleontology doctoral student Charles Smith was forced to transfer his samples of coccoliths (calcareous algae) from the campus lab to a makeshift "kitchen lab" in his apartment to avoid contamination by similar fossils that the construction stirred up from the chalky ground.²⁵ At the same time, one thousand miles northwest of Dallas, scientists were trying not to move the earth but to keep it as still as possible. UTD physicist Ervin J. Fenyves and others devised an ingenious method for detecting antineutrinos, or antimatter, passing through the Earth following the birth of a neutron star near the center of the Milky Way galaxy. They placed an array of 500-gallon water tanks 4,850 feet below ground in an abandoned gold mine shaft near Lead, South Dakota, arranged a series of photomultipliers inside them, and waited for arriving antineutrinos to strike



Bryce Jordan (R) inspecting a table-top model of the nascent UT Dallas campus, and the proposed McDermott Library, with Margaret and Eugene McDermott, circa 1973. The library opened in 1974.



UTD's core campus in the early 1970s, viewed from the southwest. A parking lot occupies the site of the current Student Union Building, between Founders Hall (L) and McDermott Library (R).

hydrogen nuclei in the water and produce tiny bursts of light. On January 4, 1974, the detectors recorded several such bursts, each lasting only a millionth of a second but providing tangible evidence of the far-off star's birth.²⁶

Back on campus, Fenyves's colleagues Carl B. Collins and Austin Cunningham neared the start-up of the world's first nitrogen ion laser in the University's High Energy Laser Laboratory, aiming ultimately to achieve the elusive goal of nuclear fusion.²⁷ And Ivor Robinson joined Fenyves in organizing the seventh meeting of the acclaimed Texas Symposium on Relativistic Astrophysics, in downtown Dallas.²⁸ Fenyves was among several gifted scientists who had emigrated from Europe and been recruited for UTD. Istvan Ozsváth, a fellow Hungarian, had been especially encouraging to him, as Ivor Robinson had been to Ozsváth several years earlier.

The appointment of Nobel Prize winner Polykarp Kusch in June 1972 burnished UTD's reputation in the scientific community—a legacy of SCAS and boosted the University's credibility as it sought to expand its offerings and recruit talented faculty. Kusch and Willis Lamb had shared the Physics prize in 1955. Kusch was a dynamic and popular teacher to audiences of all ages and backgrounds. He also held strong beliefs about the importance of spreading scientific knowledge throughout society. He had spent most of his career at Columbia University, where he had joined the Physics faculty in 1946 and conducted his prize-winning research in measuring properties of the electron. He had also served as vice president and dean of faculties (1969-1970) and executive vice president and provost (1970-1971) at Columbia.

The allure of colleagues such as Ivor Robinson, Istvan Ozsváth, Wolfgang Rindler, Francis Johnson, William Hanson, John Hoffman and other former SCAS scientists helped pull Kusch to the American Southwest, then regarded by many academics as frontier territory. UTD's novel interdisciplinary model also appealed to him. But Kusch was also feeling a push. Columbia University had experienced some of the most violent and disruptive of the campus protests in the late 1960s. In April 1968, in the days coincidentally surrounding the assassination of Martin Luther King, Jr., students and some non-students protested the Vietnam War, racial discrimination, and Columbia's involvement with military-related research. They occupied several buildings, including the library and the president's office. One dean was briefly held hostage. After several days, police forcibly cleared the buildings.

Nearly 150 persons were injured, including 12 police officers.

As a senior administrator, Kusch had been at the center of the storm. A passionate advocate of reason, he had concluded "it was not possible to take a reasoned view of the future when people were sitting in buildings."²⁹ David Truman, Kusch's predecessor as provost, noted how damaging the disruptions had been to the "ideal of the community of scholars," and decamped to the presidency of Mount Holyoke College.³⁰ Kusch found UTD's hushed, middle-of-theprairie ambience a welcome change from the turmoil on Morningside Heights.

Among other early faculty hires was Howard Van Zandt, a senior executive with the International Telephone and Telegraph Company who had lived for 27 years in Japan (his father was chief engineer for a cement company there) and became an expert on business, management, and trade practices with that country. Eager to engage his scholarly interests more fully, Van Zandt retired from IT&T to help



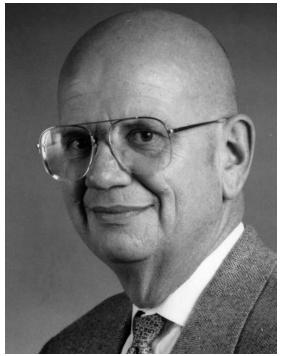
Nobel Prize winner Polykarp Kusch (Physics, 1955, with Willis Lamb) joined UTD's faculty in June 1972. His commitments to both teaching and research well expressed the University's ideals of scholarship.

UTD develop its new international management program. His experience and prestige (Japan had awarded him the Order of the Rising Sun, third class, an almost unprecedented honor for a Westerner) gave a boost to the new university's graduate program in management and administration.

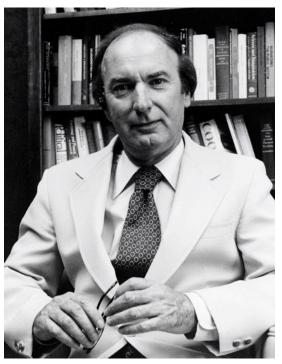
That program–Management Science–gained formal leadership when Raymond Lutz joined in 1973, after having successfully launched a National Science Foundation-funded program in Industrial Engineering at the University of Oklahoma. Lutz was among the first of incoming faculty to take note of UTD's growing pains. He observed "the existing entrenched culture" among the former SCAS researchers who constituted the Academic Senate's Committee on Qualifications (CQ), the body charged with approving new faculty. Although these senior scientists knew little about hiring outside their own fields, Lutz was able to convince them to approve hiring three assistant professors along with a cadre of lecturers from the local business community.

The pace of hiring quickened in summer 1974, a year before the first undergraduates would arrive, when Alexander L. Clark became UTD's new Vice President for Academic Affairs and Dean of Faculties. Clark replaced Lee H. Smith, who left to become president of Southwest Texas State University.³¹ Clark had been Staff Associate and Acting Executive Secretary of the Division of Behavioral Sciences, National Academy of Sciences, National Research Council, in Washington, D.C., before moving to UT Austin. He was acting Dean of the LBJ School of Public Affairs at Austin when the UTD position became available. Clark quickly turned his attention to the task of recruiting faculty for the Fall 1975 Semester.

Time was short, but the mid-1970s was a buyers' market for universities. "There were 5,000 faculty applicants for 130 positions," Clark recalled. Aided by Robert Plant Armstrong, an anthropologist hired the previous year, Clark made three complete circuits around six cities in the U.S. to cover as wide a territory as possible, conducting about 550 interviews in 1975 alone to net 130 new faculty members.³² The trek was especially arduous



Raymond P. Lutz came to UTD in 1973 to help organize the School of Management and was named its first dean in 1975. Over the next 25 years he also headed SOM's Graduate Program in Management Science and served as the School's Executive Dean of Graduate Studies and Research. He retired in 2000.



Alex Clark became vice president for academic affairs in 1973 and took the lead in the massive effort of recruiting faculty for the opening of undergraduate instruction in 1975. His influence upon the culture and essence of UT Dallas, from then until his retirement in 1991 as vice president for academic affairs, was immense.

for Armstrong, who had an aversion to airplanes following a crash years earlier in Southeast Asia.³³ "We ended up hiring 82 percent of our first choices," Clark noted with satisfaction.³⁴ But the Committee on Qualifications had not made it easy for him. "We were on very friendly terms with Alex," CQ Chair Wolfgang Rindler recalled, "except once a year he got very angry with me." The occasion was the annual meeting of the Academic Senate when all committees made their reports. Rindler would recount the number of faculty the CQ approved and the number it did not, and then report the number of decisions either way that Alex Clark had vetoed. This greatly embarrassed the Vice President for Academic Affairs, who did not wish to be exposed as overriding the wishes of the faculty.

After one such occasion, Clark invited Rindler to a large dinner party at a nearby country club. He seated the professor on his left and Mrs. Rindler on his right, causing Wolfgang to wonder what was going on. During the dinner Clark rose, tapped his glass for attention, and announced the reason for the dinner: "We want to thank Wolfgang Rindler for his many years as Chairman of the Committee on Qualifications." Well, Rindler thought, "isn't that a gracious thing to do!" Then Clark completed his toast. "And we want to express our regrets that he has now resigned." That was news to the chairman, who was genially philosophical about it. "Some bad things that happen to you are arranged in such a clever way," he reflected later, "that you can't help but respect the effort." He remained on good terms with Clark.³⁵ Stan Rupert sympathized with Clark's desire to make quick hiring decisions as the fall semester of 1975 approached, but there was a downside in alienating the faculty by marginalizing them as decision makers. The issue of faculty governance-whether faculty were to be merely consulted on academic matters or would in fact make important strategic decisions-was among many matters to be settled in this new and still forming community of scholars.

Another was the organization of the university itself. Clark saw administrative responsibility for every one of UTD's multiplying programs converging directly on his and President Jordan's offices. Before things got to be unwieldy and unmanageable, Clark and Jordan, with Regents' approval, established six separate schools, each led by a dean, into which they placed all the University's programs—Arts and Humanities (Regina Kyle), Human Development (Aram Glorig), Management and Administration (Raymond Lutz), Social Sciences (Alexander Clark, temporarily; soon to be replaced by William J. Hanna), Natural Sciences and Mathematics (Stan Rupert), and General Studies (Carolyn Lipshy Galerstein).

This School-Dean schema absorbed the previous College-Master system, still intact as an ideal, which had guided the SCAS-UTD transition. Under that system, faculty would affiliate with various Colleges as suited their interests, not just their degree disciplines, and would apportion their time accordingly for pay purposes. Such freedom from an exclusive financial dependence on any single college or program was designed to facilitate cross-disciplinary collaboration. The College-Master system also allegedly fostered closer ties between faculty and students. Early UTD planners' disaffection with traditional university patterns was evident in references to the "severe depersonalization" that undergraduates were said to experience in large classes taught by remote professors who would rather be doing research. At the graduate level, too, "the University will avoid self-perpetuating departmental curricula in which Ph.D.s are trained to train more Ph.D.s, to train more Ph.D.s."36

New members of the UTD community welcomed the meritocratic egalitarianism the school had acquired from SCAS. The University's first ID cards, for instance, did not specify whether the bearer was a student or a faculty member.³⁷ All were considered scholars. At SCAS, and now at UTD, there would be no stuffiness, pomp, or pretension. Deference there was, as any scholar knew, but it went to knowledge and accomplishment, not rank. In the School-Dean system Alex Clark and Bryce Jordan strove to reconcile these ideals to the complex and imperfect realities of on-theground, academic management. Yet the core notion remained—to maximize scholars' creative potential by giving them as much intellectual freedom as possible while imposing minimal bureaucratic requirements. UTD's aims were ideal, to be sure. But as poet Robert Browning had once put it, "A man's reach should exceed his grasp, or what's a heaven for?"

UTD's grasp was cosmopolitan as well as egalitarian. In October 1975, when the recently formed Committee of Concerned Scientists mobilized to protest the treatment of dissident scientists in the Soviet Union, 16 faculty members from UTD's School of Natural Sciences and Mathematics signed a letter to the Soviet Academy of Science asking that Academy to take up the cause of its own members who had been expelled for voicing an intention to emigrate to Israel, or for speaking out for human rights. Among the signers were Polykarp Kusch, William B. Hanson, Harold Werbin, Royston Clowes,



Carolyn Lipshy Galerstein served as the first dean of the innovative School of General Studies, later renamed the School of Interdisciplinary Studies, from 1975 until her death in 1988. The Galerstein Women's Center, later renamed the Galerstein Gender Center, was founded in fall 1996 and named in her honor.

Wolfgang Rindler, and Ivor Robinson, all internationally recognized scientists.³⁸

Traces of the College-Master system survived, with masters evolving into the equivalent of associate deans for undergraduate studies. The colleges lingered on, some with more energy than others, as venues for shared interests rather than as core administrative or curricular entities. Dean Galerstein, for instance, was Master of College IX, "Maturity College," which was organized in anticipation of the large number of women expected to enroll at UTD to complete degrees set aside earlier for family or other reasons. Galerstein, who had been drawn to UTD's "non-traditional" programs for "non-traditional" students, planned to teach a continuing education course in fall 1975 titled, "How to Go to College When You're Over 25."³⁹ Numerous supportive offerings in Maturity College such as counseling for parents of adolescents, for students going through a divorce, or for single parents, bespoke an academic environment quite different from that of the scientists, all male, who had migrated from SCAS to UTD's School of Natural Sciences and Mathematics (NSM).⁴⁰ All sought community among fellow scholars and the shared advancement of knowledge, but it would be no surprise when, over the next two decades and beyond, UTD experienced jostling among its members-students, faculty, and administration-for recognition, inclusion, and power.

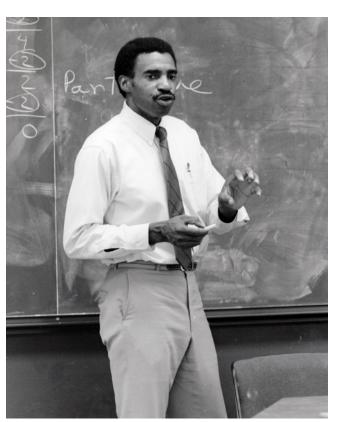
A flurry of faculty appointments in 1975 included Joan Chandler (American Studies) from Amherst College, Murray Leaf (Anthropology) from UCLA, Robert Xavier Rodriguez (Music) from the University of Southern California, Rainer Schulte (Comparative Literature) from Ohio University, George Fair (Special Education) from the University of Pittsburgh, Victor Worsfold (Philosophy) from Harvard, and Lawrence Redlinger (Sociology) from the University of Michigan. Redlinger, a sociologist who had known Alex Clark at the National Science Foundation and had also met Bryce Jordan in Austin, was on his way back from the Texas border in 1975 where he had been studying drug cartels. He had heard about a job opening at UTD and paid a visit. By



Lawrence Redlinger joined the faculty in 1975 and has filled many key roles in the UT Dallas administration.

then the dirt track had been improved. "They picked me up and drove me up this two-lane, blacktop road," he recalled. "The very first thing I asked Bryce Jordan was, 'Where is the University?' He said, 'You see those cranes? They're building it.' To which I said, 'You've got to be kidding.''' Nevertheless, Redlinger signed on, and in three years earned UTD's Teacher of the Year award.⁴¹

By mid-August 1975, the UTD faculty roster numbered 123, with more aspiring faculty in the pipeline. Additionally, a month later, the trustees of the Callier Center for Communication Disorders in downtown Dallas, near Southwestern Medical School, cemented a prior affiliation with UTD by transferring its assets and personnel to the University. Established in 1963, Callier was fast becoming one of the nation's leading centers for research and treatment of communication disorders. It proved a major resource for new health-related master's and Ph.D. programs at UTD's School of Human Development. Callier's joining the University coincided with a major donation by the



George Fair joined UTD in 1975 and became dean of the School of Interdisciplinary Studies in 1994. He also served as Vice President for Diversity and Community Engagement.

Excellence in Education Foundation–450 acres of land worth an estimated \$21M–just north of the core Richardson campus.

Although McDermott Library was still unfinished, staff was filling its stacks with donations from sundry sources: a 5,000-volume collection on American art; the 40,000-volume undergraduate library of short-lived Mackinac College in Michigan; a 13,000-volume undergraduate liberal arts collection from St. Bonifacius, a former Jesuit college in Minnesota, courtesy of a \$65,000 gift from the Hoblitzelle Foundation; 30,000 books on Latin America from Edwin M. Shook, through a gift by Cecil and Ida Green; and a 10,000-volume collection of German literature from recently deceased Professor Helmut Rehder of UT Austin. Hundreds of books in the Rehder collection had been published in the eighteenth century, many as early as the 1600s.⁴² Soon, McDermott Library also would house various special collections in philately, botany, rare books, and aviation, the last being transferred to UTD from UT Austin in fall 1977. These were of

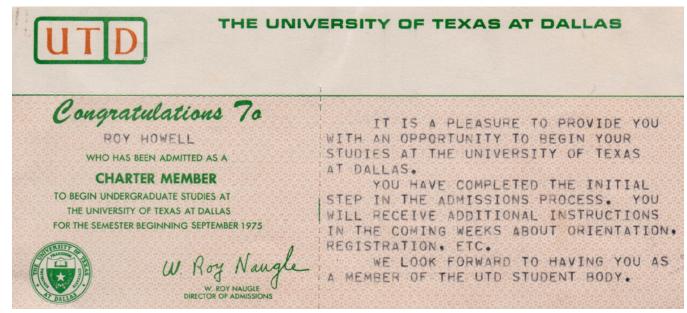
considerable value to specialists and brought distinction to the library but were not otherwise linked to any specified University mission.

On April 29, 1975, University of Toronto scholar Marshall McLuhan stood on temporary carpeting in McDermott Library to deliver an address on "The Fourth World: Electronic Man." McLuhan's studies of modern media and their effects had reached wide readership in works such as Understanding Media: The Extensions of Man (1964), and The Medium is the Massage (1967). At UTD he briefed listeners about the disorienting and unintended effects of certain electronic media. Information moving at the speed of light, he averred intriguingly, "introduces situations in which effects are seen and planned before causes are apparent." McLuhan tailored a special warning to his audience, sitting stoically in folding chairs: "Beware the computer in education. It is merciless with regard to teaching and learning."43

Enter the Undergraduates: Juniors and Seniors Only

Unfazed by Professor McLuhan's cautions and unaided by computers, UTD personnel opened the doors for registration on September 4th, 1975. Lines were long, and the weather was hot, but at the end of the day, 3,333 students had enrolled–1,838 undergrads and 1,495 graduate students. Slightly more men than women enrolled, with the typical student being about 26 years old, married, and employed. Most had transferred from local community colleges, with a sizeable minority coming from four-year schools in Texas. As expected, the School of Management and Administration drew the most students–29 percent of the total, with 544 undergraduates and 418 graduate students. Human Development, Social Sciences, Natural Sciences & Mathematics, and General Studies divided the remainder. The School of Arts & Humanities was not yet ready to accept students.

The first day of classes had its share of glitches. Dean Sherry and Bill Thompson were supposed to conduct a chemistry lab in brand-new Berkner Hall, but the necessary glassware had not yet arrived. In fact, the stockroom was still mostly empty. Only a few test tubes were available. Sherry and Thompson improvised, instructing the students to bring an egg to the lab class. As Sherry remembered, "The very first experiment was to isolate cholesterol from egg yolk, crystallize it, and measure some of it using NMR (nuclear magnetic resonance) spectroscopy. It was kind of fun because the students didn't realize how much cholesterol there is in an egg yolk."



Admission notice for the first undergraduate students, 1975.

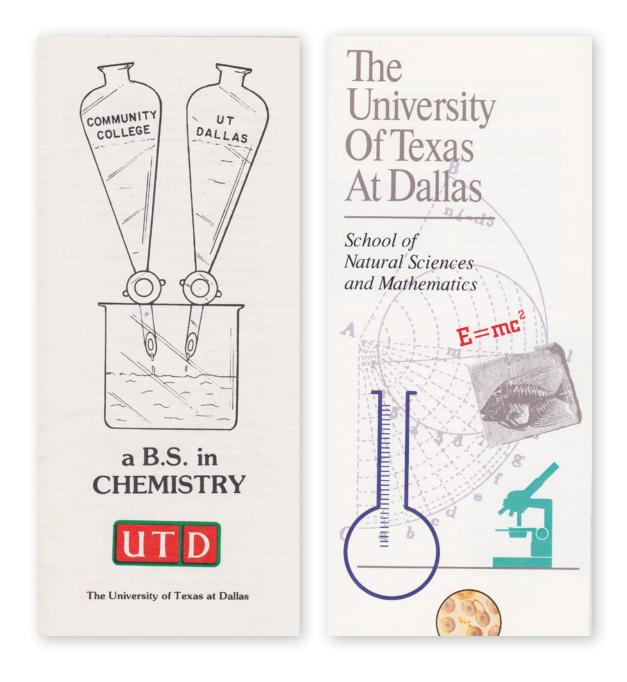




Students registering for classes in UTD's early years often faced long lines (L). A multi-tiered signpost (R) instructed applicants to "follow the signs inside."

Eventually all the lab stock and equipment arrived. "But," Sherry recalled with a laugh, "that first year must have been traumatic for the students. I know it was traumatic for the faculty."44 Other problems were vanishingly minor in hindsight but vexing at the moment. Stan Rupert found himself in front of a brand-new blackboard on the first day of class with no chalk anywhere in the building. Teachers could not locate the rooms they were supposed to be in. Many did not know or recognize each other yet. For SCAS "old timers" like Rupert, there were "teachers of French, English, and Spanish, and the theater people, and this 'n that that we had never had on campus before. And we began to try to make this thing look more like a university. It worked, as all things do, in time. Why, we got it together."45

At the end of that first academic year, in May 1976, President Jordan presided over a meeting on UTD's campus of college students, faculty, and UT System administrators to undertake "one of the most searching self-evaluations of the System in modern times."46 The effort was aimed at the larger UT System, not just UT Dallas, but the committee's final report in September, by five UT presidents with Jordan as chair, included observations on the new Richardson campus. As if anticipating arguments yet to come that an adequate university was to an excellent university as a Chevrolet was to a Cadillac-both got you where you needed to go but one did it more cheaply-the report pointed out that "the achievement of educational excellence is in the long run an economy and not a luxury." Universities were not factories. They were neither Chevrolets nor Cadillacs because they were not automobiles and could not be understood through such simple analogies. A university's success could not usefully be measured in terms of tangible "inputs," "outputs," or "products." To apply business models to universities did not clarify matters but simply filled a vacuum created by lack of familiarity.



This reminder was important because the bill to taxpayers was fast coming due. Without better preparation, many citizens were unlikely to appreciate on its face the value of public investment in higher education. Accordingly, they or their representatives would demand accountability in whatever terms they understood. Educators would need to take the initiative. If they did not, argued Chancellor Howard R. Bowen of Claremont University Center, "others, without professional qualifications and without deep understanding of the educational process will take over the task of evaluation and will import biases and simplistic approaches leading to distortion."⁴⁷ Texas, especially, would have some explaining to do, Jordan's committee noted. Enrollment at state colleges and universities had grown from 271,000 students in 1968 to 662,000 in 1975–an increase three times the national rate. Texas's metropolitan areas were growing at twice the national rate; its business climate was regarded as highly favorable; it had very low tuition rates, ranking 48th nationally; it ranked third in population in the United States; and 98 percent of its people lived within 50 miles of some institution of higher learning. Higher education was not, as some officials claimed, "bankrupting the state." On the contrary, it was key to the state's future growth and development. As Jonsson, Green, McDermott and many others had been saying since the 1950s, Texas's future no longer rested in agriculture, gas, and oil, but in "ideas," which universities were especially designed to generate and nurture.⁴⁸

The UT System self-study anticipated and addressed another long-lingering perception-that universities should primarily teach useful job skills. To some laypersons, research was a kind of faculty self-indulgence, a way for professors to avoid teaching students, which is what many citizens assumed they had been mostly hired to do. The self-study committee pointed out that even practical problem solving was more effective in tandem with basic, open-ended research than when conducted as an isolated activity. But even setting aside practical benefits to society, graduate education itself would be unsustainable without research, and new technologies would not readily evolve without it. Antipathy to research, especially basic research, would never cease completely in a pragmatic society, but thoughtful advocates of higher learning were obliged to push back whenever they could. In the committee's report, Jordan summarized UTD's current work as his best means of convincing the public of its value:

"[UTD] Professors are conducting research to create instruments for use on future space probes, to develop studies of new mathematical processes, and to identify emotional insecurity in one-year-old children. Among the numerous specific subjects being examined are the following examples: the accounting problems of multinational corporations, procedures for evaluating potential groundwater contamination, instruction in waste treatment management, the effects of deafness on the central auditory function, the significance of chemical contaminants in urban sediments, the recovery of human cells from ultraviolet damage, evaluation of hazardous chemicals in the Great Lakes, electron microscopy of DNA of cells and viruses, investigation of the daytime lunar atmosphere, and the regulation of bacterial growth."49

Jordan, of course, was determined to encourage the arts as well as the sciences. He had no greater allies in this endeavor than the university's scientists. In September 1971, just two months after Jordan's official start as president, UTD's fledgling School of Arts and Humanities invited Southern Methodist University's Harris Crohn to speak on "Listeners' Problems with Contemporary Music." The lecture was the first in a series for Arts and Humanities. Characteristic of UTD's renaissance culture, the series was organized by a committee from NSM chaired by biologist Harold Werbin and including fellow biologist Stan Rupert and physicist Donald Rapp.⁵⁰

In fall 1976, when Jordan's committee issued its report on the UT System, Texas sculptor Jim Love installed a huge, 10-foot-by-10-foot piece titled, "Jack," an enlarged facsimile of the six-pronged game piece, near the University Theater and the Jonsson Center. Margaret McDermott, whose husband and UTD founder Eugene had passed away on August 23, 1973, purchased the sculpture for the university. It was, inevitably and in short order, dubbed, "Love Jack."⁵¹ A July 1978 exhibit in McDermott Library of photographs, drawings, and silk screens by senior Marti Dees titled "Looking



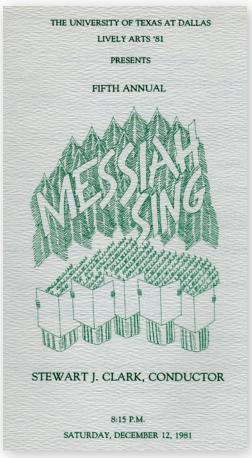
The Love Jack is a campus landmark, although many do not realize that Love is the name of the artist, not just a whimsy.

for Space" featured greatly enlarged microscope images of rock samples. It would not be the last such exhibit; indeed, the University was on course one day to take interdisciplinary work in the arts and sciences to entirely new levels of collaboration.

December 1977 brought the University's first Annual Messiah Sing, which started as an informal and nostalgic reminiscence by professors such as Gavin Hambly, Joan Chandler, and Victor Worsfold, who had spent time in English universities. The Richardson community was invited to attend and participate. The Messiah Sing, later renamed the Holiday Sing, was repeated every year afterwards in the University Theater, becoming one of UTD's happiest and most enduring traditions. In a few months, construction of the 26,000 square-foot Visual Arts Center would be completed, providing another venue for the arts on campus and in the community. The Center opened with a five-hour celebration of eclectic, multimedia presentations on September 30, 1978. The McDermott Library also would be open for use by Richardson residents who paid a small fee for a library card, thus encouraging their involvement with the University.⁵² Additionally that fall, Dennis Kratz, a Classics professor from Ohio University, joined the faculty. Kratz would help shape and invigorate UTD's Arts & Humanities offerings for decades as professor and then Dean of A&H.

Student life on campus, always difficult to foster in a commuter school, got some support from construction of a Student Union facility, funded by student fees, which the Regents approved in April 1978. After much planning and further approvals, construction began in summer 1979. Regents also approved the Anson L. Clark Memorial Fund to support summer research internships for high school students as well as a guest lecture series on campus. Clark had been a physician and engineer whose family, through a foundation established after his death, supported a wide variety of educational activities in Texas. SCAS had received Clark Foundation support in 1968. Now, official Regent approval carried it forward to UTD.⁵³

Early in 1979, the School of Arts & Humanities' Rainer Schulte received a \$50,000 National



The amateur-driven Messiah Sing, later the Holiday Sing, has been a revered institution since the 1970s.



With the arrival of undergraduates, a vigorous program in the visual arts emerged.



Cecil H. Green and UT System Regent Beryl Buckley Milburn cut the ribbon during the Student Union dedication, April 23, 1982.

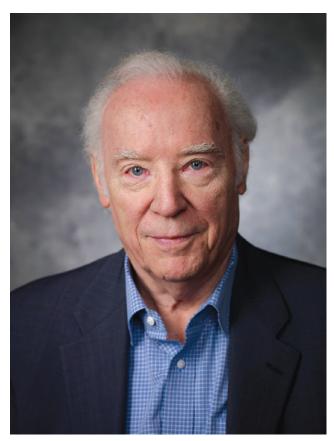
Endowment for the Humanities grant to investigate "the art of translation in the interdisciplinary curriculum." The previous year Schulte, with A. Leslie Willson, had founded the American Literary Translators Association (ALTA) "to bridge cultural communication and understanding among countries and languages through the art and craft of literary translation." The grant helped Schulte, Dennis Kratz, and others in the School's literature and creative writing programs to make UTD a national center for translation studies, an important field of scholarship often overlooked in traditional academic settings, while ALTA proved a lasting success as the premier professional association in the literary translation field.⁵⁴

Schulte remembered his extended 1975 job interview with Bryce Jordan, Robert Plant Armstrong, and Alex Clark in which he had laid out his plans for translation studies. Later, after he had befriended Clark, he asked, "Alex, you knew nothing about the whole area of translation, and you knew nothing about me. Why would you have supported me?" Clark replied he had learned something from his mentor—"If you have a younger faculty member with a vision, then you just go with it."⁵⁵

Schulte's journey to UTD was more exotic than many. As a seven-year-old boy in Germany he was caught in the advance of American troops in early May 1945. The Americans commandeered his house and sent him, his mother, and his 12-yearold brother out onto the streets. Along with others, they found their way to a shelter, which through some error soon came under attack from the Allies. The shelter's occupants stitched together their handkerchiefs to make a white flag and fixed it to a pole. Schulte's older brother grabbed the flag and walked slowly out of the shelter toward a hill where the fire was coming from. With the flag held high, he had progressed just a few feet when bullets started whizzing past his head. He lost his footing but managed to keep the pole upright. "We are women and children!" came shouts from the shelter. The firing stopped. Soon it stopped officially, on May 8, VE Day. Schulte "grew up with the American soldiers," as he recalled it. These memories rekindled later when he made his way to the United States for graduate education and a distinguished academic career.56

In a different arena of scholarship, at NASA's Ames Research Center in Mountain View, California, NSM's John Hoffman and R. Richard Hodges were studying computer printouts from the mass spectrometer they had designed at UTD and that NASA had sent to probe the scorching Venusian atmosphere. The instrument survived the heat and the five-year journey and was now sending back prized data. Hoffman and Hodges took the printouts back to campus and, using a back-up spectrometer, began what would be a year's worth of tests.⁵⁷

In 1979, UTD's expertise was on public display in Washington, D.C. when faculty members Stan Rupert and Frank Johnson served on a prestigious, 13-member National Research Council committee charged with reviewing research on the effect of chlorofluorocarbons, such as those in wide commercial use as refrigerants, on the Earth's ozone layer. The assessment of this group of scientists was



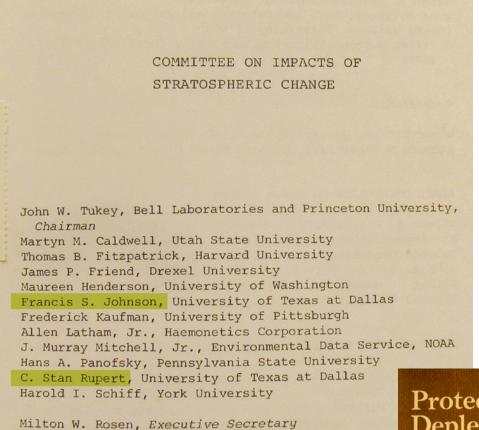
Rainer Schulte, one of the faculty hired in 1975 who already had significant academic careers. In 1978 he co-founded the American Literary Translators Association and the journal Translation Review, shown here in its 100th issue (2018). It is now the dominant medium for scholarship in literary translation. In 1980 Schulte also formed the Center for Translation Studies and Intercultural Communication.



crucial in shaping policy, enlisting corporate support in an area of vital public interest, and ultimately placing sharp limits on the use of chlorofluorocarbons. UTD was a small university, but its scientists comprised 15 percent of the NRC's committee membership. UTD was the only university with more than one member.⁵⁸ "It wasn't a big deal," Rupert demurred, "but somebody knew the University of Texas at Dallas!"⁵⁹

Schulte and Kratz, Hoffman and Hodges, and Rupert and Johnson represented a wide range of scholarship. Their peers and appreciative laymen valued them. But they understood well the urgency of enlisting public support for research in a consumer society where the need for another cereal or shampoo sometimes seemed more evident than the need for more knowledge. Martin Katzman, head of UTD's program in Political Economy, had perhaps an easier task in that regard, as his study of how federal funds could best be distributed in the Dallas area—to neighborhoods or individuals rather than in lump sums to cities, he concluded—was on its way to offices in the Carter Administration that were preparing a report on urban growth.⁶⁰

In May 1979, Paul Gaddis replaced Ray Lutz as dean of the School of Management and Administration. Gaddis had held executive positions at Westinghouse Electric Corporation prior to his most recent position at the University of Pennsylvania's Wharton School of Business. A graduate of the U.S. Naval Academy, he had earned master's degrees at Rensselaer Polytechnic Institute and MIT, where he had been a Sloan Fellow. After Gaddis's arrival, Lutz took over from Frank Johnson as Executive Dean for Graduate Studies. Johnson would be busy enough, as he had



The stature of the SCAS/UT Dallas faculty such as Frank Johnson and Stan Rupert is evidenced by their participation in national committees formed to address matters of important scientific concern. Protection against Depletion of Stratospheric Ozone by Chlorofluorocarbons

just been named assistant director of the National Science Foundation, pending U.S. Senate confirmation in October, and would be on leave from the university.

As Johnson was departing, UTD looked forward to the arrival of physicist Cyrus "Cy" Cantrell III from the Los Alamos National Laboratory. Cantrell had earned his Ph.D. in physics at Princeton, and then taught at Swarthmore College and Université Paris Nord before going to Los Alamos. He believed he was coming to UTD to start an applied physics program. He would soon learn, though, that there were other things planned for him. Cecil Green, Erik Jonsson, and Texas Instruments' Jack Kilby, who years later would be awarded the Nobel Prize (Physics, 2000) for his development of the integrated circuit, wanted to start an engineering school at UTD. In fact, they had wanted one from the beginning. That was applied physics, in a sense, but also a very different proposition. They placed it before Cantrell, who agreed to lend his support.

Course Corrections

UTD was still a few years away from its tenth anniversary and was anticipating its next accreditation visit when it undertook a formal self-study in 1975-1976. The School of Social Sciences' Murray Leaf was the committee's executive director, assisted by Wolfgang Rindler and Dmitri Lang, an electron microscopist. The committee made several recommendations regarding university governance, most notably to adopt the model used by the University of California system, which Leaf knew from his years at UCLA. In this model, unlike those in place at other public universities in Texas, the Academic Senate

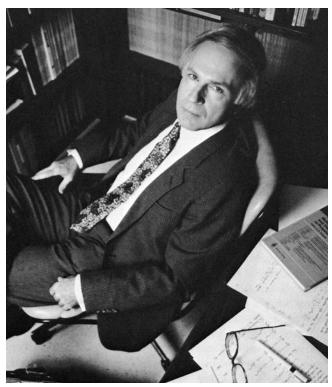
served not just as an "advisory" body of the faculty to the administration but as a major policy maker concerning core academic matters such as faculty hiring and firings, the establishing of new programs and courses, granting tenure, and settling faculty grievances. Bryce Jordan accepted this model with the proviso that the University president serve as the chair of the faculty Senate. UTD was small enough, he reasoned, that the close communication that this arrangement fostered between the faculty and the chief executive would serve the institution well. Many years later, Leaf would validate Jordan's judgment. In his view the system had worked well and could serve as an example to other public universities in Texas.⁶¹

The self-study committee reevaluated the University's initial aspirations for "greatness" as well as its assumptions about interdisciplinarity and about the structure translating traditional departments into schools, majors into programs, and colleges into venues for coalescing communities of common interest. The School/Program model seemed to be working; the college portion, however, fell short. As originally conceived by SCAS faculty, the colleges would have "rough organizational parallels to problem-oriented research teams, only concerned with a pedagogical rather than a research mission. [They] have not turned out to be appropriate vehicles for this idea," the committee observed.⁶² The college element of the organization would prove increasingly vestigial as the School/Program structure proved adequate for the institution's needs.

The committee held that the skills and attitudes of faculty were key to UTD's future success. If the university were to continue toward greatness, it would need a faculty committed to research and teaching at both undergraduate and graduate levels. It would not do to divide the faculty into an essentially non-research group focused on teaching undergraduates and a research-oriented group clustered in graduate programs. All faculty, in line with the example set by Polykarp Kusch, would commit to the ideal of excellent teaching and research. UTD's lack of residences



Murray Leaf devoted much of his energies over many years to the functioning of the Academic Senate and to the principles of shared governance of American universities.



Cy Cantrell played important roles in physics and engineering education and research, as well as in faculty governance activities.

for students impeded these aims, however, if only because students who otherwise would be working with professors or in labs and libraries would be spending some of that time commuting. Given the scarcity of affordable rental housing in surrounding Richardson, commuting times were long. Additionally, some courses would have to be offered in the evenings, creating planning and other logistical challenges for faculty.⁶³

In that vein, a survey that Leaf conducted for the School of Social Sciences in 1977-1978 revealed that classes scheduled in a twice-per-week, Tuesday and Thursday, pattern had 50 percent more enrollment than those with a three-times-perweek, Monday-Wednesday-Friday, schedule. The reason was apparent: most students had jobs and were trying to minimize the number of trips they had to make to campus. They were not trying to avoid the university; indeed, they were trying to make the most of their time on campus. But they were also members of other communities (work and family, principally) that competed for their attention. UTD would have to adjust. The School of Social Sciences revised its offerings to fit the twice-per-week pattern where possible. That approach held for nearly 20 years, yielding regular increases in enrollment each semester for that School.⁶⁴

At UTD's ten-year mark, President Jordan looked toward the coming decade and saw continued improvement in the university's reputation; enrollment rising in "fits and starts;" more construction, including some graduate student residences; and perhaps some increase in research funding and other financial support. This was realistic, and a refreshing departure from the puff and pipe dreams sometimes voiced on such occasions.⁶⁵ UTD leaders from Jordan onward would learn how to gently check overly high expectations while simultaneously stoking necessary enthusiasm. In ways larger than its founders might have imagined, UTD would be a great experiment in leadership and management, as well as, perhaps, a great research university.

With an enrollment of 5,400 and growing, UTD was still finding its footing in the UT System, let alone the nation and the world. Its pursuit of a guiding vision might accelerate in coming years; on the other hand, the march might slow to a merely competent plod, adequately but not brilliantly illumined. Fueled by the excitement of new beginnings, but burdened with externally imposed restrictions and the prospect of a long haul, UTD would discover whether the challenges would strengthen—or weaken—its resolve and ambitions.

CHAPTER 2 The Community Widens (1980-1988)

hile UTD accommodated to its founding restrictions, private supporters of the original plan persisted in trying to widen its mission and create an engineering school. This anomaly–the University adapting to its apparent destiny as an "upper level" commuter school while forces outside the campus worked for change– paralleled a growing tension on campus between those enamored of the status quo and those who wanted UTD to become a four-year school. Students "found their voice" in this era, advocating for on-campus child care and School of Management accreditation, among other matters.

In 1986, the push for an engineering school at UTD at last succeeded. From there, proponents of widening UTD into a full, four-year university carried their case forward and, in March 1989, Texas legislators introduced a bill to enact that aim. If the bill became law, UTD would face opportunities it had been denied 20 years earlier—and disruption of the stability to which many on campus had become accustomed.

The Status Quo: Mixed Feelings

To the daytime visitor, UTD seemed like a quiet place in 1980. The evenings were a different story, when a rush of commuter students, taking precious time out from their jobs or families, or both, filled UTD's parking lots and classrooms. It was a young school, but some traditions had already been established. Back in the summer of 1971, before there were any undergraduates around to consult, President Jordan and Executive Assistant Donna Beth McCormick had chosen a logo and the University colors—orange, green, and white. Organized sports were mostly intramural and easy-going in those days, but UTD's competitive baseball team had some ardent fans, and by 1980 they wanted a team name. From a menu that

included Armadillos, Suns, Titans, Unicorns, and Comets, students chose the latter. "Comets" evoked the University's famous Center for Space Sciences and symbolized UTD's soaring ambitions. Students also started a newspaper, The UTD Mercury, whose name conjured a long tradition of inspired messaging. The paper's editors adopted the philosophy of Arthur Sulzberger of the New York Times: "A man's judgment cannot be better than the information on which he has based it. Present him only with distorted and incomplete data, with ignorant, sloppy or biased reporting, with propaganda and deliberate falsehoods, and you destroy his whole reasoning processes and make him something less than a man."66 This was high purpose, indeed, but over the years the Mercury proved itself worthy.

McDermott Library, proud of its 650,000 volumes, pushed on to acquire the nearly half million more still required to meet UTD scholars' needs. Reference librarian Abby Kratz recalled making frequent trips with various faculty members to the Library of Congress in Washington, D.C., where they selected volumes from that Library's surplus to send back to UTD.⁶⁷ Just westward across the walkway from McDermott, construction of the Student Union offered architectural reassurance that community existed on this new campus. Yet even as UTD was coming together as an upper-level commuter school, forces were working like tectonic plates to alter the grounds on which the University had arisen just over a decade ago.

UTD had resulted from a compromise made by men not accustomed to half measures. In 1969 Erik Jonsson had wanted a four-year college with an engineering school. He had not gotten it, but neither had he given up. In 1964, as newly elected Mayor of Dallas, Jonsson had helped the City recover from the shock and the shame of President Kennedy's assassination and led it into a new economic era. Three terms in office had only fortified his conviction



Abby Kratz joined UTD in 1980 as Head of Reference in McDermott Library. "The library was an experiment in librarianship," she recalled, as it bypassed the old card catalogue system in favor of electronics, which were not yet fully developed. Kratz joined the Office of the Provost in 1994 and has served in many different important administrative capacities during the intervening years.

that higher education was key to Dallas's future success as a city and as an expanding "metroplex" with Forth Worth. SCAS had once embodied Jonsson's belief in the power of intellectual capital. He had carried that conviction over to UTD. But as Jonsson saw it, the vision would remain unfulfilled if it failed to address vigorously the educational and research needs of the electronic age. That meant a rigorous curriculum of engineering, math, and science-as Jonsson himself had experienced it years earlier as an undergraduate at Rensselaer Polytechnic Institute in Troy, New York. By that measure UTD was falling short. The powerful UT System Regent Frank Erwin-apparently overlooking the authority of the Higher Education Coordinating Board-had once promised Jonsson an engineering school in a handshake deal. But Erwin had stepped down from the Board of Regents in 1975 and died five years later with the promise not kept.

Jonsson and others who wanted to see an engineering school at UTD took heart from the conclusion of a study commissioned by several Dallas firms and released in December 1980: the Dallas-Fort Worth area would need 20,000 more engineers by 1990 and an engineering school to train them, for existing colleges of engineering would be able to supply only about 25 percent of the projected demand.⁶⁸ Accordingly, President Jordan and Vice President for Business Affairs Stewart Fallis submitted a proposal to the Regents in March 1981. The Regents approved it and forwarded it to the Coordinating Board. The timing was unfortunate, however, for the University of Texas at San Antonio, a four-year school also established in 1969, had just opened an engineering school. In August, UT Chancellor Don Walker withdrew UTD's proposal in deference.⁶⁹

Meanwhile, members of the UTD community had mixed feelings about an opinion expressed by former Governor Preston Smith, who had signed the legislation creating UTD and who now headed the Coordinating Board. In March, Smith pronounced upper-level universities in Texas as failures because they had not done what they were intended to doattract students from two-year junior and community colleges.⁷⁰ UTD was an exception, since enrollment had been increasing every year, with nearly 60 percent of students coming from Texas community colleges. That did not seem like failure to many Comets. Nevertheless, those who still nurtured visions of UTD as a full, four-year university shared some of Smith's discontent with the upper-level model.

In any event, the Coordinating Board remained protective of the vital vocational training function of community colleges. It did not want them seeking four-year status or being sidelined by four-year schools expanding their own missions. As an upper-level school, UTD remained a "rara avis," a rare bird with an illustrious pedigree and brilliant plumage, but with clipped wings and a limited flight range. Proponents of engineering education at UTD remained committed to reaching their goal, but with an engineering school at the private Southern Methodist University in Dallas, and another at UT Arlington about 25 miles west of Dallas, they faced an uphill climb against the cautious, efficiency-conscious gatekeepers on the Coordinating Board.

UTD's subdued daytime campus ambience contrasted with ongoing, strenuous efforts by its administrators to shape the university to evolving conditions. Substantial numbers of faculty members hired in the rush to prepare for upper level undergraduates in 1975 had been let go in the following two years, not necessarily because of their performance or their gualifications. Indeed, Alex Clark and his team of recruiters had taken pains to hire excellent candidates. But class enrollment patterns did not always align with the administration's projections. More students than expected enrolled in Management courses than in Arts and Humanities, for instance.⁷¹ By fall 1982, a pattern had settled in: continuing annual increases in total enrollmentnearly 7,400 that term-with a large majority going to the School of Management (2,700), seconded by Natural Sciences and Mathematics at 1,084 students, then Human Development (551), Arts & Humanities (549), General Studies (382), and Social Sciences (323). About 1,800 enrollees had not committed to a program in any of the six schools.⁷²

Change at the Top

In August 1981, President Bryce Jordan announced that he would be leaving UTD to assume the position of Executive Vice Chancellor for Academic Affairs of The University of Texas System. Members of the UTD Development Board and other appreciative supporters, led by Dr. C. L. Lundell, an eminent Dallas botanist, raised funds to endow the Jonelle and Bryce Jordan Music Scholarship for music students at UTD. (The scholarship later was broadened to include all creative and performing arts.) Jordan's ten-year tenure at UTD had convinced early skeptics, mostly former SCAS scientists, that he could run the university very well without a science background. "He turned out to be exactly what we needed," said Stan Rupert.⁷³ Mathematician John Wiorkowski agreed, hailing Jordan as "very energetic, dynamic, and polished."⁷⁴ Jordan had successfully cultivated relationships with the community,

with donors, and with the founders, of course, but he also knew the Regents well, and they trusted him. In another two years, his talents would receive further confirmation as he became president of Pennsylvania State University.

On September 1, 1981, Alex Clark took over as UTD's interim president while the search for Jordan's replacement began. In February 1982 the Regents announced their choice for UTD's next president-Robert H. Rutford, a geologist and vice chancellor for graduate studies at the University of Nebraska. Rutford's scientific credentials were solid. Prior to his work at the University of Nebraska he had directed the National Science Foundation's Division of Polar programs (1975-1977), which required negotiating numerous agreements concerning Antarctic research, often conducted jointly by international groups of researchers, and assuring compliance with the Antarctic Treaty. He had won the NSF's highest award for employees, the Distinguished Service Award, and had a long history of pioneering research in the Southernmost Continent.

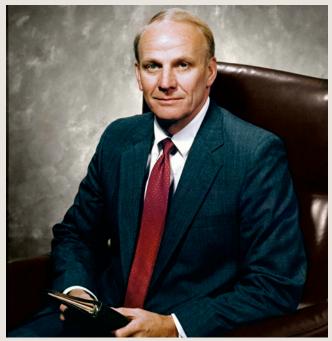
In that sense, Rutford was what Bryce Jordan had not been—an administrator with scientific credentials. Further, Rutford seemed almost a stereotype of an Antarctic explorer/scientist—tough, disciplined, straightforward, a no-nonsense leader. His style, as almost all who came to know and to like the new president attested, was brusque. But whether that would prove an asset or a handicap in negotiating UTD's percolating brew of faculty and student subcultures, or in the University's larger, surrounding environment of corporations, donors, and Austin officialdom, remained unknown.

In contrast, few questions remained about the University's engineering school proposal. A new study, completed in the summer of 1983 by The National Center for Higher Education Management Systems reinforced earlier conclusions about the Dallas area's burgeoning electronics firms and their "critical need [for] more new engineers appropriate to their work, as well as more continuing education resources for their engineers." The bulk of the new high-tech firms were not only in Dallas, but

Robert Rutford and Antarctica

TD President Robert Rutford was among several internationally known researchers at UTD whose work often put the University in a larger spotlight. In Rutford's case, the light shone from one of Earth's most isolated regions, Antarctica, where he had conducted doctoral research in the 1960s on glaciation in Antarctica's Ellsworth Mountains. In the 1970s Rutford directed the Division of Polar Programs at the National Science Foundation, earning the NSF's highest award, the Distinguished Service Medal, before returning to academia in 1977 as Vice Chancellor for Research and Graduate Studies at the University of Nebraska. In 1982 he moved to the University of Texas at Dallas, where he succeeded Bryce Jordan as UTD's president.

Rutford's expertise was much in demand during his 12-year tenure at UTD as Antarctica increasingly became the focus of environmental, scientific, and commercial interests. Rutford chaired the National Research Council's Polar Research Board (1991-1994) and, as a member and president (1998-2002) of the Scientific Committee on Antarctic Research (SCAR), advised the United States Department of State on international treaties governing Antarctic exploration and environmental protection. On retiring from UTD's presidency in 1994, he returned to teaching as a member of UTD's Department of Geosciences.



Robert Hoxie Rutford, UTD President 1982-1994.

In both areas of his professional life–Antarctica and academia–Robert Rutford will be forever remembered. In 2006 Mount Rutford, the Ellsworth Mountains' highest peak at 14,688 feet, was named in his honor, as was the Rutford Ice Stream, 15 miles wide and 180 miles long, flowing westward from the Ellsworth Mountains. The UT Board of Regents added further honors by renaming UTD's Avenue C Rutford Avenue in 1994, and by bestowing on Rutford the title of Emeritus President of the University of Texas at Dallas in 2007.

even closer to UTD's immediate neighborhood in Richardson, the study observed.⁷⁵ The Strategic Plan that Rutford's administration composed in fall 1983 stated as the University's "Goal #1" to "establish a school of engineering and computer science, offering the bachelor's, master's, and doctoral degrees in carefully selected disciplinary areas to contribute to the fulfillment of local, state, and national needs in high-tech industries."⁷⁶ Rutford declared his enthusiasm for what seemed obvious to everyone except the staff of Texas's Higher Education Coordinating Board. "The total impact of a high technology area is mind-boggling. In the area north of the LBJ Freeway there are a high number of large and small firms for engineers and managers, and their needs for training continue."⁷⁷ Private corporations continued their advocacy, with Rockwell International executive Kent Black leading the effort.

But the question remained: who would pay for the new school? The Texas Constitution prohibited using the state's historic Permanent University Fund (PUF) for any public university except UT Austin and Texas A&M. How had that happened? And what was the Permanent University Fund, anyway? The PUF was a unique Texas legacy, stretching far back into pre-Civil War days. In 1839 the Republic of Texas had set aside land with the provision that income resulting from the investment would fund a public college. In 1858, after Texas had been granted statehood, its legislature passed a bill establishing the University of Texas. Legislators also enlarged the prior land endowment, which in 1876 became the Permanent University Fund by amendment of the Texas Constitution.

More land was added in 1883 when the University of Texas opened in Austin. About two million acres, mostly in sparsely populated West Texas and considered to be of little value, provided regular but modest funds—about \$40,000 in 1900 from grazing leases, water royalties, and mineral rights. But when oil was discovered on PUF land in 1923, the endowment swelled rapidly to become, in time, one of the top ten university endowments in the nation. In 1931 the Legislature decided to split the investment income from the PUF between the University of Texas at Austin and Texas A&M at College Station, the former receiving two-thirds and the latter the remainder.⁷⁸

Subsequent expansion of public higher education in Texas included 17 additional universities in the two systems and 26 other universities. But the 1876 amendment to the Texas Constitution blocked the use of any PUF funds, which totaled about \$9 billion in 1984, to back bonds for construction on any campuses except UT Austin and Texas A&M. The Texas Legislature, therefore, turned to other funding sources, such as property taxes, for higher education capital projects. But a 1978 lawsuit successfully challenged the constitutionality of using tax revenue for such purposes, so non-PUF universities were forced to compete with each other for legislative support. All parties agreed that this biennial competition, seen by many as a "feeding frenzy" for funding, was an inefficient way for Texas to support its public universities. But the state constitution blocked the way forward by directing the PUF to

just two, "flagship" campuses. It would have to be amended again, and only Texas voters could do that.⁷⁹

Voters had their chance on November 6. 1984, and overwhelmingly approved Proposition 2, making all universities in the UT System and the Texas A&M System eligible for PUF-backed, bond-funded construction of classrooms, libraries, and laboratories. Additionally, voters approved an amendment creating from general revenues a Higher Education Assistance Fund for public universities outside the two PUF systems.⁸⁰ Proposition 2 did not end competition for funding, since each PUF system's Board of Regents would still have to decide how to allocate the funds among its member institutions. As new UT System Chancellor Hans Mark confirmed during a visit to UTD a week after the vote, "This will obviously help some of our funding problems. Now we're struggling with the question of how to divide the money." Still, Texas voters had given a major boost to their state's higher education efforts and had removed a roadblock in the way of UTD's engineering school. "It's a definite possibility," Mark reassured his hosts about the proposed new school.⁸¹

The chancellor had an additional message for some liberal arts students who told him they were concerned he might ignore the arts because he was a scientist (Ph.D., Physics, MIT). Mark rejected the division of arts from sciences as artificial. "Science is a product of Western civilization," he said. "It grows out of philosophy."82 Historically, Mark was on solid ground. But when it came to matters of funding and development priorities, UTD's major push for an engineering school was raising doubts in some quarters about the future of arts and humanities at the University. The UTD scholarly community would continue to wrestle with that issue over the years, but the most skepticism about including engineers and computer scientists at UTD came not from the University community but from the Higher Education Coordinating Board in Austin. Did Dallas really need an engineering school at UTD? After all, Southern Methodist University had one, right in the heart of the city. And so did the University of Texas

at Arlington, to the west of Dallas about halfway to Forth Worth. Erik Jonsson stuck doggedly to his conviction, widely shared by the hundreds of telecommunications and related companies in the area, that the demand for trained engineers was so great that SMU, UT Arlington, and UTD put together still would be challenged to meet it. Worrying about overproduction was needless.⁸³

Meanwhile, Robert Rutford and Kent Black marshalled another attack on what they saw as a mistaken Coordinating Board view that Dallas residents seeking engineering training could just drive over to UT Arlington. UTD's Strategic Plan had noted the difficulty in commuting from Richardson in north Dallas County-south Collin County over to UT Arlington, about 45 miles away. As the crow flew, it was not a great distance. But students from the Richardson area and, more to the point, employees of companies in the Telecom Corridor seeking continuing education, would not be flying; they would be driving, often during rush hour, in bumper-tobumper traffic. The round trip could take anywhere from one-and-a-half to three hours-a significant deterrent to enrollment.

One morning at a Richardson car wash, Rutford started talking with a man who by coincidence turned out to be the driver for Rockwell's Black. They discussed the Richardson-to-Arlington commute. "How long does it take you to get from Rockwell to UT Arlington?" Rutford asked. The driver drew him a time map, not a distance map, showing the various times that the trip would take during the day and evening. That gave the Antarctic researcher an idea. Rutford called Black, who procured a helicopter and invited several members of the Coordinating Board for a ride. They lifted off from the UTD campus at 5:00 p.m. to survey the rush-hour traffic. The trip proved an eye-opener for the Board members, many of whom had known little about Dallas's traffic tie-ups. "They began to realize," said Rutford, "that when you had Texas Instruments with about 17,000 employees, and Rockwell with 10,000, and Fujitsu, and all the other firms in the Telecom Corridor, there was a real market and a chance to start an engineering school in electrical engineering."84

Chancellor Mark was a seasoned administrator-scientist, having served most recently as



Obtaining approval for an engineering school at UTD in the late 1980s was a team effort by University officials, business executives like Rockwell International's Kent Black, and supportive legislators. To address the Texas Higher Education Coordinating Board's contention that students could just commute to the engineering school at UT Arlington, Black arranged a helicopter flight for Board members to see firsthand how traffic jams made commuting to Arlington from Richardson unfeasible. Still, the Board turned down UTD's proposal. Subsequently, an impassioned letter from Eric Jonsson helped turn the tide, and the Board approved UTD's engineering school proposal in July 1985.

deputy administrator at NASA. He reviewed Mayor Starke's Task Force on High Technology report, as well as a letter from Coordinating Board Chair Ken Ashworth outlining that body's concerns, and then consulted with some colleagues in the National Academy of Engineering. Mark recommended that the Regents withdraw the UTD engineering school proposal and make some revisions.⁸⁵ The Regents submitted the updated proposal in March, making it clear once more that the UTD engineering school would address specific needs, such as electrical engineering, that were not adequately covered, or not covered at all, by the schools at SMU or UT Arlington. On July 18, 1986, the Coordinating Board reviewed the proposal—and turned it down.

Change Comes, Challenge Follows

Erik Jonsson, then 84 years old, was stunned by the Board's July 18 rejection. He and the Excellence in Education Fund had donated many millions of dollars and equivalent values in land acreage to furthering UTD as the best way to meet Dallas's growing high-tech needs. Jonsson believed ardently that the future of the City and even the state of Texas lay precisely in the direction that the Coordinating Board seemed to be blocking. He sent an impassioned statement of his feelings to be read to the Board. After recounting the history of SCAS and its evolution into UTD, Jonsson cited the 1967 "handshake deal" he had made with the then chair and vice chair of the UT System Board of Regents that they would commit to securing legislative approval of UTD, along with approval of an engineering school at the University, "at the earliest possible time." Now, many years later, he was still waiting.

"We acted in the utmost good faith," Jonsson declared. "None of us would have believed that 15 years later the approval of an application to the Coordinating Board for such a School would be opposed or delayed on the grounds that the Engineering School could not be approved until certain conditions—mostly related to private funding for it—were met." Jonsson summarized the generous donations of the Excellence in Education Fund and those from numerous corporations to UTD, and then concluded with an anguished protest. "Have these gifts not 'more than paid for' the beginning of the requested School of Engineering and Computer Science and require no more private gifts for its approval? Sixteen years, Ladies and Gentlemen, is a long time to wait. It is future generations, and indeed the great state of Texas, which will suffer if the decision is 'too little, too late.""⁸⁶

Reaction from other Dallas leaders was equally compelling, for the next day the Board met again, and this time approved the engineering school-but only if certain conditions were met. They were stringent. UTD would have to demonstrate a firm commitment of \$24 million up front from private sources to fund the endeavor. UT Regents would be required to authorize PUF bond proceeds of \$11.5 million to construct a building for the new school. UTD would have to provide \$11 million from its endowment. And finally, the school would have to enroll at least 700 students in order to start operations. Rutford was gratified by the approval but dismayed by the harsh conditions. "The school was to be established and initially funded with NO state tax dollar support!" he recalled 20 years later. "This meant that the new president must raise funds for a building, faculty salaries, library materials, labs, etc., if the school were to become a reality."87 The Board had set its conditions; now there was nothing to do but try to meet them.

President Rutford remembered turning to Kent Black. "Kent, you know all these industry guys. I don't know them the way you do." Said Black, "Bob, I've never raised a dime in my life." So Rutford proposed a team approach, "You open the door, I'll raise the money."⁸⁸ To be sure, Black did his share of asking, and numerous corporations opened their wallets once more for UTD–all in the midst of the tough times created in Texas by the collapse of oil prices. Rutford, Black, and several other key area executives like Dave Tacke, Jim Lightner, and Jerry Junkins engineered a campaign characterized as much by grit as by spirit to free UTD's newest school from its most recent, state-imposed hobbles and launch it on its useful mission. They succeeded.



The Student Newspaper of The University of Texas at Dallas

Board gives engineering school go-ahead

The next eighteen months will be pivotal ones for UTD. The fate of the new Engineering and Computer Science School depends on UTD's ability to raise \$52.5 million, to enroll 200 articles and the science of the scienc 700 students and to sign a con-tract for construction of a building to house the new school

school. On July 19 the Coordinating Board of the Texas College and University System gave UTD a conditional go-ahead to estab-lish the proposed school. In a proposal submitted to the Coordinating Board in March, UTD stated that, "Nothing less than the economic health of the entire area is at stake." Supported by economic health of the entire area is at stake." Supported by Mayor Starke Taylor's Task Force on Higher Education, UTD hopes to provide some of the 28,000 new engineers Dallas area technology will demand by 1990. Existing facil-

ities to train engineers at UTA and SMU provided only 755 engineers last year.

and SMU provided only 755 engineers last year. The submitted proposal separate School of Engineering and Computer Science which would provide degrees in electrical engineering, with majors in telecommunication and microelectronics, or in computer science. Degrees will be offered on the bachelor, master and doctorate levels. Traditionally, new schools receive approval from the Co-ordinating Board only if they are based on already existing programs. For example, UTSA has a program in, rather than a school of, engineering. UTD asked the Board to change this requirement in order to attract a berter faculty. The board did not approve the UTD proposal. On the 19th,



"We're happy. We really are," UTD president Robert Rutford said when he heard the news that the Coordinating Board had conditionally approved the proposed School of Engineering and Computer Science.

however, Board Chairman Larry Temple presented the proposal with the new twist of Board Chairman

the above-mentioned conditions. Temple said his plan was a compromise—it would not set too difficult a precedent for the Board in terms of other state schools asking for permission to establish new schools from thin air, but it would allow UTD to back up its recruit-ment efforts with a promise of a school.

"It's difficult to recruit national and quality staff if there is no insurance (of a school)," Temple said. Kent Black, a division presi-dent of Rockwell International

dent of Rockwell International and member of Mayor Taylor's Task Force who presented the proposal to the Board along with Peter O'Donnell, Jr., director of InterFirst Bank of Dallas, and UT Chancellor Hans Mark, said the adminis-trative structure of the school is vital to the ability to attract a good program head and faculty. Without offering the title of dean, it would have been diffi-Con't on page 5 Con't on page 5

In just a few months they raised an additional \$12 million, which, when added to \$12 million already donated, provided the required \$24 million. In October the Coordinating Board acknowledged that the goal had been reached, and UTD bestowed a hard-won Leadership Award on Kent Black.

In short order, the search began for the new school's first dean, and in May 1987 the selection of accomplished electrical engineer Blake Cherrington as dean was announced. Rutford introduced him at a news conference as "the only employee in engineering at this date, the person who must develop the curriculum, design a building, hire a faculty, and attract students."89 Cherrington, as dean, became the first recipient of a newly endowed chair, the Lars Magnus Ericsson Chair in Electrical Engineering, funded by the Sweden-based, multinational telecommunications company, Ericsson, which had offices in Richardson and had strongly supported the engineering school drive. In September the now-named, though not yet officially designated,

Erik Jonsson School of Engineering and Computer Science (ECS) held its first classes, with an initial enrollment of about 20 master's degree students. One year later ECS posted an enrollment of 700 students-107 in electrical engineering and the rest, a substantial majority, in computer science.

Erik Jonsson had strongly objected to the Coordinating Board's apparent preference for an engineering program, rather than a school, at UTD. This would have allowed the University to offer some courses but would have kept it from structuring those efforts and competing for the best faculty. That outcome had been averted. Still, the school, as approved, was guite specialized in its electrical engineering focus and in its incorporation of computer science, which had migrated there by a circuitous route. The University's computer scientists had started out in the School of Natural Sciences and Mathematics, in the Math Department. But, as sometimes happened in the community of scholars, friction arose over whether computer

THE UNIVERSITY OF TEXAS AT DALLAS ANNOUNCES THE POSITION OF

> DEAN OF ENGINEERING AND COMPUTER SCIENCE PROGRAMS



UTD's first order of business following approval of its new Erik Jonsson School of Engineering and Computer Science was to find a dean. Blake Cherrington was chosen in May 1986. Classes began-initially for master's degree students only-in September that year.

science was really mathematics. The Coordinating Board aggravated the problem by viewing computer science through its bureaucratic pigeonhole of "applied math," which meant that it needed funds only for some chalk and blackboards.⁹⁰ NSM created a separate department for computer science but strained to get adequate support from Austin.

As the new engineering school took shape, then, the administration decided to move computer science into it, making it the School of Engineering and Computer Science–partly to provide a readymade body of students who already were enrolled at UTD, partly to tap the right funding siphon–engineering rather than applied mathematics–and partly because of the core compatibility of the two fields.⁹¹ "My area straddled electrical engineering and computer science in those days," recalled Professor of Electrical Engineering Poras Balsara, who later served as interim dean of ECS (2018present). "Some of the courses I taught were taught by people with similar backgrounds from computer science."⁹²

Distinctions between academic fields remained useful as a means of structuring curricula or administering schools, but the concept of interdisciplinarity, a necessary adaption to the programmatic restrictions placed on the embryonic UTD, had infiltrated much of UTD's academic architecture. Toilers on the frontiers of knowledge, by definition, breached older distinctions based on factors such as group affiliation or degree rather than on the skills best suited to study and understand natural phenomena. This spirit provided flexibility to address problems from varying perspectives, but as the university grew larger in coming years, the downsides of embedding "interdisciplinarity" in actual structure appeared: research fund grantors, peer-reviewed journals, and even parents and students wanted to know just what a particular degree program was, what department a professor worked in, or what a described field of study at UTD actually meant.

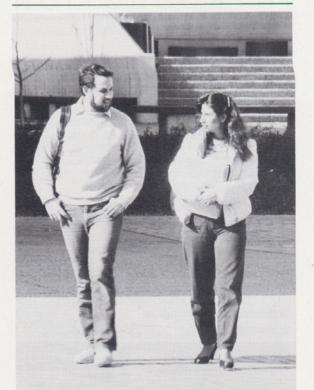
Defining UTD's difference from other universities in terms of interdisciplinarity made comparing its performance difficult. By what metric, against what standard, would you measure its success? The University's enabling legislation had prohibited offering programs that competed directly with surrounding universities—the "Arlington compromise." NSM's departments had been grandfathered in from SCAS, but ECS was allowed to teach only electrical engineering and computer science. And there had never been History, English, Psychology, Economics, or other traditional programs at UTD. Interdisciplinarity had been embraced as a refreshing ideal, but it also had been a way of making a virtue out of an externally imposed constraint.

Students Find Their Voice

While Rutford and his administration, along with UTD's cadre of strong corporate and community supporters, were busy pulling the Coordinating Board across the line in the Engineering School tug-of-war, the University continued forward unrestrained on several other fronts. Here, too, Rutford's leadership was a strong element in forming the nascent community's sense of confidence in its scholarship and its members' sense of belonging. Some tensions had already been felt in, for example, the transfer of SCAS faculty into UTD, in the respective roles of faculty and the administration in hiring and tenure decisions, and in adjusting to the arrival of undergraduates in 1975. In retrospect, it might have been expected that adjustments also would have to be made due to the fact that half of those undergraduates were women.

In the June 13, 1983, issue of the student paper, the Mercury, a women's support association known as UTD Network (soon renamed Women's Network) wrote an "Open Letter to the Faculty." "I will be showing up in your classes," wrote a composite "student" on behalf of her peers. "From what I have heard from your previous students, there is reason to believe my reception may not be the warmest." The student explained her harried home life of juggling family responsibilities with studies, but also pointed out the ingenuity and imagination that this required and how such traits would help her achieve academic success. "I am asking you not to ridicule and belittle me," she concluded. "If I make comments which seem inappropriate or different from what you have experienced in the past, it may be because I am seeing things from a different angle." She signed off as, "The Future."93

Student requests for a child care facility on campus reflected that "different angle" at various times during the 1980s. Student Government President Buddy Gibson touched off a controversy in January 1985 when he declared on-campus child care a "non-issue."⁹⁴ During the recession, Gibson argued, when even basic library services were being curtailed and tuition increases were likely, such student-fee-supported additions as a child care facility were unlikely. Additionally, he had sensed only lukewarm support for the proposal. Proponents of a child care center at UTD vigorously contested Gibson's assessment, focusing on the THE UNIVERSITY OF TEXAS AT DALLAS



DIFFERENT BY DESIGN

This 1985 brochure emphasized UTD's non-traditional approach to the collegiate curriculum. Soon UTD would increase its offerings with the addition of a new school, the Erik Jonsson School of Engineering and Computer Science.

"non-issue" part of his statement as insensitive and inaccurate.

The administration was no more adroit in responding to this developing proxy issue for the full acceptance of women on campus. Finances partly explained President Rutford's lack of enthusiasm for on-campus child care. Setting aside such "philosophical" issues as whether UTD ought to be competing with private child care facilities in the Richardson community, Rutford asked child care proponents, "Who pays? Who takes the responsibility?"⁹⁵ Following his annual "State of the University" address on April 22, 1985, Rutford held a question-and-answer session with students. His forecast for the coming year had included an increase in the Student Union fee. When students asked what they could expect from that increase, Rutford replied that the fee hike would be necessary just to maintain current services, let alone support any new ones. Then he added, "I'm not sure why we have a Student Union." He also commented on the ongoing issue of starting a coffee house or pub on campus where people could socialize. Coffee was fine, but "If I had my druthers," he allowed, "I would have this campus as dry as a bone." And to a student who asked why students had not been consulted during discussion of possible curtailments in student counseling and health services, Rutford replied, "My dear, we have asked the students, but student attitudes go like this," and drew circles in the air with his finger.⁹⁶

Small wonder, then, that the *Mercury*'s editor felt constrained to remind the administration, "Complaints or comments from UTD students do not come from immature kids with nothing better to do than complain, or from students with no realworld experience." If such students took the time from their busy lives to make a complaint, it "should receive the administration's serious consideration." [italics in original] ⁹⁷ Gender issues were a component of a larger matter of inclusion in the process of decision-making at UTD, a process that perhaps involved generational differences as well as differences in management style and philosophy. When students at the School of Management asked about the School's lack of accreditation-it was accredited by the Southern Association of Colleges and Schools (SACS), as part of UTD's overall accreditation, but not by the major national business school accrediting body, the American Assembly of Collegiate Schools of Business (AACSB)-Dean Paul Gaddis cited SOM's need for more full-time faculty and better library resources in order to satisfy AACSB's requirements. With budget cuts likely in the near future, said Gaddis, these problems would probably remain unresolved. Gaddis then went on to sav that while the SOM would continue to work toward reaching AACSB's standards, the issue was "not important to the majority of faculty or students."98 President Rutford concurred, announcing in a November 1986 open forum that non-accreditation

by AACSB "has no serious implications because UTD itself is accredited and all major universities accept transfer credits."⁹⁹

It was another purported "non-issue," and it sparked a similar reaction among students. A poll of 100 SOM students conducted over the next three months indicated that only half of them had known of the School's accreditation status, and that the majority, once informed of the distinction between SACS and AACSB accreditation, regarded AACSB accreditation as important and wanted the University to pursue it. Through a succession of subsequent deans-Martin Geisel (1985-1987), Gerald Scully (interim 1987-1988), Charles Kroncke (1988-1995), and Frank Bass (interim 1995-1996)and through some evolution in AACSB's approach as well, UTD's School of Management achieved the much-sought-after AACSB accreditation in April 2002, under Dean Hassan Pirkul (1996-present).

Meanwhile, progress was slow on UTD's child care center. After Vice President for Business Affairs Robert Lovitt sent out a memo to all UTD staff warning about "Unsupervised Children on Campus," student government Vice President Samuel Rodriguez replied with a disturbing anecdote. "As I was walking in the parking lot one day, I noticed a small child inside a car. The window was cracked open, so the child wouldn't suffocate. I asked him where his mother was, but he was well-trained enough not to talk to strangers." Rodriguez left to notify the security office but when he and an officer returned, the car was gone. Lovitt's memo recognized the problem, but it offered no solutions, said Rodriguez. Nevertheless, Rodriguez was pleased that the administration had allocated \$5,000 to a committee to work on a child care plan.¹⁰⁰

Darrelene Rachavong, then assistant to the Vice President for Student Services, shepherded the child care matter through a complex maze of regulations, requirements, and funding challenges—and through some on-campus attitudinal adjustments, too.¹⁰¹ Along the way, President Rutford exposed his good-natured side by agreeing to participate in a *Mercury*-sponsored competition. Readers were asked to submit a caption for a photo showing Rutford posing business-like at his desk with a trio of stuffed penguins. The winning caption was, "OK, OK, so we *do* need a penguin-care center." It was submitted by A&H student Susan Tong, who had been one of the most outspoken critics of the administration's hesitancy on child care. In fall 1988, UTD opened a child care service in the Student Union for student-parents, cosponsored with the Richardson YWCA and available during evening class times for a fee of \$3 per child per night. "I can't believe it's finally happening," exclaimed Rachavong.¹⁰²

New Faculty, New Programs

From its joining UTD in 1975 and through the 1980s, the Callier Center for Communications Disorders sailed forward, smoothly and with following winds. The University's 1983 Strategic Plan had included the development of Callier into "the premier center for the introduction of educational and technology advances for the identification, remediation, and prevention of communication disorders," right behind UTD's first priority of establishing an engineering school.¹⁰³ The Regents helped by approving a \$436,000 renovation of the Callier Center building on Inwood Road, downtown adjacent to the UT Southwestern Medical Center. A new foyer, patient waiting area, and lecture auditorium were soon in the works. Callier provided valuable clinical training for students in UTD's School of Human Development as well as creating research opportunities for faculty. Additionally, students in UTD's special education training program, organized through the College of Human Development, found useful learning experiences in the many and varied challenges that Callier's patients presented. When the Center marked its 10th Anniversary as a part of UTD in September 1985, it was seeing about 25,000 patients a year, with 124 full-time faculty and staff.¹⁰⁴

Just as the School of Human Development had grown through its affiliation with the Callier Center, so too had UTD's other schools expanded by adding distinguished faculty and by strengthening the University's research capabilities. In January 1985 UTD established the Morris Hite Center for Product Development and Marketing with a \$1 million endowment raised over the previous year by the Hite family and many others who wished to honor the renowned civic leader, who had died suddenly in a car crash in May 1983. An advertising executive, coiner of the word "slacks" to describe casual pants, and a two-time president of the Dallas Chamber of Commerce, Hite had been instrumental in the drive to create UTD in 1969. He was developing the concept for a marketing research center at UTD at the time of his death. Professor of Marketing Randall L. Schultz, director of the new Hite Center, recalled that Hite had been "a great believer in what the University was doing. In many ways he could be described as 'Mr. Marketing' of Dallas."105

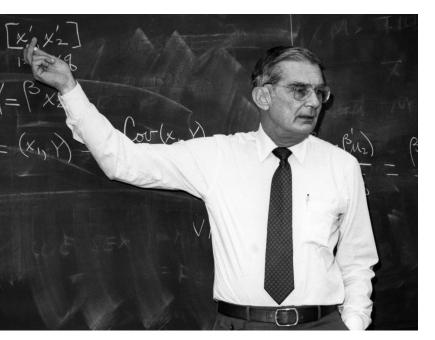
Marketing professor Frank Bass's arrival at UTD also reflected the University's growing



Dallas marketing innovator and executive Morris Hite supported UTD's founding in 1969 and continued his support for the University until his untimely death in 1983. His family helped organize a \$1 million endowment that established UTD's Morris Hite Center for Product Development and Marketing in January 1985.

reputation for academic excellence in marketing. Bass began his career at UT Austin in 1954 and went on to become a nationally renowned leader in marketing research. Most recently he had been Loeb Distinguished Professor of Management in Industrial Administration in the Krannert School of Business at Purdue University. He came to UTD's School of Management in February 1982, where he held the endowed Eugene McDermott Chair, an important statement of support from the Regents. Bass was a former president of The Institute of Management Science and former vice president of the American Marketing Association. At Purdue he had been known as an outstanding mentor for doctoral students, a role that he sustained at UTD by chairing an impressive 58 doctoral committees during his tenure.¹⁰⁶

Professor Ram Rao, who followed Bass to UTD from Purdue in 1983, later described him as "a gentleman, imbued with curiosity, and absolutely the most honest person that you could meet." Of the UTD campus itself, Rao recalled his early astonishment. "Capture this if you can. There were hardly any trees. And it was all prairie. Everywhere, there



Frank Bass was already an eminent scholar in the field of marketing research when he joined UD from Purdue University in 1982. His method for tracking the sales of durable goods became famous as the "Bass Model." He set the tone for the high academic reputation of the Jindal School faculty.

was prairie. There were coyotes running around. On campus there were roadrunners, and even bobcats." It was a stark contrast from the University of Chicago, where Rao recently had been a visiting professor. But Bass's personal qualities, as well as his outstanding academic credentials, helped Rao and others overcome their initial misgivings about moving to such a new, seemingly isolated, campus.¹⁰⁷

UTD also drew Brian J. L. Berry, a highly esteemed pioneer in the field of geography, to the faculty in fall 1986 as Founders Professor in the School of Social Sciences. Berry's quantitative approach to geography, not original to him but with never a more ardent or prolific proponent, opened up new avenues for political and economic analysis that took geography beyond its roots in charts and maps and into pathbreaking interdisciplinary work. His views were often controversial, but their grounding in hard data gave them solid footing. They also made Berry the most frequently cited author in his field for a remarkable guarter century and kept him busy as a consultant on city planning and other development issues around the globe. Years earlier, when Berry was looking to leave Chicago, he and Alex Clark had discussed a position at UTD, but Berry had chosen Harvard instead. Now, when he was ready to leave Carnegie Mellon, he called Jack Meltzer, a former colleague and current dean of Social Sciences at UTD, who invited Berry to Dallas. "I've been here ever since," Berry declared, "helping to build a new university."¹⁰⁸

When he arrived, Berry was already an academic veteran, not only in teaching and research but in administration, and in the in-fighting and turf warfare every professor knew took place behind the stereotype of ivy-covered repose. At the University of Chicago, at Harvard, and then at Carnegie-Mellon in Pittsburgh, Berry had distinguished himself as a vigorous advocate of the new geography as well as a determined, goal-oriented administrator. He had been named a member of the National Academy of Sciences in 1975, the youngest member ever to be elected from a social science/political science field. The following year he was elected a Fellow of

The Callier Center

ena Evans Callier was 64 years old in 1942 when her husband Edward, president of the Trinity Cotton Oil Company, died. Sometime afterwards, Lena's hearing began to fade. As her deafness increased, so did her social isolation, leading in 1950 to her establishing a trust for the study and treatment of hearing loss and speech and language disorders. In 1963, six years after her death, Lena Callier's wishes materialized as the Callier Hearing and Speech Center, which soon occupied a new building on Inwood Road, near the UT Health Science Center (now UT Southwestern).

In 1972 Callier changed its name to the Callier Center for Communications Disorders, and in September of that year it began an affiliation with UTD that led to new master's and doctoral degrees in communications disorders, with Callier's director Aram Glorig, M.D. as head of the new programs. In March 1975, the Excellence in Education Foundation (EEF), established by Texas Instruments in 1960, donated 450 acres on the north campus to support the UTD-Callier alliance. The alliance was consummated in August 1975 when Callier's trustees transferred the institution's assets to UTD, effective September 1, making Aram Glorig Dean of Callier's new home, UTD's School of Human Development (later, School of Behavioral and Brain Sciences). Callier's graduate Audiology and Speech/ Language Pathology programs rank consistently among the nation's best. In 2003, the University opened a satellite building on campus, and in 2016 UTD completed an expansion of that facility. What began long ago as one woman's resolve to resist isolation had developed into a nationally acclaimed center for advanced research and treatment.



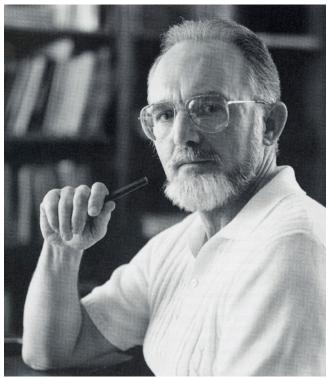
Lena Evans Callier



Callier Center, downtown Dallas, 1980s.

the American Academy of Arts and Sciences, and in 1978-1979 he served as president of the Association of American Geographers. In 1983 he received an honor of which he was especially proud when his alma mater, University College of the University of London, elected him a Fellow.

Further honors pursued Berry at UTD. In 1987 he became a Fellow of the American Association for the Advancement of Science. In 1988 the Royal Geographical Society awarded him the Victoria Medal in a ceremony in London, and the next year he was elected a Fellow of the British Academy. There would be more recognition, and much more work. A few years after joining UTD, Berry helped found the University's newly funded Bruton Center for Development Studies, applying the principles of quantitative analysis to planning Dallas's future. The School of Social Sciences itself would develop in coming years under the leadership of Dean Royce Hanson, who arrived from the University of Minnesota's Humphrey Center a year after Berry.



Brian Berry was among many scholars drawn to UTD by the opportunity to help shape a new university. His international distinction as a pioneer in the use of geospatial mapping and other quantitative approaches to geography had earned him appointments at the University of Chicago, Harvard University, and Carnegie Mellon University before he moved to UTD.

In 1984 the Texas Academy of Sciences, which was affiliated with the American Association for the Advancement of Science, named UTD's first president (Acting, 1969-1971) and School of NSM faculty member Francis "Frank" Johnson a Distinguished Texas Scientist for his many years of space-related research contributions. Four years later, the Texas Academy similarly honored NSM's Carl Collins, director of UTD's Center for Quantum Electronics, for his work on high-energy lasers as well as his development of a new method of creating thin films of diamond. This latter accomplishment would soon lead to valuable commercial licensing agreements with industry, and to further research in the discovery's applications.¹⁰⁹ Diamond was an ideal coating substance, Collins explained. "It's hard, durable, transparent-and simultaneously the best heat conductor and the best electrical insulator in nature. That is very unusual." Collins's new process yielded a thinner coating at cool temperatures, allowing its application to plastics and other heat-sensitive materials.¹¹⁰

Some of Collins's work was funded through the Reagan Administration's Strategic Defense Initiative (SDI), popularly known as "Star Wars," to construct a ballistic missile defense system around the United States using lasers, interceptor missiles, and related technologies. It was expensive and potentially risky because it could upset the Cold War balance of "mutually assured destruction" between the United States and the Soviet Union. In October 1986, a group of students and protestors used poetry, chalk drawings, and talks outside the University Theater to protest against SDI and Collins's laser research.¹¹¹ The following March, UTD Professor Lloyd Dumas (School of Social Sciences) debated SDI with Army Major General Stewart Meyer. In January 1988, protestors stood quietly by as U.S. Senator Phil Gramm toured UTD's Center for Quantum Electronics, offering praise for the "world class research that's being done" in order to, as he famously put it, "keep Ivan back from the gate."¹¹² SDI's high price tag and the collapse of the Soviet Union, led to the program's curtailment in 1993. But as Collins and other researchers well knew, SDI had yielded new

knowledge valuable in its in own right as well as in many non-military applications.¹¹³

Chemistry Professor A. Dean Sherry's work in the 1980s on chelated gadolinium, a modified, safely injectable form of the metallic element, gadolinium, found useful application in enhancing the clarity of magnetic resonance images. This discovery also facilitated the University's first licensing agreement with a private company. The experience proved helpful in coming years when Sherry and colleagues working at UT Southwestern Medical Center broke new ground in producing additional substances that further extended the capabilities of medical imaging.¹¹⁴ Also in NSM, physicists John Hoffman and Richard Hodges continued with their spectroscopic studies of outer atmosphere phenomena, this time with instruments placed aboard the European Space Agency's craft, "Giotto." (NASA had chosen to sit this one out.) Giotto passed a mere 375 miles from Halley's Comet on March 13, 1986, sending readings back to help understand the origins of the Earth and its planetary system.¹¹⁵

UTD's School of Arts and Humanities came under new direction in 1984 with the appointment of Robert Corrigan as dean. Corrigan had won plaudits for his innovative work at the University of Wisconsin's (Madison) School of Fine Arts, building new programs in theater, film, dance, music, and the visual arts. He had been the first dean of New York University's School of the Arts (1964-1968) and the first president of the California Institute of the Arts in Valencia (1968-1972). At UTD Corrigan revamped the curriculum, stressing interdisciplinary work over academic specialties and encouraging novel pursuits such as avant-garde theater and science fiction. Professor Dennis Kratz, who later served as A&H dean, organized the science fiction curriculum. Kratz recalled an interview with a prospective faculty recruit. The hiring committee asked, "What would be your dream course to teach?" "The applicant answered, 'Jacobean drama,' and we knew he wouldn't want to be here," said Kratz.¹¹⁶ After Corrigan consolidated A&H's ten degree programs into four-literary studies, historical studies, art and performance, and arts & humanities studies-some

faculty who were more comfortable with traditional subject matter groupings left, while some students worried about the transferability and marketability of their degrees.¹¹⁷ But most students and the majority of faculty who remained enjoyed the atmosphere of experimentalism and creativity encouraged by the new dean.

Among them was Zsuzsanna Ozsváth, who had left Hungary with her husband Istvan in 1957 and come to UTD's predecessor, SCAS, in 1963. Many of Zsuzsanna's family and friends had perished in the Holocaust. She and her parents had managed to survive as Hitler's "final solution," pushing eastward into Hungary in 1944, was halted by the Soviet army when Zsuzsanna was just ten years old. The Communist takeover of Hungary removed the death sentence from the Jewish population but brought its own forms of oppression. When the Soviet Union violently crushed a popular rebellion in fall 1956, the Ozsváths joined about 200,000 others fleeing westward. By the early 1960s, Istvan and Zsuzsanna had arrived in Texas. While Istvan embarked upon his academic career at SCAS and then UTD, Zsuzsanna, an accomplished pianist, struck off on a new career, earning her Ph.D. in German Language and Literature at UT Austin in 1968 and teaching at local universities through the 1970s. When a nepotism prohibition keeping her from working at the same university as her husband was lifted in the early 1980s, Zsuzsanna joined the A&H faculty.

A Center for Holocaust Studies

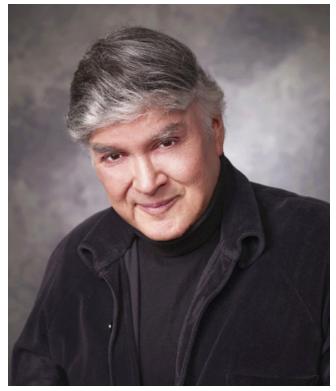
Dean Corrigan encouraged impassioned, pioneering scholarship. Zsuzsanna brought such forcefulness to her literature studies, with a special emphasis on the Holocaust and, more widely, what that phenomenon meant for literature, the arts, and the human condition. One of her doctoral students was Arnold Jaffe, a Dallas businessman who had returned to college at the age of 66 to earn his B.A., then M.A., degrees in General Studies. He was in the process of choosing his Ph.D. dissertation topic when he died unexpectedly, in January 1986. While researching possible topics on the Holocaust, Jaffe had discovered to his surprise that little had been written about the German-Jewish community before the war, and much of what had been done was not readily available in Dallas. He began to raise funds to build a Holocaust library. When he died, his son Michael donated \$10,000 on his father's behalf to support such a library at UTD. Jaffee's guide and mentor, Professor Ozsváth, sought to widen that gift's influence. "We will have a huge collection," she vowed, "that will deal with the history of antisemitism, the persecution of Jews in Spain, England, France, etc. At the end we will have virtually all of Weimar culture, all of the documents that exist."¹¹⁸

The Arnold A. Jaffee Holocaust Collection opened officially on November 16, 1986. Zsuzsana Ozsváth made good on her vow by continuing to raise funds for its mission. Over the years many Dallas citizens were inspired by Ozsváth's work with Holocaust Studies, giving rise to endowments for the annual Burton Einspruch Lectures on the Holocaust, the Lewis Chair in Holocaust Studies, the Hillel Feinberg Chain and the Rabin Professorship. In 2011, a major endowment gift led to naming the program the Edward Ackerman Center for Holocaust Studies and a relocation into new quarters in the Jonsson Academic Building which houses the Center's faculty and graduate students and a new reading room for the Jaffe Collection.

In addition to encouraging an interdisciplinary approach to Holocaust studies, the School of Arts & Humanities offered such imaginative courses as "Music from Source to Experience," taught by a quartet of scholars-musician and composer Robert Rodriguez, biologist Stan Rupert, physicist John Hoffman, and psychologist Jay Dowling. Each brought the perspective of his own discipline to understanding sound, from the processes at work in the auditory canal to the structure of a symphony. "It is as interdisciplinary as you can get," said Rodriguez.¹¹⁹ Rupert remembered his amusement one day when the four co-teachers gathered together to discuss an upcoming class. He and the other two scientists placed their folders down on the table. All bore the label, "Music." Then Rodriguez

entered the room and deposited his own folder which he had labelled, "Science."¹²⁰

Rodriguez had been composing and performing music since the age of six and had studied at several institutions, including UT Austin. In 1971 he had received the "Prix de Composition Musicale" from the Prince and Princess of Monaco at their Monte Carlo palace. He was teaching at the University of Southern California when UTD offered him a position in 1975. The San Antonio native accepted, enthusiastic about starting a new program. In 1980 he was nominated for a Pulitzer Prize. By 1984 his works included two symphonies and two operas, some of which he composed during a two-year stint as composer-in-residence with the Dallas Symphony Orchestra. In 1988 he received an award from the American Society of Composers, Authors and Publishers (ASCAP) for the wide acclaim his compositions had achieved. The following year his national reputation grew after performances in Chicago, Indianapolis, and Washington, D.C.¹²¹



Composer Robert Xavier Rodriguez earned his bachelor's and master's degrees at UT Austin and his doctorate at the University of Southern California. He joined UTD in 1975 and now holds an endowed chair in art and aesthetic studies in the School of Arts and Humanities. His works, numbering more than 100, have been performed to critical acclaim in venues all over the world.

Hard Choices

Back at UTD, the administration struck a harsh note by announcing in August 1987 that it was eliminating all undergraduate teacher training programs, including the one in special education, effective in the upcoming fall semester. Current students would have to finish their degrees by September 1, 1989. Some graduate-level programs would be retained. Then, a month later, further cuts were announced. The entire Environmental Sciences program, graduate and undergraduate, would be phased out by the close of Spring Semester 1989.

The reasons were manifold. Some were economic. The national savings and loan scandal had hit Texas especially hard, with more than 40 percent of S&L failures occurring in that state.¹²² Texas Governor Mark White had imposed a statewide hiring freeze that constricted UTD's staffing. Facing a budget shortfall of \$1.12 million in the 1985-1987 fiscal biennium, the University looked everywhere for possible savings. It pared down its utility bills by \$300,000 by holding Saturday classes in McDermott Library, which would be open anyway on that day, while shutting down classroom buildings to save on expenses.¹²³

These conditions prompted the administration to more closely examine its programs. It determined that some, such as teacher education, did not align well with UTD's core mission as a research university. Environmental Science had held an ambiguous position in NSM for several years, with some viewing it as an important wave of the future while others, including the administration and NSM Dean David Dunn, wondering about its viability. Dunn also worried that the imminent departure of Computer Science from NSM to the new Jonsson School of Engineering (and Computer Science) would leave NSM all the less able to support Environmental Sciences, which was not generating enough research funds to pay for itself.

The administration surely anticipated protests after making such difficult decisions. The question would be how to handle the process and the pain. Alex Clark suggested one approach in his choice of an unfortunate metaphor: "It was a question," he explained grimly," of whether you let the corpus deteriorate or you amputate."124 Many on campus felt this to be insensitive-had the programs in question really been rotting their host schools? Moreover, they believed the administration had failed to offer the affected tenured faculty members sufficient opportunity to make the case for their continuance at UTD in some other program where their skills would be relevant. The latter issue soon displaced the programs' elimination, as such, as a point of contention. UTD and the UT System's Board of Regents claimed that the faculty had been given a chance to speak for themselves. The affected faculty members disagreed. In October 1988, the Texas Faculty Association, a statewide organization aimed at protecting faculty rights, filed suit on behalf of the ten professors slated to lose their jobs.

The U.S. District Court for the Northern District of Texas ruled against the plaintiffs, who appealed to the U.S. Court of Appeals for the Fifth Circuit. On October 23, 1991, the appeals court issued its ruling, partly in favor of the defendants-UTD administrators had the right to terminate the two programs and had done so in accordance with correct proceduresand partly for the plaintiffs: UTD had not granted them adequate opportunity to present reasons for their retention. The Fifth Circuit remanded the case to the lower court for disposition.¹²⁵ Both parties claimed victory. In a sense, they were right. The UT System claimed it had followed lawful procedures all along-but proceeded to update, in writing, its policies regarding tenured faculty in terminated programs. Meanwhile, the TFA celebrated the Fifth Circuit's clarification that in Texas, faculty tenure lay in the university as a whole and not just in a particular program, school, or department.

As a general rule, the UT System set policy but left it up to each of its member universities to tailor that policy to its own particular conditions. At UTD, then, President Rutford sat down with Lynn Melton and Richard Caldwell, representatives of the Academic Senate, to work out the necessary changes in tenure, grievance, and other administrative matters that the TFA lawsuit had highlighted. It was a rough ride, but Rutford remembered the final leg with satisfaction. "When we were all done with it, we set the standard for the entire UT System. That was a major accomplishment at a time when the campus could have blown apart. It didn't. Everybody came together and tried to solve the problem."¹²⁶ Symbolic of the reconciliation was the rehiring of Professor George Fair, who had lost his job in the special education program but soon returned to the School of Human

The Ozsváths' Odyssey

stvan and Zsuzsanna Ozsváth met in Budapest, Hungary, in 1954, when Communist forces were consolidating control of that country. Zsuzsanna was studying music, Istvan mathematics. She and her immediate family barely survived the Nazi occupation, and Zsuzsanna recounted their experiences in her 2010 book, *When the Danube Ran Red*.

Zsuzsanna and Istvan were married when he undertook astronomy studies in Vienna in 1957. She remained briefly with her family before obtaining a false passport and joining Istvan. The two relocated to Hamburg, where Istvan began doctoral studies and Zsuzsanna continued piano training. Istvan befriended Englebert Schucking, a relativity expert who left Europe for a position at the University of Texas at Austin in 1962. Istvan was a visiting lecturer there in 1963 when Ivor Robinson recruited him for the new Southwest Center for Advanced Studies.

Zsuzsanna's wartime experiences continued to percolate. Could any sense be made of all the

suffering? What did it mean for understanding history, art, and literature? She earned her Ph.D. in German Language and Literature at UT Austin, then joined UTD's Arts & Humanities faculty. She oversaw the creation of the Arnold A. Jaffe Holocaust Collection, a comprehensive library of Holocaustrelated materials, as well as the Ackerman Center for Holocaust Studies.

Istvan, or "Pista," as he was known, continued his work on the mathematics of relativity. When he first came to SCAS he wondered if his students would have difficulty understanding his lectures, but when he asked if that was the case, one replied, "Your English was the least of our problems, Professor." He died in 2013 at age 85, remembered for his twin dedications to scholarship and family. Zsuzsanna continued the odyssey both had begun more than 60 years earlier, furthering understanding and encouraging others, especially young people, in its ardent pursuit.



Zsuzsanna Ozsváth

lstvan Ozsváth

Development. The remaining plaintiffs moved on to positions elsewhere.

A New Home for the Administration

On March 17, 1987, just months before the administration announced the cuts in special education and environmental science, dignitaries gathered at a groundbreaking ceremony for the Multipurpose Engineering/Administration (MP/AD) Building. Founders Cecil H. Green and Erik Jonsson were among them, along with Dallas Mayor A. Starke Taylor, Rockwell International's Kent Black, UT System Chancellor Hans Mark, President Rutford, and ECS Dean Blake Cherrington, who would be most closely involved with the new building's activities. The occasion was moved indoors—hardhats, shovels, dirt and all—to an auditorium in Green Hall after the previous night's torrential rains soaked the designated land just to the north.

The MP/AD Building represented the first tangible manifestation of the founders' vision for engineering education at UTD. When completed, it would house not only the small start-up staff of the Jonsson School on a temporary basis until its larger, permanent home was constructed, but also provide a permanent home for the University Administration, whose officers and staff had been encamped for nearly 20 years on the other side of Waterview Parkway from the west edge of campus. The TAB, or Temporary Administration Building, was a holdover from the SCAS days-a construction company's on-site structure at the time-and was variously described, not without some affection, as a triple-wide or double-wide trailer, an old shed, or a one-story shack. Rutford conceded that the TAB had deficiencies. "If you sat at your desk and put a marble on top of it, it would roll off." But as an outdoorsman, "an outside guy," he saw the TAB's bright side. "It emphasized the point that people were more interested in getting things done than they were about the fact that the Administration was in this funny old building."127 Besides, the long walk to and from the rest of campus created opportunities for extended talks, problem-solving sessions, and dialogue, which, claimed Rutford, reduced the need for formal appointments.¹²⁸

Judy Snellings, Executive Associate to the President, also mused over pencils rolling off desktops in the uneven "trailer," but alluded to more serious issues as well. President Rutford, she recalled, prided himself on greeting every faculty member by name and knowing something about his or her particular work. It upset him, then, when he would hike across the prairie to visit the central campus and be asked, "Well, what are you doing



(L to R) Erik Jonsson, Robert Rutford, and Cecil Green at the March 17, 1987 groundbreaking for the Multipurpose and Engineering Building. over here?" Rutford enjoyed the walk; others, like Snelling, never considered it. "You had to drive," she said.¹²⁹ Brian Berry agreed. "You didn't walk across there. The grass and whatever else was growing was shoulder high."¹³⁰

A 1983 study of the campus by the American Council on Education saw in the Administration's physical remoteness from the central campus a metaphor for the distance between a top-down administration and the faculty, and the Administration's prioritizing of relations with external parties over nurturing those with its own faculty.¹³¹ This was a far cry from Rutford's own view of his relationship with the faculty. It was perhaps premature to draw firm conclusions about a university not yet 15 years old. But in any event no one, including President Rutford, rued the move to more suitable quarters when the Multipurpose Building opened in April 1988. The engineers, of course, discovered novel uses for the new building. Poras Balsara, who arrived in 1989, remembered Friday afternoons when the campus emptied and double doors in the hallway could be opened, leading straight down to a skyway connecting the Jonsson Building to the south. "It's a nice, long hallway," noted Balsara. "You could race radio-controlled cars there." It was, in fact, a way to test various electronic and other design configurations, a form of research as well as amusement, like that now conducted outdoors on "quadcopters" and similar craft.¹³²

It would take more than new buildings, though, for ECS to accomplish one of its major aims—to boost enrollment by encouraging more women to join the mostly male ranks of engineers and computer scientists. UTD announced "3-2"



After receiving an up-front financial commitment from private sources, the UT Regents authorized funding for a new Engineering and Computer Sciences (ECS) building and new UTD Administration offices in the "Multipurpose" building, shown here shortly after completion.

programs with private Austin College, Texas's oldest liberal arts college, and with public Texas Woman's University (TWU), then still a single-sex school. Students would complete three years at their home school and then study for two more years at UTD, earning two bachelor's degrees. "We must encourage women to enter engineering," said ECS Associate Dean Bernie List. "Without significant numbers of women entering the field, the shortage of engineers will grow critical in the mid-90s."¹³³

Students in UTD's special education and environmental science programs noted glumly the celebrations surrounding the buildup of the new School of Engineering and Computer Science. That was understandable under the circumstances, as was their somewhat sour-grapes worry that training engineers instead of special education teachers put UTD at risk of becoming "an elaborate trade school."¹³⁴ But there was a larger dynamic churning on campus as the University approached its 20th anniversary year in 1989. What did the juxtaposition of cuts and cutbacks on the one hand, and groundbreakings and endowed chairs on the other, mean for the whole community? Who was valued and who was not? Indeed, who was a scholar, and what counted as scholarship?

Such questions emerged from a seemingly routine decision in spring 1988 to deny tenure to a highly popular Arts & Humanities professor with a thin record of research productivity. "In my three years at UTD," said the editor of the UTD Mercury, "I've never seen such a spontaneous outpouring of unsolicited support for a member of the faculty."¹³⁵ Student anger focused not on the tenure review committee in the Academic Senate but on Vice President Clark, who was perceived as the final arbiter of the matter. The Administration had closely guarded the tenure decision. Clark justified this by citing the need to protect the professor's confidentiality.¹³⁶ Students dismissed this as an excuse for what could only have been, in their eyes, a personal vendetta against the professor, bias against women professors, or the Administration's preference for engineering over the humanities. Indeed, the Association of Professional Women, an informal

group of faculty and professional staff at UTD organized by Dean Carolyn Galerstein (General Studies) had been meeting to provide peer support and guidance to women concerning tenure and other career issues.¹³⁷

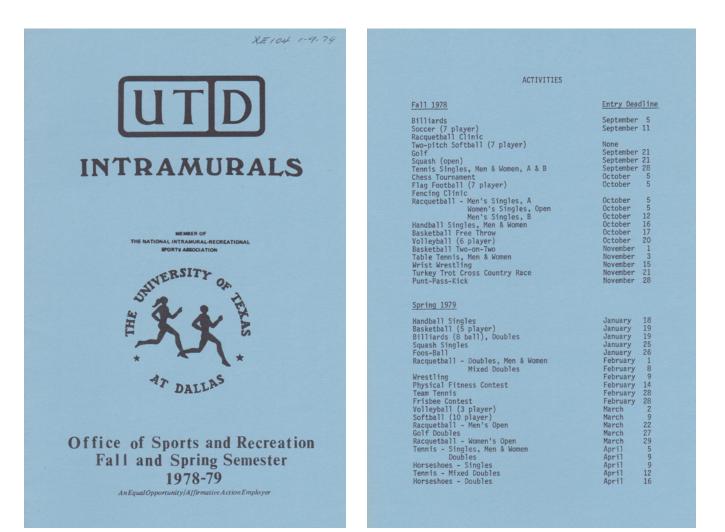
Students, on the other hand, appeared to have little understanding of tenure or the normal tenure review process. Some thought excellence in the classroom alone sufficed as grounds for granting tenure. Others thought teaching ability could, or should, serve to offset deficiencies in research accomplishments. Many viewed teaching as not only more important than research but as the primary reason for having professors in the first place. These notions were at odds with academic realities in a research university, realities that UTD faculty members had not only accepted but embraced. Research and teaching were not isolated functions but were closely bound together in a broader search for knowledge. But if UTD faculty and administration saw their institution as a research university, that understanding had seemingly escaped a large number of students at both the undergraduate and graduate levels. For the Administration, it was, perhaps, a missed teaching opportunity. But for the professor in question, it may have been the opportunity of a lifetime. She went on to enjoy a long career at another university, where her teaching abilities were amply appreciated without regard to her continued lean research output.

Growing Pains

The tenure denial controversy signaled that the University's ambitions were larger than many of its commuter-student members may have realized. As UTD continued to grow, as its labs, classrooms, faculty, and student enrollments pushed its grasp closer to the reach of its vision, its success would depend, as one member put it, on management's handling of "a large number of benevolent forces moving in similar directions at different speeds."¹³⁸ But through the 1980s, it increasingly appeared that UTD's culture as a lean, upper-level and graduate commuter school was at cross purposes with its self-image as a major research university. Size, scope, and scale mattered. Or did they? Was UTD better off trying to grow, or trying to constrain growth?

This tension lay below the surface calm of campus life. For all the tranquility and seeming acceptance of the status quo, UTD students never ceased contrasting their school with other, more traditional campuses that had competitive athletics, and where participation in campus activities and organizations, attendance at concerts, guest lectures, and the like was much higher. One older "returning student" described the outburst of a younger, "traditional" student who was frustrated by the workload at UTD. "Next semester I'm transferring back to a *real* college where they have fraternities and football!" he declared.¹³⁹ This was, of course, trading in stereotypes. But it worked both ways. One older student suggested just ending the comparisons. UTD's older, busy commuters were never going to be "highly involved in activities primarily associated with youth," she said. "Let's stop worrying and just accept the fact that this is how matters are. Let's stop being overly hopeful and optimistic."¹⁴⁰

Tensions about UTD's identity were obscured by an inheritance from the receding SCAS days, passed on from one newly recruited faculty member to another. UTD already *was* a good research university, not because of its undergraduates but because it had to deal with *only* a limited number of them, plus the graduate students. Additionally, the upperlevel undergraduates were mature, cooperative, and focused on earning their degrees. As one such



UTD's strong emphasis on scholarship led in its early years to a decidedly light touch on athletics. The University fielded a modestly serious baseball team, but otherwise its offerings were strictly intramural, even whimsical. What was "Wrist Wrestling"? And was "Foos-Ball" a sport?

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student put it when asked for his "pet peeve" about UTD, "I don't really have any. I just go to class and go home. My classes are good, and my instructors are good."¹⁴¹ What more was there to ask for? In 1983, visitors from The American Council on Education observed that UTD administrators, including its deans, "do not wish to be a comprehensive university." Instead, they were proud of UTD's unorthodox structure and sought to realize its potential rather than relocate to an established university. At the same time, there was little consensus about what exactly made UTD so different. "People comment freely about what the university is *not*," said the visitors, "but their vision of what the university *is* remains fragmented."¹⁴²

President Rutford recalled that the Coordinating Board had given him grief over UTD's classrooms going unused during the daytime hours. He had been looking at graphs charting classroom use at different universities in the UT System, and noticed that UTD's differed greatly from the others. They were empty in the day, then filled up in the evening-the opposite of UT Austin's pattern. Then it occurred to him that if he simply "flipped" UTD's graph, it matched up well with that of UT Austin. Conventional universities may have been busy in the daytime, but they were as deserted between 5:00 p.m. and 10:00 p.m. as was UTD between 8:00 a.m. and 5:00 p.m. After Rutford presented this data to the Board, "We heard very little more about classroom utilization," he said. Besides, he added, filling classrooms was only a part of UTD's mission. "Research, research...by very dedicated people" filled those daytime hours when the university only appeared to be "idle."¹⁴³

This ingeniously argued equivalence in space usage patterns did not translate into an equivalence of on-campus cultures. Nor would Rutford ever have advanced it as such. But the hobbling of UTD's potential in 1969 by the terms of its founding legislation had morphed over the years into a kind of self-convinced virtue. UTD had not been crimped from the start; on the contrary, it had been lucky. Its campus was not, as some groused, "dead" during the day; rather, its researchers were free all day long to work in their labs and offices. Its student body was not deprived of the stimulation found in a normal university; instead, it was busy, focused, and "mature"-too much so to miss greatly the "activities primarily associated with youth."

It is hard to know where all that would have led, if left alone. But it was not left alone. In March 1989, as the UTD community stood by, State Senators Ike Harris, Eddie B. Johnson, and Craig Washington, and Representatives David Cain, Fred Hill, and Sam Johnson introduced legislation to make the University of Texas at Dallas a full, four-year school. It might have seemed to some that adding freshmen and sophomores would make little difference to the University's identity or mission. But most knew better. Some thought it would compromise the University's special strengths; others saw new, if unanticipated, opportunities. But few underestimated the potential for both disruption and progress that the proposed change represented. If it succeeded, the bill would comprise the largest grain of sand ever inserted into the UTD oyster. From there, the decision would be the University's: to resign itself to another imposed aggravation-or start producing a pearl.

CHAPTER 3 Changing Times (1989-1993)

'n July 1989, the four-year UTD bill became law and the University prepared to admit its first freshman class, a development daunting not only in its logistical aspects-recruitment, housing, dining, classroom and library resourcesbut also in its implications for curricula, faculty assignments, and that ever-important but hard to capture entity, "campus life." The very mission of the University was up for review and redefinition, a task that some faculty and staff undertook with forward-looking vigor, while others looked back wistfully at a more tranquil academic landscape. Fundraising remained a perennial challenge and an uphill climb for new leaders at UTD who understood that attracting outstanding freshmen would be crucial to the University's future development. Accordingly, the University turned its attention to this paramount aim.

Uncertainty Prolonged

In 1989, President Rutford warned his colleagues attending a campus-wide gathering, "If you're not all excited about this thing, you're either going to get swept up into it or you're going to get swept aside, because we're moving on."¹⁴⁴

"This thing" began in May 1989, as the Texas Legislature moved to make UT Dallas a full, fouryear school. The Senate passed its bill, SB895, on May 15, but also proposed expanding the University of Texas at Permian Basin, another UT System upper-level university, to four-year status. It also permitted the Board of Regents to develop UT Pan American, which had recently merged with UT Brownsville, into a single, degree-granting institution. A committee in the House stripped the provisions regarding the other two schools and sent the bill back to the Senate on May 26. A conference committee reinstated the provisions applying to UT Permian Basin and UT Pan American-Brownsville, both chambers accepted the decision, and on May 29 the bill went to Governor William Clements for signing.

But the governor did not sign. He vetoed SB895, objecting to the provisions regarding the two other schools. Clements insisted on a "clean" bill for UTD and he got it. On June 26 the House passed HB42. The Senate followed two days later, and Governor Clements signed HB42 on July 12. The effort to make UTD a four-year school could not yet claim final success, however, for the Higher Education Coordinating Board had to review and approve the measure. Until that body made its decision, the University could not spend any public money on activities such as advertising and recruiting for the proposed expansion.

Besides requiring the Coordinating Board's review, the four-year law came with other strings attached, including a cap on enrollment of freshmen and sophomores at 1,040 students for the first two years (summer 1990-summer 1992) and 5,000 students in all years thereafter. Furthermore, students not transferring in from local community colleges had to meet or exceed the admission standards of UT Austin. This meant that UTD would have to compete for the same high-performing students as the System's century-old flagship campus. Additionally, UTD was obligated to recruit students for programs in the natural sciences, engineering, and mathematics. Of course, UTD would continue to offer other programs, in part because all schools in the System had to meet core curriculum requirements reflecting an ideal of "well roundedness," and in part to accommodate the substantial number of students who, notwithstanding UTD's emphasis on technology, chose not to major in these fields. The University's stress on science, engineering, and math had been an important aspect of the enabling legislation, stemming from the need to justify UTD's expansion in terms of the Dallas area's needs



On July 12, 1989, Governor William Clements signed House Bill 42, authorizing UT Dallas to admit freshman and sophomore students. Looking on, from left to right, are Peter O'Donnell, Jr., person unknown, Edie Bernice Johnson, Alex Clark, David Cain, Rita Clements, and Fred Hill. UT System Regent Louis Beecherl, Jr., stands behind Ms. Johnson.

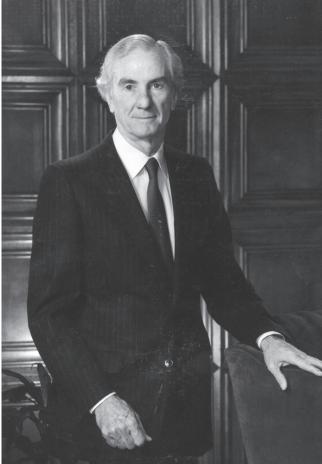
for high-tech training and research. The focus on technology had also reflected directly the wishes of several major donors. Nevertheless, UTD would be challenged in years to come to explain, and keep clarifying, the school's larger scholarly mission and purpose.

Chemistry Professor Chris Parr, Dean of Undergraduate Studies, had earlier speculated that UTD might try to become the "Harvard on the Trinity River." That would be "not a bad thing," he mused, but then there was the Massachusetts Institute of Technology, not far from Harvard, with its historic emphasis on science and math. "We're going to try to tread a very fine line between the two," concluded Parr, explaining that UTD had not forced the four-year change on the Dallas metroplex, but rather had waited for the mandate to come down from the Legislature. "We'll follow it, whatever it turns out to be," he said in May, before Governor Clements signed the final bill. "We haven't started this ball rolling," he added. "It was done essentially by a consortium of the movers and shakers of the Dallas community-many of which are in the high-tech areas."145

These supporters included not only two of the original Southwest Center for Advanced Studies founders and early UTD advocates, Cecil H. Green and Erik Jonsson–Eugene McDermott had died in 1973-but a new generation of executives and officials. They comprised a veritable "who's who" of Texas leaders such as Ross Perot, Kent Black, Trammel Crow, Jerry Junkins, Peter O'Donnell, and UT System Regents Jess Hay and Louis Beecherl of Dallas and Jack S. Blanton of Houston-who believed that future prosperity depended on making an aggressive, but focused, commitment to higher education. "The concept here is not another UT Austin or Texas A&M," said O'Donnell, an investor, philanthropist, and good friend of Governor Clements who had supported SCAS in the late 1960s and now led the movement to make UTD a four-year school. "It's a Texas-style MIT."146

It was O'Donnell who got the governor's backing-not easy since Clements was a stalwart SMU supporter. When the two met in Clements's office, the governor sat in silence while O'Donnell made his plea. "He sat there for three or four minutes, like a stone," O'Donnell recalled. "Finally,





Dallas businessmen and civic leaders Jess Hay (top) and Peter O'Donnell were among many who believed that making UT Dallas a full, four-year undergraduate university would best fulfill its mission, as well as serve the interests of Dallas and the state of Texas.

he said, 'I'll help.'"¹⁴⁷ The local community colleges also signed on, alleviating the Coordinating Board's concern that a four-year UTD would adversely affect those schools. Given UTD's enrollment caps and high admission requirements, there would be plenty of students to go around.

President Rutford saw the expansion as an opportunity to "grow some of our own students" and to design a unique curriculum. But UTD had recently finished a long campaign to obtain an engineering school, and though that success virtually assured a subsequent push for a four-year expansion-no accredited engineering school in the country was just "upper level"-Rutford's feelings were mixed. "It's a little overwhelming," he acknowledged in May.¹⁴⁸ Nevertheless, by July he had accepted the inevitability of the change, and exhorted students and faculty assembled on the campus to pitch in or step aside because "we're moving on."¹⁴⁹ Alex Clark emphasized the importance of lending a hand. "The prospect of opening the excellence of UTD to freshmen is both exciting and demanding," said the Vice President for Academic Affairs. "In addition to their full-time duties, nearly everyone in the university will participate in a massive planning effort."150

Preparing the Way

That summer, a cauldron of issues simmered on campus, stirred by the expansion bill. Practical matters mixed with soaring visions and expectations, while the Coordinating Board's protracted deliberations added an aura of uncertainty. Meanwhile, UTD staff realized that they would have to be ready to move at a moment's notice. Committees multiplied in areas including admissions and recruitment, academic advising, scheduling, computer and library resources, student life, and even publications. Vice President for University Affairs Scherry Johnson pointed out that if the Coordinating Board were to approve the expansion, every UTD document describing the school as "upper division" would suddenly become obsolete.¹⁵¹

As the Coordinating Board continued to deliberate, Rutford and Clark assembled a Task

Force on Academic Expansion to prepare for the first freshman class. Clark served as chair, with Professor Stan Rupert as vice-chair. The challenges faced in 1975 when incorporating upper-level undergraduates resurfaced, now in more urgent form, for the needs of much younger students would differ markedly from those of the older commuters. Where would the freshmen live? Where would they eat? And, in the case of unsupervised 18-year-olds with no cooking experience, what would they eat and what would their parents think about that? In what classrooms and labs would they be taught? Upper-level students would also be affected. The University's schedule of evening classes had served them well, but if those classes were curtailed or shifted to daytime hours, many students with daytime jobs or other fixed commitments might be unable to finish their degrees.

The residence issue was partially addressed by the coincidental opening, in the summer of 1989, of the University's first on-campus student housing on Waterview Parkway just west of the central campus. Waterview Park was a complex of 200 garden-style apartments initially intended to bring graduate students onto campus and closer to their research. Those apartments would be barely a year old before they might have to accommodate incoming 18- and 19-year-olds. How many freshmen would enroll, how many of them would need on-campus housing, and would they displace any graduate students already residing at Waterview? The likelihood that the first freshmen would be local commuters removed some of the housing pressure for the coming 1990-1991 academic year, but the University did not wish to kick that noisy can too far down the road—some might say farther than it already had. UTD quickly began planning for additional apartments in Waterview Park, unaware that the process would continue almost uninterrupted for the next 30 years.

The Legislature had passed its bill but had appropriated no money for student housing or for any other aspect of UTD's four-year expansion. Its position seemed to be that if private donors were pushing for it, then private donors could pay for it. The University had leased its Waterview Park land on a long-term basis to a private developer who built the apartments, collected rent, and managed the property. The same arrangement would apply to the new units. Meanwhile, Texas Instruments Chairman & CEO Jerry Junkins led a "Campaign to Make History," enlisting nearly 50 other corporations and foundations to raise the \$3 million necessary to fund the university's transition.¹⁵² "This was the first time a public university had been required to fund from private sources," remarked Scherry Johnson.



In fall 1990 UTD made its new Waterview Park Apartments available for entering freshmen. The complex is shown here in 2006.

The Campaign to Make History

"U.T. Dallas is a public university," *The U.T. Dallas News* reminded readers in Autumn 1991, "but more than almost any other public institution of higher learning, it was founded and shaped by the private sector." This was never more in evidence than in October 1986, when the State Higher Education Coordinating Board approved UTD's engineering school, and in early 1990 after that body also approved the University's expansion to a full, fouryear undergraduate curriculum.

Substantial private sums had to be raised to cover the start-up costs of these new programs– \$52 million for the engineering school and \$3 million for the addition of freshmen and sophomores. In 1990 Texas Instruments' Chairman and CEO Jerry Junkins led "The Campaign to Make History," a fundraising effort by UTD founders Erik Jonsson and Cecil Green, by Margaret McDermott, and by 46 other donors to ensure the four-year expansion's success. Contributions surpassed the original goals.

President Rutford appreciated the donors' votes of confidence in the University, especially with the nation and the oil industry still in an economic recession. UTD had started life in 1969 as an underdog, with its mission limited by state-imposed restrictions. Its most ardent supporters, like Erik Jonsson, had worked hard to free the university from constraints such as barring an engineering school and a full, four-year curriculum. With those bans lifted, he and others were loath to allow yet another limitation—a final, financial one—to crimp UTD's potential. They were not just raising money for a good cause; they were ensuring that a worthy underdog had a fighting chance. That made more than a great university; it also made history.



MCI Vice President Richard Liebhabor presents a check to President Rutford, MCI was among many corporate donors supporting the University's "Campaign to Make History."

Extra Extra Extra Extra Extra Extra The U.T. Dallas News Jol. II No. 2 APublication of The University of Texas At Dallas January 1990

Expansion approved

Coordinating Board vote adds freshmen, sophomores

Engineering building receives OK

A new building for The Eric Jonson School of Engineering and Computer Science at U.T. Dallas was approved on Jan 26, by the Texas Higher Education Coordinaing Board. At the heart of the new facilit is a "clean room" — one hundred times more dust free than the city's best hospital operating rooms — for the design and construction of high-technology microelectronic devices.

"This is a red-letter day for the Unive 'y and the Jonsson School," said Dean ake Cherington. "The Board's decision will help U.T. Dallas bring to fruition the goals inherent in its founding twenty years See "New" Page 2



President Robert H. Rutford cuts one of cakes celebrating approval of expansion undergraduate programs, the new engir building and Human Development and 1 Sciences program changes. The campus also celebrated Dr. Rutford's birthday. The Texas Higher Education Coordinating Board on Jan. Edg. space final approval to add the freshman and sophomore years to off eress at Daller. The view was animous: The opportunity to "grow our own" undergraduates to the sciences, mathematics and engineering will strengthen our undergraduate programs, and contribute to the Education of the sciences, mathematics and engineering will strengthen our underregulated programs, and contribute to the Robert H. Rutford said in response to the view. "This provides U.T. Dallas a unique opportunity to continue the downward Building of cadeotics U.T. Dallas a unique opportunity to continue the downward Building of science in the strengthener miniversary in 1980, and its prodecessor institutions first offered graduate education hen jusior and science level undergraduate education beginning in 1973 and now The president said that current programs will continue to play an integral part in the Sie **errestance Tage 1** "We're very fortunate," she noted, "very, very lucky, particularly in corporate support."¹⁵³

Johnson organized a gala dinner in the fall of 1989 to thank donors and to celebrate UTD's 20th anniversary. It was an opportunity to welcome back onto campus founders Erik Jonsson and Cecil Green, along with Margaret McDermott, widow of Eugene McDermott. "To engage a donor takes more than somebody knowing their name and writing them a letter," said Johnson. "They have to have an interest in the mission, and they have to have a personal connection. I thought the best thing I could do is at least get the founders back on campus."¹⁵⁴ But there was only one venue on campus large enough for such an event-the basement of McDermott Library. It seemed an unlikely setting at first glance, but Johnson and her team set to work hanging drapery on the walls and providing all the finery, flowers, good catering, and music that a grand occasion required. The effort succeeded. "They all had a good



Dean of Undergraduate Studies Chris Parr chaired a committee in 1989 charged with reexamining UTD's educational philosophy and mission in light of the anticipated admission of freshmen and sophomores.

time," Johnson recalled with satisfaction. "I considered my job done," she said after the event, and then corrected herself—"not done, but started."¹⁵⁵.

Generous backing from private donors freed UTD to focus on the all-important curriculum debate—what courses would now be required of its students? This was a question close to the institution's heart, for it hinged on the meaning of scholarship itself. What sort of education would stamp the UTD graduate of the future? What sort of information, values, perspectives, outlooks, experiences, habits—indeed, even hopes and dreams could students be encouraged to adopt during their all-too-quickly-completed college years? These were heady, inspiring, and contested questions, easy enough to discuss in abstract terms but much harder to translate into the specifics of course requirements.

Chaired by Dean of Undergraduate Studies Chris Parr, the University Committee on Undergraduate Curriculum visited a dozen different institutions, including Columbia University, Drexel University, and the University of California campuses at San Diego and Irvine, to get some ideas. Parr reported back to the Academic Senate that they had not expected to find much, but instead were "finding a lot more of interest than we could have imagined."¹⁵⁶ All of these new ideas informed a September 1989 Senate debate on a statement of "undergraduate teaching philosophy." Ideals such as the university's instilling in students "the will to further educate oneself, a love of learning, a love of scholarship, and the will to pursue this throughout one's life" led to discussions of how, specifically, to realize such ideals in the curriculum.¹⁵⁷

Naturally enough, scholars promoted their own perspectives. Computer scientist Herman Harrison thought all UTD students should have a good working knowledge of computer systems. Physicist and Engineering and Computer Science (ECS) professor Cy Cantrell suggested a statement that UTD "is committed to providing undergraduate education of the highest possible quality in the natural sciences, mathematics, and engineering as well as in other fields, *as needed*." (Italics added.) After all, he noted, UTD's many corporate supporters and HB42 itself had expressly called for a science and engineering focus. In the end, Natural Sciences & Mathematics' (NSM) representatives on the Committee amended Cantrell's statement to remove the words "as needed."¹⁵⁸

In November, Robert Rutford and Alex Clark met with Coordinating Board Commissioner Kenneth Ashworth to discuss the four-year curriculum, two pending master's degree programs in the School of Human Development, and the construction of a new engineering building to replace ECS's current guarters in the Multipurpose Building. The Board had approved UTD's Doctor of Science in Engineering degree the previous month but still had made no decision on the University's four-year expansion or on the timing of engineering building construction. MCI Telecommunications executives and other community leaders hosted a lunch for Board members in December to reassure them of their continued support for UTD and to address any lingering concerns.¹⁵⁹

The Board's caution stemmed from the fact that it was on unfamiliar ground. In the past, it had dealt with numerous proposals to expand lower-level schools into upper level schools, but never had it faced a proposal to go the other way. On January 10, 1990, President Rutford addressed still another meeting, this one a public hearing held on campus, concerning the Coordinating Board's imminent decision. UT System Regent Louis Beecherl, a longtime proponent of UTD's engineering school and the four-year concept, joined Rutford and Rockwell International's Kent Black in this final push for approval.¹⁶⁰

A Final Decision, Continued Preparations

At last, on January 26, 1990, the Coordinating Board let go the leash and gave its unanimous blessing to UTD's expansion. Celebrations on campus included champagne and cake-cutting, for it happened to be President Rutford's birthday.¹⁶¹ The Coordinating Board also signed off on two new offerings: a Master of Science in Human Development and Early Childhood Disorders, and a Master of Science in Applied Cognition and Neural Science. Psychologist Bert Moore, who had succeeded Tom Tighe as Human Development dean in February 1989, explained HD's new directions, toward early childhood studies such as those going on in the Callier Center on the one hand, and toward technical fields such as artificial intelligence and computer modeling on the other.¹⁶² Finally, UTD welcomed the final go-ahead for construction of a new, \$20 million engineering building, this one with state-of-the-art, dust-free, climate-controlled "clean room" capabilities to support sophisticated microelectronic work.¹⁶³

Meanwhile, the Academic Senate continued its curriculum discussions, which it described as "very positive, even if heated." All shared the strong, energizing conviction that, "This is your baby; the curriculum debate is a faculty debate."164 Stan Rupert oversaw the process. "It took a good semester of hard work and people arguing," he recalled. "Some of them got pretty steamed up."165 But gradually the heat subsided, and opinions coalesced around a rough consensus. Efforts to impose a uniform set of requirements on all undergraduates, for instance, would put engineering and computer science students and, indeed, the Engineering and Computer Sciences school, on the wrong side of national accreditation standards for their fields. These were highly technical, intensive majors that allowed little room for electives, or courses outside the major. If such students were given the same number of electives as the humanities students, they would essentially be forced to "spend" their electives on their own major, thereby defeating the aim of "well-roundedness." In engineering, computer science, and other science fields, then, the curriculum would allow fewer electives than it did with other majors.¹⁶⁶

The discussion went the other way, too. If engineers should be exposed to the humanities, it was only fitting that poets and artists should know something about math and science. But how much? Art historian Deborah Stott worried that the proposed requirement of six courses in science and math for all undergraduates might be "excessive for someone majoring in arts and humanities," explaining that "art and humanities have sought other ways of knowing the world than through the scientific model." Professor Stott was particularly concerned that transfer students might be intimidated by the stepped-up requirements, stop enrolling, and not be replaced by sufficient numbers of incoming freshmen.¹⁶⁷ But Larry Redlinger, who had replaced Carolyn Galerstein as dean of the School of General Studies when she died in March 1988, expressed a view that was widely shared across campus: in a technologically complex society, "People are required to be literate and numerate."168

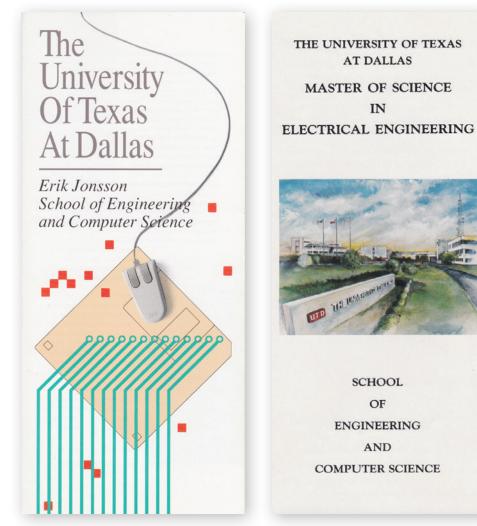
Some faculty feared too great a discrepancy of depth and breadth between the incoming students, whom they would be educating from the very beginning of their collegiate experience, and upper-level transfer students who had received their first two

years of instruction at other institutions. Redlinger announced that his school would gradually tighten its admission requirements to assure alignment of transfer students' preparation with that of their four-year UTD peers. "If UTD does its job right, the people who are here will be getting a crackerjack education," he said.¹⁶⁹ At the same time, Task Force co-chair Stan Rupert believed that UTD would need to retain some flexibility, for the terms of HB42 required the University to continue to meet the needs of transfer students from community colleges even as it expanded to a four-year curriculum.¹⁷⁰ At the end of a months-long discussion, the Senate decided to require transfer students to meet the same graduation requirements for their fields as the other undergraduates, but not until 1994. This would allow current students to finish their degrees before the change took effect.¹⁷¹

AT DALLAS

IN

SCHOOL OF ENGINEERING AND COMPUTER SCIENCE



ECS program brochures circa 1999.

Strong undercurrents of institutional transformation were detectable throughout the many months of curricular debate. UTD had been instructed by the Legislature to reshape itself, and it had undertaken to do so. But its members experienced in different ways the mix of opportunity and anxiety presented by largely unexpected change. Understandably, ECS Dean Blake Cherrington was upbeat. He might worry about recruiting and keeping good faculty, and about establishing a strong research program, but these were "upside" concerns for a dean who had just been promised a new lab and classroom building. The winds of opportunity were at ECS's back.¹⁷²

On the other hand, prospective freshmen with an ear close to the ground might have detected the approach of heavy hooves in NSM Dean David Dunn's relish for an undergraduate curriculum "exercising the same quality control standards that were already in place for a doctoral program."¹⁷³ Chris Parr also might have alarmed potential applicants by asserting that the "key concept" behind UTD's general education curriculum was "for all students to utilize higher mathematics to deepen their understanding of the sciences and their applications."¹⁷⁴ The University's ideal was to "create an academic experience which will compel students in the technical fields and in the liberal arts fields to function in and appreciate the paradigms of the other," Or, as Parr put it more pithily, to produce "high-tech poets and literate engineers."175

But it was hard to translate the ideal of renaissance learning into specific course requirements. What went into making a "high-tech poet?" Further, it risked condescension to imply that students in engineering, business, or science fields would be illiterate without completing some number of humanities courses. Humanities students might shrug off charges of innumeracy, perhaps at their peril. But illiteracy was different, not just the flip side of "bad in math." The "well-educated person" proved difficult to describe, in no small part because the learning process was never finished; nor was it supposed to be. Education was life-long. The university experience gave it direction but by no means aimed to complete it. In these discussions, nothing less than the University's intellectual identity, as well as that of its future students, was in transformation. The four-year expansion had upset the institution's equilibrium. Not only was UTD trying to find a new balance, it was also redefining what kind of place it was going to become. Maybe that would be a life long process, too. But this was now, and the scholars were deeply engaged on home turf.

Social Sciences Dean Royce Hanson weighed in by granting the importance of technology and high-tech innovation while reminding his colleagues that students also needed to understand "the social, economic, and political context within which a new kind of society will operate."176 A&H Dean Robert Corrigan focused on balancing the needs of that school's lower-division and upper-division students, speculating that "the lower-level curriculum will result in some very interesting students entering our school in their third and fourth years."¹⁷⁷ He had reservations about limiting evening classes and meshing the existing upper-division program with the new freshmen/sophomore curriculum, given the limited funds available. School of Management (SOM) Dean Charles Kroncke looked forward to UTD's becoming "a more traditional institution." It would be a dozen more years before SOM admitted freshmen (its lower-division students began their courses as second semester sophomores, after completing the University's non-management prerequisites), but Kroncke joined School of Human Development Dean Bert Moore and other colleagues in appreciating the greater control they would now have over the full undergraduate experience.¹⁷⁸

Dean Larry Redlinger viewed the changes at UTD as the fulfillment of the founders' intent—not to make a scaled-up version of the Southwest Center for Advanced Studies, but to create a full, four-year university. The changes would begin gradually, he believed, "then as they become additive, they will be noticeable, then exponential. When they finally level off, it will be interesting to see what resemblance the school bears to its former self."¹⁷⁹ At the time, with the enabling legislation capping UTD's freshman/sophomore population at 5,000, Redlinger's expectation that the changes would "level off" made sense. But the leveling never happened. Transformations, "additive, noticeable, then exponential," would continue. That, too, was unexpected.

A First-Class First Class

By late February 1990, UTD had mounted an all-out drive to recruit its first freshman class. It printed brochures for distribution to high school counselors, sent out multiple press releases, and in March organized a "blitz" of 128 high schools by a team of administrators and faculty.¹⁸⁰ Making the brochure presented a challenge. On a campus where the average age was 28, there were few people who looked young enough to pose as freshmen for photographs. Scherry Johnson and colleague Judi Hensley improvised. They drove to J. J. Pearce High School in Richardson, recruited a dozen volunteers, and took them back to campus. Sprawled out on top of the stonework of the University of Texas Dallas sign on Campbell Road, the multi-ethnic group of smiling, waving youths looked every bit the part of





From recruitment brochure "Come Make History at U. T. Dallas," 1990



Recruiters for UTD's first freshman class faced an unusual challenge: its existing upper-class undergraduates looked, well, a bit mature to pose for an appropriate brochure. Scherry Johnson (L) and Judi Hensley (R) met the challenge by enlisting volunteers from a nearby high school. When some at UTD objected that the high schoolers were not UTD students, Johnson replied, "Well, they are not our students now, but they might be next year!"

happy UTD undergrads. "I got in trouble for that with the faculty," Johnson chuckled. "We had to do something. So I said, 'Well, they are not our students now, but they might be next year!"¹⁸¹

Two hundred and eighty-eight high school seniors applied to UTD that spring. Of the 138 who were accepted, 107 enrolled.¹⁸² Their class rank and average SAT scores placed them ahead of all other public universities in the state. These academic qualifications of course were consistent with the requirements imposed by the enabling legislation, that UT Dallas use the same admission standards as UT Austin. The students boasted a variety of extracurricular achievements such as membership in honor societies, participation in student government, athletic awards, and various volunteer activities. UTD publications declared the entering freshmen "top-notch," and a "first-class first class."¹⁸³ More than half of them held part-time jobs, suggesting that finances and the option of staying close to their homes were among the reasons they had chosen UTD. Fifty-nine percent were male and 41 percent female, reflecting a national gender trend at the time in "STEM" subjects (science, technology, engineering, and math) that UTD would soon try to counter by encouraging young women

to enter those fields. The University organized a Freshman Orientation on August 24–Darralene Rachavong in Student Services recalled having to persuade several senior faculty members that such an event was necessary–and on August 27 and 28 they joined 8,589 other students registering for fall classes. That number included 3,846 graduate students, 44 percent of all registrants.¹⁸⁴

Total enrollment was up from the previous year's 8,100, as were the late-summer temperatures. Long lines, inadequate signage, and procedural confusion caused widespread frustration. And, as seemed often to plague such occasions, the computers sputtered and stalled. "You would think that a school like the University of Texas at Dallas would be better organized," commented one new student.¹⁸⁵ The influx of 107 freshmen had not caused the glitches. Nor was the boost in total enrollment solely responsible, for UTD had been registering undergraduates since 1975, when students also had experienced exasperating registration snafus. The more likely explanation was that the University, for all its emphasis on first-class academics, had not yet adopted a first-class "service culture" toward its student population. Over the years, UTD's older, upper-division commuters and graduate students

had shrugged off concerns about lack of a campus life, occasionally complained, and then carried on. It remained to be seen if younger students with more choices would prove equally self-sufficient—and forbearing.

Meanwhile...

The arrival of freshmen was the major change at UTD in the fall of 1990, but the university changed in other ways while moving into its third decade. The School of Human Development's Callier Center for Communications Disorders, located downtown near UT Southwestern Medical Center, celebrated its 25th anniversary in May 1990. Months earlier, in January, the Callier Center had opened a clinic on the Richardson campus to serve a growing suburban clientele. Located in the Cecil Green Hall (the "Green" building, or just "Green"), the new Communications and Learning Center (CLC) also provided valuable teaching and research opportunities for UTD. Dr. George Fair, a tenured professor who had faced an uncertain future after the University cancelled its special education teaching program in 1987, found a new setting for his skills and experience when UTD named him the CLC's director.¹⁸⁶

In April 1991, co-founder Cecil H. Green returned to campus to break ground for a new "think tank" venture, the Cecil and Ida Green Center for the Study of Science and Society. The goal was to provide a forum for scholars to explore the many ways in which science shaped social policy in matters such as education, health, and economics, and how policy, in turn, affected science. "Progress is very dependent upon the blending of technology and human feelings," Green observed.187 Instead of jackhammering the parking lot where the building was to rise, participants marked the occasion by potting young maple trees. The Dallas Civic Garden Center took care of the trees during construction, and then replanted them during the project's landscaping phase. The Center also housed papers and other memorabilia from Green's lifetime of educational philanthropy around the globe. Oxford, Stanford, MIT, the University of British Columbia,

the University of Sydney, the Scripps Cancer Clinic, and Woods Hole Oceanographic Institution were among the dozens of schools, research centers, and libraries he had supported. Green had noted with pleasure UTD's progress. Now, the Green Center represented a further investment in the University's future. After comments by President Rutford and Alex Clark at the groundbreaking, he allowed that, "You are looking at a very grateful and young man, only 90 years old."¹⁸⁸

Alex Clark became the Green Center's first director as of September 1, 1991, the effective date of his resignation as UTD's vice president for academic affairs. In his seventeen-year tenure in that role Clark had left a deep imprint of academic excellence and innovation. He had taken advantage of a buyers' market in academia in the mid-1970s to recruit highly qualified applicants and believed strongly in what he had promised prospective faculty members— "a fresh look at the future forms of higher education, unburdened and unconstrained by convention." Clark passed on to many of them his enthusiasm for this novel academic experiment.¹⁸⁹

Clark and his faculty recruits believed they were on the "cutting edge of their fields, models for other institutions of higher learning."¹⁹⁰ Ironically, though, this revolutionary approach bore some conservative fruit. Once excellence had taken a certain form, it inclined toward self-preservation and protection. Clark often described UTD's schools as "steeples of excellence," a term borrowed from electrical engineer Fred Terman, the legendary provost at Stanford, where Clark had earned his M.A. and Ph.D. degrees in sociology. Under Clark's close guardianship, UTD had achieved a reputation for high academic standards, but also for being different from other universities. The externally imposed admission of freshmen had upset all that. It was some consolation that the young newcomers would all be very bright, but with UTD now reconfigured as a comprehensive university, Clark's carefully constructed interdisciplinary steeples would require some restructuring. His successor as vice president for academic affairs would have to work with the president to make necessary adjustments

to the blueprints Clark had helped draw, and then faithfully followed, through the University's critical formative years.

UTD was home to one steeple of excellence whose reliable pipeline of research funds largely insulated it from campus transformations. The Center for Space Sciences won a \$9.1 million Department of Defense contract in spring 1991 to build monitoring systems for satellites bound for the ionosphere. The satellites were intended to spend an astonishing 15 years in orbit 500 miles above the earth, recording meteorological variables like temperature and the flow of charged particles. It was the largest research contract in UTD's history, and a welcome contrast to difficulties such as those afflicting McDermott Library back on Earth.

In 1990, for the first time in four years, the Regents had failed to approve a \$1 million expenditure of Permanent University Fund money for UTD's library. A national recession was partly responsible. Several states, including historically strong education advocates California, Massachusetts, and New York, were imposing hefty tuition and fee hikes for the 1991-1992 school year.¹⁹¹ Texas also felt the pressure of shrinking public funds generally, and an increasing taxpayer antipathy toward public education in particular. State budget cuts to higher education shrank McDermott's resources even further. In 1986 the library had acquired 36,000 volumes, but by 1989 that number had dropped to 15,000. Library Director Ed Walters laid off four professional staff members in order to avoid reducing the Library's hours, and some private donations enabled remaining staff to purchase materials needed for the new freshmen/sophomore courses. But a year later, in fall 1991, diminished state support had Director Walters facing the prospect of reducing weekday hours and closing McDermott entirely on Sundays.¹⁹²

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Library funding slashed

Student Fee Committee votes to eliminate funding over two years

by Christopher Klee Mercury layout editor

Despite impending legislative budget cuts for state universities, UTD's Student Service Fee Committee voted to phase out the use of student fees to supplement the McDermott Library budget. As a result, the library will be forced to cut back itshours from 97 hours per week.

The six-to-four vote followed a motion to decrease funding for the next fiscal year by 50 Percent as a step toward total elimination. Proposals to reduce the funding by 20 percent and 30 Percent next year were rejected.

"The library is a need for everybody," said Thomas Sala, Committee Chairman, " but you've got all these other areas that the Student Service Fee should fund."

"When it comes to the li-

brary, that's an academic area," he said. "That's for the administration to deal with. That's not something for which the student should be taxed and forced to deal with.

"I think the administration is just dumping responsibility on the Student Service Fee Committee, rather that making an effort to remedy the situation," said Sala. "One of our fears was that the administration would play this as the Student Service Fee Committee's responsibility, but students need to be aware of the philosophical debate. It basically boils down to a philosophical debate, because [student funding of the library] is not illegal."

The debate, according to Sala and other Committee members, is whether students should pay for the library out of funds which are designated for nonacademic uses, such as Student Activities and the Student Health Center.

"It's perfectly legal, but the money is supposed to go towards enhancing student life," said Committee Member Elizabeth Fisher. She cited a recent increase in Student Service fees. "Yes, we do need the li

brary, but if we're going to have cost increases we should have it go to what we need," said Fisher.

Sala and Fisher both cited needs in the Physical Instruction facilities and Student Services.

"While I don't disagree that [funding the library with student fees] is not a traditional use of fee money, I think it's a worthwhile expenditure to help a large number of students on campus," said Priscilla Beadle, vice presi-Please see FUNDING, page 5

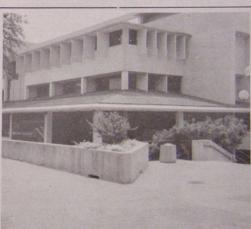


photo by René Hampto As a result a recent decision of the Student Service Fee Committee, McDermott Library's current operating hours of 97 hours per week will be cut to approximately 80, according to preliminary estimates by Edward Walters, Director of Libraries.

William B. Hansen and the The Hansen Center for Space Sciences

hen Francis Johnson became interim president of the new University of Texas at Dallas in 1969, William Bert Hanson became director of what had been SCAS's Division of Atmospheric and Space Sciences. Renamed the Center for Space Sciences, it became part of UTD's Department of Physics.

Despite an abundance of technical arcana, there has been nothing dry or colorless about space exploration. Bill Hanson was as colorful as the subjects he researched. An avid biker and sportsman, he took up golf and skiing at age 60, scuba diving at age 63, and windsurfing at 65. With a surfboard strapped to the top of his yellow Cadillac, Hanson was ready to take advantage of a combination of good wind and low work pressure to head for a nearby lake. He and Larry Redlinger set up a "bow stand" for bow-and-arrow quail hunting on campus, before the university's development scattered quail and hunters alike. Redlinger also enjoyed sessions of the informal "Hundred Thou," as in "thousand," Club that Hanson organized, where researchers with grants over \$100,000 brainstormed each other's work.

Colleagues often referred to Hanson's "backof-the-envelope" instinct for accuracy in physics. "He was an old-style, hands-on, pencil-and-paper guy," younger colleague Rod Heelis recalled, "but he was working on projects that demanded the computer. He needed a go-between, between the paper-and-pencil and the computer, and I was fortunate enough to be that person." Hanson's energy and informality—he wore running shoes while accepting the American Geophysical Union's John Adam Fleming Medal in 1985 at a black-tie affair in Baltimore—endeared him to colleagues and students.

After Hanson's untimely death at age 70 in a bicycle accident in 1994, UTD renamed the Center for Space Sciences in his honor, and in recognition of the spirit of inquiry and adventure that he embodied.



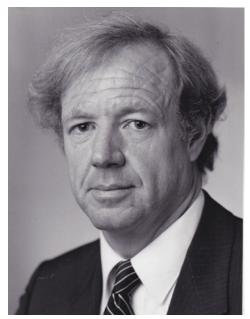


William B. Hanson, Professor of Physics, Cecil H. and Ida M. Green Chair in Natural Sciences and Mathematics, and Director of the Center for Space Sciences.

The faculty was up in arms. The Academic Senate drafted a resolution, preceded by five sharply worded "Whereas" paragraphs asserting the importance of the library to the University's mission, and urging the legislature to fund the library "at the level recommended by the Texas Higher Education Coordinating Board." Academic Senate Speaker Richard Caldwell turned to Rutford, who as president of the university attended the Senate meetings, and declared, "I would like this man [Rutford], whenever asked about how mad the faculty is, to say, 'This Senate does not often take resolutions about problems. It decided to do on this issue." Rutford promised to send copies of the resolution to all the appropriate officials in Austin and to relevant lobbying groups.¹⁹³

The library's travails also stirred students into action. Since 1985, the Student Government had voted to divert to McDermott Library some of the fees that it raised for student activities. Strictly speaking, those fees were not supposed to be used for academic purposes, but UTD students believed that keeping the library open an additional 27 hours per week was worth the expenditure, provided the Administration would eventually provide full funding for the library. But after six years of stopgap funding, students balked at allocating another \$57,000 in fees to McDermott. Student Government representatives voted to cut the amount by half for the 1991-1992 academic year and to eliminate the contribution entirely in 1992-1993.

Director Walters did not object. He had always viewed the idea of a student fee-funded library as "unprecedented." Rutford agreed, but pointed out that the Texas Legislature, not the Administration, was responsible. Whether it was potholes in the parking lot, a child care center, or maintaining library hours, Rutford felt stuck with empty pockets. Who would pay for these things? Where would the money come from? "You as students need to talk to your state representatives," he replied.¹⁹⁴ In the meantime, Rutford announced his intention to close McDermott Library on Sundays. But this time the students did not back down. A petition drive protesting the closure was underway when the president



McDermott Library Director Edward M. Walters was a strong advocate for students and library staff during times of stringent budgeting.

announced on September 18, 1991, that he had "scraped together the funds" from several unspecified sources.¹⁹⁵ By the next fall, the library's fortunes had improved, with the addition of a new Electronic Reference Center and additional work stations and seating areas.¹⁹⁶

Don't Count Your Money

From Rutford's vantage point, the library problem may have seemed minor compared to another controversy no one had seen coming. In late June 1991, as the Campaign to Make History fundraising drive grew close to its \$3 million goal, Scherry Johnson had anticipated success but was reluctant to predict it. "You don't count your money 'til it's lying on the table," she said.¹⁹⁷ Johnson knew the Dallas donor community well, and had every confidence that Jerry Junkins and his colleagues, and other supporters like Patti Henry from the Richardson community, would handily put UTD's fundraising campaign over the top. She was right they did.

But what Johnson had expected to be put on "the table" was not just the \$3 million in donations. She expected a major infusion of more than \$35 million from the Excellence in Education Foundation, holder of all SCAS's remaining assets. No public announcements had been made, but with Erik Jonsson at 89 years of age and Cecil Green at 91, the EEF's board of directors decided to liquidate the foundation's assets and disband. There had been no more ardent supporter of UTD over the years than the EEF, with its deep roots in Texas Instruments and in SCAS. The EEF's assets surely were destined for the University of Texas at Dallas. There was no other logical place for them to go. UTD awaited the windfall. However, as noted earlier, the EEF also had pledged to support other higher education initiatives in the Dallas area.

So, in fact, the bounty fell on a neighbor. Unbeknownst to UTD leaders, UT Southwestern Medical Center had been lobbying the EEF to support its Molecular Genetics Research Program and, perhaps more to the point, to keep its two recent Nobel Prize-winning researchers, Joseph L. Goldstein and Michael S. Brown, (Physiology or Medicine, 1985) from being lured away from Dallas. EEF complied, handing the medical center a \$30-million gift and keeping the two prize-winning researchers in Dallas. UT Southwestern had carried off an endowment that many had presumed to be UTD's birthright. In recompense UTD received 76 acres of land and \$5 million in endowed chairs and fellowships for the School of Management and the School of Engineering and Computer Science. The Cecil and Ida Green Center also received a \$350,000-contribution to its endowment fund. Peter O'Donnell, who with Erik Jonsson steered the EEF Board to its decision, looked back years later with satisfaction. "Goldstein and Brown are pure gold," O'Donnell declared. "EEF funds have been essential to their ability to recruit and train young scientists, many of whom today are making groundbreaking discoveries to improve human health."198

But it did not look that way from Richardson. In July 1999, Scherry Johnson wrote to O'Donnell that the "sudden erosion of support was particularly devastating" to UTD in light of the state's recent reductions in higher education funding. She worried that Dallas-area donors might perceive the decision to be a retreat by the founders from their historic commitment to the University and therefore reduce their support, too. "With the new mandate to add the lower division and the resulting media focus on U.T. Dallas," she explained, "we have a window of opportunity to redefine what this university will be for the next 20 to 25 years." The worst thing that could happen, Johnson realized, was for UTD to lose critical momentum at this unique moment in its history. Passionate in her own commitment, she explained to O'Donnell that failing to let him know about her grave concerns would have been a disservice to the university.¹⁹⁹

Of course, it was awkward to express disappointment when one had just been given 76 acres and \$5 million. Johnson reminded O'Donnell that UTD was grateful for that, and for EEF's historic support. It was a face of polite gratitude, then, rather than shock and disappointment, that UTD presented to the public in the summer and fall of 1991. President Rutford announced EEF's gift at a September meeting of the University's Development Board, a group of community and business supporters. The dissolution of the EEF, he noted, marked the end of UTD's first chapter and the beginning of a new era. The ties with the old days of SCAS were now officially over. The Antarctic researcher might have experienced a chill after being dropped off with such meager provisions. But Rutford was tough. Stifling any regrets, he rallied to challenge the Development Board and the rest of the university to join him in a months-long process to envision UTD's "next chapter."200

First Class Challenges

By summer 1991 UTD had seen its first freshmen through their first year. Attrition had started out as expected, with 11 leaving at the end of the first semester. But then it accelerated. At the end of the second semester only about 75 of the original 107 students said they intended to stay on as sophomores. But nearly half the class failed to return in the fall.²⁰¹ Those who remained could list several advantages—they could go to UTD and remain in their homes and jobs. Other big "pluses" included the accessibility of faculty and the small classes. But the complaints were compelling and not surprising: the absence of a social life and traditional "college atmosphere."

Students also were put off by the wide variability in course difficulty, with some classes described dismissively as "blow-offs" while certain physics and calculus courses seemed aimed far over their heads."202 Professor Ivor Robinson taught one of the latter courses. He had been among the founding faculty at SCAS back in 1963 and was an internationally acclaimed expert on relativistic astrophysics. Now, for the first time in his life, he found himself teaching calculus to freshmen.²⁰³ Robinson's academic credentials were a story unto themselves. The highest degree he held was a Bachelor of Arts from Isaac Newton's Trinity College at Cambridge University. When Robinson graduated in the 1940s, nearly 300 years after Newton, Cambridge still regarded the Ph.D. as a "superfluous 'German' invention," and Robinson had never bothered to acquire it. His lack of any postgraduate degree often flummoxed visiting accreditation officials, to whom UTD officials enjoyed explaining that it was, after all, "an extra mark of distinction for lvor to have attained international renown without the bother of additional classwork."204

Notwithstanding his well-deserved distinctions, Professor Robinson was perhaps not the ideal calculus teacher for a group of 18-year-olds. Of course, the high hurdles of calculus rigorously taught were not solely responsible for the high attrition rate. There were other disconnects in the classroom. As one disgruntled freshman remarked in another context, "A competent professor with good communications skills makes a better introductory professor than a Nobel contender with poor communications skills."²⁰⁵ Interestingly, some freshman complaints about the faculty echoed those of older students in earlier years. "They either treat us like infants or like grad students," said one. "They need to listen to us. We're not morons."

An alumna of UTD's first undergraduate class in 1975 sympathized. "I think I know what the freshmen are going through," said Carole Thomas. "We had similar problems, like the graduate level professors and the feeling that we didn't seem to belong there. It seems to me that UTD's 1950s mentality about education and its students hasn't changed



A \$30-million gift from the Excellence in Education Foundation to U.T. Southwestern Medical Center in 1991 surprised UT Dallas, which had expected the funds to come its way. UTD recovered its stride, however, aiming to build an endowment without the major jumpstart that the EEF assets would have provided.



since I was there." But another newcomer was more optimistic. "I wish I could be a freshman here in three years. UTD will improve."²⁰⁶ President Rutford also raised a half-full glass as he cheered up faculty discouraged by increased demands and decreased state funding. "We're all in this together," he told the Academic Senate. "It will be fun. Ten years from now everybody who has been going through this will be able to look back and say, 'We did it!"²⁰⁷

Certainly, a lot was being done on campus. In October 1991, ECS received accreditation of its bachelor's degree program in electrical engineering from the Accreditation Board of Engineering and Technology (ABET). This was a major and timely step forward for the school, whose first students, 81 in all, had recently graduated. Accreditation would apply to them retroactively, and of course to ECS's current group of 203 students, increasing the value of their degrees for employability and graduate school admission. ABET's approval also would help ECS in recruiting faculty. ECS could not apply for ABET review until it had graduated its first class, so Dean Cherrington was pleased that the process had gone so smoothly. "That's quite a feat," he said, acknowledging the prodigious effort his staff and faculty had exerted to meet ABET's rigorous standards in three years instead of the usual five.²⁰⁸

In March 1992, Dean Cherrington joined a team of scientists, educators, and executives welcoming Texas Governor Ann Richards for a tour of a massive project under construction in Waxahachie, about 60 miles south of Dallas. The Superconducting Super Collider (SSC) would be the world's largest atom-smashing particle accelerator, with a 14-foot diameter tunnel carving a 52-mile circle around Waxahachie and pushing back the frontiers of high-energy physics research. It was a huge, expensive, and dramatically ambitious exercise, but it had been launched in the early 1990s just as the Soviet Union collapsed, taking some of the urgency of Big Science funding with it. Costs had ballooned from an early estimate of \$4 billion in the mid-1980s to \$11 billion and rising by 1992. About 2,000 people were employed on the site, including 200 scientists. The federal government had already spent \$2 billion,

and Texas about \$400 million. Skeptics like Governor Richards needed convincing that the SSC merited continued long-term effort and funding.

But the skeptics prevailed. President Clinton cancelled the project in October 1993, bowing to political realities while expressing regret over the loss to science. Texas was left with 14 miles of empty tunnel and a small real estate recession when thousands of construction workers, engineers, and scientists who had relocated for SSC jobs suddenly sold their houses and left the state. The European Organization for Nuclear Research, or CERN, picked up where the Americans had guit, and in 1998 began work on a smaller, 17-mile tunnel on the French-Swiss border near Geneva. They saw it through to completion in 2008. The CERN collider quickly became a center for particle physics research, drawing scientists from around the world, including from UTD, to conduct experiments.²⁰⁹ UTD physicist Rod Heelis regretted the loss of the SSC "at a time when the Physics Department was starting to grow." The facility likely would have enabled the hiring of three or four new professors in the high-energy field and given the University a heightened international reputation. "It was a big setback," said Heelis, 25 years later. "We still feel it today."210

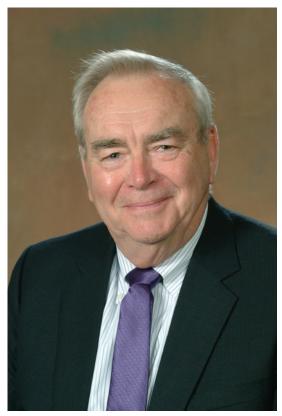
In fall 1992, the School of Management started its Executive MBA program aimed at mid-level managers wishing to earn their degrees while remaining on their jobs. Classes were held Fridays and Saturdays on alternate weeks so that students would miss only two days of work per month for the two years required to complete their degrees. Headed by SOM's David Springate, the program reached out to engage faculty from UTD's other schools to co-teach the courses. Social Science's Anthony Champagne, for example, who had recently spent a year in Washington, D.C., on a fellowship at the U.S. Supreme Court, helped teach a course on the Political Environment of Business. Sociologist Larry Redlinger initially taught sessions on bargaining and negotiations, then expanded his collaboration with SOM colleagues with new offerings on business issues such as energy, supply chains, liquidity and debt, and the development of the Internet.²¹¹

In Arts & Humanities, several faculty members were organizing a new journal, Common Knowledge, for which Dean Corrigan had high hopes. Poet and Nobel Prize winner (Literature, 1980) Czeslaw Milosz served on its editorial board, drawn, he explained, by the journal's "new approach towards the relationship between the intellectuals of the West and of my Central-Eastern Europe."²¹² The first issue of the thrice/yearly publication, in spring 1992, was dedicated to the memory of Andrei Sakharov and those who died in the Hiroshima and Nagasaki bombings. Astrophysicist and political activist Fang Lizhi, who had received the Robert F. Kennedy Human Rights Award for his role in the 1989 Tiananmen Square protest in China, wrote the dedication. Editors Jeffrey Perl and Robert Nelsen promised timely articles that would be neither "easy reading" nor "jargonized peer fodder." Common Knowledge set a record for the most subscriptions to a new journal in 1992-1993 and earned wide praise for the sharp skepticism it directed at all fixed views, particularly in cultural studies, social studies, intellectual history, and the arts.²¹³

UTD also provided a new home for the well-established quarterly journal, ISSUES in Science and Technology, which had been published since 1984 in Washington, D.C., by the National Academy of Sciences, the National Academy of Engineering, and the National Academy of Medicine (formerly the Institute of Medicine). Starting with the Spring 1993 issue, the national academies joined with the Cecil and Ida Green Center to publish the journal at UTD. "It is very fitting for this magazine, devoted to issues of public policy related to science, to be located at the Green Center," said Director Alex Clark.²¹⁴ Added UTD Mercury editor Boots Pennington, "A marriage has been achieved, combining ISSUES's goals with those of the Center. This includes policy for science (how we nurture research) and science policy (how we use knowledge more effectively to achieve our social goals)."215

Alex Clark clearly had found a comfortable home at the Green Center in September 1991. Stan Rupert, who had served with Clark as an associate vice president in the academic affairs office, filled in as interim vice president while a search committee, chaired by Human Development Dean Bert Moore, looked for a permanent replacement. It was perhaps the most important choice the University would make in a long time, as could be inferred from the record Clark had left during his tenure. The vice president for academic affairs served the president, of course, but no one had closer, more direct contact with the University's core mission as it proceeded day-to-day. A clear, long view was required, with all that it demanded by way of vision and foresight; but so was attention to detail, and instincts attuned to that uniquely antibureaucratic bureaucracy, the American university.

In full appreciation of UTD's ongoing transformation, Bert Moore's search committee recommended Texas native and current Dean of the College of Arts and Sciences at the University of New Mexico, Hobson Wildenthal. Before his service in New Mexico, Wildenthal had held appointments at Rice University, Oak Ridge National Laboratory,



In spring 1992 the School of Management introduced an Executive MBA program. Headed by David Springate, the program enlisted faculty from around the campus to provide a variety of perspectives and expertise to students.



Bert Moore, Dean of the School of Human Development (later, the School of Behavioral and Brain Sciences), was the chair of the search committee for vice president for academic affairs that recommended Hobson Wildenthal to President Rutford for the position.



Bryan Hobson Wildenthal joined UTD in July 1992 as the University's vice president for academic affairs. He arrived at a time of great change and challenge, most notably UTD's transition to a full, four-year undergraduate institution.

Texas A&M, Michigan State University, and Drexel University. A nuclear physicist and Fellow of the American Physical Society, he had also held visiting appointments at Brookhaven, Los Alamos, Munich, Heidelberg, Paris, and Oxford.

Challenges Engaged

President Rutford made the offer, and Wildenthal undertook his assignment in July 1992. The University's pressing challenge of integrating lower division undergraduates was probably much on his mind as Wildenthal moved into his new office in the Multipurpose Building. Passing him in the halls going the other way were engineers and computer scientists headed for quarters in the new ECS Building. UTD held a formal dedication on October 8 for the ECS Building as well as for the recently completed Green Center. "Our Future Has Just Begun," was the theme of the gala dinner that evening. Dean Blake Cherrington invited attendees to visit the new ECS facility, declaring the structure "a worthy monument" to the vision of those who had brought it about. But, he reminded his guests, "We didn't build a monument. We built an instrument-an instrument for progress, an instrument for the future, an instrument that will allow us to transform the intellect of our students and faculty into tangible advances in technology, in economic competitiveness, and in contributions to society."216

Cherrington's call to appreciate, but not get stuck in, the past seemed timely. Six weeks before Wildenthal arrived, President Rutford had marked his ten-year anniversary on campus. There was much to look back on—the engineering school, graduate student housing, the executive MBA program, the admission of freshmen, new buildings. But retrospection necessarily gave way to the president's prospectus, the "U.T. Dallas Visioning 2020" process Rutford had initiated a year earlier. Rutford presented a draft report to the university's Development Board in December, 1991. It anticipated that by 2010, UTD's enrollment would be between 22,000 and 24,000 students, three times the current level. UTD would retain its emphases on science and engineering and continue the close partnerships it had cultivated with surrounding tech-oriented businesses. It would scale up rather than radically alter its mission, although growth alone would bring changes in class size, library and related resources, housing, increased administrative specialization, more student services, and on-campus social life, for instance. Additionally, scaling up would involve adding faculty in the university's various programs to reach a "critical mass" for attracting research grants and talented graduate students. Plans already were underway to build more apartments on campus just for undergraduates.

Indeed, Bryce Jordan had a similar perspective back in March 1971 when he had arrived on campus as UTD's new president: UTD's long-term growth required that it become a four-year university. Jordan had not seen it happen. But now that the expansion had been enacted, the challenge was to make it meaningful by making it successful. It was a momentous, even pivotal, moment for the institution's future. But three years out of the starting gate, the university's transformation was not going well. Overall applications were rising, but sluggishly, freshman enrollment had declined from 1990 to 1991 to 1992, along with test scores, and large numbers of freshmen continued to drop out after their first year.²¹⁷ Hobson Wildenthal accepted reversing these trends as his primary challenge. This was essential for the four-year expansion to succeed, and, in turn, essential to the future of the university that he had decided to join.

Freshman classes with a total enrollment of 100 students were not a viable option for a public research university, as President Rutford understood. "It is just murder trying to operate an institution with [only] 120 freshmen," he remarked. "A hundred students is not a large enough cohort to offer any feeling of cohesion." Rutford looked forward to a freshman class large enough so that "there will be a feeling of belonging to a group, to a student body as opposed to a freshman class." Beyond the psychological and cultural factors loomed issues of fundamental economics. Funding for public universities assumed a pyramidal structure of enrollment, with the largest numbers of students at the beginning undergraduate level. UTD's profile was upside down. Now that UTD was going to be funded in the same fashion as other four-year universities, a solid foundation of freshman and sophomore enrollments was essential

But how was the problem of freshman enrollment to be solved? Prospective students often confused UTD with the University of Dallas, a private Catholic school in nearby Irving. Many, including those from local high schools, had never heard of UTD, or thought it was just an upper-level school. Despite its reputation in some scientific and technical circles, the University's overall public profile was insignificant. The high thresholds of academic achievement greatly reduced the university's prospective pool of graduating high school seniors.

Wildenthal recalled his thinking: "Nobody's child had ever gone to The University of Texas at Dallas, and nobody's classmate or big brother or sister had ever gone to The University of Texas at Dallas. That was a high threshold for families and students to surmount. However, we were, after all, The University of Texas. Obviously, we weren't a fly-by-night operation. I was convinced that parents and students could be motivated to take a gamble on our name if we made a UTD education financially attractive. There was little time to waste as the 1992 school year and my time at UTD had started. I went to President Rutford and proposed that we offer 'full-ride' scholarships to National Merit Scholarship Semifinalists and National Merit Commended high school seniors. I told him I thought that we could thereby increase our freshman class size to between 120 and 140. To his eternal credit, President Rutford did not hesitate to approve what was at that time a very unconventional idea for a Texas public university."218

The scholarship campaign for the fall 1993 class commenced immediately. Director of Admissions Barry Samsula and his team obtained a list of National Merit semifinalist and "commended" students in Texas, then mailed letters to them as well as to the largest high schools in the state. The admissions team also made in-person visits to schools in the Dallas area to tell counselors about UTD and encourage high-achieving students to apply for the University's newly established Academic Excellence Scholarships (AES). More than 1,000 did.

Wildenthal's estimate of an enrollment increase for fall 1993 of between 20 to 40 additional freshmen proved to be dramatically conservative. The fall 1993 freshman class numbered 452, four times larger than in 1992, with 252 of the students on eight-semester scholarships, and 200, double the previous fall, attending on their own. President Rutford and his administration willingly accepted the challenge of funding ten times more scholarships than planned. "It's an investment in the future," Wildenthal explained, as the University gathered money from private donations-endowments, gifts, and other sources-to pay for the AES program. "I think we can't avoid making it."219 The experiment of offering strong, merit-based scholarships to attract excellent students to an unknown university had yielded ten times the expected result. This result pointed the way forward for UTD to succeed as a welcoming university for the state's, and the country's, brightest high school graduates.

UTD's future depended on it. The reasons lay partly in the intangible values undergirding a major research university-factors that made it an attractive environment for many scholars and students-and partly in the nuts and bolts of finance. The institution needed to encourage creativity and productivity, mostly by providing the right climate for the right group of people-motivated, talented, and adequately resourced. Outside of that, options were limited. "There is no practical or desirable way for the central administration to tell the faculty members how to do their work," said Wildenthal about managing a university. "It's the most individualistic structure in the United States. Also, the university has no quantifiable service or product. Money comes in and money goes out, but that's not our product. Our product is somewhere else. It changes lives; it is knowledge; it is satisfaction; it's

a whole set of things that are immeasurable. We can go broke, but it's not because we are building bad cars or overpricing TV sets."²²⁰

Now, with a path forward defined for freshman enrollment, the threat of "going broke" because of the four-year expansion without freshman and sophomores faded away. The University had no desire, even it had been allowed, to boost enrollment by lowering its academic standards. In the highly competitive world of top-tier research universities, quality attracted quality, from Nobel prize winners to National Merit Scholarship finalists. The scholarship program would be a crucial demonstration that UTD was dedicated to a new future of academic excellence."²²¹

Next, the UTD administration and faculty worried about providing sufficient courses and teachers to a freshman class so much larger than expected. "But really, Wildenthal reflected, "we'd hardly tested ourselves with these classes of 100 or so, which is what the first three years had been."222 As it turned out, additional sections were added to some courses and some larger classrooms were commandeered, but there was no need to hire additional faculty.²²³ Housing loomed as another pressing concern. "It's clear that we do not have enough," Wildenthal told a *Mercury* reporter. "To recruit a larger freshman class, we will have to offer a variety of on-campus options."224 UTD responded by changing the residency rules at Waterview Park so that every occupant, not just the official renter of the unit, needed to be a full-time UTD student, or married to one, or the child of one. Kim Winkler, who joined Darralene Rachavong's team in Student Life, proved adept at managing such tough task of asking some residents to vacate their units in order to make room for freshmen.²²⁵

Stan Rupert captured well the improvisational quality of UTD's transformation during those years, in everything from academics to freshman housing: "We were buckling our parachutes on, all the way down."²²⁶ Rupert might have included among the risk-takers UTD's first freshman cohort, which would be graduating in spring 1994. For the first time, UTD would have alumni who had spent four undergraduate years at the university. Professor Larry Redlinger felt a special appreciation for those in the first class. "God bless them," he said, looking back nearly 25 years later, "the ones that made it through."²²⁷ The University was getting better at educating lower division undergrads, better with every year. But those closest to the process, like Redlinger, knew better than most how hard it had been, and how far UTD still had to go.

Vice President Wildenthal recently had answered questions from the Academic Senate about the University's future. Successful growth, he told the faculty, depended on several interconnected elements-bright graduate students, talented faculty, high-achieving undergraduates, and state-of-the-art facilities and support. Much of that that support flowed from the Texas funding formula. But the higher education budget drought spreading out from Austin, and the national trend it represented, underscored the importance of boosting UTD's endowment to at least \$100 million. "We need to reactivate the stream of private support, which at the moment has dried up," Wildenthal told the faculty. Toward that end, "Recruiting excellent freshmen is the key to establishing our credibility. "We have made a big first step, but several big steps remain."228

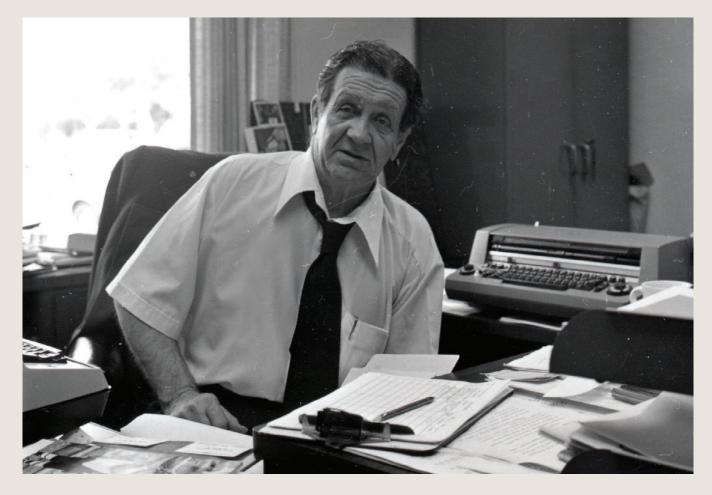
UTD's fourth entering freshmen class also was taking some big steps. As the students approached final exams and the end of their first semester in winter 1993, Wildenthal and others watched carefully to see how they would finish. Would the scholarship experiment have achieved its aim of drawing bright students to UTD to continue their academic success? Or would the scholarships instead have proven a burden, with perhaps too much expected from those to whom much had been given? UTD's Vice President for Academic Affairs was as keen as the freshmen to find out, and as hopeful as they were that all would go well.

Rutford resigns as President

A major step for the entire university was presaged on August 10, 1993, when President Rutford announced that he would be resigning as president in one year, or earlier if his replacement arrived before then. He noted that UTD had gone through "more change in its almost 25 years of existence than most universities go through in a century." And it was not over. "There's a lot of turmoil, a lot of uneasiness. One of the challenges is to get a little bit more stable without getting stabilized." In his 12 years as president, Rutford had overseen several major changes: the establishment of an engineering and computer science school, the start of an on-campus housing program, and the expansion of the university to a full, four-year institution. For all that, though, he wished to be remembered as "somebody who was very, very concerned with academic excellence and fairness, who also had a sense of humor. I learned early on that you have to be able to laugh at yourself, and I think I can still do that."229

President Rutford was handing over the leadership of a university with a profoundly different future from the one he had come to lead. Then, the future of UTD was as uncertain as it had been in 1969. In 1984 it appeared possible that UTD would continue to be an idiosyncratic example of an "Upper Division" university in a North Dallas suburb. Now, with the establishment of the Jonsson School of Engineering and Computer Science and the potential to grow into a competitive national university, Rutford could rightly claim to have presided over a resurrection of the founders' original vision.

Al Mitchell, UTD Chronicler and Diarist



In 1962, Lloyd Berkner hired Alfred T. Mitchell away from Collins Radio to be "head of technical services" at SCAS. Mitchell's background was in journalism, but his role soon expanded. In 1963, for instance, he helped Berkner and Erik Jonsson plan President Kennedy's November visit to Dallas. It would include a helicopter visit to SCAS in order to highlight the Kennedy Administration's emphasis on science. But the White House chose a downtown motorcade instead, with epochal consequences. "I have to ask," Mitchell mused in October 1989, "if the ideas which I put on paper and Erik forwarded to the White House had been used, how much of history would have changed."

Mitchell's jack-of-all trades role carried over to UTD in 1969. He edited UTD publications, directed its news service, and was the assistant coach to the Comets baseball team. In 1975 he semi-retired but continued chronicling the University's happenings, large and small. In 1977 he agreed to President Bryce Jordan's request to start the university's archives.

Al Mitchell died in his sleep on August 7, 1991, at age 79. By then, the role of University archivist had been professionalized, but Mitchell's invaluable chronology was appropriately preserved and made accessible. It included amusing events along with the sad. A July 1, 1982 news item described "the rescue of a janitor who was locked into the Physical Instruction Building and had taken the whole lock out of the door frame trying to get free. No one, including the victim, was able to determine how he did it."

The 1,200-some pages of Al Mitchell's chronology now constitute the *UT Dallas Chronology Collection* in the University Archives, Special Collections Department, at the Eugene McDermott Library. As the Library's website declares, it is indeed among the many "*Treasures @ UT Dallas*."

CHAPTER 5 Momentum (2000-2005)

n fall 2000, the visions of the founders reemerged with fresh clarity when Margaret L McDermott, widow of founder Eugene, launched the McDermott Scholars program. Other developments on campus paralleled that leap forward, accelerating construction across the entire campus, from student apartments to classrooms, research laboratories, and the McDermott Library. UTD responded to world events, too, including the terrorist attacks of September 2001 and the national economic recession of 2000-2003. The public-private partnership known as "Project Emmitt" further demonstrated UTD's close ties with "the real world." When Governor Perry signed a bill in June 2005 removing forever the restrictions that had dogged UTD since its inception, the University's national ranking as a "Tier One" institution acquired new momentum, moving from a position on the far horizon to one much more clearly in focus-and in reach.

A "Founder" Re-engaged

Sherry Marek stood out at Red Oak High School for her good grades, her school spirit, and her service as a volunteer in the school's guidance office. But in one way she was like most other classmatesshe had never heard of the University of Texas at Dallas. She thought she might want to attend the University of Dallas, a small Catholic college in Irving; its small classes and promise of personal contact with professors appealed to her. One evening in 1996, Marek's junior year, her parents picked up a brochure at a college fair that piqued their interest. They showed it to Sherry. She was intrigued. UTD, it said, was part of the University of Texas system. It had an unusual and distinguished history. It was relatively small, and it was only a short drive away from home. The family figured it was worth a closer look.

Sherry was not expecting an interview with the dean of undergraduate studies. But Dennis Kratz spent time with her, answering questions and describing the University's approach to education. So did Jim Murdoch, associate dean in the School of Social Sciences. UTD had admitted freshmen only a few years earlier, they explained, but preparing for that expansion had energized the institution and invigorated its educational philosophy-personal, innovative, and favoring scholars' interests over established disciplines. These meetings, as much as the information and enthusiasm conveyed, convinced Marek that UTD was a good match for her. "I didn't look anywhere else," she recalled. "I was so enamored by what they were offering, that feeling of a close-knit community. I felt like I was a student, not just a name or an ID number."311

Once on campus, Marek continued her volunteer activities. She was a student ambassador, assisting at University events such as concerts,



As a high school senior, applicant Sherry Marek was impressed at the personal interest shown her during interviews by numerous UTD officials, including Dean Dennis Kratz (R). Marek was among a talented group of undergraduates who helped pilot the McDermott Scholars Program to its official inaugural in the 2001-2002 academic year.

lectures, and dinners, and escorting groups of prospective freshmen on tours. Her commitment to UTD, combined with her outstanding academic achievement, won her a new kind of scholarship in fall 2000, the first semester of her senior year. In 1998 Margaret McDermott had begun offering financial support to "McDermott Undergraduate Honors Scholars" who had completed 30 or more UTD credit hours and demonstrated the requisite "citizenship and leadership attributes."³¹² The scholarship covered up to six semesters. In 2000-2001, Marek was in the third group of these scholars. But the program was about to expand dramatically.

In 1992, soon after he arrived on campus, UTD's new vice president for academic affairs Hobson Wildenthal met Margaret McDermott at the dedication of the Green Center building. She had been alerted to his arrival in Dallas by his brother Kern, the president of the UT Southwestern Medical Center, who had worked with the McDermott family in their major philanthropic activities at the medical school. In the months and years following, the new vice president accepted the challenge of reactivating the relationships between the founding families and their university. Cecil Green and Mrs. McDermott reciprocated with the canonical Texas hospitality for newcomers-in Wildenthal's case, a Texan returned home. In many social encounters with these redoubtable "senior first citizens of Dallas," Wildenthal apprised them of the University's progress, while through them he met other leaders such as Ross Perot, Peter O'Donnell and Louis Beecherl.

In 1995, after the Academic Excellence Scholarship program had proven that UT Dallas could attract top students, Wildenthal approached the Eugene McDermott Foundation with a request for private support for merit scholarships, to augment the university's own funds. In that fall, the Foundation, directed now by Margaret and Eugene's daughter, Mary McDermott Cook, pledged \$500,000 for "McDermott" scholarships, a gift that was paired by the commitment of UT Dallas to carry out needed renovations to the 20-year-old McDermott Library. The Foundation took a similar action in 1996, and in 1997 Margaret McDermott personally donated another \$1 million for scholarship support. In response, the University embarked on a \$3,000,000 renovation of the second and fourth floors of the library.

The Library renovation, led by Dallas architect Bill Booziotis, transformed the appearance of the second (ground-level) floor and totally restructured the fourth (top) floor. The open balconies, architectural follies from the 1975 construction that had long been locked up as useless hazards, were enclosed to make study spaces. Also, open "cutthroughs" between the third and fourth floors were filled in to create additional, much needed, usable square footage in the McDermott Suite, a hospitality space for which Mrs. McDermott had contributed support in the past. Now, the expanded McDermott Suite, provided with a new kitchen, was redecorated by Booziotis, with Margaret McDermott's active cooperation. She selected, purchased and donated carpets and furnishings, and then, in accord with her long-standing passion for fabrics, purchased 24 Indonesian wedding skirts to serve as wall hangings, personally supervising the hanging of each.

In the coming years, the enhanced McDermott Library continued its vital role at the University's intellectual core. In addition, the McDermott Suite became the University's much-used and treasured meeting space, where members of the UT Dallas community and their guests celebrated memorable occasions, basking in the elegant aura created by Mrs. McDermott, who now embodied the spirit of the founders. Years later, Booziotis was re-engaged to expand the McDermott Suite with two new rooms needed to accommodate new McDermott gifts, one a unique circular table designed by the famed architect Santiago Calatrava, donated in honor of Hobson Wildenthal, and the other a small conference room incorporating the personal library of Eugene McDermott.

Those last years of the 1990s, and the progressive re-engagement of Margaret McDermott, were the precursor to a spectacular first decade of the 21st century for UT Dallas. In the spring of 2000, Mrs.



Students made good use of expanded space in McDermott Library.

McDermott telephoned Provost Wildenthal and told him, as he remembered, "TI stock is at an all-time high, and I have decided I want to do something big for UT Dallas. Why don't you come to the ranch this Saturday and let's talk about it." Wildenthal recalled that next Saturday morning vividly. He and Mrs. McDermott, an indefatigable walker in her mid-eighties, struck out across the high meadow of her Allen, Texas, ranch in brilliant morning sunshine, with a bracing March wind in their faces.

"As we walked, I told her, 'Margaret, I know exactly what UTD needs. It is an elite Eugene McDermott Scholarship Program modeled on the famous Morehead Scholars Program at the University of North Carolina. I have printed off 40 pages describing that program for you to study.' Mrs. McDermott's instant response was, 'I don't need to read about the Morehead Program, I know all about it.' And, thanks to her world-wide network of friends and colleagues, she did. In particular, she knew the longtime fabled president of UNC, Dr. Bill Friday, whom she had tried to recruit in the past for a university leadership position in Texas."³¹³

In that moment, the Eugene McDermott Scholars Program was conceived. But much remained to be done before it was fully developed. Mrs. McDermott was thoroughly business-minded and always insisted on performing her due diligence. In this case, this involved multiple conversations over many weeks with Wildenthal and her long-time friends and advisors, such as Ross Perot, Louis Beecherl, Peter O'Donnell, Stanley Marcus, and Bill Friday. These conversations were vital in reinforcing her confidence in the concept. Uniformly, she was advised to go "all out" in making her investment. Wildenthal recalled that the first conversations mentioned a gift of perhaps \$10 million. But in September 2000, when the moment came to actually make the gift, the advice she had received, together with the continuing appreciation of the value of TI stock, inspired her to make a gift of TI shares worth \$35 million. Of this total, \$2 million

were dedicated to fund endowed chairs for the UTD president and provost and \$1 million for an endowment, in honor of long-time friend Tommy Thomsen, to provide tickets for UTD students to attend performances of the Dallas Symphony and Dallas Opera.

The remaining \$32 million endowed the Eugene McDermott Scholars Program, a fully-funded eight-semester education augmented with significant experiences designed to encourage recipients not just to excel academically, but also to become leaders in their fields and in the larger society. Scholars were selected based not only on academics but also on demonstrated leadership ability and participation in extra-curricular activities. Their lives as Scholars would include immersion in the cultural life of Dallas-music, theater, and art, inclusion in special dinners, symposia, and lectures, visits to state and national decision makers in Austin and Washington, D.C., and international study. The Scholars were to be treated as emerging leaders and scholars worthy of the University's, and their own, high expectations.

The gala launch of the program on September 26, 2000, featured not only Mrs. McDermott and her fellow Dallas leaders but also Bill Friday, who had traveled from North Carolina. "That's Margaret McDermott's legacy," said William Friday. "She is saying, 'We are going to find the 20 most talented, well-prepared, hard-working young men and women, and we're going to give them the richest undergraduate experience they can find anywhere in the United States."³¹⁴ As Sherry Marek put it, it was going to be "a program, not just a check."

The first class of McDermott Scholars enrolled in UTD for the Fall Semester of 2001. Eighteen years later, the program remained the defining statement of the university's dedication to providing an education second to none. Sherry Marek was then in her senior year, working on her honor's thesis with Larry Redlinger in UTD's Office of Strategic Planning and Assessment. Her topic was germane– factors affecting retention rates for students at UTD–and in the spring of 2001 she was hired by the McDermott Scholars Program's first director Charlie Leonard to help with recruitment and selection



Margaret McDermott's \$32 million contribution in 2000 established the McDermott Scholars Program, greatly enhancing UTD's prior reputation as an institution deeply committed to academic excellence.

Leadership for the 21st Century

> The Eugene McDermott Scholars Program

UTD

The University of Texas at Dallas



of the expected inaugural group of 20 freshman. As a recipient of one of the precursor McDermott scholarships, Marek had a unique "bridge" perspective in implementing the new program. She was familiar with the chief task: "how to convince people to come to a place that not many people had heard about." Even more challenging, "How are we going to put ourselves on the map with brilliant high school seniors, all of whom could go anywhere they wanted to go?"³¹⁵ Charlie Leonard, Provost Wildenthal, Undergraduate Dean Michael Coleman, and Associate Provost Richard Huckaba fanned out across Texas, visiting counselors in 62 of the state's highly-ranked high schools and sending letters to National Merit Scholarship finalists.

Among those responding was Eric Kildebeck from Frisco, Texas, about a half hour's drive north of Dallas. After making it through the preliminary selection he and two friends decided to visit the UTD campus to see what it looked like. They made an appointment to see Leonard and drove up to Richardson. After parking their car, Kildebeck and his friends walked toward the director's office, taking it all in and forming their first impressions. They were not encouraged by what they saw. "We looked at each other and said, 'This place looks like a prison," Kildebeck remembered. But they kept going until they reached Leonard's office. He invited them in, then closed the door. Smiling broadly, he announced, "Now, I know what you all are thinking. You think this place looks like a prison." The visitors glanced at each other. That was eerie. Had UTD bugged its sidewalks? How did he know what they were thinking? "But that's not what it's going to be like," the director reassured them. The description that followed was convincing enough to bring Kildebeck back to campus as a member of the McDermott Scholars' first class.³¹⁶ His two friends from Frisco also came to UTD under Academic Excellence Scholarships. Kildebeck graduated in



The appeal of UTD's scholarship and honors programs helped Eric Kildebeck and two friends overcome first impressions about the University's oppressive appearance in 2001.

2005, then went on to earn a combined M.D./Ph.D. at Stanford University and the University of Texas Southwestern Medical Center.

The 20 new McDermott Scholars joined their fellow freshmen in fall 2001, many of whom, like Kildebeck's friends, also participated in the University's various scholarship and honors offerings. All UTD undergrads-on scholarship or not-had met the University's high admission standards, the highest of any public university in the state. As a group they moved UTD forward in its quest to reach national stature. But the McDermott Scholars program added significant momentum to that drive, as well as an intangible prestige factor. Professor Murray Leaf noticed a change sometime in the early 2000s, when the McDermott Scholars Program started. Beforehand, he said, "We had to get each student on his or her own." But afterwards, he concluded, "We were getting good students because they had friends who were good students who told them this was the place to go. Now we have a flow coming in, and it's increasingly wider in scope. That's what we had to achieve."317

Growing on All Fronts

UTD's total enrollment reached nearly 12,700 students in fall 2001, with 7,475 undergraduatesnearly 1,100 more than in the previous year. Among them were 1,155 freshmen-231 more than in the previous year. The University stretched its resources to meet the demand. It scheduled more sections for large, required courses and scrambled to find suitable classroom space, even installing 33,000 square feet of temporary buildings.³¹⁸ "Government 2301" was the school's largest course with 431 students. The class met in the Conference Center's auditorium, the only lecture space large enough to accommodate it.³¹⁹ Enrollment exceeded the previous year's by nearly 14 percent and was triple the average rate for the UT System. In November 2001, President Jenifer acknowledged that while UTD wished to grow, "we are now growing too fast." In just six years, UTD had grown 38 percent, one of the largest rates of increase in the nation. Jenifer announced the formation of a committee to study the issue and report back with recommendations.³²⁰

A year and a half later, the University submitted a master plan for growth to the UT Regents, who approved it on November 12, 2004. The plan placed a manageable growth rate at about 3 to 4 percent per year, leading to a projected total enrollment of 23,000 by 2027. Everything else on campus would have to grow accordingly, from parking lots to laboratories, classrooms, offices, and library space, along with a loop road to encircle the campus.³²¹ But even the "best-laid plans" sometimes went awry, and doubtless the University would have to adjust on its own to changing circumstances.

UTD's physical plant had already been growing rapidly. In the fall of 2000, Undergraduate Dean Michael Coleman welcomed students back to campus with an alert, "It is going to be a year in which the dirt is flying." Engineering and Computer Sciences Dean William Osborne promised students "a very exciting year with new construction everywhere."³²² Several months earlier the Regents had approved \$30 million for an additional ECS building, the School's second in ten years, contingent on the University's raising \$10 million from private donors to staff the addition and make it fully operational. By law, only state funds could be used for construction purposes; private donations went to educational activities. Texas Instruments, Alcatel, Ericsson, Fujitsu, and Nortel were major contributors to the new ECS project, along with Dallas's Meadows Foundation.³²³ A new corporation, Zyvex, gave \$2.5 million, an especially noteworthy contribution because Zyvex's founder was a UTD alumnus, James Von Ehr II (SOM, 1981). Von Ehr had seen the potential for practical applications of nanotechnology, a new field based on the manipulation of materials at levels as small as a single atom. His company's donation would help UTD establish a research center on campus for this rapidly developing cross-disciplinary science.³²⁴

President Jenifer discussed UTD's relationship with hi-tech companies in an August 7, 2000 session with editors of the *Dallas Morning News*. The Telecom Corridor, he said, needed engineers and the University was producing them. But the demand was twice as great as the supply, a circumstance that transformed corporate support from one of traditional philanthropy to a more transactional business relationship. Companies saw their donations as investments rather than outright gifts and expected a return in the form of highly qualified employees, managers, and researchers. UTD had embraced this relationship as part of an experiment necessitated by rapidly developing technologies in a new business environment, said Jenifer, though he acknowledged that not all universities were comfortable with such arrangements.³²⁵

Such protest as could be found at UTD featured hyperbolic allusions in the student newspaper to corporate takeover of curricula: "churning out competent cogs for a technology-starved society," and compromising "education's duty to cultivate productive, thinking citizens."³²⁶ More representative was a Mercury piece by an ECS student titled, "Industry-Please Takeover! [sic]" The author asserted that his education was not simply technical but aimed at underlying principles as well. Besides, he enjoyed his studies. "I have a passion for my major," he declared. "I WANT to learn how solid-state devices work and I WANT to learn the differences between Frame Relay frames and ATM cells." And to those who thought technology students were just in it for the jobs, he replied, "Don't be mistaken. Many of us love what we do."³²⁷ As the University grew, this would serve as a timely reminder that its legacy was a passionate commitment to knowledge of all kinds and in many fields. In the meantime, the rise of new structures on campus continued to astonish, and sometimes inconvenience, UTD's expanding community of scholars.

Arts and Humanities marked its 25th anniversary in 2000 with a variety of courses in the visual and performing arts and a creative writing program that was thriving under the direction of Professor Robert Nelsen. Only five percent of UTD's students were A&H majors, yet the School accounted for 13 percent of the total credit hours the University offered. Dean Dennis Kratz underscored the mission of A&H as central to developing students into "the most complex, interesting, and responsive human beings" they could be.³²⁸ With Nelsen's guidance, the University's interdisciplinary arts journal Sojourn began publishing pieces by undergraduates and soliciting contributions from every quarter of campus. Nelsen, who won the UT System's Chancellor's Award for excellence in teaching in 2005, was a champion of the unconventional approach and enjoyed expanding his and students' horizons.³²⁹ "They keep you alive," he said of the students. "I get to kick them out of the box, or at least give them ways to get out of the box."330 Sojourn's Editor Lori Ann Stephens understood that thinking. "We want everyone to submit," she said, "business majors, computer science, human development, everyone." Added Nelsen, "I want the journal to represent us well, to say to the world, 'We really are good at UTD, aren't we?"³³¹

In 2002, A&H's interdisciplinary goals came closer to realization when the state's Higher Education Coordinating Board approved its new program in arts and technology, or ATEC. The idea was to combine in one program the engineering and computer capabilities of ECS with the artistic talents of A&H. The two seemed naturally to converge in such areas as computer-generated design, animation, and gaming, and Kratz expected there would a high demand for this new major. "We're trying to blur a lot of boundaries," said Kratz, with characteristic enthusiasm.³³² It remained to be seen how this new venture in merging technology with art would take root in a rigorous research environment. Kratz enlisted Tom Linehan to find out. Recently of Ohio State University and formerly president of the Ringling School of Art and Design in Sarasota, Florida, Linehan became a professor of Aesthetic Studies in A&H and director of the University's new Institute for Interactive Arts and Technology.³³³

Groundbreaking for the new ECS building took place in March 2001, with a ceremony and lunch in the Student Union. The three-story, 152,000-square-foot expansion opened for occupancy just 18 months later, in September 2002 after a flurry of last-minute fixes. "It's wonderful," said professor Nathan Dodge, who wanted to be sure he wasn't seen as "griping" when he added, "but it's being built up around our ears." Some of Dodge's <section-header><section-header><text><image><image><text><text>

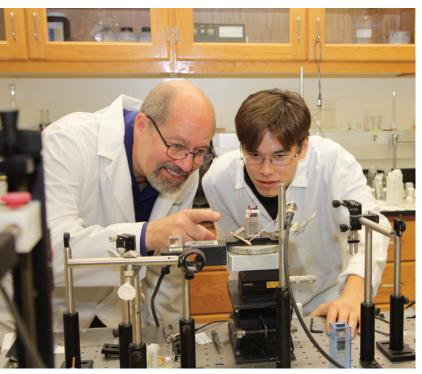
A new building for the Jonsson School of Engineering and Computer Science went up quickly between groundbreaking in March 2001 and dedication in September 2002, allowing ECS to double its enrollment.



UTD Alumnus (MS '81) and founder of the Zyvex Corporation, James Von Ehr, was among the donors providing UTD with sufficient resources to support its rapid growth in the late 1990s and early 2000s.

first lectures that semester had been interrupted due to disconnected network outlets in one of the new building's large classrooms.³³⁴ But Professor Dodge was in the right frame of mind in accentuating the positive. The new facility allowed ECS to double its enrollment to about 5,600 students, with labs and offices allowing commensurate recruitment of faculty and development of research initiatives.

One of the University's new research initiatives was the new NanoTech Institute. Its creation, stimulated in part by the Von Ehr gift, was based on the move to UTD of Ray Baughman and Anvar Zakhidov from Honeywell International in Morristown, New Jersey, where their research work had won worldwide respect among their scientific peers. Baughman, who had been recruited as UTD's first Robert A. Welch Chair of Chemistry, speculated that soon North Texas might have a "Nanotech Corridor" alongside the Telecom Corridor for which it was already famous.³³⁵ The California Institute of Technology's physicist and Nobel prize winner (1965), Richard Feynman, had seen it coming. In his 1959 lecture, "There's Plenty of Room at the Bottom," Feynman envisaged the opening of new



Ray Baughman (L), director of UTD's NanoTech Institute, was an enthusiastic supporter of young researchers like Carter Haines (R).

worlds at "the bottom" of the atomic scale, once the technical capabilities to observe and manipulate materials at that level had been achieved.³³⁶

UTD found a felicitous match in NanoTech Institute Director Baughman. In 1959, as a high school sophomore in Pittsburgh, Pennsylvania, Baughman had been looking for some lab experience and showed up unannounced in the science building at the University of Pittsburgh. Someone directed him to Professor George A. Jeffrey's office. The teenager, strategically dressed in a suit and tie, had been caught in a torrential rain en route to the campus and was soaking wet, but Jeffrey invited him in to talk. Baughman said he wanted to work in the chemistry lab. He offered no letters of recommendation or any other introduction-just his request, backed by the evidence of his earnestness then dripping onto the floor. Jeffrey took him on as a volunteer lab assistant. Baughman never forgot Jeffrey's trust in him and the extension of collegiality it implied.

As he and his team prepared to launch one of the nation's most sophisticated, and potentially lucrative, research endeavors, Baughman also started a venture named the George A. Jeffrey NanoExplorers program. Funded through the endowed Robert A. Welch Chair that Baughman occupied in UTD's Chemistry Department, the NanoExplorers program quickly enlisted a dozen promising high school students to work in the NanoTech Institute's labs. "The wonderful opportunity that he gave me-to do original research when I was in the 10th grade," Baughman recalled of his mentor, "was so important for my entire life." Now, Baughman was able to amplify Jeffrey's generosity many times over.³³⁷

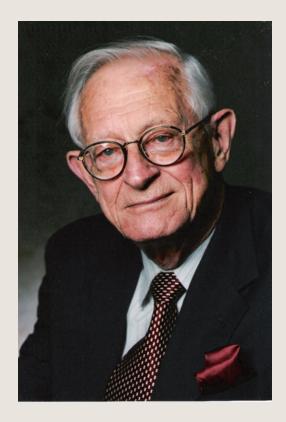
Talented high school students populated one end of the science's human spectrum. Nobel Prize winners occupied the other, more rarified end. UTD's NanoTech Institute included the entire range. In 2000, Alan G. MacDiarmid had shared the Nobel Prize for Chemistry with Alan Seeger and Hideki Shirakawa for "the discovery and development of conductive polymers." Ray Baughman had known MacDiarmid for 20 years. Early on, they had collaborated on research into superconducting polymers, substances like certain proteins or plastics that, if cooled below certain temperatures, conducted electricity with nearly no resistance. Now MacDiarmid joined Baughman and the new nanotech team at UTD as a distinguished scholar in residence to further the research effort and advise the University and its president on science and technology matters.³³⁸ Within a year, however, MacDiarmid's role had expanded. James Von Ehr, whose Zytex Corporation had contributed to the new ECS building and nanotech research labs, endowed a chair, the James Von Ehr Distinguished Chair in Science and Technology, for MacDiarmid, who thus became the second Nobel Laureate, after Polykarp Kusch (Physics, 1955) to serve on UTD's faculty.

Alan G. MacDiarmid

n 2001, Nobel prize winner Alan G. MacDiarmid (Chemistry, 2000), joined UTD as scholar in residence, advisor to the new Nanotech Institute, and science advisor to President Jenifer. The next year, MacDiarmid also filled the newly-created James Von Ehr Distinguished Chair in Science and Technology.

Like Nanotech Institute Director Ray Baughman, MacDiarmid was an enthusiastic supporter of younger researchers. Both men received such assistance early in their own careers and never forgot its importance. MacDiarmid grew up in New Zealand during the Great Depression. Family, including Alan's four siblings, ate lightly when guests came to make sure the visitors had enough. In one of the family homes, hot water for bathing came from pipes routed through the back of the fireplace. To help pay college costs, MacDiarmid delivered milk, then newspapers, washed lab equipment, and prepared chemistry demonstrations at Victoria University College in Wellington, where he obtained his B.Sc. and M.Sc. degrees.

A Fulbright scholarship brought him to the United States, where he earned his Ph.D. at the University of Wisconsin in 1953. An additional scholarship allowed him to complete a second Ph.D. at Cambridge University in England in 1955. He then spent most of his academic career at the University of Pennsylvania, winning the Nobel Prize for work he had done in the 1970s with Alan Heeger and Hideki Shirakawa developing revolutionary polymers that could conduct electricity as effectively, and more flexibly, than metals. Appreciative colleagues celebrated MacDiarmid's 75th birthday in December 2002 with three days of lectures in UTD's Student Union by noted scientists from around the world, including Nobel co-winner Alan Heeger. MacDiarmid maintained his position at the University of Pennsylvania, choosing to live in a third-floor Waterview apartment when he was working at UTD. He died in February 2007, age 79. The Nanotech Institute was renamed the Alan G. MacDiarmid Nanotech Institute in his honor, and in memory of his exemplary life of shared scholarship and collegiality.

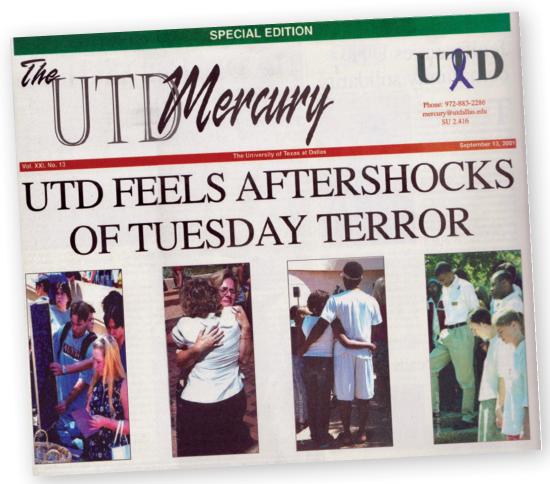


The University helped MacDiarmid celebrate his 75th birthday on December 6, 2002, in the Student Union's new and spacious Galaxy Room. As often happened with scholars, the celebration took the form a conference featuring talks about MacDiarmid's work and contributions to the field, which were then published in the journal, Synthetic Materials. Students were welcome to attend the conference and its accompanying poster session. All was not work, however, for the celebration finished with a formal dinner in the Lincoln Center in downtown Dallas. One of the attendees was Walter Voit, a McDermott Scholar in his second year who related the events of the day to the UTD community in his role as a *Mercury* reporter. A formal birthday dinner invitation with a Nobel Laureate was one of the unpredictable, yet wholly intended, benefits afforded by the McDermott Scholars Program, though at UTD such opportunities might well have extended to a Mercury reporter, too.³³⁹

Terrorism & Recession: UTD Responds

While UTD built new structures, labs, and programs, other groups around the world aimed instead at destruction. On September 11, 2001, terrorists seized commercial aircraft and attacked the World Trade Center Towers and the Pentagon. A third attack, probably headed for the nation's capital, was diverted when hijacked passengers fought their assailants and the aircraft careened into farmland near Shanksville, Pennsylvania, killing all aboard. In less than two hours, the United States had endured the largest attack on its homeland and the greatest shock to its citizens' sense of security since Pearl Harbor, nearly 60 years earlier.

At UTD, as in countless places around the world, people gathered around television sets, at first disbelievingly and then with overwhelming shock, sadness, and outrage. Many perceived that their lives and their children's lives had changed



UTD responded to the terrorist attacks of September 11, 2001, by reinforcing bonds of community on campus as well as enduring ties to the international world of scholarship and research.

forever-that the world as they had known it would never be the same. The Student Union offered live news coverage throughout the day while also serving as an informal gathering place during the crisis. President Jenifer spoke to a crowd of about 300 the next day, reminding them that, "Our university is composed of faculty, students, and staff from many different ethnic, religious, and geographical backgrounds, and that is a source of strength for UTD."³⁴⁰ The University remained mostly free of backlash against its international students, but many of them felt keenly a new tension in the nation at large as some mosques and people of Middle Eastern heritage were attacked. The Palestinian Arab American Club, known for its Shalom dance troupe performances at campus events, took its website offline because of incoming hate messages. "Personally, I feel safe at UTD," said club President Mariam Elsadi, "but I am feeling a lot of pressure. I just wish people would realize that this is the time for Americans to unite."³⁴¹ Salman Ansari, a junior in the School of Management, shared that hope. He was born in Pakistan and came to the United States with his parents when he was just nine months old. "This is America," he pleaded, "I am American, and now I live in fear."³⁴²

One month after 9/11, UTD faculty members from the School of Social Sciences–Lloyd Dumas, Jennifer Holmes, Marie Isabelle Chevrier, and Murray Leaf-organized a symposium on terrorism and the various ways that the United States might respond. All agreed that haste, overzealousness, and intolerance would only give terrorists another victory. Symposium participants backed improved cooperation among intelligence agencies and maintained that any pertinent legislation must accord with the nation's basic principles and preserve civil liberties. The panel's presentation, and the hourlong question-and-answer session that followed, exemplified the capacity of an academic community to offer reason, perspective, and context at a time when emotions sought to rule.³⁴³

UTD did not cancel classes at any time during 9/11. The University, like the nation, determined to carry on. And with rapid growth as its major challenge, UTD continued very much in construction mode. Indeed, a wag at the Mercury offhandedly suggested that UTD might stand for "the University" of Towering Dirtpiles."³⁴⁴ An addition to the Student Union was underway, and by spring 2002 four more major projects were in the works. These included the additional ECS building, an on-campus satellite facility for the Callier Center, and another round of Waterview Apartments, now in "Phase VIII" of their seemingly endless expansion.³⁴⁵ With mixed feelings of resignation and appreciation, students had dubbed the latest expansion "Phase X," as in "fill in the blank." The new apartments featured small, single bedrooms and larger communal rooms, something like a dormitory but much like the apartments that students still preferred-and at lower rent.³⁴⁶ Lastly, the School of Management, whose classrooms were currently spread out in five locations, looked forward to gathering all its classes under one roof.

SOM was UTD's largest school, with 4,329 students enrolled in the 2001-2002 school year—a remarkable 19.4 percent increase over the previous year and a 50 percent increase over the course of three years. Faculty had grown also, from 50 in 1997 to 84 in 2002.³⁴⁷ In November 2000, the Regents approved \$30 million for a new SOM building, contingent on UTD raising \$8 million from private sources. UTD alumni Chuck and Nancy Davidson pledged \$1 million toward the SOM project. The Davidsons hoped their support would inspire other alumni "to consider the benefits they have reaped from their UTD degree and to give something back as well."³⁴⁸

In spring 2002, SOM capped a five-year effort and reached a long-desired goal when it earned full accreditation from AACSB International-the Association to Advance Collegiate Schools of Business-for its undergraduate, Master's, and Ph.D. programs in business administration and accounting.³⁴⁹ Dean Pirkul had begun the application process as soon as he arrived in 1996. "Coming from Ohio State," said Diane McNulty, "he understood the accreditation process. He recognized what needed to be done, and he basically jumped in."³⁵⁰ With a



School of Management Alumni Chuck and Nancy Davidson, shown here with Dean Hasan Pirkul and President Franklyn Jenifer, were among those whose consistent support helped UTD meet the needs of its students during times of rapid expansion.

full year of accreditation under its belt, SOM opened its new building for classes in August 2003. Dean Pirkul thought the SOM Building was ideally located at UTD's southern Campbell Road entryway, and with understandable pride he dubbed it "the signature building for this campus."³⁵¹ The facility was formally dedicated on December 3, with ceremonies conducted in the new Charles and Nancy Davidson Auditorium.

UTD, as part of the larger society, could not escape the consequences of national events. The recession caused by the collapse of the "dotcom bubble" in 2000 reverberated powerfully in the "Telecom Corridor" with long-term dire consequences for the telecom companies that had been key stimulators for UTD's progress during the late 1990's. The recession impacted the Texas economy and tax base over the following years, prompting Texas Governor Rick Perry to mandate a seven percent cut in all state institutions' spending for 2003.

President Jenifer anticipated a "staggering shortfall" in the state's budget and warned students to expect tuition and fee hikes. He also cited a *New York Times* editorial entitled, "Universities in Decline," to emphasize that UTD and Texas were part of a nationwide problem in higher education funding that was aggravated by the recession. Indeed, Jenifer underscored the message by revealing that one corporate contributor had asked if it could rescind a recent large donation. The University also imposed a hiring freeze, though two deanships—at NSM and ECS, where Richard Caldwell and Bill Osborne had stepped down—were not affected.³⁵²

On June 1, 2003, the legislature responded to the shortfall by deregulating tuition at state universities effective spring 2004. The bill was a compromise measure, falling short of total "free-market" deregulation by imposing both a cap of \$23 per credit hour on the increase and a time frame of two years for implementation.³⁵³ Raising tuition would help UTD's finances, but three weeks after passing the deregulation bill the legislature cut research funding to universities by \$55 million, deepening UTD's shortfall from \$3 million to \$6 million and effectively offsetting any gains anticipated from tuition increases. Student Government Vice President Sophie Rutenbar speculated, "It's quite possible that it will not be financially feasible for the University to grow this year."354

Provost Wildenthal also acknowledged the hard times ahead. "The financial problems are not going away," he warned, "they're getting worse." The only solution he could see in the short term was for the state to restore the \$3 million in additional cuts it had imposed over the summer.³⁵⁵ A *Mercury* piece cheekily challenged the legislature to find the funds. "UTD students, the SGA (Student Government Association), and the administration have upped their resolve and commitment to excellence in education," it went, "So, folks in Austin, up yours!"³⁵⁶

In early September 2003, UT System Chancellor Mark Yudof met with Jenifer and a group of students in McDermott Library to assure them of his support in the event that UTD sought special permission to exceed the \$23-per-credithour increase. Indeed, the University submitted a plan to the Regents for their review in November asking for a drastic tuition hike of 48 percent for spring 2004 and a possible additional 39 percent increase the following fall. Administrators managed the crisis well, keeping students on board as fellow problem solvers rather than as passive subjects. "You can be opposed to the tuition increase or not," said Wildenthal, "but it would be fantasy to think that you can keep tuition constant and cut state funding and maintain the same institution. You can't do it. You do not run a university on rhetoric, you run it like any other organization-on funding."357 SGA President Ryan Davidson adopted the same reasoning. "I am not at all for students paying more," he said, "but until I see some other way for the campus to get this money . . . I can't support just protesting it without an alternative."³⁵⁸ A statement by the *Mercury*'s editorial board echoed the sentiment, concluding pragmatically, "Whether it be a necessary evil or the assurance of the value of our degrees in years to come, the hike in designated tuition is for the good of the University, which ultimately is the good of its students."359

"Project Emmitt"

Then, on June 30, 2003, in the midst of a summer of cutbacks, shortfalls, hiring freezes, and tuition hikes, came an astonishing announcement. Texas Instruments had offered to build a \$3 billion semiconductor manufacturing plant in Richardson, but with an important proviso: the state of Texas would provide \$100 million to build still another engineering and science research building at UTD, and also give the University \$50 million from the Texas Enterprise Fund, an initiative of Governor Perry's to induce companies to do business in the state. An additional \$150 million would be raised privately, amounting to an overall \$300 million boost to the University. United States Senator Kay Bailey Hutchison attended the announcement at TI headquarters in Richardson, along with the company's Chair and CEO Tom Engibous, President Jenifer, and Governor Perry.

UTD officials had been informed about this project, dubbed "Project Emmitt" by TI for Dallas Cowboys star running back Emmitt Smith, in the early spring of 2003. TI Vice President Phil Ritter had asked to meet with President Jennifer, Provost Wildenthal, and Vice President for Advancement Carlos Pena. He informed them that TI was considering building the "Fab Plant" in Richardson, conditioned on a commitment by the State of Texas and the UT System to invest \$500 million to make the Erik Jonsson School of Engineering and Computer Science a "national top 40" school. Given that the legislature was then already in session dealing with the deficit crisis, UTD officials were simultaneously skeptical, amazed and elated at the news.

Ashbel Smith Professor Ramaswamy Chandrasekaran served as interim dean at ECS after Bill Osborn left in the summer of 2002 for the University of Missouri. The search committee for a new dean included Bob Helms, a former executive with Texas Instruments and now president and



On June 30, 2003, UTD, Texas Instruments, and the state of Texas announced an ambitious plan for TI to build a chip fabrication plant in Richardson and for Texas to support a new, state-ofthe-art Natural Sciences and Engineering Research Laboratory (NSERL) at the University. U.S. Senator Kay Bailey Hutchison (at podium) and TI Chairman & CEO Tom Engibous (seated) made the announcement at TI's headquarters in Richardson.



Bob Helms became Dean of the Jonsson School of Engineering & Computer Science in March 2003, a time of national recession and budget challenges for public universities.

CEO of International SEMATECH, an Austin-based consortium of semiconductor manufacturers. Helms was also professor emeritus of electrical engineering at Stanford University, where he had earned his Ph.D. and taught for 20 years. Helms and the committee had spent months reviewing applications and conducting interviews, but a suitable candidate eluded them.

Then, as TI and UTD began to work closely on making Project Emmitt a reality, TI emphasized the importance of hiring the best possible candidate for dean of the Jonsson School, someone with all of the corporate and top university experience of a Bob Helms, who had just masterminded a huge public-private partnership in the state of New York. It did not take the UTD leadership long to realize that an actual Bob Helms was now living in Dallas and volunteering on the dean's search committee. Things quickly moved apace. Intense discussions with Helms, with the search committee, and with the faculty of the Jonsson School swiftly led to Helms accepting UTD's offer to become the next ECS dean in March. From then on, he became the University's and Project Emmitt's chief spokesman in the remaining

months that led to "Emmitt" successfully crossing the goal line that summer.

The *Mercury* hailed Helm's arrival, citing his ambition to see UTD "on the annual top-50 list of the *US News & World Report* Rankings of Engineering Schools and Universities."³⁶⁰ The sentiment of the *Mercury*'s six-member editorial board was unanimous, demonstrating the strength of investment by UTD students in their university's continued rise toward national prominence. At the same time, officials like Hobson Wildenthal worried about keeping ambitions in tune with reality, lest disappointment born of unrealistic aims discourage support for the University's more measured, long-term growth strategy.³⁶¹

Nearly a year and a half later, on November 18, 2004, UTD and TI co-hosted a virtual groundbreaking ceremony in the Student Union for two facilities—TI's chip fabrication plant nearby in Richardson and UTD's new Natural Science and Engineering Research Laboratory (NSERL), on campus at the corner of Synergy Park Boulevard and Rutford Drive. The twinned events were broadcast on large screens set up in the Student Union as the success of Project Emmitt, now formally referred to as the Jonsson School Research Enterprise Initiative, was celebrated. Some estimates predicted an additional \$7.5 billion in spending in Texas by 2009 as a result of the TI/UTD arrangement, with about 82,000 jobs added to the Dallas area's economy.³⁶²

Project Emmitt promised to give the University an impressive, state-of-the-art research facility as well as significant additional research funding. It also provided greatly appreciated momentum to its rising standing and reputation. UTD aspired to become a "Tier One" institution, joining the ranks of major, national research universities. Several criteria defined such schools, including some subjective ones such as "excellent" students. But among the most important for UTD was research spending. In 2001, for instance, the University's approximately \$27 million in total research spending placed it in the 165th position nationally among public universities and 227th among all universities. By comparison, number one Johns Hopkins University spent \$900 million that year.³⁶³

UTD considered \$100 million in research expenditures to be a challenging but not unreasonable goal to set for itself over the coming decade.³⁶⁴ That meant attracting, and paying, talented researchers and students, especially graduate students. The new NSERL building would help, but it remained for UTD to come up with the funds to pay for the 40 new professors who would work there, and whose talents and reputations would earn the research grants necessary to maintain momentum toward the Tier One goal. Indeed, Project Emmitt had made UTD "capital rich but salary poor," Wildenthal explained to the faculty in July 2003, just two weeks after the project's announcement.³⁶⁵ With that brick-and-mortar windfall came increasing pressure to find funds for personnel at a time when money was scarce, donors were wary, and hiring was frozen; hence Wildenthal's circumspection about Project Emmitt. It did not mark the last leg of the climb to the peak; instead, said the provost with deliberate understatement, "We've just lived to hike another year."³⁶⁶ Tuition increases remained on the table as a necessary measure to sustain UTD's progress.

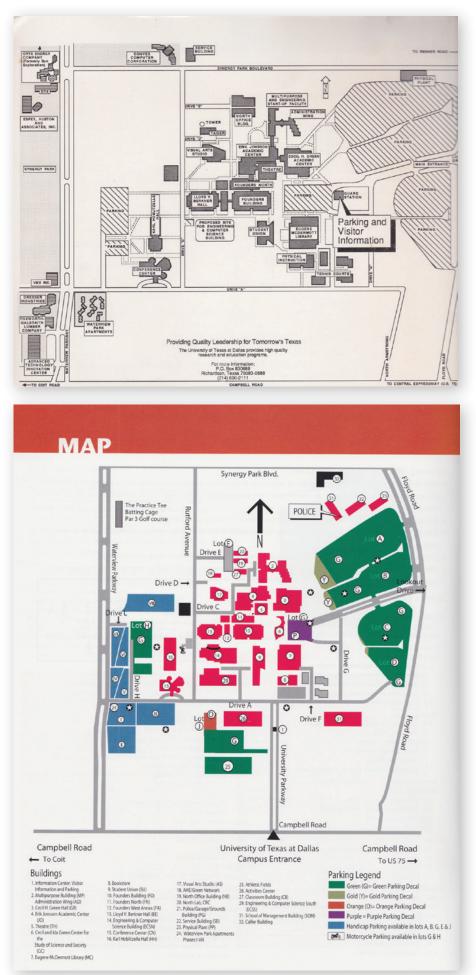
Notwithstanding such caveats, UTD's enrollment for fall 2003 reached a record high of about 13,800, its freshman class of 1,200 averaging a combined SAT score of 1224, up eleven points from 2002. Meanwhile, the number of National Merit Scholarship finalists attending UTD doubled to 30 and the number of Academic Excellence Scholarships awarded rose from 395 to 479. "Lots of things are coming together to suggest the University's future is very bright," affirmed Undergraduate Dean Coleman.³⁶⁷ Thankfully, the university's growth in enrollment was receiving some measurable response from the state and the UT System in terms of increased facilities for teaching and research.

Transitioning: Leadership, Labs, and BBS

While the University enjoyed this season of wellearned satisfaction, President Jenifer sent a campus-wide email declaring that "UTD, I am pleased to say, is no longer the best-kept secret in Texas." But that was not the main thrust of his message, which was the revelation of a different, better-kept secretthe president's retirement. On October 1, 2003, after nine years in office, Jenifer announced that he would be stepping down by the fall of 2005, or whenever a suitable replacement had been hired. The 64-year-old looked forward to continuing his sideline of research into the Civil War, as well as to the chance to "chase my grandkids around" back in New Jersey.

Jenifer's announcement was well-timed, though his departure remained many months off. Project Emmitt had just been successfully launched after months of behind-the-scenes preparation. Thanks in part to that success, UTD had grabbed the headlines and drawn national attention to its capabilities as an up-and-coming, nationally ranked research university. Texas had been prodded out of its recession-bound caution with an offer too good to refuse, and Texas Instruments, no less in the downturn's grip than other tech companies, had expressed its confidence in the future-its own, the state's, and the University's-with a multi-billion-dollar investment. "He is going out on a high note," said Provost Wildenthal of President Jenifer, "and the University is on a high note." Of the search for a new president, Wildenthal was confident that, "We will attract the interest of some able people."368 Wildenthal and Robert Nelsen, then speaker of the Academic Senate, were among many on campus who attested to Jenifer's careful, consensus-fostering and sensitive leadership style.³⁶⁹ Former Speaker Murray Leaf also testified to Jenifer's intangible contributions to campus life, beyond the million-more square feet of buildings and 62 percent increase in enrollment he had overseen. "He has helped make this a remarkably cohesive academic community," said Leaf, "and for that very reason his absence will be felt especially sharply."370

Transitions, "even at the presidential level, are a normal occurrence in the life of any university," Wildenthal reminded the campus community. Some transitions were more difficult than others, but few were more eagerly anticipated by the scientists in the School of Natural Sciences & Mathematics than the opening of the new Natural Sciences and



A comparison of UTD campus maps in 1990 and 2003 shows the university's rapid growth. Note the addition in 2003 of the Activities Center (26), the School of Management Building (31), the Cecil & Ida Green Center (6), two new Engineering & Computer Science buildings (14 & 29), and a doubling of student residences (in blue, north of Drive A).



The multi-year renovation of Founders Building began in winter 2003. It required careful planning to accommodate the relocation of sensitive laboratory equipment and ongoing experiments.

Engineering Research Laboratory made possible by Project Emmitt. For more than 40 years researchers had done their best to advance the frontiers of knowledge in the increasingly antiquated environs of the Founders Building, which remained home to most of NSM. However, it was also clear that the NSERL building, expected to be completed in 2006, would not be able to house all of the NSM faculty. "The Natural Sciences and Math folks need new facilities, not in 2006 but now," declared ECS Dean Bob Helms in November 2003.³⁷¹ Founders would have to be renovated. But in the meantime, where would its occupants go? And would they return to that old structure? NSM had some unique problems, such as anticipating the nature and extent of laboratory facilities it required, and what to do with experiments currently underway in the existing labs. One couldn't simply halt them all for construction, or even handily relocate many of them. Moreover, Founders' chemistry labs were not just for research but for teaching, and often operated seven days each week to accommodate increased course demands as enrollment grew. Math classes, also NSM's responsibility, were held in a room in the Green Building that was "booked solid" from morning to night.³⁷²

UTD hired a consulting firm to advise it on the Founders renovation. After looking the building

over, the firm thought that demolishing it and starting over might be the best approach.³⁷³ But Founders had historic significance and lived in the hearts of many who remembered it fondly as the University's first and, for a while, only structure. "I used to park my car right up front, walk up the steps, and my office was the corner office right there," Rod Heelis recalled. "So, in terms of sentimental attachment, there sure was one, I can tell you that."³⁷⁴

An unusual degree of sentiment involved the dining hall. "We had the best cafeteria in the world up on the second floor," recalled John Hoffman at the Hanson Center for Space Sciences. "It was just solid food, and the variety of it was just great. John [Tucker, the manager] ran it."³⁷⁵ Marketing professor Ram Rao concurred. "You could have eggs and toast and bacon for a dollar. Our first Nobel laureate, Polykarp Kusch, had retired but he would often come and have lunch there. We'd all get together, faculty from all the schools, and we'd talk about everything from baseball to football to politics and what's wrong with science. It was a very different place."³⁷⁶ It was finally determined that the Founders Building, or at least its shell, would survive. In winter 2003, UTD announced a two-stage plan: first it would construct a building just north of Berkner Hall to house the labs currently in Founders. Then it would renovate the old building,

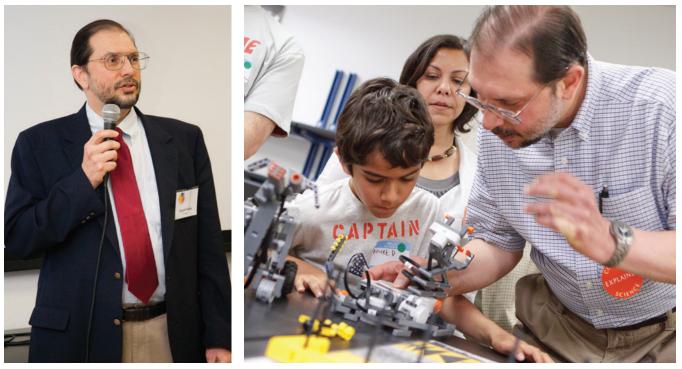
including the time-consuming removal of extensive asbestos materials, and reopen it, mostly as class-rooms and offices.³⁷⁷

But circumstances overtook that plan. With some lab equipment spilling over into hallways, and research assistants crowding four to a room in spaces designed for one, relief could not await the design and construction of a new building. Acutely conscious of safety concerns, Provost Wildenthal pushed hard for temporary lab quarters. In spring 2004, the Physics Department moved into the new ECS building, "squatters" as Rod Heelis put it.³⁷⁸ At the same time, the University purchased a building across Waterview Parkway to the west of campus to house the Hanson Center for Space Sciences. Finally, after a decade of touring visiting officials through the corridors of Founders congested with a heterogeneous jumble of refrigerators filled with biological agents, in the hopes of stimulating funds for renovations, Project Emmitt had added that "extra point" in addition to providing NSERL.³⁷⁹ While seeking speedy resolution of NSM's space problems, the provost also stated that the renovation and the

NSERL building would not be rushed. "This is two years into the future, and there will be a lot of work," he cautioned. "We don't want to waste a cent. We want to take the time and do it right."³⁸⁰

The all-important group of UTD space scientists could appreciate that, even as they groused about all the disruption. They, too, had learned to be cost-conscious, to do things right, and to be patient. While they completed their move out of Founders and into quarters across Waterview Parkway, they awaited the arrival of NASA funds to build another mass spectrometer, this one designed for an unmanned 2007 scouting mission to Mars. NASA's engineers were designing a mobile device which, when lowered onto the Martian surface, would dig up samples and then heat them in small ovens. The spectrometers built by Hoffman and his colleagues would analyze the resulting evaporated gases for traces of water-a key inquiry into the planet's, and indeed the solar system's, origins.³⁸¹

In spring 2004 the University welcomed its third Nobel prize-winning scientist, Russell A. Hulse, as visiting professor in NSM. With his thesis advisor,



Nobel Prize winner Russell Hulse joined UTD in 2004 to pursue his interests in science education. Under Hulse's direction, the University opened its Science & Engineering Education Center in 2008 to develop programs for K-12th grade students.

Joseph H. Taylor, Jr., Hulse had earned the Nobel Prize in Physics in 1993 "for the discovery of a new type of pulsar, a discovery that has opened up new possibilities for the study of gravitation." He retained his position at Princeton University's Plasma Physics Laboratory, commuting to UTD in order to pursue his interest in developing novel approaches to math and science education. The spring 2004 semester also ushered in UTD's expected tuition increasesabout \$300 per semester for most students, with \$360 more kicking in the next semester.³⁸² Students generally accepted the hikes as necessary for their school's well-being, and hence to theirs. With all the cranes, trucks, and backhoes on campus, plowing along against the anomalous backdrop of a sluggish economy, UTD maintained its forward motion. More significantly, the University strengthened its sense of community as its members, in many ways disparate in age and interests, concluded that they would all sink or swim together.

Since 1989, when he had become Dean of the School of Human Development, Bert Moore had managed to consolidate numerous seemingly diverse activities under one roof. But, by 2001, he and others at UTD concluded that the name "Human Development" no longer adequately described the School's evolving concentrations. These centered on psychology, particularly cognitive psychology; neuroscience, especially brain functioning; and communications, the traditional realm of the Callier Center's audiologists and speech/hearing specialists. In 2003, the School changed its name to the School of Behavioral and Brain Sciences (BBS).³⁸³ It retained its degree programs in child learning and development, for there was now much national interest in early infant and toddler development, known in the vernacular as "0 to 3." Indeed, BBS faculty had secured a \$1.2 million training grant in that area a decade earlier.³⁸⁴ But BBS also forged new, interdisciplinary bonds with UTD's other schools-neuroscience with NSM's biology program, for instance, and cognitive psychology with ECS's computer scientists. It also offered a unique doctoral degree in audiology, the Au.D., as well as collaborative research and service opportunities between the Callier Center and ECS to study cochlear implants



The Callier Center opened a facility on campus in 2003, coinciding with the renaming of the School of Human Development, which became the School of Behavioral & Brain Sciences.

and other hearing devices. Such work received a major boost with the opening of the Callier Center's on-campus satellite building on August 18, 2003.

About 40 percent of BBS faculty were involved in cooperative work with colleagues at Callier and other programs at UT Southwestern Medical Center.³⁸⁵ The Center for BrainHealth, for instance, had opened in 1999 in a small section of the Callier Center. Now, under the direction of Dr. Sandra Bond Chapman, it was starting a major, \$20-million fundraising campaign to construct a new building adjacent to UT Southwestern. Many donors in the community had witnessed the struggles of stroke victims and their caregivers to recover from life-changing brain damage.³⁸⁶ Others arrived at that difficult place following other diseases, such as Parkinson's and Alzheimer's, or after accidents. Active research programs were sorely needed to learn more about, and to better treat, such conditions. "We will be able to ramp up very quickly," Dr. Chapman vowed, when the new facility opened in late 2006.³⁸⁷

With fundraising for the Center for BrainHealth on a reassuringly ascendant path, UTD's chess team, a carefully nurtured avatar of the institution's cranial acumen, also continued a string of victories. Its December 2003 win at the Pan American Intercollegiate Team Chess Championship in Miami over powerhouse rivals University of Maryland, Baltimore County (UMBC), Stanford, and Brooklyn College clinched a "number one" ranking for the chess Comets among teams in the Western Hemisphere. UTD had tied for first place at the Pan American championship in 2000 and 2001 but had never won outright until that year. "This is the pinnacle for the UTD chess team," exulted Tim Redman, chess program director. UTD's players had shown up as underdogs and emerged victors, "a tremendous accomplishment for Coach Rade Milovanovic and all of the players."388

The players included Grandmaster and Team Captain Marcin Kaminski of Poland, a senior majoring in computer science and software engineering, and three freshmen International Masters–Dmitri Schneider of New York (business administration), Magesh Chandran Panchanathan of India (computer science/telecommunications), and Amon Simutowe of Zambia (economics and finance). Further honors came in July 2005, when Panchanathan, now a sophomore, beat the highest-ranking chess player in the United States, UMBC's Alexander Onischuck, to earn the title of Grandmaster, the highest competitive chess ranking possible. Tim Redman did not know if any Western player had ever won the title the same way. "It's one thing to recruit a grandmaster to come to your school," he mused. "It's something else entirely to recruit a student who becomes a grandmaster while going through your program. I couldn't be prouder."³⁸⁹

At the nether end of cerebral ambition was a nascent UTD tradition known as "oozeball," a derivative of volleyball in which opposing teams faculty and staff on one side and students on the other—fought for supremacy on a court of mud, concocted with the aid of a firehose. UTD's Student Ambassadors started the annual spring event in 2002. More than 200 participated in the April 2004 tournament. The occasion leant itself to



UTD's spring "oozeball" tournament started in 2002 as a studentinspired effort to offset the seriousness of academic work with some unmistakably lighthearted activity.

plain-spoken commentary. "The mud is it," summed up junior Justin George. "I think the majority of the people were out there to have a good time," chimed in senior Tim Hise, raising unspoken questions about the minority's motivations. But sophomore Laura Unclebach edged the discussion toward more serious territory. "It's like being a little kid again and breaking the rules," she offered. "We're skipping our classes. Everyone's skipping their classes." A fine example was set by the captain of the winning faculty/staff team, Dean of Undergraduate Studies Michael Coleman, whose ardent participation seemed not to diminish the event's subversive appeal.³⁹⁰

Tier One: Consultants Weigh In

If the Oozeball Tournament managed to poke fun at the world of rankings and competition, such light-heartedness did not extend to the University's

James Reilly

mong UTD's notable alumni is a scientist whose experiences encompass the depths of the ocean as well as the heights of interplanetary space. In 1975, James Reilly was in the first group of undergraduates juniors and seniors only at the time—admitted to the University. Two years later, he began master's degree research aboard a submarine exploring the geology of western Antarctica, then went to work for an oil exploration company in the Gulf of Mexico, researching effects of possible drilling on communities of organisms thriving on naturally-occurring "cold seeps" of oil from beneath the ocean floor.

A few years after earning his M.S. at UTD in 1987, Reilly decided he wanted to be an astronaut. He had worked in "adverse environments" but had no flight experience. As a scientist and mission specialist, a Ph.D. would help his application. He returned to UTD, where Dr. Richard Mitterer guided him toward his Ph.D. in 1995. With his doctoral degree all but completed in December 1994, NASA accepted him into the astronaut program.

Reilly flew on three space shuttle missions, working on the Mir station as well as the International Space Station. He logged 853 hours in space, including five spacewalks. A loyal UTD alum, he returned to UTD as homecoming parade marshal in 2002 and commencement speaker in 2003. Richard Mitterer was always pleased to welcome his former student with a quip, "He's risen higher than anybody else in his profession." Reilly took a UTD flag with him aboard one of his shuttle flights in 2007 and presented it to his alma mater on returning. He retired from NASA in 2008 and currently serves (2019) as director of the U.S. Geological Survey in Washington, D.C.



striving toward Tier One status. It was a somewhat vague goal as yet-size and guality criteria were not specified until the Texas legislature quantified them in 2008-but it was serious business, nonetheless. And it got more serious as some universities in the UT System began to focus on which of them might be next, after the Austin campus, to achieve substantial size, quality, staffing, reputation, and resources, particularly in its ability to win major research grants. Absent an alternative to the usual scrummage for funds and resources, universities competed in any way they could for pride and position in recruiting students and faculty, and in attracting research grants and donations. Project Emmitt had placed UTD in the spotlight, unintentionally leaving seven other UT System universities in the background–UT Arlington, UT El Paso, UT San Antonio, UT Brownsville, UT-Pan American, UT Permian Basin, and UT Tyler. These institutions also aspired to national prominence and let their intentions be known to friends in Austin and to the UT Regents. In response, the Regents hired the Washington Advisory Group, a Washington, D.C.based consulting firm, to conduct a study of the universities' Tier One potential. (The 100-year-old Austin campus was excluded since it was already a first-tier institution).

The consultants divided the eight universities into two groups, with Dallas joining Arlington, El Paso, and San Antonio, and delivered their report, known as the WAG Report, in May 2004. The study did not compare the "emerging national research universities" in the UT System, one against another, but instead assessed where each of them stood in relation to existing tier one standards. The study also outlined the measures each university had to take over the next decade or so in order to meet their goals. Paramount aims for all of the schools included increasing research expenditures by hiring between 300 and 400 additional faculty, fostering a "research culture" that encouraged and rewarded such activity, and enrolling talented graduate and undergraduate students.

Consultants approved of the research collaborations already underway between UTD, UT Southwestern, and UT Arlington, and recommended more of them. But they also observed "turf fighting and zero-sum gaming" among Texas's public universities and recommended that they "find a way to lessen these unproductive activities."³⁹¹ The consultants also noted the need for a change of perspective in the Higher Education Coordinating Board. The Board, it said, should support the creation of doctoral programs, such as Psychology, that could be recognized by national accrediting boards, instead of forcing universities, as UTD had been forced from the start, to create hybrid or atypical degree programs in order to assuage the Board's concerns about duplication.³⁹²

The WAG Report noted UTD's relative youthunder 40 years old-and how unusual and difficult it was to develop a major research university in such a brief time. UTD had gotten a late start, said the consultants, and was not there yet. Indeed, progress was likely to be slow, if steady, given the daunting challenges ahead. On the positive side, UTD had developed "truly excellent undergraduate programs," had "recruited actively and well in specific research areas," and, with Project Emmitt, had rejuvenated the University's relationship with private donors. In 2001, the University ranked 49th nationally among public universities in SAT scores. In 2002 it was also 49th in the number of National Merit and Achievement Scholars. "The University has worked hard and imaginatively to reach its current level of excellence," the report noted, with such success boding well for similar results in UTD's research and graduate education efforts. The consultants concluded that the main obstacle the University faced in reaching its goals was size: "UTD is simply too small in terms of the total number of faculty in each disciplinary or sub-disciplinary area." This tended to lower the school's profile nationally and diminish its ability to win large research grants. UTD's leadership was fully aware of these factors, however, and was "approaching them in sensible ways, pursuing a strategy of focused excellence."393

With President Jenifer's retirement imminent and a search underway for his replacement, the

consultants also warned that recruiting a "first class president for UTD is an absolute must if it is to achieve its goals." Such a person should be "an accomplished scientist or engineer and a strategic thinker. He or she should have both the reputation and the personality to coax funds from the Dallas philanthropic community and the state, and the administrative capacity to appoint an excellent administrative team and, with them, execute the planned programs with courage, judgment, and precision."³⁹⁴ That was a high bar for any mortal as well as for the members of the presidential search committee, who were flying to various locations around the country in the summer of

A Symbol of Excellence

In the early 1990s, Tim Redman discovered he was not the only chess lover at UTD when a couple of students suggested starting a chess team at the university. Redman had been an avid player during high school but reduced his involvement in college in order to focus more on his studies. Now, as a professor of comparative literature and expert on the poet Ezra Pound, Redman heard once again the quiet call of intense competition from "the game of kings."

UTD was receptive. Big-time athletics had never been a strong point at UTD, and though some sports, like basketball, volleyball, baseball, and softball were starting to shine–UTD became a provisional NCAA Division III member in 1997– they were not likely to draw national attention anytime soon. But so-called "brain competition" was another story. President Franklyn Jenifer made success in this realm a major priority for UTD in the mid-1990s, even as traditional sports also advanced, though more slowly, on campus.

It did not take long for UTD to reach the top. Its first team placed ninth in the Pan American Intercollegiate Chess Championship in 1996-1997, collegiate chess's "Super Bowl," then jumped to second place the next year. In April 2001, the team won the President's Cup at the "Final Four" of intercollegiate chess, defeating teams from Stanford, the University of California at Berkeley, and the University of Maryland, Baltimore County. In just four years, UTD's players had won their University recognition from the U.S. Chess Federation as "Chess College of the Year." UTD's chess team never left the top ranks. Careful recruiting and support, excellent coaching, and, most important, a determination to keep student-players' academic work on the front burner at all times, made UTD's team symbolic of the University's guiding standard of intellectual excellence.





Chess Coach Rade Milavanovic, Franklyn Jenifer, and Tim Redman.

2004 trying to deepen an initially shallow pool of applicants.³⁹⁵

UTD's response to the WAG Report was mixed. Jenifer told the Academic Senate that there was nothing surprising in it. But faculty members were less charitable. Some believed that the consultants had imposed an MIT model on UTD because they "did not understand who we are."³⁹⁶ Said Murray Leaf, "They didn't get that we didn't want to be a niche school but a full-scale university that was strong in the sciences."³⁹⁷ It was especially important to faculty that the incoming president, when chosen, have different perspectives available when reviewing the WAG Report. The University offered many such perspectives, and the WAG Report could be read through different lenses. But the UT System's recommendation was clear, that UTD should take the report seriously and try to implement its recommendations.³⁹⁸

A New President; Restrictions Lifted; Momentum Builds

After an extended period of uncertainty, the UT Regents announced on February 10, 2005, that David Daniel, professor of civil engineering and dean of the College of Engineering at the University of Illinois at Urbana-Champaign, had accepted their offer to become the next president of The University of Texas at Dallas. Earlier, Daniel had made a highly secret visit to campus, hosted by vice president for communications Jon Senderling. Daniel later remarked that his incognito meeting with UT Dallas students in the Student Union convinced him that UT Dallas had a great future. The day after the Regents' announcement, Daniel visited the campus for a round of meetings and a welcome in SOM's Davidson Auditorium. His official starting day was set for June 1.

The arrival of a new president, charged to lead UT Dallas to new heights, coincided ironically with the final and complete elimination of the original constraints that had been imposed on the university at its creation. On June 17, Governor Perry signed into law a bill, SB254, that had been authored by State Senator and Chair of the Senate Education Committee Florence Shapiro. SB 254 lifted "restrictions intended to minimize the impact of expansion at the university on programs at other public universities in the North Texas region, caps on the number of entering freshmen students and on the total enrollment of freshmen and sophomore students...



On June 1, 2005, David Daniel, professor of civil engineering and dean of the College of Engineering at the University of Illinois at Urbana-Champaign, succeeded Franklyn Jenifer as UTD's president.



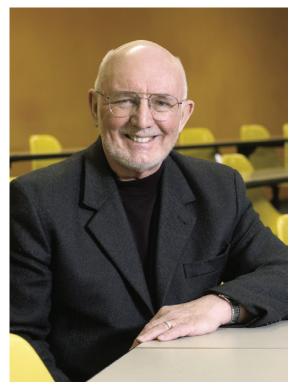
Just 16 days after President Daniel started at UTD, the Texas Legislature passed SB254, lifting all of the historical restrictions that had been placed on the university from its founding. State Senator and Chair of the Senate Education Committee Florence Shapiro, shown here with Daniel, authored the bill.

and a requirement for undergraduate admissions policies to emphasize the admission and enrollment of lower-division students into academic programs leading to degrees in natural sciences, mathematics, or engineering."³⁹⁹ Shapiro's intent in lifting the restrictions was "to eliminate the risk that in the future they might constitute potential or perceived impediments to the university as it continues to meet the needs of the citizens of Texas."⁴⁰⁰

The daughter of Holocaust survivors, Shapiro graduated from UT Austin and worked as a public school teacher in Richardson, Texas, before beginning her political career on the Plano City Council in 1979. She was elected to the Texas Senate in 1992 and became president pro tempore of that body in January 2005, third in line of succession to the governor. Shapiro had been a long-time supporter of UTD, and her bill brought overdue and welcome relief. But it was worth considering some less onerous effects of that sequence of historical limitations. They had helped define UTD's identity, out of necessity, as small, different, special, and academically creative. The first major barrier to fall had been the prohibition on engineering education. The next was the prohibition on teaching freshmen and sophomores. The provision in the 1989 law permitting freshmen admissions that had mandated high admission standards as a constraint to limit enrollment had been turned into a positive, as the AES scholarship program enhanced UTD's reputation for excellence and increased the University's appeal to a wider applicant pool. UTD had made something special of itself within confines set by law-an achievement all the more impressive. The relief from the prohibition against competing with neighboring institutions was a welcome confirmation of what had evolved into a practical reality. History would show that the most important new freedom granted by SB254 was the elimination of the 2000student cap on freshman enrollment.

The School of Social Sciences did not wait for SB254 to take effect to add new doctoral programs to its existing Ph.D. in political economy. The Coordinating Board had already approved Social Sciences' Ph.D. programs in public affairs (2002) and economics (2004). Political science and geospatial information sciences (GIS) followed in 2005, the latter being the first of its kind anywhere in the world, according to GIS mapping pioneer Brian Berry.⁴⁰¹ The GIS doctoral program was jointly conducted by three schools—SS, NSM, and ECS—in order to make the most of the University's interdisciplinary capabilities and the field's own practical versatility.⁴⁰² But, as had happened with the School of Human Development, the School of Social Sciences' name no longer accurately described its evolving activities. A new name was needed—and, as it turned out, a new dean.

Geographer Brian J. L. Berry had contributed much toward UTD's prominence since arriving from Carnegie-Mellon in 1986. In 1999, he began a threeyear term on the Council of the National Academy of Sciences, the first geographer ever to hold such a position in the Academy's 150-year history.⁴⁰³ In the spring of 2005, Provost Wildenthal asked Berry



In spring 2005 Brian Berry accepted Provost Wildenthal's offer to become dean of the School of Social Sciences. One of Berry's first actions was to change the School's name to the School of Economic, Political and Policy Sciences (EPPS) in order to reflect more accurately its activities and priorities.

to consider becoming the School of Social Sciences' new dean. At age 70, Berry had been thinking about retirement. But he also had been thinking about his father, who lived independently and drove his own car well into his nineties. That night, Berry discussed the provost's proposition with his wife, Jan, and in the morning told Wildenthal that he was game.

Berry started right away, changing the school's name from Social Sciences to Economic, Political and Policy Sciences, or EPPS. The new dean also worked to increase the school's research productivity, recruiting new faculty and, where necessary, suggesting to others the wisdom of looking elsewhere to continue their careers. After half a century in the trenches of academia as professor and administrator, Berry had no illusions. He knew that he would have to exert leadership and represent the Administration. "If you ask a faculty to independently go through a strategic planning effort," he explained, "what you end up with almost always is a document where each group wants to do more of what they are doing right now. It never becomes a picture of what the alternative futures might be. I always thought of my role as an administrator as identifying those elements of strength that I want to support and encourage, but also identifying different elements that might make the future a lot more exciting and a lot more useful."404 EPPS's new organization and direction reflected not only what UTD's leadership had long recognized as necessary, but also what the WAG Report had recommended. The consultants identified a frequent refrain at the many meetings they had attended on campus in 2003-2004: "We need twice as many faculty members doing twice as well."405 With that message clearly at the top of Berry's agenda, EPPS's doctoral enrollments surged, from 85 in 2003 to 140 in 2004, and more than 170 in 2005.406 Berry's own contributions to doctoral education in EPPS over his first 30 years at UTD have been massive, numbering more than 70 chaired doctoral dissertations.

Dean Hasan Pirkul in SOM also looked for ways to encourage research productivity and boost his school's national standing. The two goals were closely related but, Pirkul came to think, not



In 2004-2005 SOM Dean Hasan Pirkul (top) and Associate Dean Varghese Jacob developed a new business school ranking based primarily on faculty research output. The *UTD Top 100 Index* quickly proved a widely sought metric for business school performance nationally as well as worldwide.

closely enough. He had observed how business school rankings often were based more on MBA programs than on faculty research output. UTD had some well-regarded MBA programs, but in 2004 the SOM's strong suit was research. "I believe that what makes a university a university is its ability to conduct high quality research," he said, "otherwise, you are a trade school."⁴⁰⁷ One day Pirkul was looking over a paper that ranked operations management departments based on their research. To his surprise, UTD was in the top ten. More surprising was the fact that MIT was not even on the list.

Pirkul called the authors of the paper to ask if they had made a mistake. They explained that MIT had not made the list because it did not have an operations management (OM) department to rank. It struck Pirkul as unfair not to tell readers which schools had OM departments and which did not. But it also gave him an idea. Why not expand the concept and rank business schools on their overall research output, not by a single department or program but by the entire faculty? Using the top 22 journals in the field, he and a colleague, Associate Dean Varghese Jacob, soon produced and published a new ranking metric for business schools, the *UTD Top 100 Index*.

UTD did not perform well by the terms of its own index. It was in 35th place nationally and 38th worldwide.⁴⁰⁸ But Pirkul was undeterred. He figured he had found "a new tool, a set of incentives," as he put it, to motivate faculty members to improve their productivity. In so doing, he also provided other business school deans a means to do likewise. "I believe in competition," he declared. "If a faculty member is not doing well, they should know that."409 SOM's 74 faculty members got the message. The school's position in the UTD Top 100 Index improved quickly, placing UTD in the world's top ten business schools and raising its reputation for research-oriented, top-quality programs.⁴¹⁰ Further, the UTD Top 100 Index guickly became a much-consulted yardstick for business schools worldwide. In March 2018, SOM Professor Diane McNulty was attending an AACSB meeting when she met a professor from a university in Georgia. "Oh. UT Dallas," he exclaimed.

"We love you guys!" Why, she asked? "Because we're number 36 on your *Top 100 Index*. We weren't ranked when you started, but now we're really proud that we made it to 36."⁴¹¹

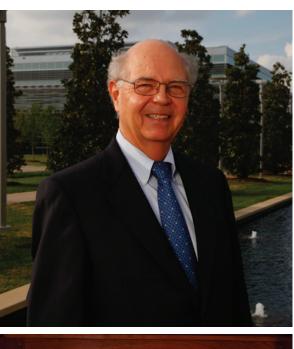
UTD held its 100th graduation exercise on August 6, 2005, in the Activity Center. The occasion elicited numerous assessments of the University's progress over 36 years. It had granted about 55,000 degrees in that time, with the number of degree programs now passing 100, 26 at the Ph.D. level. Dean of Graduate Studies Austin Cunningham conferred 126 doctoral degrees in the 2004-2005 academic year, bringing to 1,500 the total number conferred since UTD's founding. By comparison, the University had awarded 72 doctorates just ten years earlier.

ECS also repeated, in 2005, a record it had set the previous year, granting more computer science degrees—bachelor's, master's, and doctoral combined—than any other university in the United States. It also awarded more computer science degrees to women (179 of 575) than any other U.S. school.⁴¹² An additional measure of the University's rapid expansion was the number of buildings it had constructed. In 1995, the campus map showed 44 buildings—ten years later the number had nearly doubled to 81.⁴¹³ The pace of construction correlated with a rise in total student enrollment, from about 9,000 in fall 1995 to 15,000 in 2005.⁴¹⁴

"It's easier to get bigger than it is to get better," noted Dean Michael Coleman.⁴¹⁵ But the University seemed to be doing both. Average SAT scores for freshmen, already the highest for any public university in the state, kept rising, reaching 1242 in 2004. The freshman retention rate also was rising, with 84 percent of the class returning for their sophomore year in 2004 compared to 72 percent six years earlier. The first class of McDermott Scholars graduated in 2005, leaving behind a higher level of discourse in classroom discussions, higher degrees of participation in campus organizations and activities, and a powerful accelerant in the Collegium V honors program's enhancement of the entire undergraduate experience.

Everyone downplayed ratings and scores, but a newly growing institution could not help looking

in the mirror once in a while. Even the McDermott Library snuck a peek, with Director Larry Sall announcing in August 2005 the acquisition of the library's one millionth volume-a rare, first edition botany book by William Curtis, published in 1777 and titled Flora Londinensis. "A special occasion calls for a remarkable book," Sall proclaimed. Collegium V's director, Edward Harpham, also was pleased by what he saw. The average SAT score for the honors program's 330 students in 2004 was an impressive 1420 out of an almost unheard of "perfect score" of 1600. Harpham noted the program's ripple effect across the whole student body. "Education isn't just in the classroom," he said. "It's what happens outside the classroom with students encouraging one another to do new and better things."⁴¹⁶ As any of UTD's scholars well knew, there was another word for that kind of cumulative energy, one that summed up the University's overall spirit as it began the fall 2005 semester with a new president at the helm-momentum.





In August 2005 Director Larry Sall announced the McDermott Library's one millionth acquisition, *Flora Londinensis*, a rare botanical volume from 1777 featuring more than 400 hand-colored, engraved plates.

CHAPTER 6 Acceleration (2006-2011)

TD's momentum accelerated in a "virtuous circle" wherein growth attracted talent, which, in turn fostered new growth. Working with members of the Texas Legislature, UTD administrators were a driving force in creating innovative funding mechanisms to enhance the emerging public research universities of Texas by regularizing competition for state support. The University's seven schools ("colleges" on traditional campuses) added new programs, centers, and institutes. Faculty continued to distinguish themselves in arts, humanities, and sciences, as did a new vanguard of select undergraduates who thrived in UTD's growing panoply of honors and scholarship programs. The physical plant, a perennial scene of cranes and construction sites, became even more so as crews labored to provide facilities to match the University's expanding endeavors. This included a dramatic "landscape enhancement" plan, underwritten by Margaret McDermott, to transform the campus's appearance and express more suitably its aims and values. After such acceleration, UTD could rightly anticipate its next step-takeoff.

Dallas, David Daniel, and UTD–Fates Entwined

David Daniel would say he was the fortunate one. But the University of Texas at Dallas truly had a stroke of luck when Daniel, who had rejected an initial inquiry from the presidential search committee, reconsidered his decision. He accepted the position of University President in February 2005.

Daniel came from the University of Illinois at Urbana-Champaign, where he had been chair of the department of civil engineering and then dean of the College of Engineering, but he knew Texas well. He had earned his bachelor's, master's, and doctorate degrees in civil engineering at UT Austin, then joined its faculty and progressed from assistant to associate to full professor. Highly regarded for his engineering expertise as well as his administrative abilities, he had been recognized with the highest marks of distinction in his field, such as his election in 2000 to the National Academy of Engineering.

Any reservations Daniel may have had about applying for the UTD presidency appears to have evaporated when he took the job. "He was not the kind of president who sat back and let things flow around him," said EPPS Dean Brian Berry. "He was a person with an agenda."⁴¹⁷ Besides getting acquainted and developing his own on-the-ground feel for the University, Daniel's first major project was the development of a strategic plan to impart purpose and direction to UTD's growth. Numerous committees toiled away on that task through the 2005-2006 academic year.

The president's agenda was straightforward from the start–accelerate the pace of change at UTD with the goal of reaching Tier One status. He began by convincing leaders in Dallas and Austin that their



President David Daniel, May 2005, a few months after accepting the UTD presidency.

future depended on it. As Daniel presented it, there was no need to overreach or exaggerate. The vital link between UTD and Dallas's prosperity was plain to see. It was exemplified in the growth of every economic powerhouse in the nation, from Boston and New York to San Francisco and Seattle. Even Austin had thrived in recent years due to high-tech, entrepreneurial spillover from research at the UT flagship campus. Only a large, well regarded, research-focused university could enable Dallas to reach its full economic potential. Sure, UTD needed Dallas, but Dallas needed UTD just as much. Indeed, a 2004 UT Austin study estimated that UTD had added \$350 million to the North Texas economy in that year alone.⁴¹⁸ In accepting the UTD presidency, the Dallas Morning News observed, Daniel had in effect "stepped into a second, unofficial job: raising the profile of Dallas as an undisputed world-class city."419

But Daniel's straightforward agenda had its challenges. Some groups remained skeptical of higher education's aims and purposes, and dubious about the connection between the rising cost of college and its practical benefit to society. Even universities, at times, seemed more intent on competing with each other for the sake of winning than on cooperating for the greater good of the society that supported them. As an executive, Daniel had to "stay on message" about Dallas's and UTD's interdependent futures. But as an ambassador, he also had to manage the multiple diplomatic challenges of building constructive alliances with the state legislators, the Regents, other UT System universities, private donors, the community at large, and, not least of all, his own campus. "Look for the pace to quicken," he alerted his UTD colleagues. "It has to. The great universities and cities of the world will not be sitting still waiting for us to catch up."420

One of Daniel's early initiatives involved switching places for a day with UT Arlington President James Spaniolo to demonstrate the two schools' commitment to working together to advance higher education in North Texas instead of just competing for resources. "It is time for that limited emphasis to end," said Daniel, with Spaniolo adding, "The best way for us to succeed is by working together." The two presidents agreed to create a \$250,000 fund to seed joint research projects, to work together with lawmakers in Washington, D.C., to support higher education in the Dallas-Fort Worth area, and to broaden their schools' ongoing research collaborations on brain imaging, robotics, and nanotechnology.

A few months later, in April 2006, UT Dallas and UT Arlington awarded 12 research grants under their new joint funding arrangement, suggesting that, as UTD's Vice President for Research Da Hsuan Feng said, "The desire for more interaction between the two institutions is not limited to the presidents, but is shared by many of the faculty and staff as well."421 Daniel and Spaniolo's job exchange was not entirely original-the presidents of Texas A&M and UT Austin had met for similar purposes in 2002-but the message was more than symbolic; it had grown increasingly urgent as Texas considered new ways to fund higher education in an era of diminishing public support and rising costs. The state's universities were searching as never before for a way past the usual "zero-sum" scenario to compete constructively in the future.422

Daniel was pondering this conundrum in November 2005, just six months into his presidency, when the American Society of Civil Engineers tapped him to head an external review panel, commissioned by the federal government, to investigate levee failures in New Orleans resulting from Hurricane Katrina. The job required Daniel to spend some long weekends away from UTD, but it burnished the pride and reputation of the school to consider that its president, a member of the National Academy of Engineering, had been chosen from among the nation's many experts to lead this important effort. A year later, Daniel gave a talk on the subject in SOM's Davidson Auditorium, citing "complacency, a lack of priority on protection of public safety, and some very poor management choices" as the root causes of the levees' failure.⁴²³ As Daniel's analysis demonstrated, engineering was not just about physical things like bridges, electrical circuits, airplane design, or chemical production;

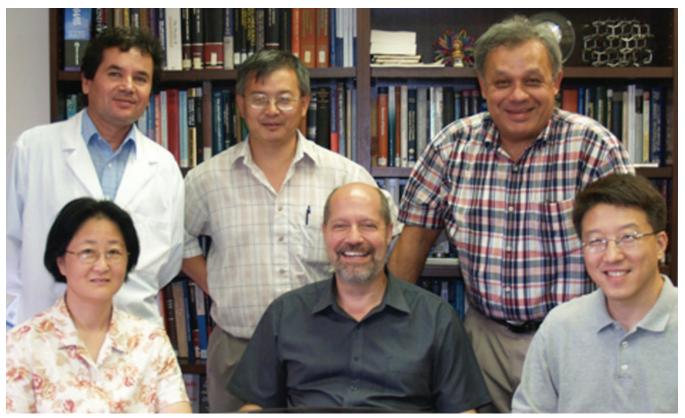
it also required an appreciation of history and a working knowledge of the larger society's political, economic, and management systems.

UTD experts often had been consulted on matters of national importance, from Stan Rupert and Frank Johnson's 1979 National Research Council review of ozone layer depletion research to Robert Rutford's leadership on the Scientific Committee on Antarctic Research, and Bill Hanson and John Hoffman's contributions to numerous NASA missions. Still, it was frustrating when a national news reporter introduced a UTD faculty member as working at "the University of Texas," without designating the particular campus. Andrea Stigdon of UTD's Office of Strategic Planning and Assessment complained, "Outside of the state, people assume they're talking about the one in Austin, and I think, 'No, that guy is from Dallas!"' It was some measure of progress, she added, that "the local news [now] does not make that mistake."424

Continuing and Growing Faculty Achievements

UTD's faculty members also continued to distinguish themselves as David Daniel pushed for growth. Marion Underwood, a psychologist in the Department of Behavioral and Brain Sciences, was awarded Fellow status in the Association for Psychological Science in fall 2005. Her research on adolescent development, particularly the effects of social media and the phenomenon of aggression in girls, earned her a \$1.8 million National Institutes of Health (NIH) grant in 2002. The previous year she had won the UT System Chancellor's Council Outstanding Teacher Award. NIH continued its support for Underwood's research in 2005 with an additional grant of \$597,000.⁴²⁵

In 2006 EPPS's Greg Thielemann, an expert on Texas government and director of UTD's Center for the Study of Texas Politics, also earned



Led by Ray Baughman, a team from UTD's NanoTech Institute conducted frontline research on the assembly of nanotubes to make large sheets with fascinating new characteristics and potentials. They reported their findings in *Science*, Vol. 309 (August 2005).

(L to R, front) Mei Zhang, Ray H. Baughman, Shaoli Fang (L to R, back) Ali E. Aliev, Sergey B. Lee, Anvar A. Zakhidov

the Chancellor's Teaching Award.⁴²⁶ Among the diverse topics covered in the more than 20 courses Thielemann had taught at UTD were "Legislative Decision Making," "Southern Politics," "Film and Politics," "Sex and Politics," "Campaigns and Elections," and "The Politics of Education." UTD's vice president for public affairs Amanda Rockow worked with Thielemann to bring Texas lawmakers serving on education-related committees to campus for a Texas Education Forum to discuss legislative and budget issues with students. "We might be the only campus in the state," said Thielemann, "where the people who wrote the budget explain themselves to the students who live with it."⁴²⁷

A&H professor and composer Robert Xavier Rodriguez celebrated the 250th anniversary of Mozart's birthday (January 27, 1756) with an April premier of three original pieces commissioned and performed by the Dallas Symphony Orchestra. Back on campus, Rodriguez's colleagues in the UTD Chamber Singers and the UTD Chorale (Hoyt Neal, director) helped celebrate Mozart's birthday with a performance of choral works in University Theater. The following month, the Dayton Philharmonic Orchestra included Rodriguez's Agnus Dei, inspired by Mozart's unfinished Mass in C-Minor, in its Mozart birthday offering. Three years earlier, the Dayton Philharmonic had premiered Rodriguez's *Flight*: The Story of Wilbur and Orville Wright, to commemorate the centennial of the brothers' first flight at Kitty Hawk, North Carolina, in December 1903.428 Rodriguez was reaching international audiences, too, with summer engagements as guest composer at the European American Musical Alliance and teacher of a master class in composition at the École Normale in Paris.429

Music and science had always been international enterprises and were becoming more so as new channels of communication encouraged cross-fertilization and collaboration. In science, the increased cost and complexity of research also promoted cooperation. In June 2006, UTD's Nanotech Institute and Australia's Commonwealth Scientific and Industrial Research Organization (CISRO)'s Textile and Fibre Technology Division

received the NanoVic Prize from Nanotechnology Victoria Ltd., sponsored by the Australian state of Victoria and a consortium of three universities. Ray Baughman at UTD and Ken Atkinson at CISRO had led their respective research teams' successful advances in making nanotube yarns and transparent nanotube sheets-materials with remarkable properties of strength, flexibility, and electrical conductivity created by structuring carbon molecules on an extraordinarily small scale. It was an exciting field, closely watched both by industry and by scholars around the globe. Texas's Higher Education Coordinating Board acknowledged its importance when it approved, in January 2006, UTD's new master's and Ph.D. programs in materials science and engineering.430

Under Baughman's leadership, and with the guidance of Nobel Laureate Alan MacDiarmid, UTD's NanoTech Institute had rapidly become a world leader. Along with the NanoVic Prize, the Institute also garnered a Nano 50 Award in 2006, conferred annually on the top 50 products and researchers in the field by NanoTech Briefs, a monthly magazine. Scientific American also included Baughman and two colleagues, Mei Zhang and Shaoli Fang, on its annual list of 50 outstanding contributors to science and technology, generally.⁴³¹ Among the many accomplishments of Baughman's team, which proudly included its high-school NanoTech Explorers as collaborators, was the creation of artificial muscles from twisted nanotube yarns that converted a variety of energy sources to mechanical energy, causing expansions and contractions, or "twitching," eerily similar to actual muscle activity.432

Other notable scholars also were migrating to UTD, stimulated by Project Emmitt and the completion of the centerpiece of that initiative, the Natural Sciences and Engineering Research Laboratory. Physicist Yves Chabal, formerly of Bell Labs and Rutgers University, joined UTD in January 2008 to head the materials science and engineering program. He joined professors Bruce Gnade, Moon Kim, and Robert Wallace, who had all arrived in 2003 after Project Emmitt funding



UTD's state-of-the-art Natural Sciences and Engineering Research Lab (NSERL), dedicated in June 2007, greatly advanced the University's contributions in several research areas. A Skybridge connected the NSERL to another advanced research facility, the Bioengineering and Sciences Building (BSB), which was completed in fall 2015.

enabled ECS to develop its materials science and engineering program. By 2008, Gnade had become UTD's vice president for research, Wallace had been named a fellow of the Institute of Electrical and Electronics Engineers (IEEE), and Kim was directing the Silicon Wafer Engineering and Defect Science Center (SiWEDS), a consortium effort based at UTD to explore further reductions in the size of semiconductors.⁴³³

Chabal was the first holder of the Distinguished University Chair in Nanoelectronics.⁴³⁴ He was impressed by UTD's new NSERL facilities, declaring there was "no comparison" between this stateof-the-art facility and those he had seen in prior settings.⁴³⁵ Chabal was a Fellow of the American Physical Society and co-winner in 2009 of the APS's Davisson-Germer Prize for "for the individual development and collaborative application of fundamental surface infrared spectroscopy and quantum chemical methods to silicon surface reactions important in microelectronics." Said Bruce Gnade, "In the world of infrared spectroscopy of semiconductor surfaces, Yves is the world's expert."

Additionally, Chabal strongly supported women who aspired to science and technology careersnearly half of his laboratory staff were womenand in 2012 he received the American Chemical Society's Award for Encouraging Women Into Careers in Chemical Sciences, the first time in the Award's 20-year history it had ever gone to a man. Chabal's efforts on behalf of women were among many by UTD to "close the gender gap" in STEM (Science, Technology, Engineering, Mathematics) fields. UTD's enrollment was not immune from the national trends, with about a 5-to-1, male-to-female ratio in ECS in fall 2011 (about 3,000 males



Yves Chabal, the first holder of the Texas Instruments Distinguished University Chair in Nanoelectronics, joined UTD in January 2008 to head ECS's materials science and engineering program.

to 592 females).⁴³⁶ But, as proponents of diversity often stressed, establishing a receptive "climate" for women and minorities was an important condition for further progress. At UTD, Chabal's initiatives set an example, as well as a persuasive argument, for that kind of "climate change."

As a *Mercury* headline cleverly noted in early 2009, UTD was "hiring on all cylinders."437 Much of that hiring was in fields like science and engineering, where major research grants were mostly likely to be awarded. ECS expanded its research spending from \$7.5 million to \$31.3 million between 2002 and 2008; boosted the number of doctoral degrees awarded from nine to 46 between 2002 and 2007; and increased its tenured and tenure-track faculty from 74 to 97 in that same period. Mark Spong, also a University of Illinois colleague of Daniel and a nationally recognized robotics expert, became ECS dean in August 2008. Physicist Myron Salamon, another former Illini, became NSM's new dean in October 2006. The University, as a whole, doubled its research spending between 2003 and 2008, reaching a total of \$64.3 million-an impressive

advance toward its Tier One goal of \$100 million, though still substantially shy of it.⁴³⁸ These were big steps, but a glance at Texas A&M and UT Austin, whose engineering school research expenditures in 2007 alone totaled \$205 million and \$135.2 million respectively, revealed why many viewed the race to Tier One as a marathon, not a sprint.⁴³⁹

As it set the pace for growth, UTD's administration coolly assessed the progress made and the distance still to be covered. The university's acceleration was necessary and so far, effective, but it had to remain deliberate. Benchmarks abounded. In 2008, for instance, *U.S. News and World Report* ranked UTD's Jonsson School of Engineering and Computer Science 80th in the nation of public universities, behind UT Austin (number 11) and Texas A&M (number 13).⁴⁴⁰ In Texas, ECS ranked third behind those schools. Just two years later, ECS's undergraduate programs had advanced to the 60th slot, and its graduate programs to the 46th, on *U.S. News and World Report*'s list of public schools of engineering.⁴⁴¹

Growth in Programs and Facilities

The School of Behavioral and Brain Sciences (BBS) under Dean Bert Moore's visionary leadership was expanding on several fronts. Its Center for BrainHealth opened on schedule in September 2006 after an extensive renovation of a building at 2200 Mockingbird Lane. The building was named for Francis and Mildred Goad, the mother and grandmother of Dianne Cash. Cash had provided the principal funding for the renovation in appreciation of the help offered her mother by the Center. Director Sandra Bond Chapman expected the facility to house more than 200 researchers and clinicians, conducting as many as 50 separate investigations into conditions such as stroke, brain injury, and dementia. In 2007, legendary Dallas businessman T. Boone Pickens endowed a faculty chair at the Center and provided support for several clinical and research programs.⁴⁴²

The Center for BrainHealth joined the Callier Center for Communications Disorders as one of two



Sandra Bond Chapman, Director of the Center for BrainHealth in the School of Behavioral and Brain Sciences.

research centers with clinical impact within BBS. In 2008 BBS added a third-the Center for Children and Families, which received initial funding from a grant from the Meadows Foundation. Dean Bert Moore aimed to make the School's wide range of expertise in child development available to the community in the new Center's on-campus location.443 Soon afterward, a fourth center, focused on neuroscience, was opened. It was located in rented quarters near UT Southwestern so as to have convenient access to the brain-scanning complex in the Advanced Imaging Research Center, a joint enterprise of UT Southwestern and UT Dallas. The Center for Vital Longevity was established by Denise Park, a world leader in Alzheimer Disease research recruited from the University of Illinois. In the years following, Park was joined by colleague Michael Rugg and four young colleagues who together created one of the most productive and well-recognized research consortiums at UT Dallas.

Building and Beautifying

Meanwhile, much was happening in the material domain on UTD's Richardson campus as well. In May 2006, President Daniel alerted the UTD community to "watch for those construction cranes on campus-they will remain here for the foreseeable future."444 The following summer, he again cited "several major construction projects" as the activity likely to have the greatest impact on students in the coming school year.⁴⁴⁵ These projects included a new Student Services Building, a new "Living-Learning" residence and dining hall, and the long-delayed renovation of Founders Hall. Most comprehensively, a \$30-million "Campus Landscape Enhancement Project," to transform the appearance of the entire campus from one of concrete efficiency to a more inviting environment of reflection and repose had been initiated. This last project, the latter stages of which are still underway, was the result of Margaret McDermott's continually growing enthusiasm about UTD's progress. All of these projects were still in the planning stages, and since the actual work would take years to complete, Daniel might well have extended his alert to encompass the next several years.

The Campus Landscape Enhancement Project commenced with a competition to select the landscape architect, with the jury being composed of Mrs. McDermott and her good friends Ray Nasher, who had just completed construction of his Nasher Sculpture Center in downtown Dallas, and Roger and Carolyn Horchow. After submissions and presentations, the design from the renowned landscape firm of Peter Walker and Partners (PWP) was selected. The formal kick-off for the project took place on September 22, 2006, when Peter Walker and his team met with members of the UTD community to discuss their proposed plan.

The crowd attending the Campus Enhancement groundbreaking on November 20, 2008, reported the *Mercury*, focused its attention not on the landscaper's drawings or scale models but on an elegant white-haired woman. Once again, Margaret



Dedicated in fall 2010, the Science Learning Center provided much-needed classroom space. It also included a lab for research about effective teaching and learning techniques in math and science at both college and K-12 levels.

McDermott had stepped forward to help UTD. No doubt with her husband, UTD co-founder Eugene McDermott, in mind, Mrs. McDermott termed the project "the continuation of a dream."⁴⁴⁶ In time, with all the pipes back underground, the plantings rooted, the sidewalks laid, and the sod in place, the campus would more readily lend itself to similar reflections.

The project was not merely cosmetic. It aimed to recreate the central campus as a learning environment, rerouting traffic away from the center of campus, increasing pedestrian movement, and providing new opportunities for engagement in settings such as gardens with benches and a trellised plaza in the commons between McDermott Library and the Student Union. The long reflecting pools called for in the PWP design extended from the School of Management and the Activity Center northward toward the library and required digging up and replacing sewer and water lines more than 40 years old. "This was an opportunity to update it before you put the landscaping in," explained Andrea Stigdon, who had worked for a general contractor before joining UTD. "It was more than just landscaping."⁴⁴⁷ Indeed, to those who lived through it, it felt more like reconstructive surgery than a simple makeover.

The buildings that would rise above this new UT Dallas landscape included the Science Learning Center (SLC) for which the Regents had approved \$27 million in August 2006. Groundbreaking for the SLC took place on October 28, 2008, with completion expected in 2010. The project stemmed from a need to address a national problem of deficiencies in "K-through-12" science and math education—a situation Daniel deemed "a national disgrace."⁴⁴⁸ There was much educators still needed to learn about how best to teach these subjects, and the challenge extended to the college level.

Tackling "Gateway" Courses and Satisfying SACS

UTD had acquired that insight first-hand back in the early 1990s as it wrestled with ways to teach calculus to its new freshmen. Because the problem was larger than UTD, and more complex than most

Campus Enhancement

he Campus Landscape Enhancement Project had its origins in a telephone call from Margaret McDermott to Provost Hobson Wildenthal. The McDermott Scholars Program had by this time had the powerful impact on the university that she had envisioned, and she was further encouraged by the appointment of President Daniel. Wildenthal recounted their conversation. "She told me that she was extremely happy about the progress the University was making and felt it was now time to make another major gift. She asked me for my recommendations about what would be most important now that the Scholars Program was up and flying. I told her that we both knew that great people, students and faculty, were the most important ingredients of a great university. We are successfully recruiting great students and hiring great faculty. But, I said, everyone is human. Even the brightest intellects are also sensitive to their surroundings. Our campus appearance is just mediocre."

"I know I could recruit even greater people if they did not have to overcome their distaste for our physical appearance. The university can never divert funds from salaries and scholarships for campus beautification. And, most philanthropists would not see the importance of this issue. But you are someone who does understand how important beauty of surroundings and an elegant landscape are for a healthy, optimistic, community. Only you could help us with this essential priority, and I think it is the most important thing you can do now to again move UT Dallas forward."

Wildenthal continued, "My remarks struck a chord with Mrs. McDermott, as I had imagined that they might. She agreed with my assessment. She became so enthused with the concept that she took the extraordinary step of selling one of her paintings for \$10 million to generate the initial funds. Ultimately, as the years rolled by, she and the McDermott Foundation would invest a total of \$60 million to totally transform the entire UT Dallas campus, but she never forgot the sacrifice of the painting for that first \$10 million."



Margaret McDermott (third from left) helped with the planting of a magnolia tree, referring to the Campus Landscape Enhancement Project as "the continuing of a dream."



Ten months after the formal groundbreaking in November 2008, the Campus Enhancement landscaping project dominated the central campus, looking south with McDermott Library on the left and the Student Union on the right.

had realized, the solution had proven elusive. It would require more than simply adjusting older teaching methods (and professors) to match the needs of younger students. Students often came to UTD because of the University's strong reputation in science and engineering, but then struggled with introductory or "gateway" courses, especially in calculus and chemistry. More often than anyone liked, these experiences caused students to switch majors and career plans, transfer to another college, or just drop out. David Daniel remarked, "I wish that the problem was solely one of inadequate highschool preparation. But study after study has shown that part of the problem is the way universities teach science, engineering, and mathematics. It's often sink-or-swim, with insufficient tutoring and little one-on-one peer support and engagement."449

It was a nationwide problem, but 18 years after its first unhappy experience with entering freshmen, UTD was still struggling to find a solution, particularly for transfer students and freshmen who had not taken a calculus course in high school. About 40 percent of these students–192 of 482 in 2006-received grades of D or F in the university's introductory calculus classes or withdrew from the course before getting a grade. Similar performance and withdrawal figures applied to the school's introductory chemistry classes. These were often deemed among the most demanding, in part, because of their lab components. Between 2003 and 2007, between 30 percent and 45 percent of students received D's or F's in introductory chemistry or chose to withdraw from the course before being graded.450

Providing success and mastery experiences for students in so-called "gateway" math and science subjects remained problematic for UTD as it prepared for its 2008 decennial accreditation review by the Southern Association of Colleges and Schools (SACS). The review itself would take several days. With five-year, mid-cycle reviews, and numerous other self-studies to be completed along the way, preparing for SACS amounted to a full-time job. A new requirement was that universities have in place what was termed a "Quality Enhancement Plan" (QEP) to enhance learning. The school had to have a plan, and the accreditors had to approve it. Tackling the intractable "Gateway Course" problem seemed a natural project for UTD's QEP.

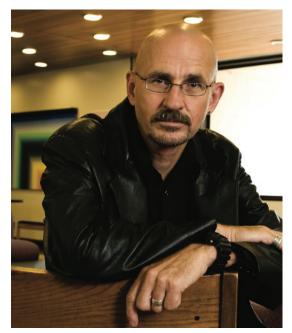
In 2006, Hobson Wildenthal convened a 16-member QEP Council and enlisted the aid of A&H's Robert Nelsen, who took time off from leading the creative writing program, to help the University prepare for its accreditation review. Nelsen brought several perspectives to the assignment. He was well-regarded for his academic and teaching abilities and had a broad knowledge of university life beyond the classroom. He had served as speaker of the Academic Senate, chaired the UT System Faculty Advisory Council, and, most recently, helped develop the University's Strategic Plan. Like the accreditation review, the Strategic Plan was as much a process as a product-it was still being assembled in early 2007-and called on a wide range of talents, including a capacity for patience and an ability to meet deadlines.

In some ways Nelsen seemed an unlikely candidate for such plodding organizational work. His daily wardrobe was unconventional—all black, after the Johnny Cash song, "Man in Black."

"I wear the black for the poor and the beaten down, Livin' in the hopeless, hungry side of town, I wear it for the prisoner who has long paid for his crime, But is there because he's a victim of the times."⁴⁵¹

If society ever lived up to its own ideals, Nelsen explained in 2005, he would start wearing white. But until then, he, too, would be a "man in black."⁴⁵² As Nelsen extended his activities into crucial but often unglamorous administrative areas, the thought-provoking professor showed that one could make a public statement yet also make a difference behind the scenes.

With SACS reaccreditation on the horizon, the University mounted a concerted effort to address the "Gateway" problem with its QEP. In May, Provost



Arts & Humanities professor and former speaker of the Academic Senate Robert Nelsen brought all his experiences to bear in leading UTD's successful reaccreditation effort in 2008.

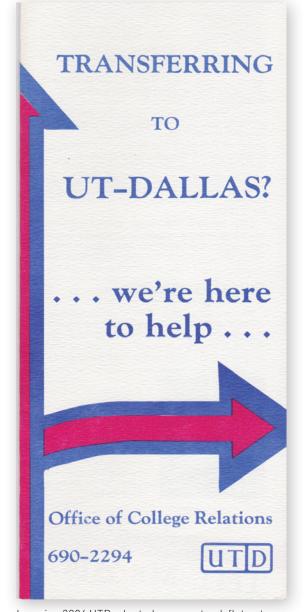


Provost Hobson Wildenthal appointed Chemistry professor John Sibert to head the Quality Enhancement Council, a committee tasked with improving the University's approach to teaching difficult "gateway" courses in chemistry and mathematics.

Wildenthal named chemistry professor John Sibert to direct the QEP Council. Sibert's classroom skills were widely acknowledged on campus, as was his enthusiasm for helping his students succeed. Now he would have an opportunity to help create a campus-wide program to increase student success in calculus as well as in his own subject area. Over the next year and a half, Sibert lived up to his reputation, becoming, as Abby Kratz put it, the "mental soul" of a major pedagogical innovation at UTD.⁴⁵³

In August 2007, the QEP Council produced a plan it termed GEMS-Gateways to Excellence in Math and Science.⁴⁵⁴ GEMS called for an overhaul of the introductory chemistry and calculus curriculum, a vigorous program of tutoring and peer-group support called "Peer-Led Team Learning" (PLTL), and an ongoing search for ways to encourage innovative instruction. It also used a plan devised by QEP Council member and professor of electrical engineering Matt Goeckner to make sure important concepts presented in various courses were taught in ways that were consistent and aligned with each other, from introductory to advanced levels. The School of Engineering and Computer Science had already implemented Goeckner's "concept-mapping" model, which allowed for its ready adaptation to GEMS.⁴⁵⁵ The thoroughgoing SACS review also required a mechanism for evaluating a QEP's effectiveness. Assistant provost Abby Kratz, who was working in the Provost's office on the upcoming SACS review as well as the GEMS initiative, traveled to City College of New York with Mary Kaye Adams, Director of UTD's Learning Resource Center, to attend a conference on PLTL programs and their assessment. "We did it in two months," said Kratz of the assessment plan, who looked back years later and concluded, "It really worked well. 456

The University stood firm in its view that GEMS was not a "remedial" program because it targeted "high-risk courses rather than high-risk students."⁴⁵⁷ UTD's undergraduate admissions standards supported that argument. "If you're good enough to get in," Undergraduate Dean Michael Coleman told entering students during their orientation, "you're good enough to stay in." Coleman repeated this



In spring 2006 UTD adopted a guaranteed, flat-rate, four-year tuition plan, offering it first to transfer students from Dallas County Community College under the University's "Comet Connection" program, then widening it to include all incoming UTD students

message at a February 26, 2008 "town hall" meeting to present GEMS to the UTD community.⁴⁵⁸ In short order, the grades of participating students began to rise–about 0.5 points on average, or the difference between a B plus and an A minus. At the same time, failure and dropout rates fell about 15 percent, reinforcing GEMS's claim to be more remedy than remedial.⁴⁵⁹ The SACS reviewers approved, granting UTD full reaccreditation through 2018.⁴⁶⁰

Tuition Rates and University Finance

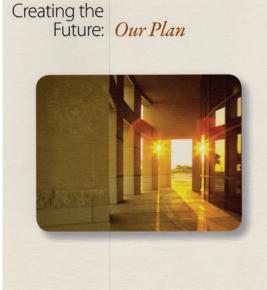
In October 2005, amidst the uncertainties of change and the unpredictability of tuition increases, President Daniel had formed a Tuition and Fee Policy Review Committee to explore ways to increase enrollment and income while keeping costs down for students and families. Chaired by Provost Wildenthal, the 16-member committee included seven students and canvassed the entire institution before recommending, in March 2006, that UTD adopt a guaranteed, flat-rate, four-year tuition plan.⁴⁶¹ The Administration accepted the recommendation, offering the plan first as a "Comet Connection" program to students transferring from Dallas County Community College, a significant pipeline for UTD's enrollment. (At this time, more than 50 percent of UTD students transferred in from other schools, mostly community colleges).⁴⁶² All incoming UTD students became eligible in fall 2007, and by January 2008 the Comet Connection extended to nearly all of Texas's community colleges-42 out of 50. In order to get the plan's full benefit, students were required to maintain 15 credit hours per semester. Credit hours above that amount were essentially free, which encouraged on-time or even early graduation.

Few public universities had adopted guaranteed tuition programs, the University of Illinois, Daniel's former campus, being one of them. These programs involved a calculated risk that the appeal of flat, four-year rates would increase enrollment, which in turn would provide more income to the University than unpredictable year-to-year increases, which might discourage students from applying or, more worryingly, from continuing or from completing their degrees on time-important "accountability" metrics to the UT System and to legislators. The calculation of risk extended to state actions too, such as when the Regents imposed a 4 percent cap on tuition increases in fall 2007, the same semester UTD implemented its guaranteed flat-rate program. But UTD, no amateur at number-crunching, placed its bet on predictability. "The public does not want high tuition," Wildenthal noted, "but they don't want to put money through taxes into building a better school system, either."⁴⁶³ Stabilizing tuition in order to incentivize enrollment and retention offered one route through those narrow straits.

Strategic Plan: Growth, NRUF and TRIP

President Daniel outlined UTD's Strategic Plan in his November 7, 2007 State of the University address.⁴⁶⁴ Titled "Creating the Future: Our Plan," its major recommendation was that the University needed to scale up rather than change its mission, in order to achieve critical mass as a nationally significant, or Tier One, research university. The plan provided a number of specific recommendations, but as Daniel told the Academic Senate, it was a "living document," not a rigid to-do list.⁴⁶⁵ UTD's endowment, student enrollment, Ph.D. production, tenure and tenure-track faculty, research expenditures, alumni giving, physical space for classrooms and labs, undergraduate retention and graduation rates– all of these would have to increase, and by specific amounts over defined time periods. In the case of faculty size, research expenditures, Ph.D.s awarded annually, endowment, space, and alumni giving, for example, the aimed-for increases had to double or more in ten years. Was this possible? The Strategic Plan asserted positively, "We Can Do It."⁴⁶⁶ Daniel's fact-based enthusiasm inspired his administration's enlistment of stakeholder support and commitment to the Plan's goals.

Daniel again addressed issues of university finance with an idea to overcome the self-defeating competition between UT System institutions for the state's shrinking pool of tax dollars dedicated to higher education, a problem exacerbated as schools sought Tier One status. In May 2008, he released a paper titled, "Thoughts on Creating More Tier One Universities in Texas." The paper set the stage with a history lesson and a path forward. In the 1920s, manufacturing jobs, access to ports, railways, and natural resources such as rivers, had placed Philadelphia, Detroit, Cleveland, and St. Louis among



UTD

IVERSITY OF TEXAS AT DALLAS

Meeting the Imperatives

We Can Do It

The University's ability to succeed in all the critical elements of this plan is proven.

UTD's Strategic Plan, unveiled in November 2007, set ambitious growth goals along with a plan to reach them. With confidence born of the conviction that "Dallas Needs Us To Succeed," the University leadership concluded, "We Can Do It."



President David Daniel never passed up an opportunity to spread his core message that Dallas's future prosperity and UTD's growth were deeply connected. The concept was as old as the University itself, going back to the SCAS days, but Daniel marshalled new evidence to make it freshly urgent and relevant.

the nation's six most populous cities. But as conditions for economic prosperity changed, so did those cities' fortunes. In today's tech-oriented, entrepreneurial economy, access to brains characterized the nation's most successful cities. And in that regard, Texas, the country's second most populous state, lagged significantly behind other states with only three major research universities-UT Austin, Texas A&M, and the private Rice University in Houston. By contrast, California had nine such universities, New York had seven, and Pennsylvania four. Despite the warnings of UTD's founders nearly 40 years earlier, Texas still suffered a "brain drain" of its ablest high school seniors. The state welcomed 3,700 freshmen to its doctorate-granting institutions in 2007, Daniel pointed out, but also bid farewell to 11,500 others matriculating out of state. That meant a net loss of 7,800 students in just one year.467

Daniel had done his homework. His formidable amalgam of inspiration and jeremiad caught the attention of a legislature inclined to ask why taxpayers "needed to spend more money on research universities when the state was doing fine without them."⁴⁶⁸ Daniel's foretelling of Texas's future was full of hope and bright possibilities; but its accompanying alarm bells also served as antidote to shortsighted self-satisfaction-and a pragmatic rebuke to latent anti-intellectualism. Working with Vice President for Public Affairs Amanda Rockow, who brought her expertise in the workings of the Texas Legislature and her credibility with elected officials and their staffs, Daniel embarked on a statewide road show with a message that rang true to many legislators.

Amanda Rockow noted, "President Daniel's proposal was brilliant as it created a framework in which an already established group of universities could compete to earn state money to advance their research operations. Every competing university could be a winner." House Higher Education Committee Chair Dan Branch of Dallas and Senate Higher Education Committee Chair Judith Zaffirini of Laredo, took a plan created by Daniel and crafted legislation (HB51) to create the Texas Research Incentive Program (TRIP) to provide state funds to match private donations for research purposes to the seven "emerging research universities," including UTD. Legislative appropriators, led in the House by Representative Jim Pitts of Waxahachie, agreed to fund TRIP at \$50 million for the next biennium.

That step forward became a giant leap when Senator Robert Duncan, an attorney who would eventually become chancellor of the Texas Tech University System, led a proposal in the Legislature to repurpose an existing but dormant stockpile of education money to benefit the emerging research universities. In 1876, Texans had amended their constitution to make sure that the long-standing investment fund the state had established to benefit higher education remained permanently dedicated to that purpose. Earnings from the Permanent University Fund (PUF) went primarily to UT Austin and Texas A&M. Constitutional amendments in 1983 and 1993 redressed this inequity by creating another fund out of general revenues, the Higher Education Fund (HEF), to benefit the state's other public universities. By August 2008, the HEF fund balance had reached \$576 million, but under the state's constitution no money could be distributed from HEF earnings until the fund balance reached \$2 billion. That day looked a long way off to Senator Duncan. Meanwhile, more than a half-billion dollars was just sitting there, doing no one any good. But the November elections were just around the corner, Duncan thought. Why not put it to the voters, and ask them to amend the constitution to repurpose the HEF monies and put them to good use? Thus, The National Research Universities Fund (NRUF) was born.

Branch, Zaffirini and Duncan inserted language into HB51 to create NRUF. Then Duncan shepherded through the legislature a proposed constitutional amendment, Proposition 4, to appear on the November 3 ballot, that would repurpose HEF as NRUF. As a nod to the role that UTD played in this game-changing legislation, Governor Rick Perry came to UTD on June 17, 2009, for a HB51 bill-signing ceremony outside the University's new Natural Sciences and Engineering Research Laboratory building. "There have been people who have had concerns that we didn't have enough Tier One institutions in the state," said Perry, with David Daniel and Amanda Rockow in close earshot. Perry added that he, too, had been concerned, but now was confident that "out of this legislation will come innovative, wealth creating technologies."469 Nearly five months later, voters handily approved Proposition 4, thereby transforming the dormant HEF into the National Research University Fund (NRUF) and finalizing HB51's accomplishment.

Under the new law's provisions, no NRUF funds would be distributed until September 1, 2011. At that time the Texas Higher Education Coordinating Board would begin allocating money based on the seven participating universities' progress in reaching certain benchmarks. These included spending at least \$45 million of funding that was restricted for research and meeting four of six criteria: \$400 million in endowment funds; 200



Texas Representative Dan Branch (center, with President David Daniel and VP for Public Affairs Amanda Rockow) led a successful effort with Senator Judith Zaffirini to create the \$50 million Texas Research Incentive Program (TRIP). In 2015 UTD awarded Rep. Branch the Gifford K. Johnson Community Leadership Award.

doctoral degrees awarded annually; high-achieving freshmen; national recognition by honor societies such as Phi Beta Kappa, the Association of Research Libraries, or their equivalent; high-quality faculty; and high-quality graduate education. "High quality" was left vague but lent itself to numerous measures such as research publications, SAT or GRE scores, number of National Merit Scholars, and the like. The rewards and the rules were now in place. In Texas higher education, a new era of structured competition had begun.

Donors Step Up as the Economy Implodes

The UTD community wasted no time. On September 1, 2009, just two and a half months after HB51 became law, making the University eligible for TRIP matching funds, 16 donors responded with gifts totaling nearly \$17 million, seven of them a million dollars or more and none smaller than \$100,000. It was the largest number of seven-figure donations ever received in a single day at UTD. The TRIP matching fund formula raised the value of the donations to \$31.7 million. "When we learned of the opportunity," said Charles Davidson, who with his wife, Nancy, had given \$250,000 to endow a faculty chair in SOM, "there really wasn't any question." Similar sentiments motivated other donors, who directed their gifts toward nearly every part of the university. David Daniel was expectedly exuberant, but also careful to observe that "this is a very encouraging beginning to what will be a marathon effort." ⁴⁷⁰

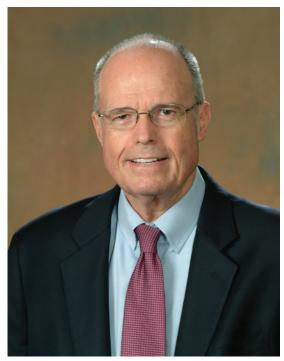
Recent events imparted more than the usual note of caution to Daniel's remarks. One year earlier, on September 15, New York's venerable Lehmann Brothers had declared bankruptcy. The collapse of the nation's fourth-largest investment firm had crippled the national economy, too, as a high-flying balloon of bundled sub-prime mortgage derivatives imploded, triggering the worst recession since the Great Depression. The UT System announced a "flexible hiring freeze" for non-faculty positions and a freezing of all senior executive salaries. Said Chancellor Francisco Cigarroa, "Just as Texans are tightening their belts, so must we."471 UTD's challenge, as Daniel put it, was "maintaining momentum in tough times."⁴⁷² In 2009, all state agencies, including its public universities, were asked to return 5 percent of their state funding for the 2010 and 2011 fiscal years. State funds made up about a quarter of UTD's \$400 million annual budget. Daniel vowed that the University would reduce spending but not retreat from its goal of hiring 21 more faculty members in the 2010-2011 academic year, a crucial element in the institution's drive toward Tier One status. "UT Dallas may be among the best-positioned universities in America to ride out the difficult times," he said. "But we must act responsibly now and prepare."473

Faculty Activities

Richard Bowen III, who became an adjunct professor of accounting in the School of Management in 2008, believed he had acted responsibly in spring 2006 when, as senior vice president and chief business underwriter in the consumer lending division of Citigroup, he noticed multiple irregularities in the bank's mortgage derivative business. He notified his superiors that required information about subprime mortgage loans was missing or incomplete. Their response surprised him. They seemed not to care, and the transactions were approved anyway. Soon subprime loans amounted to more than 80 percent of Citigroup's entire mortgage business. "The whole system was broken," Bowen recounted.⁴⁷⁴

After months of fruitless efforts, in November 2007, Bowen sent an email to Citigroup CEO Robert Rubin. His email went unanswered. Instead, in January 2008, Bowen was placed on administrative leave. When Lehman's house of cards tumbled in September, so did Citigroup's. On April 27, 2010, Bowen testified before the Congressional Financial Crisis Inquiry Commission, but soon realized that his revelations were an inconvenient obstacle to the government's bank bailout plan. Two days later, on April 29, the U.S. Treasury purchased Citigroup's devalued stock. If Bowen's testimony became widely known, the stock price would fall, potentially undermining the Treasury's plan. In January 2011, therefore, the record was sealed and sent to the National Archives, not to be opened for five years.

At UTD, Bowen's students listened attentively as he warned them of the high costs of speaking up. "During your career you will be faced with circumstances that will require you to take action based on your conscience and personal code of ethics," he counseled them. "If you find yourself in this type of situation, think it through. Don't just act."475 Bowen had suffered physically, emotionally, and financially for his principled stance. He wanted his students to do the right thing also, but to be ready for the consequences. The Dallas Certified Public Accountants Society awarded Bowen its "CPA of the Year" award for 2011, with a citation by board member Ken Helfenbein: "One man standing up alone for truth. We should all be proud of Richard for setting the standards we should all strive to duplicate when we are faced with fraud or corruption, even if corporate profits are at risk. Always do what is right regardless of its impact on profits."476



Richard Bowen III brought hard-won experience to the classroom when he joined UTD in 2008 as an adjunct professor of accounting.

SOM's Charles Hazzard, who joined the faculty in 1996 after a career at Occidental Petroleum, also brought decades of front-line experience to the classroom, winning the School of Management's Outstanding Undergraduate Teaching Award in 2010 and the President's Outstanding Teaching Award for non-tenure-track faculty in 2011. Hazzard peppered his numerous courses on business organization and management with "real-world" examples, reminding students that "what not to do is sometimes just as important as what to do." Hazzard also stressed the importance of personal factors in success, telling students that they may have talent, "but so do all the other thousands of college graduates. How they're going to set themselves apart is attitude. It's all behavioral."477

Schools Expand: EPPS, ECS, BBS

With instructors like Richard Bowen and Charles Hazzard, SOM ensured that its curriculum was personally compelling and socially relevant. UTD's other schools did likewise. Paul Tracy started the EPPS undergraduate program in Crime and Justice Studies in 1998. The major quickly proved to be among the University's most popular, with 230 students enrolled in 2004-the year Tracy won the Chancellor's Council Award for Teacher of the Year at UTD. Three years later, Tracy, an expert on juvenile delinquency and editor of the journal Crime and Delinquency, was asked to serve on a task force investigating Texas's troubled juvenile justice system, which Governor Perry had placed under conservatorship pending much-needed reforms.478 That same year (2007), EPPS started offering master's and doctoral degrees in criminology-the first such doctoral program ever in Texas.⁴⁷⁹ James Marguart came to UTD in 2005 after working as a correctional officer in the Texas Department of Corrections while earning his doctorate at Texas A&M. The experience proved invaluable in his academic career. "The officers were great," he noted, "but it was the inmates who really helped me to understand how these places were managed." Marguart was director of the criminology program when, in 2010, he succeeded Brian Berry as Dean of EPPS.480

Across campus, the School of Engineering and Computer Science was succeeding in its efforts to help accelerate UTD toward Tier One status. The 2004 WAG Report had recommended that UTD establish undergraduate degree programs in the rapidly advancing fields of computer engineering and mechanical engineering. The School's programs in electrical engineering and computer science were strong, acknowledged Associate Dean Cy Cantrell, but "none of the nation's top engineering schools have only two academic departments."481 ECS added computer engineering in 2007, and launched programs in materials science and engineering and mechanical engineering in 2008.482 In 2010, bioengineering became ECS's fifth engineering department when the Coordinating Board approved the School's master's and doctoral programs in that field-programs carried out in collaboration with UT Southwestern Medical School and UT Arlington.483 The next year, the bioengineering program expanded to include an undergraduate component, just on the UTD campus.484

Students Excel

All this growth and investment advanced UTD toward its Tier One goal, but the core vitality of the enterprise still depended on the high caliber of its students and their strivings for success in all undertakings. Undergraduates Sophie Rutenbar and Kassandra McLean, both McDermott Scholars, became the first students at UTD ever to be awarded the prestigious Truman Scholarship and Goldwater Scholarship, respectively. McLean graduated in 2006 and then pursued a Ph.D. in physics at the University of Maryland. Rutenbar earned an additional Marshall scholarship in 2006 and applied both toward programs in conflict resolution at Kings College in London and in human rights at the London School of Economics. Her interest led eventually to research projects in South Sudan and a career position at the United Nations. On the way, the former UTD Swim Club cofounder managed, in July 2009, to become the 1,000th person to swim the English Channel, a 14.5-hour feat Rutenbar used as an opportunity to raise donations for the International Rescue Committee.485

At a March 25, 2008 luncheon, UTD's Athletic Department honored 35 student-athletes: 20 women and 15 men. Besides excelling in their sports, these students had maintained cumulative grade point averages of 3.5 or better, amounting to nearly "straight A's." Sports had always come second to scholarship at UTD, and President Daniel surely was not the first to refer to UTD's non-existent football team as "undefeated."⁴⁸⁶ At the same time, the University's renaissance ideals included both fair competition and well-roundedness, qualities that favored athleticism, if not big-league athletics, as a dimension of student life worthy of recognition and support.⁴⁸⁷

Two weeks later, President Daniel flew east to the University of Maryland, Baltimore County, to watch the UTD chess team win the Intercollegiate Chess Championship. The team also made history as the first ever to win that title as well as the Intercollegiate Pan-American Championship two years in a row. Standouts in UTD's unprecedented victory were Davorin Kuljasevic and Marko Zivanic, with International Master Zivanic earning special plaudits from chess program director Jim Stallings. "He produced a perfect 3-0 score—the best of anyone in the tournament." And to those in the know, Stallings pointed out that Zivanic had done it by playing the black pieces in each round, putting him "at a slight disadvantage in every game."⁴⁸⁸

In May 2010, the first class of Terry Scholars graduated from UTD. Houston philanthropists Howard and Nancy Terry had started the Terry Foundation Scholarship program in 1987 to help deserving students attend designated public universities in Texas. Howard Terry never forgot the boost his own life received when UT Austin awarded him an athletic scholarship in the 1930s. Now, he aimed his Foundation scholarships toward students who had demonstrated the capability to become leaders and put their advantages to good use helping others, as he had with the assistance once given him.

Mike Coleman, Dean of Undergraduate Education, approached the Terrys and the staff of their program and very effectively conveyed the outstanding UT Dallas story to them. As a result, in 2006 UTD became the seventh university eligible for Terry Foundation support. Four years later, eight inaugural Terry Scholars graduated, among them a business administration major, Ahmed Zidan, a cross-country runner who also had been honored in 2008 by the Athletic Department as a distinguished scholar/athlete. Zidan finished his bachelor's degree in just two and a half years, had already done work toward his master's degree in finance, and was planning a career in law.⁴⁸⁹

UTD senior and McDermott Scholar Samia Hossain addressed the Terry Scholars and her other graduating classmates in May 2010. Having students speak at graduation ceremonies was a long-standing UTD tradition, established decades earlier when it seemed peculiar to invite a guest speaker to offer words of mature wisdom to mostly older, working, often married graduates. Why not have us speak, instead, the students proposed? UTD officials accepted. The tradition had outlasted the University's transition to four-year status and the coming of a younger undergraduate student body. Older students still shared the valedictory honors, but the younger ones did not disappoint. In her speech, Samia Hossain recalled her mother's advice as she began kindergarten in Lewisville, Texas: "Be good, and don't lose your backpack." At UTD, Hossain had enlarged that advice from being good to being "great," referring to the University's Tier One progress as well as the achievements of its faculty and students. She especially credited Collegium V director Edward Harpham, for his patient counsel as she made an early shift in her major from neuroscience to international political economy.

Hossain served in the Student Government Association, Student Ambassadors, and several other campus organizations. She studied government not only in her EPPS courses but also on site in Kuala Lumpur, Malaysia. A U.S. State Department scholarship enabled her to study Arabic in Jordan, while an Archer Fellowship allowed her to intern at the World Bank in Washington, D.C. In May 2010, just as she was graduating, Hossain capped her UTD achievements by earning a nine-month Fulbright award to study language and literature at the University of Cairo in Egypt. From there, she was heading to law school at the University of California, Berkeley.⁴⁹⁰ By any measure, Samia Hossain had held on to her backpack, and UTD had helped her stock it wisely for future journeys.

While Hossain was speaking to her graduating class in Richardson, a former McDermott Scholar, Rachel Markowitz, was playing Ultimate Frisbee in Morocco, an extension of her UTD honors thesis under EPPS's Marie Chevrier, on the potential utility of sports in facilitating conflict resolution. The thesis had helped win Markowitz a Fulbright Scholar award, the first for a UTD student. "Dr. Chevrier's interest in conflict resolution was contagious," Markowitz explained. Markowitz hoped that her own enthusiasm for Frisbee, when guided by the principles she learned in her coursework, would help her teach conflict management skills to Morocco's disadvantaged youth, with corollary positive effects in other areas of their lives. Eventually, Markowitz's



Sophie Rutenbar '06 was among many remarkable McDermott Scholars who continued their accomplishments in the wider world. Rutenbar earned Truman and Marshall Scholarships, studied at Kings College and the London School of Economics, conducted research in South Sudan, and found a career at the United Nations. A competitive swimmer, she also started a swim club at UTD and later swam the English Channel to raise funds for the International Rescue Committee. Such achievements seemed, quite literally, breathtaking.

interests led to a position with a non-profit aimed at improving relations between the United States and countries with predominantly Muslim populations.⁴⁹¹

UTD was deeply determined, highly organized, and ingenious in deploying scholarships to build and burnish its reputation for academic excellence. Some programs, like the McDermott Scholars, were broad in scope and well-financed. Others enabled UTD to implement more specific means of attracting and advancing students toward their goals. Among these was a program in BBS initiated by psychologist and Associate Dean Duane Buhrmester in spring 2010. The Dean's Scholars Program targeted talented freshmen who entered UTD expecting to continue on to graduate school. They would receive support to conduct research projects with BBS faculty members during the summer, thereby acquiring both a "leg up" and a first-hand taste of the graduate school experience. Recipients were eligible to join the University's Collegium V honors



McDermott Scholar, Archer Fellowship holder, Fulbright award winner, and UTD 2010 graduation speaker Samia Hossain honored her mother's counsel back in kindergarten to "be good, and don't lose your backpack."



Psychologist and Associate Dean of the School of Behavioral and Brain Sciences Duane Buhrmester initiated a unique honors program in BBS just months before perishing with his wife, Linda, in a mountaineering accident. The program moved forward under his name, the Buhrmester Undergraduate Student Research Award.

program in their junior year, do a senior honors thesis, and graduate with the appropriate honors recognition. The program looked promising. But in July 2010, Buhrmester and his wife, Linda, both experienced climbers, died while scaling one of the highest summits in the Rockies. The University mourned the Buhrmesters' passing, and BBS carried the scholarship program forward under a new name, the Buhrmester Undergraduate Student Research Award, to memorialize its inspirer.⁴⁹²

Phi Kappa Phi

Additional recognition of UTD's academic prowess came with the honor society Phi Kappa Phi's approval of a chapter at the University. Membership in a prestigious honor society was one of the benchmark indicators for NRUF support. The nation's oldest such society, Phi Beta Kappa, dated back more than 235 years to Virginia's College of William and Mary during the Revolutionary War. But its liberal arts emphasis and language requirements did not fit UTD, whose mission leaned toward science and engineering and whose curriculum omitted language courses in order not to overlap with UT Austin and other competing North Texas schools.⁴⁹³ That requirement was now moot, but UTD's mission statement still reflected the restrictions built into the University's original charter.

In response, partly to the honor society application process, partly to ongoing self-reflection, and partly to a request from the Regents, the University undertook a revision of its mission statement in 2011 to more accurately reflect the importance of Arts and Humanities at UTD. The prior statement had read:

The University is committed to (1) producing engaged graduates, prepared for life, work, and leadership in a constantly changing world, (2) advancing excellent educational and research programs in the natural and social sciences, engineering and technology, management, and the liberal, creative, and practical arts, and (3) transforming ideas into actions that directly benefit the personal, economic, social, and cultural lives of the citizens of Texas.⁴⁹⁴ But after some discussion of the meaning of "liberal arts," "practical arts," and "humanities, arts, and sciences," the Academic Senate settled on a traditional descriptor used at most universities, "arts and sciences," and in September 2011 approved the following, revised mission statement:

UT Dallas is committed to graduating wellrounded citizens whose education has prepared them for rewarding lives and productive careers in a constantly changing world; to continually improving our major educational and research programs in the arts and sciences, engineering and management; and to assisting the commercialization of the intellectual capital generated by our students, staff, and faculty.⁴⁹⁵

Under either statement, Phi Kappa Phi seemed a better match for UTD than Phi Beta Kappa. It was the nation's oldest all-discipline honor society, dating back to 1897 at the University of Maine and now composed of chapters in more than 300 universities. With Assistant Provost Abby Kratz managing the application process, Phi Kappa Phi approved the new chapter, its 316th, in March 2011. Associate Professor of Criminology Denise Paquette Boots served as the chapter's president. Formal installation of Boots and the induction of the first faculty members, in full academic dress, occurred during a ceremony in the McDermott Library on April 19, 2011.496 Qualifying junior, senior, and graduate students began receiving invitations in the fall semester.⁴⁹⁷

In one sense, establishing a Phi Kappa Phi chapter was a box to be checked on the way to Tier One status. In another, it reflected the University's successful shift from its legacy days of exceptionalism toward more conventional academic norms. And in still another sense, the tangible rituals and regalia of the honor society provided a connection to other institutions for many faculty members and students, and to academic traditions centuries old and reassuringly durable in times of great change. By 2019, 22 UT Dallas students had received competitive scholarship awards from PKP, nine at the level of \$5000 and one for \$10,000, placing them and the University on a national stage.



Associate Professor of Criminology Denise Paquette Boots was the founding president of UTD's Phi Kappa Phi honor society.

New Facilities and Reflections on Growth

No evidence of change was more tangible on campus in the 2009-2010 academic year than the many scenes of construction, replete with heavy equipment and hard-hatted workers sporting vests in UTD's orange and green colors. "Embrace this as a tradition," counseled the Mercury in its fall orientation issue, "and it will help you deal with detours and closures as construction continues on campus."498 At the time, seven major projects were underway in an area about the size of five city blocks. That did not include the Campus Enhancement landscaping effort, which was gradually coming to completion in the center of all the other activity. Samia Hossain's fellow graduate Megan Newman had, like all her classmates, spent four years at UTD "in a constant state of evolution." When she started classes in



President Daniel sampled the waffle bar during the new Dining Hall dedication, September 10, 2009.

2006, Newman recalled, the campus was "ghostly on Fridays and completely empty on Sundays." But she contrasted those memories with new revelations. "I was stunned just last Sunday to find...LIFE... on campus! Students were walking the pathways and laying out studying under the trees." Newman enjoyed imagining a return to campus even further into the future to see "this premier university finally coming of age."⁴⁹⁹

She wouldn't have to wait very long. In summer 2010, the Regents approved construction of a second residence hall, or "Living-Learning Center," on campus. The 400-bed facility was modeled on the first, which had opened in August 2009 and was so successful that student demand led almost immediately to a waiting list and plans for a second building. The concept enabled freshmen with similar interests to be clustered in five areas broadly reflecting UTD's Schools-arts and technology; engineering and computer science; management; music; and health-related fields. Participating students enjoyed increased contact with faculty as well as greater social contact with their peers.⁵⁰⁰ Faculty members were welcome to join on-campus residents in a new dining hall-President Daniel presided at the waffle bar during its dedication in September.⁵⁰¹

The second residence hall was under construction on September 29, 2010, when Daniel stood before a tall, columnar "mister" dispersing fine fog over a calm pool in the new plaza outside the McDermott Library and the Student Union to celebrate the completion of the Campus Enhancement's first, southern phase-another would soon begin to the north. Daniel declared progress, if not yet total victory, in the effort to transform UTD into "a place with looks that measure up to its brains." Mrs. McDermott also spoke, remembering the days nearly half a century earlier when she and her husband, Eugene, had visited the once deserted site where UTD now stood, looking for a place to build a research center. "He asked me what I thought," she told the crowd, "and I told him it needed trees. Today, we have trees," she concluded to warm applause."502

Five thousand trees and native plants now adorned the University Drive entryway to campus from Campbell Road, and rows of towering vertical magnolia trees bordered the long sequences of rectangular pools and walkways that defined the north-south axis of the central campus. Prior to the landscaping upgrade, some UTD couples looking for wedding photo backdrops had chosen the striking NSERL building as a backdrop; now, they would have several new alternatives to choose from.⁵⁰³

The next month, three new buildings were jointly dedicated: the renovated Founders Building; the Science Learning Center (SLC); and the Student Services Building (SSB). The four-story, LEED Platinum-certified (Leadership in Energy and Environmental Design) SSB was located just south of the Student Union. Students had been involved in every stage of the building's design. And, as vice president of Student Affairs, Darralene Rachavong proudly noted, students also had paid for the construction through a student-approved fee increase of \$71. SSB consolidated in one location the Dean of Students office, the Health and Counseling Center, the Bursar's office, the Career Center, Residential Life and Housing, and the Galerstein Women's Center.⁵⁰⁴

The inclusion of new laboratories in the SLC eased a long-standing burden on Natural Sciences





Hobson Wildenthal, Margaret McDermott, and Judy Snellings, longtime stalwart executive secretary to three presidents, at the September 29, 2010 dedication of the first phase of the Campus Enhancement Project. The columnar "mister" sits just outside the entrance to the McDermott Library in the campus's most central location.

and Mathematics, since its existing labs were in continuous use from 8:00 a.m. to 9:00 p.m. six days a week.⁵⁰⁵ The renovated Founders Building's new, glass and vertical-sheath exterior enclosed a spacious atrium on its east side, facing the central campus and successfully subsuming, while also preserving, the building's original brutalist exterior.⁵⁰⁶

Workers completed renovation of the Student Union in the summer of 2011. Student input had largely determined how the new space would be used. Seating for the Comet Café on the upper floor was expanded, while the first floor housed student media such as the *Mercury*, the student-run station, Radio UTD, and a "reflection room" for meditation.⁵⁰⁷ Late that summer, the second residence hall opened, but even before students moved in, plans were underway to build a third hall for fall 2012, again modeled on the others and built next to the other two. Enrollment growth, said Darrelene Rachavong, had made adding this third hall a "must."⁵⁰⁸ About 18,900 students registered for classes in fall 2011, a 9.5 percent increase over 2010.⁵⁰⁹

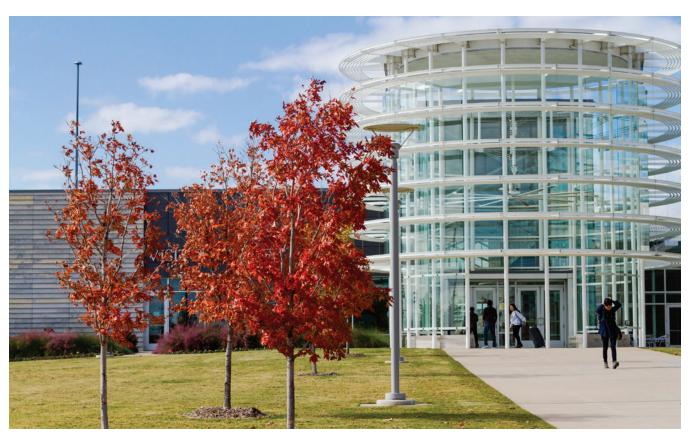
All the while, the *Mercury* was blinking its editorial eyes at the rapid transformation of campus life. The class graduating in spring 2011 was the first to enjoy a full year of the Campus Enhancement's



Vice President of Student Affairs Darralene Rachavong made sure students were involved in the design of the Student Services Building, which was paid for by student fees and dedicated in October 2010.



The renovators of the interior discovered that the Founders Building had been built to top-of-the-line standards in 1964. The threestory addition to the east end of the original building provided sidewalk-level access to the building from the center of campus as well as study and congregation spaces.



UTD's Visitor Center, which also housed the bookstore, dramatically expressed the University's culture of innovation and openness to new ideas.

improvements. Editor-in-Chief Jessica Melton appreciated the new buildings but confessed that "the ability to walk through the center of campus is my favorite addition." "The way students hang out on the Student Union steps, play hacky sack on the mall, or stay on campus when their classes are over," concluded Melton, "just didn't happen [before]."⁵¹⁰

Taking over from Melton as editor-in-chief that fall, Shane Damico compared his years in the Waterview Apartments with life in the new residence halls. He valued the privacy and independence of apartment living but acknowledged, "During my entire career at UTD, I have never known any of my apartment complex members by name. Try doing that in a residence hall–it's impossible." The dining hall also seemed like a major benefit. "While I was using the same fork to eat my ninth bowl of cereal, alone in my computer-monitor-lit room, freshmen can now socialize over warm meals prepared especially for them." As for the new Student Services Building and Student Union renovations, Damico looked forward to a new bookstore, soon to be housed in "a brand new, much flashier building featuring a coffee shop and a welcome center." All the upgrades, he concluded, "are giving our university a younger, hipper feel than that of a few years ago."⁵¹¹

Construction of the Visitor Center, with its direct connection to the Activities Center, was fasttracked after its January 20, 2011 groundbreaking. Calvin Jamison, the University's vice president for Business Affairs, called the structure "the gateway facility for our campus." It opened just eight months later, with formal dedication on September 28. Dean Pirkul also claimed "signature building" status for the School of Management, just across a traffic circle from the Visitor Center/bookstore and the Activity Center. Taken together, SOM and its new sister structures to the west presented to visitors the first features of UTD's new face.⁵¹²

The Visitors Center provided a home for the campus bookstore, which had been located on the site of UTD's former Physical Instruction Building,

just north of SOM. The PI building was demolished when the bookstore moved into the Visitor Center, and construction quickly began on a much-anticipated building to house A&H's burgeoning Arts & Technology (ATEC) program. A&H had been struggling to conduct its visual arts and performance classes in three temporary modular buildings since fall 2009.⁵¹³ Its popular ATEC and "Emerging Media and Communications" courses, focusing on social media, podcasting, blogging, and the interesting interface of arts and technology in a "virtual" environment, also required substantial amounts of space and equipment. UTD's facilities were bursting at the seams under this new influx of student interest.

A new building for ATEC had been in planning since 2009, but construction did not begin until August 2011. With completion expected in time for the fall 2013 semester, ATEC's director Tom Linehan still had two years to contend with severe space constraints-classrooms were booked solid from 8 a.m. to 10 p.m. to accommodate the demand, with some students sitting in the hallways as they worked.⁵¹⁴ The new building, however delayed, was not the only source of hope on the horizon for A&H and ATEC. In fall 2010, an anonymous donor gave \$5 million to the School to hire more faculty and create two endowed chairs. Dean Dennis Kratz called the gift "transformational," and began searching for faculty to make significant research contributions in this new field.⁵¹⁵

The Davidsons and Jindal Boost Management as UTD Prepares for Takeoff

Upon learning about School of Management alumnus Naveen Jindal's (MBA '92) interest in supporting the school from Dean Pirkul and Kyle Edgington (PhD '13), the school's development officer, Charles and Nancy Davidson, devoted alumni who had met while students at UTD, unreservedly joined in a transformative and record-setting philanthropic gesture to the University. "In order for UT Dallas to advance to Tier One status, we believe it is critical that management research is given serious support," Nancy Davidson (BS '80) said at the time.

The Davidsons, who had already donated \$1 million in 2001 for the existing SOM building and another \$1 million in 2006 for two endowed chairs, had long considered their financial support an ambassadorial duty to encourage giving among fellow graduates. In tandem, the alumni trio saw an opportunity to help with the School's expansion by creating scholarships, fellowships, and endowing chaired faculty positions resulting in the largest alumni gifts in UT Dallas history. Matching TRIP and Regents' Research Incentive funds added more than \$10 million to the alumni's contribution, and UT System approval of a substantial addition to the SOM building furthered the significance of these gifts. "We look forward to seeing the School of Management continue to grow in both graduate and undergraduate programs, programs that attract the best and brightest students not only from the Dallas-Fort Worth area, but globally as well," said Charles Davidson (MS '80).

Jindal and the Davidsons returned to campus on October 7, 2011, to celebrate the formal announcements of the creation of the Charles and Nancy Davidson Management Honors Program, naming the school the Naveen Jindal School of Management.⁵¹⁶ "My vision and desire is that the School of Management becomes the school of choice for some of the brightest and best individuals who will truly lead us into the next generation, leaders who will truly embrace the global vision and balance the needs of the people with the environment in an ethical and sustainable manner," Jindal said.

UTD alumni were becoming increasingly involved at all levels of giving. With more than 66,000 alumni in its database, the Office of Development and Alumni Relations worked with increasing sophistication to harness those latent resources of the university. As UTD's support from philanthropy grew from \$40 million in FY 2010 to \$55 million in FY 2011, 4,500 gifts and pledges from alumni played an increasingly important role. In both years, the donations triggered matching funds from the state's TRIP program.⁵¹⁷



A combined, record alumni donation of \$30 million from Naveen Jindal, Chuck Davidson, and Nancy Gundy Davidson in 2011 greatly enhanced the School of Management's ability to hire faculty and offer fellowships. The University expressed its thanks by naming the SOM Building after Jindal, and by naming the SOM Honors Program after the Davidsons. (L to R: Naveen Jindal, Dean Hasan Pirkul, Charles Davidson, Nancy Gundy Davidson).

Naveen Jindal

Aveen Jindal had been prominent on campus in the early 1990s, serving as Student Government President and earning the Student Leader of the Year Award on the way to his MBA degree in 1992. One day he asked if he could display the Indian flag alongside the American flag in the UTD Student Government Office. "Sure," said the Dean, perhaps not realizing that in Jindal's home country, vestiges of British colonial law still restricted flying the Indian national flag except on certain prescribed days.

With his UTD degree in hand, Jindal returned to India to head Jindal Steel and Power Ltd., part of a large conglomerate enterprise his father had started in the 1950s. When he asked why there was no Indian flag flying over one of his company's steel mills, he was reminded of the old colonial prohibition. He contrasted this with the encouragement he had found for displaying his flag at UTD, and with the freedom that U.S. citizens enjoyed in displaying theirs. He undertook a successful campaign to change India's archaic law, thus paving the way for his election to Parliament in 2004.

In 2008, after several talks with SOM's development director, Kyle Edgington, Jindal suggested that Edgington, Hasan Pirkul, Varghese Jacob, and Diane McNulty come to India for a visit, and bring three students along, too. "It was one of the highlights of my life, actually," said McNulty of the 2008 trip. Talks with their host continued after they returned to Texas, and eventually led to Jindal's joint gift with the Davidsons of \$30 million to the School of Management.



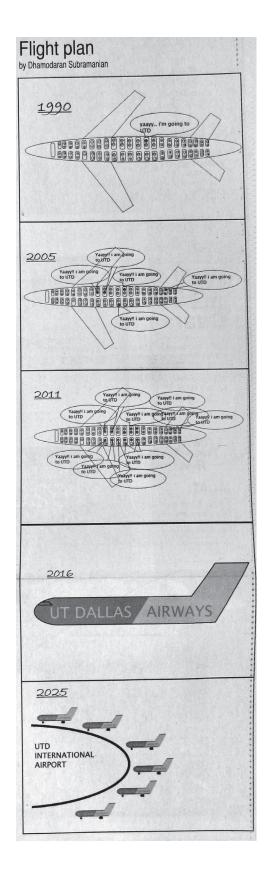
Kyle Edgington, current vice president for development and alumni relations, visiting Shallu and Naveen Jindal in their home.

The Future

"Outstanding," was Daniel's summary description of UTD's condition in his State of the University address on November 10, 2011.⁵¹⁸ The president reported a total enrollment that fall of 19,006, with 52 new National Merit Scholars—an increase from the previous year's 39—joining 1,786 other freshmen, 900 of whom lived on campus. Their presence, with 2,500 upperclassmen also residing on campus, amounted to a sea change in campus life at UTD.⁵¹⁹ Later in November, a UTD press release offered a glimpse into what Daniel was talking about. "Walls do not yet enclose the University's third residence hall opening in fall 2012," it announced, "but record-breaking enrollment growth has spurred the UT Dallas administration to begin work on a fourth residential facility for fall 2013." Soon afterward, a fifth housing unit was being planned for fall 2014, this facility to house 600 students and include classroom space, a satellite GEMS center, and a dining hall with seating for 800.⁵²⁰

As the University headed into 2012, its steady acceleration was undeniable. Analogies serve better than definitions to convey the gist of it. In the latter minutes of *Romanian Rhapsody No. 1*, composed by 19-year-old George Enescu in 1901, one pictures Roma dancing and whirling as the music crescendos to a peak. Then, just as the music should be winding down sensibly, the dancers, no ordinary folk, refuse to quit. They demand another round, at an even faster pace than before. Enescu turns to his musicians, commanding them to reach inside as never before and tap energies they never knew they had.⁵²¹ In 2011, UTD's performers were similarly refusing to quit.

Mercury cartoonist Dhamodaran Subramanian light-heartedly captured the essence of it in a five-picture sequence in August 2011. The first showed a jetliner in 1990, aloft and filled with passengers, one of whom is thinking, "Yaayy...I'm going to UTD!" Then, 15 years later, the jet carries five passengers thinking, "Yaayy...I'm going to UTD!" Advance to 2011. Now ten passengers think, "Yaayy...I'm going to UTD!" The next picture, in 2016, shows the jet sporting the logo, "UT Dallas Airways." And in 2025, six of those aircraft are docked around a terminal—at UTD International Airport.⁵²² That was how acceleration felt as it entered a new plane of experience, of the earth but also moving beyond it something like...takeoff.



CHAPTER 4 Adaptions to Freedom (1994-1999)

anaging UTD's transition from an upper-division and graduate school to a full-fledged university involved much more than the ironing out of logistical wrinkles. It was a major cultural, organizational, and even architectural undertaking requiring long-range, steady management. Faculty continued to conduct pioneering research and enrich scholarship across a wide range of disciplines, while UTD also established an honors program to enhance and encourage undergraduate learning. The Dallas area experienced continued growth in technology-related companies, which often became solid allies of, and advocates for, the University. UTD nurtured these new sources of support. In 1999 it reached its 30th anniversary, poised on the threshold of a new millennium and in a spirit of youthfulness drawn in no small part from its newest, and youngest, scholars. The University might have foundered from the pressure of these adjustments; instead the foundations for a significant university were secured.

A Fresh Start for Freshmen

The success of UTD's transition to a four-year school depended on attracting, retaining, and ultimately graduating students who entered as freshmen. The AES merit scholarship program had apparently solved the challenge of attracting students while adhering to the rigorous conditions imposed by the Texas legislature, with the more than four-fold increase in freshman numbers from fall 1992 to fall 1993. Questions remained, however, whether the university and its first freshman class of significant size would adjust to each other. Looking back on those early years of the 1990s, Larry Redlinger remarked that,"The transformation did not happen immediately."

How would this these stellar freshman recruits perform in a university still far from convinced that

teaching eighteen-year-olds was an appropriate function of a research-focused faculty? Vice President Wildenthal did not wait for the scholarship freshmen's final grades for the fall 1993 semester to come in. He, along with Vice President of Student Affairs Priscilla Beadle, and others met regularly with small groups of students. "How's it going?" they asked, "How are you doing in your classes?" The freshmen answered, not very confidently but not too concerned, either, "Well, it's hard but we're OK. Didn't do too well on the first test, but it's OK." Faculty members were also assuring themselves that things were OK. They figured the students had to be bright or they wouldn't have been admitted to UTD, much less been given scholarships. Still, something didn't seem right. "Well, you know" they told Wildenthal, "they've got to learn what it's like to be at a real university with high standards."

The first alarms went off just after the grades came in from the mid-term exams. But the students continued to offer reassurance. "It'll be OK." Of course, for these students, their high school careers had been pervasively "OK." Worried, administrators queried faculty members whether they had sufficiently recalibrated their expectations from graduate students to freshmen. "Oh yes, we understand the differences," they said. Students were reminded of the stakes: keeping their scholarships depended on maintaining a 3.0 grade point average (GPA) and completing at least 12 credit hours (usually four courses) per semester.²³⁰ Nevertheless, when the final grades came in for the fall 1993 semester more than a third of the scholarship students had failed to meet these requirements. Clearly, students and faculty were not on the same page regarding expectations, but Wildenthal was determined that there be a constructive resolution. "Our students have the ability," he explained to a Mercury reporter. "The question is why they failed."231

Clearly, many bright freshmen had shown a lack of judgment, or perhaps knowledge, about managing a college-level workload. But they were, after all, typically only 18 years old, and many had to juggle their academic work with outside jobs. Some schools, including MIT, did not give letter grades to freshmen at all. Instead, they used a pass/fail system and allowed three semesters to complete 24 credit hours, in order to give freshmen time to adjust to a new and demanding environment. Redlinger saw the students and the University as out of "alignment" and in need of mutual adjustment.²³² That diagnosis was broadly accurate and in tune with the non-judgmental tone the Administration wished to set.

Whatever the reasons, many students' futures, and in a significant way the future of UTD was at stake. Should the failing students return to UTD after the Christmas break and keep their scholarships for the spring semester? Wildenthal made what he referred to as an "executive decision." He offered a "Fresh Start" to the students of the fall 1993 freshman class whose unsatisfactory academic performances in the first semester would otherwise have made them ineligible for scholarships in the second semester. However, they would have to meet certain conditions. First, they had to attend all their classes-surprisingly, some had not understood how important that was. Second, they had to meet regularly with their academic advisors. Lastly, they had to attend tutoring sessions for any courses in which their grades were falling below average. These conditions applied to the students until they had "their academic and non-academic priorities in order."233

Wildenthal and Scherry Johnson spent much of their winter break in December 1993 writing personal letters to the underperforming students, expressing their "deep concern with your academic success" and assuring them that "if you cooperate with us and follow the procedures described, you will be able to retain your scholarship."²³⁴ Most of the freshmen opted to return. For its part, the University also recognized its failure to "align" itself with the freshmen's circumstances. Classes with big project assignments had not been coordinated, resulting in students having as many as three major assignments due on the same day. There had been no formal tracking of class attendance or follow-up to check on a student who missed several classes, and instructors had no way to track their students' progress in other courses. Moreover, UTD's five-point grading system (A through F, no pluses) was less flexible than UT Austin's eight-point scale, which included "pluses."

Change was difficult. Some faculty members recalled that the first group of upper-level undergraduates admitted in 1975 also had experienced "culture shock" in moving from a community college environment to UTD. Community college counselors had told UTD that its standards were too high. But, said faculty members, "We stuck to our standards and the students measured up to them." And thus it had gone for years. But Wildenthal pointed out that the analogy was flawed. The university's transfer students were admitted on the basis of grades from a variety of settings. They arrived without any standardized, national measurement of their potential. The University, therefore, could not reliably correlate their performance at UTD with any of the school's pedagogical practices or compare it to that of comparable students elsewhere. And, in fact, it did not. Instructors simply applied whatever they understood to be "high standards" and carried on. That included tolerating a graduation rate of only 25 percent for junior-level transfer students. Of the 4,000 juniors at UTD in 1994, for instance, only about 1,000 returned for their senior year.²³⁵ Whether that was due to academic or other reasons, no one knew.

But with entering freshmen, Wildenthal argued, the University was in a very different position. All of them had taken nationally standardized tests. They had attained scores on those tests that could be used to gauge their expected performance at UTD as compared to students obtaining similar scores at comparable universities. UT Austin provided a reasonable comparison since, by law, the admissions criteria for UTD freshmen were to be at least as high as those at UT Austin. Unlike upper level transfer students, this was a very carefully measured group. Therefore, said Wildenthal, "For the first time the faculty has to address the issue of our internal compass in relation to nationally calibrated norms."²³⁶

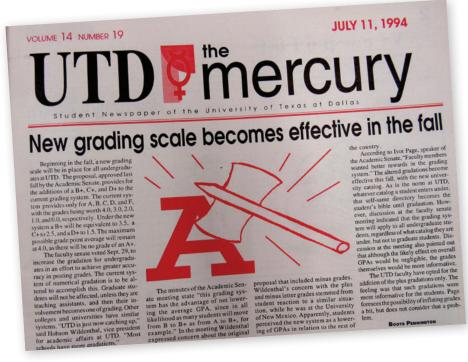
Undergraduate Dean Chris Parr likened the freshmen's situation to "drinking from a fire hose" as they transitioned from high school to UTD. "It's not that they can't make it," he said. "It's whether or not it's ever been requested of them. And in general, it has not."²³⁷ The implication that successful upperlevel students had figured out how to drink from a fire hose suggested that UTD would have to reduce its intellectual flow to accommodate a new population of 18-year-olds, or that they, too, would have to learn how to handle the University's "fire hose" pressure. Neither notion seemed especially inviting. Instead, some course instructors were changed, and staffing was increased to meet more realistically the needs of larger-than-expected first year classes.

The scholarship program itself was reconfigured to include additional predictors of success such as SAT scores and class rank, beyond the PSAT scores and National Merit status that had been applied to the entering freshmen in 1993. UTD also changed its grading system for undergraduates, starting in fall 1994, adding + grades such as B+, C+, and D+ (there was no A+) to the simple "A through F" system it had always used, thereby giving professors a wider selection of options. "UTD is just now catching up," said Wildenthal, noting that most universities already used systems with the "plus" gradations. Faculty expected the overall effect on students' GPAs to be negligible-there was, in fact, a slight increase-but the grades given would be more informative for students.²³⁸

Vice President Wildenthal was impressed by Larry Redlinger's understanding of the transformation underway at the University. He asked Redlinger, then Dean of the School of General Studies, to accept a new position, Associate Vice President for Educational Operations, to help with the University's adjustment. Working with a staff of 12 advisors that included John Wiorkowski, Cy Cantrell, Lynn Melton, Chris Parr, and a group of staff and faculty from various disciplines, Redlinger assisted Wildenthal in reviewing the University's overall academic expectations. "Retention of all students, not just freshmen, is the focus," said Redlinger.²³⁹

But UTD's historic "atypicality" made for an uphill climb. In most universities, Redlinger explained, the core curriculum for undergraduates was coordinated through an "undergraduate college" under the undergraduate dean. UTD had an undergraduate dean, too, but no undergraduate college as such. Each of the University's six Schools controlled its own courses, including those in the undergraduate core curriculum. NSM handled the math and science courses, for instance, and A&H the humanities requirements. Administering such a decentralized systemmaking sure that course content and delivery were appropriate, that students were meeting all their core requirements on time and with passing grades, and advising students about their majors, for example-presented unique administrative challenges. Wildenthal explained to a faculty ever alert to any encroachment onto their prerogatives that the new, centralized advising system would apply to freshmen only and focus on success in their first two years; from then on, any advising would be coordinated with similar efforts ongoing in the individual schools.²⁴⁰ As a matter of culture and pride, UTD was not going to surrender its commitment to the interdisciplinary, Schools-centered model of organization, no matter its origins in the hobbling legislation of 1969. But neither was it going to renege on its commitment to academic rigor. The University wanted its freshmen to excel; it would figure out how to change in order to make that happen.

UTD introduced a new required course, Rhetoric 1101, for all freshmen, in order to meet the advising and informal guidance needs usually addressed in the undergraduate college at a typical university. "A whole bunch of these freshmen did not have the life skills they needed," Redlinger recalled.²⁴¹ Budgeting, time and workload management, getting to appointments and classes on time; all proved challenging. Nearly 95 percent of scholarship freshmen with poor academic performance



UTD changed its strict "A through F" grading system for undergraduates in fall 1994, adopting a more flexible one in use at UT Austin and most other major universities. It added + and - options to the letter grades.

also had class attendance problems.²⁴² Redlinger and his team met one-on-one with the freshmen to write learning contracts, conduct small group discussions, and engage them as mentors and aides. Redlinger, a sociologist, noted that UTD freshmen were not the only ones struggling with life-management skills. Indeed, it was a national trend. "People were stumbling upon the same problem; it was culturally idiomorphic to society."²⁴³

As might have been expected, there was some backlash against the fresh start from students who had survived the "fire hose" and had otherwise correctly scoped out their new environment's demands. They regarded the effort as unfair to them, as well as to the struggling students whom "Dr. Wildenthal is unnecessarily spoiling," as one begrudging sophomore put it.²⁴⁴ Presumably, if the students who did well had only known that they could have a fresh start, they, too, would have skipped classes, procrastinated on their projects, and conveyed false confidence about their sinking grades. The controversy over this apparent elimination of moral hazard spread beyond campus, providing fodder for talk radio hosts.²⁴⁵ The Dallas Morning News, on the other hand, supported the decision as "prudent because it takes into account not only the adjustment period for the students but also the adjustment period for the

school. UTD is absolutely right to take this route."246

The University stayed its course and the backlash subsided. Wildenthal pointed out that the fresh start was not a "free fresh start," but imposed a "serious obligation" on the part of the scholarship students. Indeed, at the end of the spring semester about two dozen freshmen lost their scholarships despite the University's best efforts. Another two dozen lost their scholarships as sophomores, at the end of the next semester in fall 1994.²⁴⁷ That semester's freshman class would enter with about the same number of scholarships awarded (250) as in the previous year, but under more carefully calibrated conditions and with demonstrably greater on-campus support.²⁴⁸ In the spring of 1998, Wildenthal attended a student party organized by Darrelene Rachavong and was surprised by the presentation of a coffee mug emblazoned "Fresh Finish" by those "Fresh Start" freshman who were now graduating.

Leadership Change

UTD was transforming in expected as well as unexpected ways in 1994. The UT Board of Regents had narrowed an initial pool of 184 applicants down to four finalists in its search for Robert Rutford's replacement as UTD's president. Vice President Wildenthal was among them. Another was Tom Luce, a former candidate for the Republican nomination for governor who had been active in Ross Perot's attempts to get legislative support for reforms in public K-12 education. Luce was a prominent Dallas attorney with no professional academic experience but was well connected with political and civic leaders and with prospective major donors in the Dallas business community. The remaining two were Franklyn G. Jenifer, a biologist, former chancellor of the Massachusetts Board of Regents of Higher Education, and recently president of Howard University in Washington, D.C.; and Luis Proenza, also a biologist and current acting vice president for academic affairs and research at the University of Alaska.

The Mercury's senior editorial writer "Boots" Pennington, a former U.S. Navy machinist's mate and current master's degree candidate in Arts and Humanities, summed up the options and chances as well as anyone, adding his customary wit. Luce and Wildenthal were the "insiders," while Jenifer and Proenza were the "outsiders." Proenza, a long shot, might want to consider staying in Alaska's "more hospitable clime," offered Pennington, if he ever encountered Dallas's outsized mosquitos. And Jenifer would "undoubtedly die from culture shock here" if he were to leave the nation's capital for a campus where "African-Americans are a single-digit minority." Of the two insiders, Luce was the more so, as he was an SMU alumnus who "knows where the money is in Dallas." Wildenthal, on the other hand, also "has been a lot of places and done a lot of things." He had managed "to drag the University out of its calm, smug atmosphere of a 'grads only' school into the mainstream of a full four-year institution of higher learning. Of the four, he knows UTD best."

Notwithstanding Wildenthal's excellent resumé and in-house experience, Pennington concluded that the winner would be chosen from among the politically well-connected insider, Luce, and the outsider, Jenifer. Luce could not be ruled out, he opined, but likely the Regents would follow the "typical Dallas tradition" of choosing an outsider, this time an African-American.²⁴⁹ Pennington read the tea leaves accurately. In April, the Regents offered the UTD presidency to Franklyn Jenifer.

In July, Jenifer became the first African-American ever to serve as president of any of the UT System's 15 institutions. Meanwhile, Robert Rutford prepared to return to the classroom as a professor in NSM's geosciences program. Rutford joked about "surviving" his 12 years at the helm, but his accomplishments had been substantial and his dedication to the University's well-being and progress unwavering. UTD honored his contributions by awarding him the first endowed Excellence in Education Foundation Chair, and the Regents added an unusual compliment by authorizing the renaming of Drive C, a north-south road on campus, Rutford Avenue. The former president quipped many years later, after construction had greatly altered the campus's map, "It's the only street on campus that doesn't go anywhere. It dead-ends down here in the middle of the campus." But that was not true in 1995, when Rutford Avenue ran a prominent course from Synergy Park Boulevard on the north to then Drive A on the south, passing every major building on its way.250

Meanwhile, *Mercury* editor Pennington offered some tongue-in-cheek "words of advice" to UTD's incoming president shortly after his appointment. "Don't worry if you get lost in the hallways. Just wander aimlessly in the hall like the rest of us. You'll fit in better. Avoid going to your car at 6 p.m. You might get run over in the doorway by the masses of students heading to class. If you see a middle-aged man dressed in business attire on campus, he is probably a student. You must always drive to any location in Dallas, even if you're visiting your next-door neighbor." And, "Don't mention the word freshman, especially in the same sentence with the word scholarship."²⁵¹

On that score, though, Jenifer could mostly relax. Wildenthal's infusion of structure and support for the freshmen and sophomores had paid off. Although nearly 50 of the 250 scholarship holders in the 1993 to 1994 year had lost their awards, the majority of both scholarship and non-scholarship students were doing well, with more than half achieving GPAs of 3.0 or better. The return rate for freshmen was 77 percent, a figure in need of improvement but tolerable under the circumstances. Dennis Kratz, who replaced Chris Parr as undergraduate dean, aimed "to create an environment to minimize the number of students that will want to leave." Actively involving undergraduates in the university and in each other's development, he believed, was key to fully integrating undergraduates into UTD's community of scholars.²⁵²

One of President Jenifer's first actions was to ask Hobson Wildenthal, who had also been a finalist for the presidency, to stay on as Vice President for Academic Affairs. Wildenthal was highly respected, and his working relationship with a wide variety of people on campus made him a valuable resource to the newcomer. The two also shared a commitment to improving services for faculty and students. Jenifer added a new dimension to Wildenthal's job by naming him provost in addition to vice president for academic affairs. This made Wildenthal responsible for student affairs as well as academic affairs and furthered the aim of improving the University's performance in areas where these functions overlapped-student recruitment, retention, and enrollment, for example.²⁵³ The position was not unusual-UT Austin and UT Arlington had provosts-and it was often held by the vice president for academic affairs, who served as the president's second-in-command.²⁵⁴ At UTD, Wildenthal's responsibilities were formally broadened to capture what, in effect, he had been doing for two years already-worrying about the University's largest challenges as well as its smallest classroom and scheduling logistics.

Wildenthal downplayed the title "provost", but it was a meaningful one. Going back through medieval times to the late Roman empire, a provost was an enforcer, charged with responsibility for seeing that orders were carried out and duties responsibly performed. "The provost has got to be serving the president," Wildenthal clarified. "If there is any distance between a provost and the president, the president will get rid of the provost, and the provost generally understands that."²⁵⁵ At the same time, the provost was the administration's front-line officer with the faculty, and key to the successful engagement of this crucial group in university governance. Wildenthal had considerable experience in both capacities. "I consider myself a faculty member," he said. "I spent most of my life as a faculty member. No matter how long I've been in administration, I'll remain true." He had moved into administration earlier in his career because he thought he could do the job better than many of those currently doing it, "but ultimately, things rest on the individual faculty members."²⁵⁶

Professor Murray Leaf, a long-time member and speaker of the Academic Senate, remembered Provost Wildenthal introducing him at graduation ceremonies and other events as, "My friend, the speaker of the faculty.' It sort of made me edgy at first," said Leaf, who was used to a more hardnosed, transactional relationship with campus administration. "I thought we must be the only place in the country where the provost says that." He concluded that UTD was indeed unusual, and that by referring to him as "my friend" Wildenthal was affirming that "we have a good relationship with each other, not just me individually, and maybe not at all me as an individual, but that the faculty representative is a friend of the administration."257 When Speaker of the Senate Ivor Page once asked Wildenthal why he had not consulted with the Senate before instituting the "fresh start" policy, for example, the provost explained that time had been critically short between the announcement of grades and the need to make a decision about scholarship renewals, that it had occurred over winter break when many faculty were not on campus, and that he had consulted with whatever faculty he could find between December 22 and 28. The speaker had done his job in raising the issue, the provost had done his in explaining it, and the underlying culture of good will had done the rest.²⁵⁸

Jenifer also inclined toward a collegial, cooperative approach to governance. With Wildenthal confirmed as his second, the two wasted no time

Franklyn Jenifer

ranklyn Jenifer was in Baltimore in 1992, recruiting students for Howard University where he had been president for two years. He told them of his childhood in Washington, D.C., and how he had shortchanged his studies at Spingarn High



School working across town as a busboy and waiter in order to help support the family. He was denied admission to Howard University in 1956.

But then chance did him a favor. His brother's Boy Scout leader, who worked at the Library of Congress, gave him a copy of *Our Friend the Atom* by noted German physicist and science writer Heinz Haber. Jenifer devoured it, then went through stacks of similar science books. Soon he got a job as a Library of Congress messenger, allowing him further opportunities to make up for lost time. Howard accepted him when he re-applied for the 1957-1958 academic year.

Jenifer earned bachelor's and master's degrees in microbiology at Howard and completed doctoral work in that field in 1970 at the University of Maryland. Various academic positions preceded his appointment in 1986 as chancellor of the Massachusetts Board of Regents of Higher Education. In 1990 he became president of his alma mater, Howard University, and when the lead position at UTD opened in 1994, he put in a successful bid to go west.

For the next decade President Jenifer led UTD through its major transformation into a full, fouryear undergraduate university. All who lauded his leadership cited the effectiveness of his style– soft-spoken, collegial, can-do, and positive. A dozen years after his retirement, Franklyn Jenifer returned to UT Dallas at the invitation of then-President ad interim Wildenthal to participate in a ceremony in which the university's principal entrance from the west was rechristened Franklyn G. Jenifer Avenue.





Hobson Wildenthal (L) and Franklyn Jenifer (R) at the Franklyn G. Jenifer Avenue street naming ceremony.

realigning relevant portions of the university's administration. Student Services were placed under a new Office of Student Life, headed by Darralene Rachavong. Searches were underway to replace Deans Blake Cherrington and Charles Kroncke, at ECS and Management respectively, who were winding up their tenures as the new administration moved into place. Larry Redlinger was named Associate Provost for Academic Affairs, with George Fair taking his place as Dean of General Studies. Appointments of Dennis Kratz, Laurie Liska and Allen Rupert in the newly created positions of associate dean in the Schools of Arts & Humanities, Management and Human Development, respectively, reflected the increased numbers of new undergraduates in those schools. Wildenthal described the changes and their rationale to the Academic Senate, whose members were watching all the new activity at the administration/faculty border. Again, the culture of consultation and dialogue helped keep the ship on course.²⁵⁹

Dennis Kratz recalled his pathway to associate dean in A&H. He had recently won a teaching award when Wildenthal asked him what might be done to improve UTD's approach to undergraduates. It turned out that Kratz had some definite ideas on the subject, from academics to social life, and he did not hold back in letting the provost know how he felt. Soon Wildenthal met with him again. "OK," he said, "put your life where your mouth is and we'll make you associate dean for undergraduate studies." Kratz had been briefly involved briefly in administration at Ohio State and had not enjoyed it. Now he told his wife, Abby, the university's reference librarian, about his reluctance to accept Wildenthal's offer. She replied, "You love teaching, you love education, you care about these kids. If you turn this down and someone else takes it and does a terrible job, you're going to feel terrible. And if someone else takes it and does a great job, you're going to feel worse." Kratz took the job. Just weeks later his assignment expanded significantly when he was made dean of undergraduate studies.²⁶⁰

Kratz believed strongly in enriching the academic environment for UTD students and was

formulating plans for an honors program at the university. He also embraced an idea presented to him by faculty member Tim Redman, who was a professor of literary studies, an international chess master, and former president of the U.S. Chess Federation. Why not start a chess team at UTD? "Chess kids are smart kids," Redman explained. "I guarantee you, we'll be able to be in the top ten in four years."261 President Jenifer often referred to UTD as one of the "best kept secrets" in higher education and was eager to change that, so he endorsed the new efforts. "Brains, not brawn, that's what we want here," he declared.²⁶² The University undertook a major recruitment of chess talent. In 1996 its first team, with one master chess player, Jim Dean, placed ninth in the prestigious Pan American Intercollegiate Chess Championship, the "Super Bowl of Collegiate Chess." The next year the six-member team included four masters and finished second among 26 teams.²⁶³ UTD also cultivated championship teams in debating and in the student guiz show "College Bowl" competition, with the school's College Bowl team finishing in the top five in national competitions in the 1994-1995 and 1995-1996 academic years.²⁶⁴

New Facilities, New Funding, New Attitude

Competition at UTD was not solely brains over brawn, however. In September 1994, students voted overwhelmingly to pay an increased fee to build a new recreational sports facility on campus, a 60,000-square-foot facility to replace the old Physical Instruction building. The new Activity Center featured an indoor swimming pool, racquetball and basketball courts, and sufficient seating space to hold major events such as concerts and graduations. President Jenifer told the Academic Senate he was looking forward to having at least one graduation ceremony on campus in the coming year. "People need to have a sense of graduating from the University," he opined, instead of receiving their degrees in an off-campus hall or, worse, a local high school auditorium.²⁶⁵



UTD's Activity Center opened in January 1999, replacing the Physical Instruction Building and offering a broad array of athletic activities to the University's expanding student population.

Not coincidentally, the Activity Center would enable the University to add intercollegiate basketball to its men's and women's NCAA Division III soccer, cross country, tennis and baseball teams. It also would help in recruiting new students. The new center opened in January 1999, and by fall 2000 visitors could arrive via a new road, University Drive, leading north from Campbell Road toward the central campus.²⁶⁶ The city of Richardson helped pay for the Campbell Road entrance since it would relieve traffic on Floyd Road to the east, the usual entryway to campus, which abutted a residential community. But it also made the university more visible from well-traveled Campbell Road and created an attractive entrance for visitors, many more of whom could be expected to come for events at the new Activity Center.²⁶⁷

Dallas real estate developer Trammell Crow donated more than a hundred live oak trees to the University to help landscape the acreage on either side of University Drive. President Jenifer monitored the new plantings' progress every day as he drove past. He credited UTD's grounds crew for the trees' thriving through their first winter.²⁶⁸ Also underway in 1996-1997 was a major expansion of the Student Union to include a new, south annex for services such as health and counseling, student government offices, and the student newspaper.

The Activity Center and the Student Union expansion were funded by student fees. But the larger issue of the state's funding formula for UTD was less straightforward. In 1989 the Legislature extended for four years UTD's upper-level funding status, which budgeted a higher amount of money per credit hour based on the higher costs of teaching upper-level and graduate courses. The idea was to give the University time to adjust its financial planning to accommodate its new status as a comprehensive university with four years of undergraduates. The funding formula assumed that since lower level classes generally had more students in them and could be taught by less expensive



The Student Union expanded to meet the needs of a growing campus population. It housed dining facilities, student activities such as the *Mercury* and UTD Radio, counseling services, and various student associations. Day and night, it offered a place where the University's social life overlapped with its academic mission, and where students could meet to work on projects or just trade ideas.

instructors, the state should ultimately provide less funding per overall credit hour. During the 1994 to 1995 school year, however, UTD had only about 500 freshmen—at 12 percent of the entire student body hardly the broad base of a student pyramid that the funding formula assumed. Further, the University's stiff admissions requirements, imposed by law, worked—at least initially—to reduce UTD's competitiveness with other System schools like Austin or Arlington. From February to May 1995 Jenifer teamed with legislators such as Senator Florence Shapiro to convince lawmakers that UTD's unusual circumstances required a reconsideration of the higher education funding formula. "I cannot stress enough the need for this to pass," he declared.²⁶⁹

Ultimately UTD and its supporters, including editorial writers at the Dallas Morning News and major corporations such as Texas Instruments, prevailed. Instead of the "no increase" policy that the Legislature applied across the board to all the state's other public universities, UTD got an additional \$1.5 million. More significantly, it received a tailored solution to the formula dilemma. The University's lower division credit hours would be funded according to the lower level formula, while its upper division and graduate credit hours would continue to earn the old, higher rate. This now became the state-wide norm. "We're very, very pleased," exclaimed Jenifer, greatly relieved at this unexpectedly favorable outcome. "We couldn't have asked for anything more." Jenifer especially credited the success to Royce Hanson, Dean of the School of Social Sciences, and Robert Lovitt, VP for Business Affairs, along with "the entire Dallas/Richardson/ Plano delegation" to the Texas Legislature.²⁷⁰

Meanwhile, two new deans arrived to play their part in building up a vibrant culture at UTD: William Osborne at ECS and Hasan Pirkul at SOM. Osborne had spent 20 years in the telecommunications industry, including seven as president of Comsat Technology Products, a division of Comsat Corporation in Washington, D.C., before undertaking an academic career at New Mexico State. As director of the Center for Telemetry and Space Telecommunications he had overseen a near doubling of the facility's budget as well as the number of graduate students engaged in research there. Additionally, Osborne had increased the number of women and minority students at the Center. In the fall of 1995 he became Dean of ECS. Dallas was familiar territory for him, as he had once served as president of Teling, a small telecommunications company in Richardson.

A New Era at SOM

Hasan Pirkul also was no stranger to UTD. He had once turned down an offer to join the SOM faculty. He was teaching at the Ohio State University when UTD again contacted him, this time about the



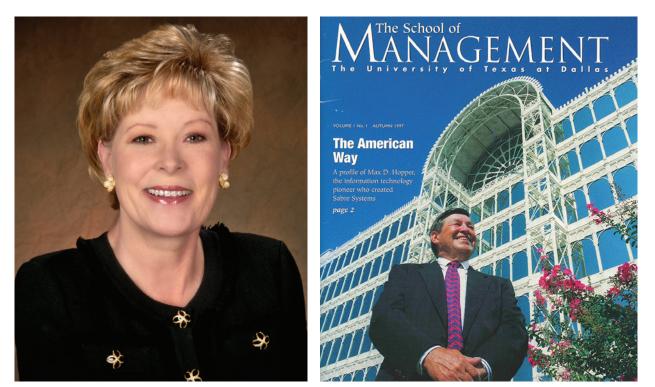
Hasan Pirkul joined UTD from Ohio State University in 1996 as the School of Management's new dean. His arrival marked the beginning of the School's rise to a position of national prominence

deanship, which came with the endowed Caruth Chair. Pirkul reconsidered, but once again turned the offer down. Soon he got a call from SOM marketing professor Constantine "Connie" Konstans. The University's leadership had changed. There was a new president and a new provost, and they were committed to building up the business school. They wanted Pirkul to lead that effort. If he accepted, he would have their unconditional support. Would he at least think about it for a week before saying no? Pirkul agreed to think about it. In a week, he was at UTD discussing the business school's prospects with Jenifer, Wildenthal, and the SOM faculty.

The discussion was open, but difficult. To Pirkul it appeared that SOM had been resting on its laurels, which, however well-deserved, were insufficient to advance the School toward the national significance to which the University aspired. Program descriptions were only one page long and had been photocopied so many times over, semester after semester, that parts were hard to read. Student advising, which Pirkul regarded as critical, was sometimes done by graduate students rather than trained advisors. And the faculty roster included too large a proportion of part-time or adjunct instructors. Indeed, the high proportion of adjuncts had been the main reason for the School's recent denial of accreditation by the Association to Advance Collegiate Schools of Business (AACSB). Pirkul sensed complacency in some quarters of the School about this long-standing student concern. "We are a Ph.D.-focused, research-focused school, so this is not really a big deal for us," he was told. "The good schools don't worry about these things." He asked those faculty members what schools they looked up to, what schools they ranked highly. It turned out they all were AACSB-accredited. Some had even been founding members of that organization. "Where are you getting your information?" he wondered. But he had already rolled up his sleeves. "I almost never shy away from difficult situations," Pirkul declared years later. "That, to me, was an opportunity to go in and succeed."271

If that sounded boldly confident, then the spirit matched the times, as well as the University's new leadership. "Hobson is a brave man," Pirkul acknowledged more than 20 years later. "He took risks with me, always backed me up. Without that we would not be here." SOM's chronic understaffing and underfunding problems were a case in point. When Pirkul asked for more money, Wildenthal had to tell him, "Hasan, we don't have any more." When Pirkul pointed to the well-funded business school at UT Austin and asked how that had come about, Wildenthal cited UT Austin's endowment as among the factors favoring that school. Pirkul asked John Wiorkowski, mathematician and now associate provost, to go with him to Austin and look at the books. Wiorkowski agreed.

"The fund book was a big, thick book," Pirkul recalled, "and we searched all through it." It turned out there was more to the story than the endowment. "I realized they were charging [student] fees, an advising fee specific to their business school, as well as other fees." Pirkul and Wiorkowski then confirmed that other schools were charging fees as well. Pirkul reported back to Wildenthal that he had found a solution to SOM's funding problem and asked if he could start charging students an advising fee and a career service fee. The Provost hesitated. If UTD imposed fees like Austin did, maybe its



In addition to her teaching duties in the School of Management, Professor Diane McNulty served as executive editor of *The School of Management*, first published in autumn 1997.

students would elect to go there instead of staying in Richardson. But Pirkul was certain they would stay, since most were commuters with jobs in the immediate area. Wildenthal gave the go-ahead to the new fees. They worked. "All of a sudden we had money!" Dean Pirkul exulted. "I had money to set up a proper advising function with professionals. I had money to create documents talking about our degree programs."²⁷²

The new fees also allowed SOM to begin publishing a high-grade, semi-annual magazine, *SOM*, to share School and alumni news. Professor Diane McNulty took on what she called "a labor of love" as *SOM*'s first executive editor. "It was my mission, as told to me by Hasan," recalled McNulty, "to put the name of the School of Management out there in front of the Dallas community. Our best marketing tool is the magazine," she said, though the School went on to develop multiple means of spreading its message. "We have press packets. We do advertising. We do everything we think will bring prominence to our name as a School."²⁷³

In Dean Pirkul's first semester on campus, SOM started its first, full-time MBA (Master of Business Administration) program, an offering that would bolster future applications for AACSB accreditation. Up to then, UTD's MBA program had been part-time, geared toward evening students with full-time jobs and requiring four to five years for completion. By contrast, in the new "cohort" program 25 students proceeded together through four, full-time semesters, including a summer internship. They were a diverse group, with 13 men and 12 women. Fifteen of the 25 were international students. With an average Graduate Management Admission Test (GMAT) score of 644, average GPA of 3.2, and average of five years of work experience prior to admission, they were "a top-notch group comparable to any of the top 20 business schools," attested program director Gurumurthy Kalyanaram.²⁷⁴ To ease the risk factor for students entering an untested, brand-new program, and following its strategy that ultimately quality would attract quality, UTD offered scholarships or tuition waivers to most of the cohort. SOM also partnered with local

corporations to enhance on-site learning experiences and elicit potential job offers to program graduates. A few years later, SOM increased its international reach with courses specializing in the then-new field of e-commerce and with an online MBA program, Global MBA Online, funded partially by an AT&T grant and aimed at students wishing to obtain their degrees via the Internet. By 2001, more than 150 students had enrolled in the new online program.²⁷⁵

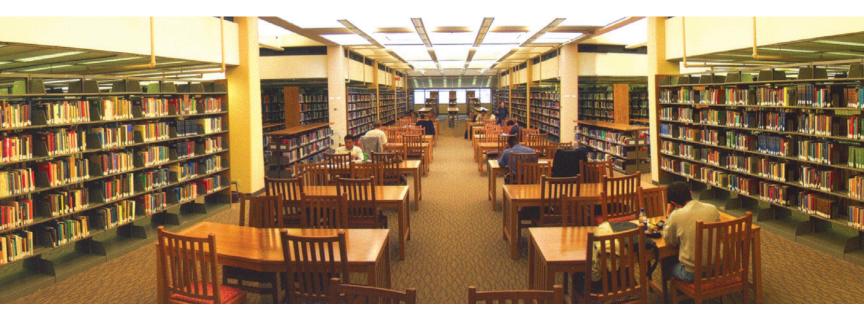
Industry Partners

Management opportunities in the telecom-rich Dallas area were increasing in the mid-1990s when ECS Dean William Osborne represented UTD as a participating member of a new industry/ academy initiative, the Texas Telecommunications Engineering Consortium, or TxTEC. TxTEC arose under new conditions to address a decades-old problem-the state's "brain drain" of skilled hightech workers and its ongoing need for research and development partnerships between universities and corporations. That need acquired fresh urgency on February 8, 1996, when President Bill Clinton signed the first major overhaul of communications legislation since the 1930s. The Telecommunications Act of 1996 aimed, in the words of the Federal Communications Commission, "to let anyone enter any communications business-to let any communications business compete in any market against any other."276

Deregulation stimulated new business activities across the nation, especially in states like California and Texas, numbers one and two, respectively, in high-tech manufacturing. DFW alone contained 80 percent of Texas's telecommunications equipment jobs, while five of the world's largest telecom manufacturers—Alcatel, Ericsson, Jujitsu, Nortel, and Samsung—maintained operations in UTD's Richardson neighborhood.²⁷⁷ As had Erik Jonsson, Cecil Green, and Eugene McDermott back in the early 1960s with SCAS, industry leaders in the 1990s pooled their resources to nurture intellectual talent and enlist universities in service of economic growth. Twelve corporations, including Alcatel, AT&T, Motorola, Raytheon, and Texas Instruments, joined with five Texas universities, including UTD, to form the TxTEC Consortium. Each company pledged \$100,000 per year for five years, beginning in January 1998, with funds delivered in consecutive years to each of the participating schools, whose engineering deans would sit on TxTEC's Executive Committee. Dean Osborne said, "For UTD to fulfill its mission, it's imperative that we strengthen and develop our telecommunications program at every opportunity."278 Osborne and Associate Dean Gerald Burnham responded guickly to the opportunity that the new consortium offered. They announced a new bachelor's degree program in telecommunications engineering, the first such program in the nation.²⁷⁹ Four years later, in 2002, ECS expanded the program to include a doctoral degree, which took its place alongside new doctoral programs in software engineering and computer engineering.

As ECS was putting together its pioneering telecommunications degree program, NSM professor Cy Cantrell announced a new Photonics Technology and Engineering Center, or PhoTEC, to replace UTD's former Center for Applied Optics. This development reflected larger changes in the field of optics, which had moved beyond the physics of light to encompass laser technology and fiberoptic communications. But the new venture, directed by Cantrell, also mirrored what the University had accomplished with TxTEC, for PhoTEC worked in conjunction with a Richardson-based high-tech business incubator called STARTech to develop new ideas in fiber optics and photonics.²⁸⁰

Some practical effects of the communications revolution were evident in McDermott Library, which was in the forefront of electronic innovations. Abby Kratz, Associate Director at the McDermott Library in the 1980s, recalled that the library had never used card catalogues and was one of the first in the region to use fully automated systems. Hobson Wildenthal was still new to the campus in 1992 when he underscored the library's importance. The library was "the keystone of the University," he stressed. "It forms a common meeting ground of all disciplines. It is where knowledge is safeguarded and transmitted, where learners at all levels first explore the creations of their predecessors, and their peers." But the current explosion in knowledge was taxing library resources as never before. "Printed pages, books on shelves, while remaining an integral component of the library, no longer are adequate," noted Wildenthal.²⁸¹ Speed-of-light transmission from sources all around the globe



Though digital and telecommunications technologies were revolutionizing librarianship in the 1990s, traditional bookstacks retained their value and importance to a university's academic mission.

was revolutionizing scholarship and increasing, not diminishing, the library's historic role. The McDermott Library had started from an advanced position, but the University would have to make sure its library kept in step with the times.

Wildenthal had the unpleasant task of informing the Academic Senate in March 1995 that "things are bad now" with the library's funding, "but on track to get worse" as sources such as the Texas State Permanent University Fund (which provided about \$500,000 per year) would be drying up for the library next year. As had often happened before, though, private donors responded. UT Austin history professor Henry David had been preparing to move to UTD in 1984 when he died suddenly. Green Center Director Alex Clark had been VP for Academic Affairs at the time and had stayed in touch with the David family through the

Anniversary Milestones

TD was a forward-looking school, but as it crossed anniversary milestones it paused to take note of how it had begun and how far it had come. The University celebrated its 20th and 25th anniversaries in the autumns of 1989 and 1994, respectively. For the 20th, Scherry Johnson organized the transformation of McDermott Library's basement, "the only big space on campus," she recalled, into an impressively draped and beflowered gala setting, complete with musicians and, of course, the founders themselves-Cecil H. Green, Erik Jonsson, and Margaret McDermott, representing her late husband, Eugene. Patti Henry, a UTD neighbor, supporter, and member of the U.T. Dallas Development Board, chaired the celebration. The evening struck all the right notes for such an occasion and brought the founders back onto campus for the first time in several years. "They all had a good time," Johnson remembered with satisfaction.

On September 26, 1994, the Mercury marked UTD's 25th anniversary with a special spread featuring a brief history and 23 "Great moments to remember at UTD," beginning with Governor Preston Smith's signing of HB303 in June 1969 and ending with Franklyn Jenifer starting as UTD's president in September 1994. In the five years between these events, UTD had enrolled its first freshmen class (August 24, 1990), dedicated the Cecil and Ida Green Center for the Study of Science and Society (October 8, 1992), and conferred its 25,000th degree (May 21, 1994). Mercury writer Lori Bost Wise cited UTD's seven schools, its wide range of interdisciplinary programs, and 13 buildings on the main campus alone, in concluding that "UTD has grown into a true university in just 25 years."



years. In 1995, Mrs. David chose to donate her late husband's library. Through the assistance of Clark, the valuable 15,000-book collection came to the McDermott Library –about half that year's acquisitions.²⁸² Reinforcing Wildenthal's point about the continued value of book stacks and the printed page, the library expanded its stacks onto the third and fourth floors while also seeking ways to develop its electronic capabilities.

Finally, after repeated fluctuations, mostly down, of the library's budget for journal subscriptions and new books, Wildenthal, taking a lead from UT Austin, proposed and implemented a new fee dedicated to pay for library materials. While there would always be feelings that even more was better, the fee provided a stable and secure foundation for maintaining the strength of the library's collections.

Diversity

The communications revolution was not the only one underway in the nation in 1995, although it may have been the least controversial. More difficult was the national effort to include more women and minorities in areas of society where they had previously been underrepresented or excluded. Bill Clinton's election in 1992 reinvigorated affirmative action efforts in many arenas, including universities. But it also energized opposition. For the most part, the higher education establishment, like the corporate community, had accepted the goals of equal opportunity and diversity and developed programs accordingly to address those aims. That was changing, and Franklyn Jenifer knew it as he came to Dallas.

As the first African-American university president ever in the UT System, Jenifer was acutely conscious of America's history of race-based conflict. Additionally, he had just become the first African-American chair of the American Council on Education, a 77-year-old umbrella organization of 1,600 degree-granting, accredited institutions and about 200 educational associations. The ACE's theme for Jenifer's year as chair in 1995 was "Building Communities of Civility and Respect," perhaps because of the backlash against affirmative action that had long been building in the nation.²⁸³ That summer, for instance, the University of California Board of Regents had eliminated consideration of racial and ethnic factors in admissions. The University of Maryland lost a legal struggle to retain a scholarship program aimed specifically at minorities. "The main thing we want to do," said ACE Chair Jenifer, "is stop any cascading away from these programs."²⁸⁴ In mid-February 1995, Jenifer had met with President Clinton to express his concerns, especially about the situation in California.²⁸⁵

On April 29, 1994, just one week after accepting the offer of the UTD presidency, Presidentdesignate Jenifer addressed a spill-over crowd of 260 at the Green Center. He conceded he was a stranger to Texas. "I have yet to see my first tornado, and I'm still looking to see my first cowboy," joked the lifelong Easterner. He encouraged his audience to think of UTD as a family, one that he wished to lead in a slightly new direction-nothing dramatic, just a "little further" than it had already come. Without compromising excellence, he wished to make the University more responsive to underserved populations on Dallas's southside, and to "improve the diversity of our student population." He also challenged the faculty members to apply their expertise to "some of the tough problems facing people across this state."286

A few months later, determined to increase the number of women and minority faculty members, Jenifer asked the Academic Senate for its counsel.²⁸⁷ Forty-eight percent of UTD's students were female, for example, but women accounted for only 14 percent of tenure track faculty.²⁸⁸ The Senate agreed that it would be useful to draft a letter to the president outlining the faculty's position. At the next meeting, on February 22, 1995, the members of the Senate debated a draft that a committee had put together outlining numerous steps that UTD could take to increase diversity.²⁸⁹

The debate, with Jenifer in attendance, led off with a stark challenge from a faculty member

to the whole idea of affirmative action. The faculty member declared it "of doubtful propriety, even in private universities," and "morally wrong" in a public university. It was particularly unfair to "young white males" who "bore the direct costs" of its implementation.²⁹⁰ A lengthy debate ensued about the course of affirmative action over the past decades. The discussion continued in the March meeting, with various alterations to the original draft letter leading to still further debate. In the end, the Senate agreed on a modified statement of support for diversity as a positive goal and voted to end debate.

If Jenifer had sought a statement from the Senate, the strenuous discussion he had witnessed and participated in surely made a stronger impression than any written letter. He thanked the members for "being willing to take on this issue," acknowledged the "sophistication of the opposition," and reinforced the whole group's commitment to academic excellence.²⁹¹ If he carried away any lasting sense of dismay, no one at the university ever detected it. Professor Murray Leaf, who argued strongly in favor of pro-diversity actions, recalled Jenifer warmly as supportive of faculty governance, and the affirmative action debate as indicative of the free, give-and-take of the Senate. "Nobody's being intimidated, and people will argue their case."²⁹²

UTD's discussion had been timely. One year later, on March 18, 1996, the United States Court of Appeals for the Fifth Circuit issued a ruling, Hopwood v. Texas, barring the use of race as a factor for university admissions in states under its jurisdiction (i.e., Texas, Louisiana, and Mississippi). The U.S. Supreme Court chose not to hear the subsequent appeal, so the ruling stood until 2003, when the Court's Grutter v. Bollinger decision abrogated Hopwood. In the meantime, minority applications to Texas universities plummeted. The Legislature responded with HB588, signed by Governor George W. Bush on May 22, 1997, providing automatic admission to all state universities for students graduating in the top ten percent of their high school class.

UTD already had an active recruitment and retention policy in place, and, as a practical matter,

was largely unaffected by *Hopwood* and HB588. The 22 students it admitted in 1997 who had been in the top ten percent of their high school class but whose SAT scores were below 1,000 did fairly well, achieving an average GPA of 2.9 in their first year.²⁹³ UTD had recently experienced, more dramatically than other schools, the tenuous relationship between SAT scores and actual performance, and had become well prepared to help all its students succeed at the collegiate level.

Mary Sias, UTD's VP for Student Affairs, worried less about performance than about appearancesthat minority students might think they were not welcome at the university, "And that's just not the case at all," she affirmed.²⁹⁴ Meanwhile, the faculty members heeded Jenifer's call to apply their expertise. John F. Kain, new director of the Green Center, won a \$1.25 million Andrew W. Mellon Foundation grant to study "the various barriers to access by Hispanics and African-Americans to Texas public colleges and universities." The research would continue earlier work done under the Green Center's UTD Texas Schools Project, an eight-year-long investigation of factors affecting performance of African-American students in Texas's public schools.295

Less controversy surrounded the introduction of the University's first undergraduate honors program, which Dean Dennis Kratz, a classicist with a specialty in medieval Latin, named "Collegium V." In Aristotelian science, he explained, there were four elements-earth, water, air, and fire-and a fifth, called the quintessence, which was "the non-physical element that gave motion and meaning" to the physical world. The idea of imbuing motion and meaning to learning well captured Kratz's idea of good teaching and seemed an apt name for the honors program, too; hence, Collegium V.²⁹⁶ Such a program seemed a natural extension of the University's goal of attracting and nurturing bright, engaged, and inquisitive students. With a proven scholarship program now in place, the time also was right to take what Kratz described as "a modest first step" toward a full-fledged honors offering. Kratz himself also was taking steps, having recently been

named interim dean—he soon would be appointed dean—of Arts and Humanities.

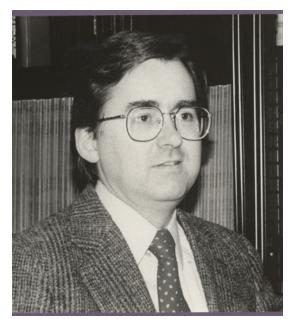
About 75 students, all with GPA minimums of 3.3 and letters of recommendation from faculty members, signed on for Collegium V's inaugural semester of fall 1996. They attended workshops, lectures, and other events designed to challenge their thinking, encourage informed conversation, and, as Kratz put it, "raise the level of intellectual conversation."297 The experimental year went well, and in the fall of 1997 Collegium V became the University's prototype honors program. By 2018, it was a highly organized enterprise of "motion and meaning," involving special, limited-size courses in every core curriculum field, and benefits such as a lounge in the Green Center, admission to various Dallas cultural events, and a designated housing area for resident participants.

Most UTD students still preferred the apartment-style living of the multiple Waterview Park complexes, which had reached "Phase VII" of their expansion by fall 1999. But change was in the air there, too. For some freshmen, setting up a household was too much of a challenge on top of beginning college. One returned to his apartment from the store with \$60 worth of groceries only to discover that he had nothing to eat for dinner. He had bought snacks enough to fill the cupboards but nothing for a real meal. Others recalled such hazardous learning experiences as using the oven's "broil" setting to bake cookies or leaving items in the oven and forgetting to check on them. A pizza that emerged as a "black frisbee" stuck in one undergraduate's mind, as did the firetrucks summoned after neglected French fries ignited.²⁹⁸

The alternative, of course, was dormitories, but to many at UTD dorms meant impersonal high-rises for the inexpensive warehousing of students—the opposite of the community ethos that Waterview was meant to foster. Such facilities had once been built to last, and still existed on many campuses. But the concept of dormitories was evolving from the cinder block, bunkbeds-and-barracks model toward designs more in keeping with a university's larger mission of fostering civility and intellectual kinship. They now included dining and laundry facilities, room arrangements that balanced privacy with community, and well-furnished lounge areas for meetings and study groups. "As UTD continues to grow," the *Mercury* editorialized, "the housing options should grow also."²⁹⁹

Faculty Accomplishments

While the teaching programs of every school at UTD adjusted to the changes wrought by the expansion of the undergraduate program in the 1990s, the breadth and depth of faculty research continue to advance. Chemistry Professor A. Dean Sherry, whose work on the metallic element, gadolinium, in the 1980s had improved the capabilities of magnetic resonance imaging and had led to UTD's first licensing agreement with a private company, extended that research with explorations of his research into thulium, a rare-earth element often found with gadolinium. Specifically, Sherry and his colleagues studied the interactions of a highly charged thulium reagent, TmDOTP⁵, with various salts. They noticed that when they put TmDOTP⁵ into whole blood



A. Dean Sherry's research in the 1980s on chelated gadolinium, a rare-earth element, led to significant improvements in the clarity of magnetic resonance images. Later, Sherry's successful creation of a synthetic reagent of thulium, another rare-earth element, also proved useful commercially to other researchers around the world using magnetic resonance imaging to study cell metabolism.

samples, two different nuclear magnetic resonance measurements resulted, one for sodium outside the cells and another for sodium inside. "Then we got brave," Sherry recalled, "and with our colleagues at UT Southwestern started putting this stuff into animals and showing that you could actually detect sodium inside the liver versus sodium outside the liver, inside the heart and outside the heart, etc." They had discovered a highly useful research tool. But TmDOTP⁵ was very difficult to synthesize, so when other researchers asked for it, Sherry instead gave them the recipe.

When the researchers called back, unable to make the recipe work, Sherry tried further coaching and instruction, but to no avail. "We get nothing but soup, black soup," they reported. Maybe chemistry was a bit like art, Sherry thought. You could give people brushes, paint, and instructions but that didn't mean they could produce a painting. It also gave him an idea. His team, by whatever means, had found a reliable way to make the thulium reagent. Others could not replicate it, even with instructions. So why not set up a business to sell it? The University provided space in a small building on campus, and Dr. Zoltan Kovacs, a postdoctoral student working with Sherry, began production.

Sales were slow but steady through the mid-1990s. Then a DuPont scientist reported that the reagent had worked wonderfully, but that his company could not make it, either. DuPont placed a substantial order, which led to a rapid expansion of the new company that Sherry called Macrocyclics. Success rested squarely on high quality control over a dauntingly difficult production process. "It takes you years to build a reputation, but you can go down the tubes in no time," Sherry cautioned the staff. Over the next ten years Macrocyclics attracted about 400 customers around the world. "It was a catalytic event," Sherry allowed. Comparing it with the impact of published research papers, of which he also had a surfeit, "It was probably the biggest impact I made on chemistry throughout the world." Eventually Macrocyclics was bought by AREVA Med (now Orano Med), but still operates under its own name in the Dallas area.³⁰⁰

UTD professors also were active in other areas of scholarship, sometimes with an international reach. In 1996, A&H's Fred Turner and Zsuzsanna Ozsváth received the Milan Fust Prize, Hungary's highest literary award, for their translation of Miklos Radnóti's poetry.³⁰¹ Drafted by the Nazis into forced labor in Yugoslavian copper mines, the 35-year-old Radnóti and other prisoners were driven into retreat before oncoming Soviet troops in 1944. When he collapsed from hunger and exhaustion, German troops shot the poet and dumped his body into a mass grave. Exhumation after the war revealed a small notebook in Radnóti's clothing containing his last poems and helped to identify him.³⁰² Ozsváth continued her work on Radnóti, publishing a biography in 1999.³⁰³ She had been just 14 in Hungary, in 1948, when a friend comforted her by reciting one of Radnóti's poems. Ozsváth then purchased Foamy Sky, a collection of the poet's work. It was in her raincoat pocket when she fled Communist Hungary 11 years later, after the Soviet suppression of the Hungarian revolution. "My students are touched by him and transformed by his poetry," she said, passing on to others what she herself had so poignantly acquired.³⁰⁴

In fall 1997 UTD hosted the 20th annual American Literary Translators Association meeting. Tim Redman, Dennis Kratz, Fred Turner, and Zsuzsanna Ozsváth joined Rainer Schulte, director of the UTD Center for Translation Studies, to welcome guests from around the world and discuss recent translations of works by Mexican novelist Carlos Fuentes, who attended the meeting, and classics such as The Odyssey. Schulte often pointed to the larger role of translation studies as means for building bridges between cultures while at the same time appreciating the subtle differences that make such work challenging. "As I walk over there," said Schulte about crossing into another culture, "I have to change my own attitudes. The first thing I have to do is listen to the other culture, and the other language for sure, and I begin to understand that cultures are not necessarily thinking the same way. I have to leave some of the things I bring with me."305

UTD entered its 30th year in 1999. That fall, enrollment exceeded 10,000 students for the first time, including a tenth freshman class of 730 students.³⁰⁶ By then, the announcement of the average SAT score for the freshman class-a very respectable 1206-had become a routine descriptor, a measure of the University's bet that quality would attract more quality in reasonable quantity. So far, it had. The Princeton Review rated UTD's student selectivity-basically, a ratio of students accepted to the number applying, modified by SAT scores and class rank-as one of the highest in the country. In Texas, UTD's selectivity was second only to Rice University. "Maybe the secret is out," conjectured Dean of Undergraduate Studies Michael Coleman, but President Jenifer was not satisfied. He vowed to make raising the University's profile his top priority during the next two years. Further, he declared, "Within the next ten years, our reputation will be second to none in the state."307

A Yearning for Tradition

UTD's 30th birthday celebration on September 25 included events for all ages at both the university and in surrounding Richardson communities: soccer and basketball camps; an Ansel Adams photograph exhibit; a display of dinosaur bones, gems, minerals, and rocks, courtesy of Geoscience's Professor James Carter; hands-on physics demonstrations; carnival and theater performances for children; and a "Sounds of Class" concert with the Richardson Symphony Orchestra. The following month, UTD's seventh annual homecoming gave additional reason to reflect on the University's rapid progress, and the evolution of tradition under such forward-looking conditions. Ashley Oldenburg, one of six students in UTD's not yet officially sanctioned cheerleading club, had expressed the dilemma well in 1997 when she said, "We would love to start a tradition here."



UTD cheerleaders were a determined group, starting in the 1998-1999 season with no official backing and with uniforms they had made themselves. Nearly a decade later, the 2007-2008 squad, shown here, placed third in a national championship.

Why? Because "tradition builds a bond between students."³⁰⁸ But a tradition was something one inherited, upheld, or passed down, like Yale alumni waving their kerchiefs at reunions while singing "Bright College Years," or Naval Academy "plebes" marking the end of their first year by scrambling up a greased obelisk to retrieve, say, a paper cup. Such things usually had some explainable origin that often had become vestigial. They no longer made much sense; but no matter, they were traditions that bonded people across generations, which was Oldenburg's point. Athletics accomplished that at some schools, but competitive athletics was not the focal point of the UTD experience. The University was new, its undergraduates newer still. Homecoming had centered on men's and women's soccer matches, and by 1999 the new Activity Center enabled UTD to field basketball teams, too. But how could one "start" a tradition? It was at once ironic, touching, and wholly understandable that this new university's dearth of traditions would be felt most sharply by its youngest members.

Oldenburg joined several others trying out for the 1998-1999 season, all repeating the same message. "I think we need to bring some school spirit to this campus, and I would like to be a part of it," said Jennifer Walls. "I would like to start a tradition here," echoed Christiana Mann. The aspiring cheerleaders had been persistent, not just in the upbeat way expected of them, but in the determination with which they had pursued their dream, often without much interest from peers. With no financial support from the University, the students assembled their own uniforms and plowed forward. Athletics Director Mary Walters gave initial encouragement. Then Darrelene Rachavong, who had become Dean of Students, promised to help with financing if the squad could prove it wasn't going to dissolve.³⁰⁹ With possible funding in sight and the anticipation of basketball as well as soccer teams to cheer for, UTD's cheerleaders hit their stride. In summer 1999 they brought home a trophy for "Most Improved Squad" from a National Cheerleaders Association camp held at SMU. And before a decade had passed, they placed third in the National Cheerleader

Association/National Dance Association championships in Daytona, Florida.³¹⁰

But, as Rachavong watched the 1998-1999 tryouts conclude with the selection of the coming year's squad, tears came to her eyes. It wasn't the cheerleading she found so affecting but something harder to describe, something old but also ageless. It was the spirit of youth, a pilot light in any successful university and now a decade old at UTD, sparking its own fresh start for the University with every entering class. Nothing at any school, old or new, large or small, could ever be more traditional than that.

Coming of Age

TD's founders had intended a fouryear research university with a strong emphasis on science and technology, summoning the example of the Massachusetts Institute of Technology in Cambridge, Massachusetts. But the founding terms of House Bill 33 ruled that out. UTD as a southwestern reincarnation of MIT seemingly was off the drawing board. But advocates did not relinquish their hopes. "The concept here is not another U.T. Austin or Texas A&M," Peter O'Donnell explained in 1989, 20 years after UTD's founding. "It's a Texas-style MIT."

As support for the four-year expansion grew in the legislature, proponents increasingly drew on comparisons with existing elite schools. Would UTD be a "Harvard on the Trinity," or perhaps an "MIT of the South?" Dean of Undergraduate Studies Chris Parr hedged his bets in May 1989, suggesting that much had yet to be decided. "We're going to tread a very fine line between the two," he opined.

Passage of Senate Bill 895 on June 29, 1989, and final approval by the Higher Education Coordinating Board a full six months later, enacted UTD's original ambition to be a highly selective research university. But Harvard was Harvard, MIT was MIT, and UTD would have to be itself, too. At graduation in May 1993, student speaker Theresa Oriabure declared, "We are not MIT of the plains nor do we seek to be. We are a great university. We are the University of Texas at Dallas." By 2003, Vice President for Research and Graduate Education Da Hsuan Feng also had set aside any talk of UTD becoming an MIT or a Cal Tech of the Southwest. The University would grow not by emulation, he believed, but by attracting outstanding researchers and letting "the best people decide what to do." UT Dallas had come into its own. Indeed, it had come of age. July 12, 1993 The UTD Mercury 3

Defining UTD

We are not MIT of the plains nor do we seek to be. We are a great university. We are the University of Texas at Dallas.

> Theresa Oriabure, student speaker at commencement ceremonies last May

Ms. Oriabure's speech at commencement hit upon a principle of greatness often forgotten at our academy. We need not delude ourselves into settling for a description, especially one meant to be complimentary, that defines our mission in terms of somebody else's accomplishments. Just as Dallas thankfully shed its early epithet as "Athens among the alfalfa fields," so UTD should recognize and unabashedly proclaim its unique position of prominence among Dallas' major universities. School by school, department by department, UTD at its finest represents liberalism of thought institutionalized. We err against ourselves most when the boundaries meant only to facilitate learning are respected with a fundamentalist's fervor, when cosmopolitan ideals are abandoned for the debilitating comfort of provincial securities, when we proudly profess ignorance in fields even tangentially related to our own.

CHAPTER 7 Takeoff (2012-2019)

TD's growth trends continued their path toward an eventual "takeoff" into national status as a major research university. Increased success led not to relaxation, but to even greater efforts to nurture UTD's expanding academic community. This included student residences, labs, and landscaping; faculty recruitment and retention, including research support for "early career" faculty; and continued development of undergraduate honors programs, along with new incentives aimed at talented graduate students. As the University approached its 50th anniversary, it announced it had achieved the status of an "Emerging National Research University" as established by the Texas Legislature. Major new gifts brought national attention to UTD as a center for art scholarship, augmenting its well-established distinctions in the areas of science, engineering, and management. UTD would begin its next half century as it had its first, traversing newly opened avenues of scholarship while continuing the pursuit of excellence in its foundational areas of teaching and research.

2012-2015: Steady at the Helm

Takeoff is exhilarating, especially for passengers not jaded by frequent flying. But for both frequent fliers and first timers, thrilled shouts of joy from the cockpit as the craft lifts off would be unnerving. There, a more subdued response reassures everyone that things are under control and in experienced hands. As UTD took off into 2012, its leaders took note of the climb path and reported back to all on board. Their consensus was that the craft was worthy. "We don't need to change who we are," David Daniel declared in the president's annual "State of the University Address" in October 2012. "We just need to scale up to compete with the best. All other parameters will fall into place for us."

The University's four-year graduation rate had risen from 31 percent to 51 percent since 2005 and was now comparable to the rate at UT Austin and Texas A&M. Average freshman SAT scores also were up, from 1248 in 2011 to 1270 in 2012. And UTD enrolled 63 freshman National Merit Scholars in fall 2012, ten more than in 2011, which even then had exceeded the total number of National Merit Scholars in the rest of the UT system.⁵²³ Eying a possible 30 percent increase in graduate school applications to UTD for the 2012-2013 academic year, the president "enthusiastically encouraged" the provost to hire more faculty. He commented to the Academic Senate that new parking lots would be built of inexpensive asphalt "because of the possibility that the space may get consumed by a building in not too many years."524

Realize the Vision and Transformative Gifts

In March of 2012, President David Daniel called the University's attention to a major new initiative called Realize the Vision: The Campaign for Tier One & Beyond. The effort was intended to raise \$200 million in private donations by the end of 2014, boost the University's endowment to \$400 million, augment research and academic programs, and help qualify UTD for support from the state's National Research University Fund (NRUF). Since its early "quiet" phase beginning in 2009, *Realize the* Vision had already gained a great deal of lift from donations-\$110 million-in order to maximize the effect of its public announcement. Hitting a target of \$200 million was "a very aggressive goal for a university that's never done a campaign before; and, we're doing it in a very short period of time," said Vice President for Development Aaron Conley.⁵²⁵

Scheduled to end in December 2014, the campaign had already surpassed its \$200 million

goal by March of that year, with \$227 million raised. Contributors to that point numbered 22,074, nearly double the number in the four years prior to the 2009 launch. They included increasing numbers of alumni-there were 50,000 in Dallas-Fort Worth and 30,000 more worldwide in 2014-partly because the University was graduating more students every year and partly because it was making a determined effort to engage them.⁵²⁶ Early in 2013, UTD President Emeritus Robert Rutford extended a challenge to 1980s and 1990s alumni that he would personally match their donations. More than 300 responded, yielding a total benefit to UTD of \$177,000.⁵²⁷ They joined 1,500 other alumni donors that year, more than double the number who had given to UTD in 2009.528

Though two months remained in the Realize the Vision campaign, the University celebrated its winddown on UTD's first officially designated "Founders Day," October 29, 2014, marking the 50th anniversary of the dedication of Founders Hall. The latter event featured the presentation by Texas Instruments officials of bronze busts of the three UTD founders, Erik Jonsson, Eugene McDermott, and Cecil Green. Later that day, the combined celebration included music, dancing, food trucks, fireworks, and a laser show projected on the side of the Edith O'Donnell (ATEC) building. Through all, the cheering and fanfare Daniel stayed on message: "If we are to remain the great city we are today, North Texas needs us to become a top tier university. Nothing short of the future of this region hinges on our success."529 By the end of December, \$273.3 million had been raised from 26,066 gifts, 10,522 of which came from alumni. At \$392.7 million, the endowment was now in reach of its \$400 million goal.⁵³⁰

Realize the Vision was an unqualified success. Additionally, two major gifts to UTD in 2014, associated with the familiar names McDermott and O'Donnell, held particular importance for the university's future. Walter Voit played an instrumental role in the first. A member of the inaugural class of McDermott Scholars in 2001, Voit graduated in 2005, earned his master's degree at UTD the next year, then completed a Ph.D. in materials science and



In 2014, former McDermott Scholar Walter Voit enlisted Mrs. Margaret McDermott's support for the Eugene McDermott Graduate Fellows Program, aimed at supporting exceptional graduate students.



A major contribution in 2014 by Edith O'Donnell enabled the creation of the Edith O'Donnell Institute of Art History at UTD. It opened in fall of that year under the direction of A&H professor Richard Brettell, shown here in his study.

engineering at Georgia Tech in 2009. He returned to UTD as a faculty member with joint appointments in Mechanical Engineering and Materials Science & Engineering. He knew the Dallas research and entrepreneurial culture well and judged the area to be one of the best in the country for translating research ideas into useful products and discoveries. But key to that notion was the ability to attract high-caliber Ph.D. students and support their work through to completion. If Mrs. McDermott had supported attracting talented high school seniors to UTD with an extraordinary scholarship program, Voit wondered, might she not also favor a similar effort to lure exceptional Ph.D. candidates away from the West Coast and the Ivy Leagues?

Mrs. McDermott had been closely involved with the McDermott Scholars from the beginning of the program, inviting the students to her homes in Highland Park and Allen, inquiring about their work and their lives, and taking a keen interest in their future plans. In that context, she and Walter had come to know each other well. Walter felt comfortable, therefore, in proposing to Mrs. McDermott that she consider supporting a new effort for graduate students. She heard him out, agreed it was a good idea, and provided \$14 million to support it. Together, with \$10 million from the TRIP program, the resulting endowment provided a foundation for continued excellence in doctoral education at UT Dallas.

Among the first beneficiaries of the Eugene McDermott Graduate Fellows Program was the same Eric Kildebeck who had also been a member of that McDermott Scholars inaugural class. Kildebeck had finished the M.D. portion of his M.D./Ph.D. program at UT Southwestern and was on leave while working on the Ph.D. component in neurophysiology at Stanford University. Kildebeck, to understate the matter, had options. But an offer of support from the new graduate program at UTD helped keep him at UT Southwestern, where he completed his doctorate and continued working on therapeutic applications of gene splicing for neurological and autoimmune disorders.⁵³¹

The second transformative gift arrived soon afterward. In 2013, the new ATEC building had been

named in honor of Edith O'Donnell. Now, in May 2014, she reaffirmed her support for the arts at UTD by donating \$17 million to create the Edith O'Donnell Institute of Art History (EODIAH). This gift, again supplemented with \$10 million of TRIP funds, provided for a research and education center to be led by Professor Richard Brettell, an internationally recognized authority on French impressionism and the Margaret M. McDermott Distinguished Chair of Art and Aesthetic Studies. As the Founding Director of EODIAH, Brettell acquired a second endowed chair, the Edith O'Donnell Distinguished University Chair. In the fall of 2014, EODIAH opened its new offices in the ATEC Building that also bore the Edith O'Donnell name. The Institute, under Brettell's leadership, began to establish close collaborations with major art museums around the world.532

Growth

Daniel assured students at the start of the school year in September 2012, "We want to make sure the growth doesn't occur so rapidly that we can't keep up."⁵³³ Executive Vice President and Provost Hobson Wildenthal agreed that while UTD was going places, its objectives needed to be specific, carefully planned, and capable of attainment.

Wildenthal knew the difference between good universities, very good universities, and great universities, and he worried that the pace of UTD's ascent might make the stars themselves seem within reach. "I'd always had concerns about setting hyperbolic goals that I knew were unrealistic," Wildenthal reflected.⁵³⁴ He wanted none of that at UT Dallas, which he judged in 2012 to be "a very good university, with very good faculty, and very good students."⁵³⁵ The journey to greatness would be a long one, requiring patience, realism, and determination. UTD must keep at it, not confusing aspiration with achievement or, on the other hand, judging an "A-" as a failing grade because it was not yet an "A."

Managing UTD's growth meant tracking several interrelated dimensions, including enrollment, academic programs, facilities, research, and faculty hiring; quality factors such as SAT scores and high school class ranking of entering freshmen, student retention and timely graduation; extra-mural scholarship awards and post-graduate appointments for graduate students; research expenditures; and faculty hiring and accomplishments. National rankings such as those in *U.S. News and World Report* reflected a university's growing, or declining, reputation. But the most important ranking lay in the opinions of individual faculty, prospective students and their parents, and influential political and community leaders.

Growth in Enrollment

Student enrollment had always been the foundation of all other growth at UTD. The University is funded by tuition and fee payments by students and by state support for credit hours that those students complete. Without additional students, there is little additional funding for more faculty or more buildings. And, as had been long understood by its leadership, UT Dallas had to have a larger faculty in order to make an impact as a significant university. A handful of well-known scholars would never be enough. Therefore, enrollment growth had been the dominating priority of university leadership at least since the 1990s. The Washington Advisory Group's simple prescription for UTD to advance by "scaling up" was merely external confirmation of what the University itself had always well understood.

The largest freshman class in UTD's history– 2,231 students–showed up in the fall of 2013, part of a record total enrollment of 21,145 at a time when college enrollment nationally was heading in the other direction. Compared to fall 2008, UTD's total enrollment was up 42 percent, while freshman enrollment rose an astounding 98 percent. Their average SAT scores posted at 1261, among the highest in the state, while 88 National Merit Scholars enrolled, swelling the University's total to 203. About 63 percent of freshmen entered as STEM subject majors, while SOM and ECS claimed nearly 80 percent of master's degree students. Larry Redlinger, director of the Office of Strategic Planning and Analysis, linked robust enrollment to



Darralene Rachavong joined UT Dallas in 1983 to manage student services, including housing. She soon added to her responsibilities the Student Union. In 1994 she became assistant vice president of student affairs and in 2005 was named vice president for student affairs. Her initiative helped launch the construction of several new residence halls, shown here in a 2018 aerial view.

"the rigorous menu of programs that the University offers."⁵³⁶ David Daniel projected enrollment levelling out between 25,000 and 30,000 students in the not-too-distant future. "At that point," he judged, "we will be large enough to compete with the very best public research universities in America. We are well on our way there."⁵³⁷

Vice President Rachavong's decision in 2008 to lead UTD into building residence halls proved crucial in persuading students and their parents, including many international students, to see UT Dallas as a destination university. The dramatic success of the first residence hall in 2009 led to the rapid construction of additional units. By fall 2013, four halls were in operation, housing a total of 1,600 students. Residence halls, together with the continuation of a strong AES merit scholarship program, drove freshman enrollment growth during this period to levels that stressed the university's capacity to add faculty and classrooms fast enough. With this track record, the fifth, 600-bed residence hall being readied for fall 2014 seemed a prudent step.

Growth in Academic Programs

Apart from electrical engineering, UT Dallas had initiated no major degree programs between 1978 and 2000–a result of the intentionally crippling, and effective, constraints imposed on the university when it was created, and again when it was authorized to add the engineering school and admit freshmen and sophomores. After 2000, a few extensions of existing programs were initiated, such as the Doctor of Audiology in 2001 and Computer Engineering and Software Engineering in 2002. The pace picked up in 2004-2005 with the creation of degrees in Economics, Political Science, Public Affairs, and Geographic Information Science.

Then, in 2005, the legislature passed, and the governor signed, the Shapiro bill, negating all of the prior laws restricting UT Dallas's growth. Still, the University was not free to initiate any degree program it chose. There remained the Texas Higher Education Coordinating Board, which took, as its



An April 9, 2012 UTD news release captured the sense of aspiration behind the University's physical growth—"Two construction cranes crisscrossed under the darkening sky, ceasing work for the day on the new Arts and Technology Building."

mission, limiting new degree programs at all of the publicly controlled universities in Texas. However, UT Dallas worked with the Coordinating Board and, with the support of the UT System, initiated degree programs in Mechanical Engineering and Bioengineering in 2008 and 2010, respectively. These two expansions of the portfolio of the Jonsson School were to have major impacts on the future of engineering at UT Dallas and on the university as a whole.

Growth in Facilities

In 2013, after the latest impressive increase in enrollment, the speaker of the Academic Senate echoed the provost's assessment. "We must

remember not to relax," said Murray Leaf. "Don't say, 'OK, now we can coast.' Never."538 In fact, the practical challenges of growth gave the University little opportunity to relax. As long as David Daniel had been at the university, space for offices, labs, and classrooms was the chief limiting factor in hiring faculty.⁵³⁹ Therefore, construction of new facilities continued to be a key priority and a dominating feature of campus life. Reporting on the closing hours of the March 29, 2012 kick-off event for the *Realize the Vision* campaign, a writer for that day's news release described, with a touch of the poetic, "Two construction cranes crisscrossed under the darkening sky, ceasing work for the day on the new Arts and Technology Building as guests filtered toward a tented dining hall."540 Even UTD's routine press announcements rang with tones of aspiration.

But even as UTD's expansion forged ahead, the University faced a new reality: the lands donated by the founders were finite, and UTD's celebrated growth might soon exhaust the core campus's nearly 500 acres. The first excursion off the "main" campus had occurred when the WSTC building on the west side of Waterview Parkway was purchased as "surge" space during the Founders Building renovation. Then, UTD acquired another building on the west side of Waterview, the ROC (Research Operations Center). Additionally, much of a building north of Synergy was leased and designated Synergy Park North (SPN).

Ironically, all three buildings sat on land originally owned by UT Dallas. They were obtained as gifts from the Hoblitzelle Foundation and the founders and later sold to provide funds for capital improvements or to augment the Excellence in Education Foundation endowment. But the most graphic evidence that UT Dallas land was becoming scarce was the appearance, starting in 2013, of multi-story parking garages, three of which replaced some of the "inexpensive" surface lots that had become, under the new conditions of land scarcity, too costly.

Vanishing land ended any future consideration of one-story buildings, of which the University already had too many. In this spirit, the Regents



Synergy Park North provided versatile space and cutting-edge resources for many UTD programs.

approved, in 201,2 a four-story \$85-million Bioengineering and Sciences Building (BSB) to be located just south of and adjoined to the Natural Sciences and Engineering Research Lab (NSERL)– on the site (as Daniel had foreseen) of an asphalt parking lot. Later, the Regents honored UTD's request to add 50,000 square feet to the original plan of 170,000 square feet for that facility.⁵⁴¹ Likewise, the Edith O'Donnell ATEC building, then under construction, and a planned eastward expansion of the School of Management, each incorporated four stories.

Students identified closely, even personally, with the university's expansion. "Like us, UTD is growing," observed Jessica Melton in a Mercury editorial near graduation time in May 2012. Five years earlier, when she and her friends were exploring college options, they had stuck the label "cement school" on UTD because of its brutalist architecture. Nevertheless, she sensed that there was more beyond her initial impression and enrolled. Now, as graduation day approached, Melton happily forgave the years-long construction inconveniences, such as "walking with your head pointed down to avoid getting dust in your eyes," concluding, "in the end, it was worth it." Besides, as many others pointed out, the construction represented an investment in the institution's future that would only add value to their degrees over time.542



UTD students accepted the inconveniences stemming from UTD's nearly constant construction activity, confident that the university's growth enhanced the value of their degrees.

Melton's colleague at the Mercury, Editor-in-Chief Bobby Karalla, confessed that "I never thought I'd see 1,500 freshman 'whooshing' during the summer [an arm signal meant to convey a comet's motion] but our university is going through a boom. UTD is at a crossroads just as you are," he told the incoming Comets. "There's never been such an exciting time in this university's history."⁵⁴³ At the end of summer 2012, the University announced it would soon extend the Campus Enhancement landscaping project northward between "the plinth," as the trellised fountain and seating area outside the Student Union was known, and the Administration Building-"basically getting rid of pavement and planting trees," explained landscape architect Peter Walker.⁵⁴⁴ During this \$15 million "Phase 2" of the project, new students would not entirely avoid the disruptions their predecessors had endured on the central campus-or fail to profit from the still-further enhanced value anticipated for their degrees.

Growth in Research and Faculty Numbers

In yet another important dimension of growth, the University's total research expenditures were climbing steadily upwards, doubling from about \$47 million to \$98.9 million between Fiscal Year 2007 and Fiscal Year 2013, notwithstanding a decline in federal research support from such agencies as the National Institutes of Health (NIH) and the National Science Foundation (NSF) (NASA support for ongoing projects at UTD's Hanson Center for Space Sciences remained consistent at about \$1.1 million during these years).⁵⁴⁵ In 2011, UTD had ranked fourth in the state in attracting NSF research support, behind UT Austin, Texas A&M, and the University of Houston, but had ranked only 19th in winning NIH funds.

In response, UTD's Office of Sponsored Projects organized a lecture series for graduate students and junior faculty by NSM professors experienced in winning grants. They provided specific advice on writing successful grant applications to non-federal and federal agencies, along with moral support. Santosh D'Mello in the Department of Cell and Molecular Biology, and Rod Heelis in Physics, were among the first professors to offer this guidance. "I wish I had that when I came here," said D'Mello. "In preparing for the talk I have been finding out things I never knew, although I've been writing NIH grants for 15 or 20 years now."⁵⁴⁶

The effort to assist young researchers was worthy in its own right, but it also served a crucial cause in UTD's striving to achieve NRUF goals, this one for producing at least 200 Ph.D.s per year for two consecutive years. The University had awarded 195 doctorates in 2010, 160 in 2011, and 179 in 2012. Increasing that number was a long-term prospect that involved many interlocking elements. Student enrollment, faculty hiring, and research dollars all helped determine Ph.D.s awarded. At the doctoral level in particular, those variables changed slowly, as grant applications were written, submitted, and reviewed. "Certainly, this is an area we have to improve in," said Bruce Gnade, professor of electrical engineering and chemistry and UTD's Vice President for Research. "We'll get there; in reality that's why we need more research funding, which pays for doctoral students. It all kind of ties in together," Bruce Gnade had said of the multiple

factors operating together over time. As university leaders always stressed, assuring quality in faculty and students remained their top priority. It could be difficult to quantify but, as Gnade added, it was not difficult to recognize. "When you are Tier One, people will know it."⁵⁴⁷

UTD seeded the clouds in 2012 by hiring 39 new faculty members in the tenure system, raising the number of such faculty from 454 to 493–an 8 percent increase that closely matched the rise in total student enrollment.⁵⁴⁸ The Jonsson School of Engineering and Computer Science (ECS) alone had hired an average of 10 tenure-system faculty per year between 2009 and 2013. With 140 on board in 2014, ECS was easily on track toward meeting its goal of 175 tenure-system faculty members by 2020.⁵⁴⁹ UTD also undertook a "Catalyst" grant program aimed at jumpstarting

New Faculty Talent

TD recognized that enrolling highly talented students was a "must" for reaching its high academic goals. But there were several other "musts," too, including the critical one of attracting, retaining, and rewarding faculty members who would be productive in their fields as well as usefully engaged with students and with the campus community at large. That was a tall order in any era, and it had only gotten taller with time. But UTD had grown taller, too, with sophisticated lab facilities and administrative structures reflecting true appreciation of young faculty members' needs, preeminent among which was the need for research support.

In 2015, Dr. Gabriele Meloni joined UTD as assistant professor of chemistry and biochemistry. He completed graduate work at the University of Milan (M.S. 2002) and the University of Zurich (Ph.D. 2008), and also postdoctoral fellowships at the California Institute of Technology (2013) and Aarhus University in Denmark (2014). The following year Sheel Dodani also joined UTD as assistant professor of chemistry and biochemistry. Dr. Dodani had earned her B.S. degree in chemistry at UTD in 2007, then completed her doctorate at the University of California, Berkeley, in 2013. A postdoctoral fellowship at the California Institute of Technology preceded her return to UTD's Department of Chemistry in August 2016.

Dr. Meloni and Dr. Dodani each received Welch Foundation grants in 2017, and in 2018 they also received five-year federal funding from the National Institutes of Health. Meloni's work focuses on how certain metals, some useful and others toxic, are transported across cell membranes, while Dodani's centered on the role of ions, especially negatively-charged ions, in cell functioning. Both professors arrived at UTD with a demonstrated commitment to expanding knowledge. UTD would do all that it could to nurture that commitment. It was the core of the University's mission, as well as the formula for its continued success.



Sheel Dodani and Gabriele Meloni

research projects by young faculty who might later build on their results to apply for larger amounts of support from external agencies. Five professors at UTD received about \$37,000 each for the 2010-2011 academic year.⁵⁵⁰

In time, federal organizations such as the Department of Defense and the NSF also recognized the value of encouraging researchers early in their careers and provided similar small grants as potential stepping stones to larger levels of support and there were many examples of newly hired UT Dallas faculty members being honored with such awards. Lunjin Chen and Fabiano Rodrigues, working with Rod Heelis in the Hanson Center for Space Sciences, were two such success stories. The U.S. Air Force Young Investigator Program granted support for Chen's research into the weather of the "magnetosphere" between the earth's upper atmosphere and the sun and the NSF Faculty Early Career Development Award granted support for Rodrigues's studies of electrical fields in the ionosphere.

Similarly, the Office of Naval Research's Young Investigator Program supported mechanical engineer Yonas Tadesse's efforts to improve "musculoskeletal" designs for robots, while a similar program by the U.S. Army awarded ECS's Tyler Summers \$300,000 to study more efficient ways of connecting and coordinating communications between large data networks such as power grids and urban transportation systems. The NSF's Faculty Early Career Development Award (CAREER) provided \$500,000 to NSM's Jeremiah Gassensmith, and doctoral students Zhou Chen and Candace Benjamin, to support their research on using viruses for therapeutic drug delivery to the body. Another ECS professor, Chadwin Young, also received early support awards from NSF for his work on non-silicon, flexible semiconductor materials.⁵⁵¹

Fatemeh Hassanipour, assistant professor of mechanical engineering, earned Catalyst funding in 2010 for research aimed at enhancing oil recovery by analyzing "vortex flow in porous media" and five years later, after adding motherhood to her list of achievements, she received a five-year, NSF CAREER grant to support her research in the mechanics of breastfeeding. Hassanipour's colleague in Mechanical Engineering, Arif Malik, received nearly \$500,000 in NSF CAREER support that year for his research on improving the quality of cold-rolled metals, while an NSF CAREER grant helped electrical engineer Carlos Busso develop algorithms to better recognize emotional expressions in human interactions.⁵⁵²

UT Dallas's humanities offerings also were expanding. Nils Roemer and David Patterson joined UTD's renowned Zsuzsanna Ozsváth in the Ackerman Center for Holocaust Studies. Both were highly regarded scholars of modern European history and literature, and holders of university-endowed chairs (Roemer, the Stan and Barbara Rabin Chair; Patterson, the Hillel A. Feinberg Chair). Roemer, who also served as Director of the Ackerman Center, earned his Ph.D. at Columbia University in 2000 and arrived at UTD in 2006 from the University of Southampton in England. Author or co-editor of numerous books on Jewish history, scholarship, and culture, he sought, in the best A&H tradition, to use his expertise to stimulate students' critical thinking across a broad range of subjects.

Patterson joined UTD from the University of Memphis in 2010, where he had established a reputation as a prolific and sensitive scholar in an emotionally and intellectually challenging field. He, too, shared Ozsváth and Roemer's understanding of the Holocaust as a window into the broader human condition, rather than a circumscribed historical specialty. Patterson had authored more than 30 books and 140 articles, winning honors such as the Koret Jewish Book award in 1999 and the National Jewish Book Award in 2008. In an April 2013 Mercury interview, Patterson explained that Holocaust denial "is not about historical facts at all; rather, it is driven by an anti-Semitic agenda to erase the Jews from history and to delegitimize the Jewish state." Though it was unique in those particulars, he emphasized that Holocaust denial "has implications for all human beings."553

In August 2013, Atanas Tchizmarov, a graduate student in information technology and

management who had earned his B.S. in software engineering at UTD in 2011, offered some advice "from a six-year Comet" to the fall semester's entering freshmen. Like many other students, he identified with the University's growth-"Over the years the campus grew and I with it"-but it was his experience's global dimension that he wished to highlight for newcomers. "The discussions I had with my Syrian and Iranian friends about the Middle East, the table tennis tournaments I participated in with my Chinese friends, the tutoring sessions I conducted for students from Sudan and the software engineering projects that kept me up at night with my Indian friends ended up carving an international view of life I couldn't have imagined." Tchizmarov had not created this diverse environment, but he found and embraced it at UTD, enhancing his education and enlarging his world. "Learning about others," he advised, "will help you understand yourself and the path you want to take in life."554

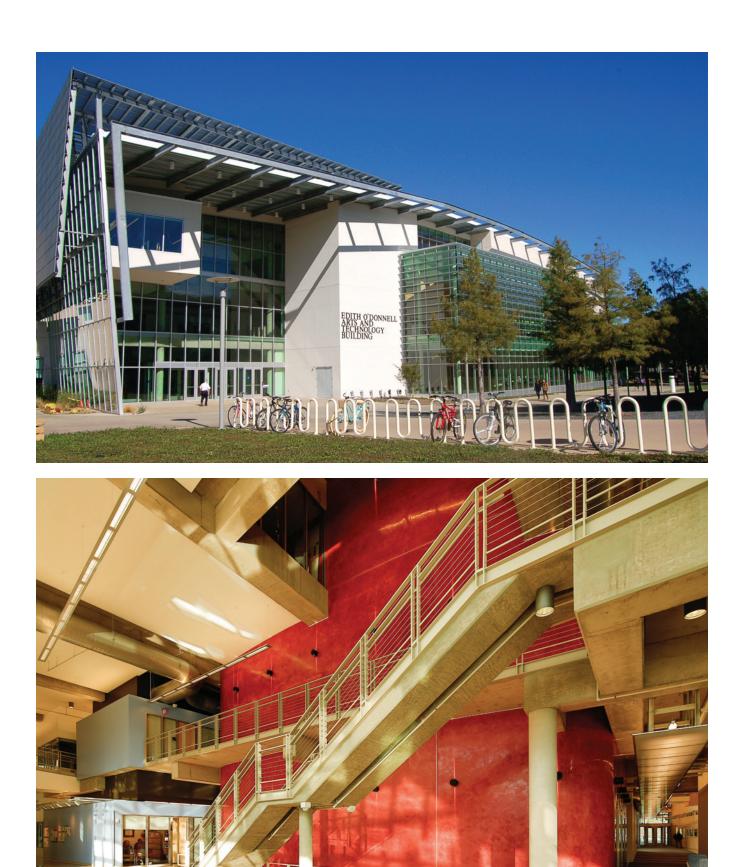
No one who witnessed such interactions in hundreds of encounters every day on campus could fail to imagine their formative effects, and if there were few metrics to capture the quality of Tchizmarov's experiences, U.S. News and World Report attempted to supply one of them, ranking UTD 23rd on a list of the nation's "top 25 most ethnically diverse campuses" in 2013. In Texas, Rice University, the University of Houston, Texas Woman's University, and UT Arlington also were included on the list.⁵⁵⁵ Other rankings attested to UTD's rise in national prominence. The Princeton Review included the University, along with UT Austin, Texas A&M, the University of Houston, and Rice University, for the first time in its 2013 listing of "The Best Value Colleges," while U.S. News and World Report ranked it in the top 10 nationally for students graduating with the least amount of debt.556 That year, Times Higher Education magazine placed UTD 15th worldwide on a list of the "top 100 schools under 50 years old." Said the magazine's editor, Phil Baty, "These new figures are really exciting. There is a new breed of dynamic universities emerging quickly and visibly."557

Celebrating the New Edith O'Donnell Building

New architecture also continued to mark the University's progress. On November 7, 2013, President Daniel presided over the opening of the long-awaited Edith O'Donnell Arts and Technology Building. The dramatic, light-filled, and above all innovative structure combined glass, steel, and polished concrete even as it harmonized with its more familiar neighbors along the central campus's reflecting pool. A few days before the dedication, a *Mercury* commentary backhandedly lauded UTD's brutalist heritage on the grounds that concrete, at least, endured. "Architecture is meant to inspire," offered Christopher Wang, "even if it does inspire fear and loathing."⁵⁵⁸

But over the years, UTD's renovations had absorbed the solidity of its original concrete into a larger, more textured expression of ideals, captured by A&H Dean Dennis Kratz when he described ATEC as a program "where students and faculty explore the convergence of the arts, technology and science in a rich, humanistic context."⁵⁵⁹ The University's new architectural designs reflected that evolution. With a plethora of multimedia rooms and resources, labs and studios, classrooms and offices, and meeting and display areas, the new ATEC building celebrated a forward-looking program while also challenging those who taught and studied there to live up to some very large expectations.

Benefactors Peter and Edith O'Donnell were among the 1,000 attendees at the building's opening, which was followed two days later by an inaugural concert featuring a world premiere, *De Rerum Natura*, by UTD Professor and composer, Robert Xavier Rodriguez. The discovery of the Roman poet Lucretius's *On the Nature of Things* in a monastery in 1417 was said to have accelerated, if not triggered, a revolution of arts and culture in Europe later dubbed "the Renaissance."⁵⁶⁰ Rodriguez considered it "a sweeping treatise on both science and the arts."⁵⁶¹ With a cello speaking for Lucretius and a violin for the Greek philosopher Epicurus, whose teachings the poet admired, UTD's Musica Nova orchestra expressed 2,000 years later, in North



The dramatic architecture of UTD's Arts & Technology Building reflected the high hopes held by its benefactors, Edith & Peter O'Donnell, by the University, and by the larger society for the creative potential of emerging electronic technologies.



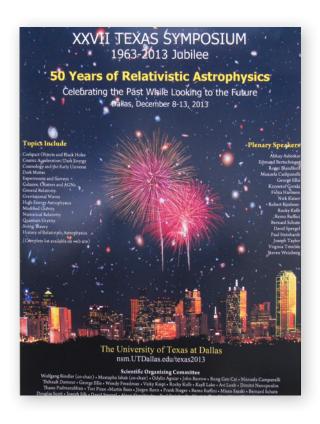
Benefactors Edith & Peter O'Donnell at the dedication of the Edith O'Donnell Arts and Technology Building, October 22, 2013.

Central Texas, the durability of arts and scholarship through the centuries.

Celebration of the new O'Donnell building continued in 2014 with a semester-long series of arts and technology lectures in the structure's 1,200seat auditorium. It was a distinguished line-up, starting in January with Dallas native and former oil executive Robert Edsel, author of The Monuments Men: Allied Heroes, Nazi Thieves, and the Greatest Treasure Hunt in History, and ending in April with Mae Carol Jemison, a physician, engineer, and astronaut who flew aboard the Space Shuttle Endeavor in 1992 and was also an accomplished dancer and choreographer. In between were Christian Belady, a UTD master's degree alumnus and General Manager of Cloud Infrastructure Strategy and Architecture at Microsoft, where he helped build the technology of cloud computing; and Vinton Cerf, winner of the National Medal of Technology, the Turing Award, and the Presidential Medal of Freedom for his central role in creating the Internet. If success bred success and excellence attracted excellence, UT Dallas was cultivating both as the calendar turned from 2013 to 2014.562

No better confirmation could be found than in downtown Dallas in December 2013, where the University presided over the 50-year celebration of the biennial Texas Symposium on Relativistic Astrophysics, the Symposium's 27th gathering since its inaugural in Dallas in 1963.⁵⁶³ The Texas Symposium's topics had always been arcane to the general publicquasars, pulsars, and the like-but no less compelling for their mystery, as they stretched popular understanding of the cosmos to unimaginably infinite dimensions. NSM'S Wolfgang Rindler, who had attended the original event, and his UTD colleague Mustapha Ishak-Boushaki, co-chaired the 2013 Symposium, where subjects such as black holes, dark matter, gravitational waves, and neutron stars continued to fascinate scientist and lay person alike. The international prestige and intellectual authority of the Texas Symposium reflected well on the University, recalling its high-powered origins in the Southwest Center for Advanced Studies (SCAS) and presaging UTD's own jubilee celebration, approaching in 2019.

The Texas Symposium on Relativistic Astrophysics and the Edith O'Donnell Institute of Art underscored UTD's international presence, which expanded further in May 2014 when UTD's Center for Global Collective Action, housed in EPPS, held its fourth annual Terrorism and Policy Conference (soon to be renamed the Political Violence and Policy Conference) in the University's Cecil H. Green Hall. Center Director and EPPS professor Todd Sandler was the author or co-author of several books on terrorism, international economics, and



global politics, including Global Collective Action (2004) and, with Walter Enders, *The Political* Economy of Terrorism (2012). He viewed the conference as "the best terrorism conference in the world." with noted experts from several countries contributing, and with their papers published in a single-issue, peer-reviewed journal. Topics were wide-ranging and included the link between terrorism and the arms trade, causes of domestic right-wing violence in the United States, and the correlation between terrorist actions and U.S. support for oppressive governments. One of Sandler's studies, conducted with a colleague from Spain, had required obtaining data from the international police agency, INTERPOL, the first time such access had ever been granted to outside researchers. Sandler attested that INTERPOL subsequently made good use of the results.564

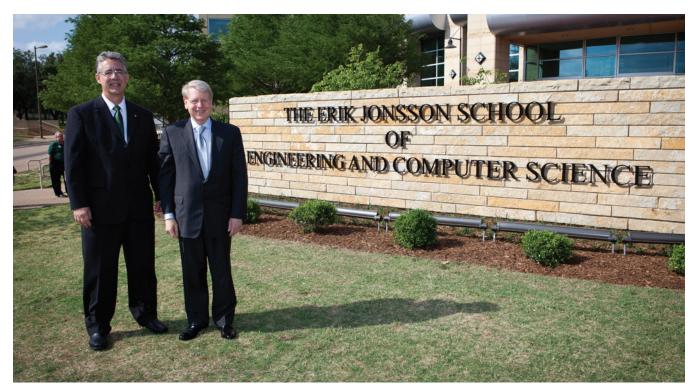
Outstanding Students: ECS Senior Design, Chess

Useful research was more than an engaging ideal for ECS seniors; it was also a requirement, as all of them completed a team-conducted, "real-world" design project under the guidance of an industry mentor and a faculty member. Mark Spong, who succeeded Bob Helms as ECS Dean in 2008, envisioned a capstone course, UTDesign, that would enable students to bridge the academic and industry worlds. An IEEE Fellow and an award-winning researcher and developer of robotics software and hardware, Spong himself had crossed that bridge many times in his career. Starting in 2009 with six team projects, UTDesign expanded to more than 40 projects by 2014.

The course posed major challenges to young engineering and computer science majors, but the University also provided them with substantial resources, including a 30,000 square-foot studio in the Synergy Park North (SPN) section of the campus. The studio was amply equipped by industry donors such as Texas Instruments, which constructed a special design lab for the facility in 2014 that could handle 29 projects, with the capability to accommodate up to 56. Industry participants worked with student teams and faculty advisors to develop project challenges with specific goals.

ECS students proved remarkably adept at reaching these goals—so much so that they began winning national contests year after year. Three of the four UTD teams that submitted projects to the annual Capstone Design Conference in Rochester, New York, in 2016 were accepted as finalists, surpassing the finalist rate for any other participating university. One of the three won first place over competitors from 21 other schools with an injection device aimed at helping restore control of the bowels in cases of incontinence. The other two UTD finalists fashioned a wearable device for calculating a user's hydration level, and a method for using smartphone-based alarm to send signals quietly to a wearable, wireless earbud.

Still another UTD team earned top honors at the 2016 Manufacturing Science and Engineering Conference of the American Society of Mechanical Engineers (ASME). Team members developed a mechanical alternative to the manual method of testing the adhesion of optical lens coatings by placing tape on the lens, pressing out the bubbles, then removing the tape to see how much



Mark Spong (L), shown here with President David Daniel, became ECS Dean in 2008. He introduced the idea of a "capstone" project for all ECS seniors.

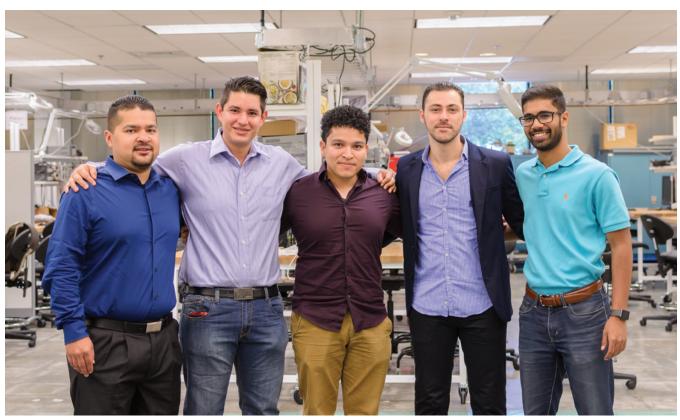
coating residue adhered. In 2017, a UTD mechanical engineering team again won first place at the ASME conference with a robot that could replace a manual element in the assembly of Raytheon radar devices.⁵⁶⁵

These were all highly technical projects geared toward solving specific industry-related problems. They generated valuable hands-on experience for students, who were able to obtain their preferred jobs on graduating, launch "start-up" ventures inspired by their UTDesign experience, or continue their education in graduate school. The teams also drew on several different areas such as bioengineering, electrical and mechanical engineering, and computer science, sometimes in collaboration with students from SOM and ATEC. The success of these cooperative projects reinforced for students the importance of multidisciplinary perspectives and, in a broader sense, the University's legacy values of academic innovation and disciplinary cross-fertilization.

UTD's chess team also maintained its stature in national and world rankings, as senior physics major

and Grandmaster Conrad Holt won the 2014 U.S. Open in Orlando, Florida, in a tiebreaking, time-limited game that lasted just five minutes. "Most games take a few hours," Holt explained. "Only the tiebreakers work like that." Chess program Director Jim Stallings and Coach Rade Milovanovic made sure that team members kept their academic priorities in place while competing. Holt remembered a clear example in 2012 when the U.S. Championship Invitational took place during UTD's exam week and a chess team official had to proctor one of his exams between games. Sophomore Holt finished the remainder of his exams when he returned to campus.⁵⁶⁶

Coach Milovanovic sought to close competitive chess's gender gap by recruiting talented women players to UTD's team. "In our chess camps we see many, many girls," he said, "but the question becomes, 'Where do they go afterwards? Do they drop out of playing?" Milovanovic saw the gender gap as a global problem, and just as he recruited worldwide for men, he also looked overseas for potential women chess champions. His efforts were rewarded in 2014 when he recruited finance major



ECS mechanical engineering students (L to R) Zain Shariff, Joey Nahlous, Bayron Murillo, Gerardo Ramirez, and Luis Soria won first place at the 2016 Manufacturing Science and Engineering Conference of the American Society of Mechanical Engineers (ASME) with their senior capstone UTDesign project.



Bioengineering and mechanical engineering students (L to R) Anjani Penumatcha, Jenny Trieu, Priyanka Das, and Ellen Shih created 3D printed models for Children's Health in Dallas to help parents understand cleft lip and palate.

and International Master Miriam Danelia, winner of the European Junior Chess Championship, and finance and computer major Alekhya Nandula.⁵⁶⁷ Since 1996, chess mastery had symbolized UTD's reputation as an intellectual powerhouse. Twenty years later, it also represented the University's values of global diversity and gender equality while confirming that its excellence was not flash-in-thepan but consistent and enduring–crafted into, not grafted onto, UTD's academic culture.⁵⁶⁸

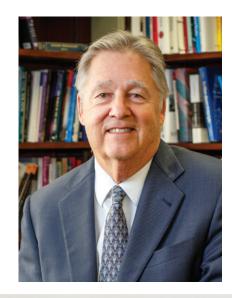
Honors College

In August 2014, the Academic Senate unanimously approved a proposal to consolidate the University's various honors programs, initiated by Deans Dennis Kratz and Mike Coleman, into a formal administrative organization by creating an honors college. UTD's growth and its success in attracting National Merit and other top scholars had swelled its honors ranks from 60 students in 1997 to more than 1,400 by 2014, calling for new levels of organization and administration. The Regents agreed, making the UTD Honors College official in November. EPPS Professor Edward Harpham, who had directed the Collegium V program since 1998, was named the Honors College's first dean, now coordinating such programs as the McDermott Scholars, the Texas-based Terry Scholars, the Archer Fellowship Program, Collegium V, Phi Kappa Phi, and the National Merit Scholars Program.⁵⁶⁹ In fall 2017, the Honors College added a Liberal Arts cohort aimed at increasing the number of participating A&H and EPPS majors.570

Later, in 2016, Margaret McDermott made yet another gift to UTD to support undergraduate excellence, this latest an endowment of \$10 million for support of undergraduate research. As a condition of her gift, she stipulated that the Honors College be renamed the Hobson Wildenthal Honors College, in recognition of her appreciation of his dedication to ensuring UTD's academic vitality. EPPS Professors Nicole and Alex Piquero donated a plaque for the newly named college, citing Wildenthal's "dream that UT Dallas offer America's best students



Edward Harpham, who had directed UTD's Collegium V Honors Program since 1998, was named dean of the University's new Honors College in 2014 when all UTD's honors programs were given a single organizational home.



The Hobson Wildenthal Honors College

Hobson Wildenthal served as the Chief Academic Officer of The University of Texas at Dallas from 1992 to 2017. The Honors College is the realization of his dream that UT Dallas offer America's best students unsurpassed opportunities and support for exploration, growth, and fulfillment, through personalized programs of individual and collective engagements with outstanding fellow students, leading faculty, great art, and world travel.

A gift from Drs. Nicole L. and Alex R. Piquero

In 2016, the Honors College was renamed the Hobson Wildenthal Honors College in honor of the provost's long-time commitment to UTD's academic vitality. The plaque expressed Wildenthal's ideals for undergraduate learning. unsurpassed opportunities and support for exploration, growth, and fulfilment through personalized programs of individual and collective engagements with outstanding fellow students, leading faculty, great art, and world travel." It was, Wildenthal reflected, "The kind of university I wished I had gone to."⁵⁷¹ It was also the kind of university that thousands now attended, in no small part due to Wildenthal's steady application of visionary pragmatism over a quarter century.

ATEC and the Limits of Interdisciplinarity

Wildenthal had to draw on that experience to address growing pains of the Arts and Technology (ATEC) program. This academic innovation had been launched in the School of Arts and Humanities by Dean Dennis Kratz and Professor Tom Linehan, who had prepared the way in 2002 and 2003 by constructing curricula and coordinating collaborative teaching assignments with ECS Associate Dean Andy Blanchard. Their enthusiasm was understandable. Everyone supported art, and most everyone hailed the transformative potential of new digital technologies. What could be more exciting than bringing these two fields together to create something new? "I was dreaming of a new kind of education," Kratz later said, "and it wasn't arts and technology-it was arts and technology embraced in a larger humanistic context."572

It was a pioneering notion, and if it was not entirely clear how it would work when translated into specifics, Kratz was not deterred. He had been there before at UTD, where A&H faculty in the 1970s deliberately overrode academic convention in pursuit of innovative approaches and new perspectives. Now UTD would do it again. The new program, launched in spring 2004, offered bachelor's and master's degrees, and in 2011 added a Ph.D. sequence. In 2006 the program extended its scope by including a field termed "Emerging Media and Communications," or EMAC, which encompassed new social media, blogging, podcasting, and web-based writing. From one point of view, ATEC's purview was urgently relevant and prescient; from another, though, it was amorphous and difficult to grasp.

By 2014, ten years after ATEC's start, it could be considered a great success by one fundamental standard, namely enrollment. The ATEC-EMAC majors numbered 1,300, while the total for all of the other majors in A&H was only 700. Most of its students found good jobs, although some encountered difficulties finding work in areas like animation, where, as freshmen, many had dreamed of landing after graduation.⁵⁷³ Meanwhile, some traditionally "interdisciplinary" A&H faculty found it difficult to accept the different standards of achievement that their newer ATEC colleagues valued.⁵⁷⁴

What was the best strategy by which ATEC could achieve its full potential?⁵⁷⁵ President Daniel joined Wildenthal in discussing the matter with the Academic Senate in November 2014. There seemed no solution that satisfied everyone. Many ATEC faculty desired to be free to set their own standards of professional accomplishment. Other A&H faculty and administrators were opposed to seeing "their" expansion of interdisciplinarity short-circuited. And the central administration was not enthusiastic about creating new units.

After months of emotional discussions, the decision was made for a fresh approach, and on February 12, 2015, the Regents approved UTD's recommendation to separate ATEC from A&H and establish it as a separate school. The University began a national search for a dean with the requisite scholarly and leadership skills, and in spring 2016, Anne Balsamo, former dean of the School of Media Studies at the New School in New York City, joined UTD as ATEC's new dean.⁵⁷⁶ Balsamo had worked at the Georgia Institute of Technology and the University of Southern California, as well as in private industry, and had authored Designing Culture (2011) and Technologies of the Gendered Body: Reading Cyborg Women (1996). On accepting her appointment, Balsamo stated that she relished the opportunity to "build a school when you don't have any blueprints."577 Meanwhile, students hoped that the reorganization would iron out the program's kinks.⁵⁷⁸

David Daniel Departs

The University community and Dallas received a major surprise and shock in May 2015 when Daniel David announced that he had accepted a position as deputy chancellor of The University of Texas System, reporting to the new Chancellor Bill McRaven, and would be leaving UT Dallas. A crowded and emotional gathering on June 30 in the Student Union's Galaxy Room attested to Daniel's popularity, and to the gratitude the University community felt for his ten years of leadership. Hobson Wildenthal later reflected on what placed Daniel, in his estimation, among the "top 10 percent" of university presidents. "He was unflappable and extremely articulate. He had this wonderful persona of positive optimism, but at the same time he was in no way a fool nor did he offend by exaggerating. And he pushed the envelope, which is what a president should do."579

In the Galaxy Room, Provost Wildenthal, who would succeed Daniel the next day as UTD's interim president, offered a memorable tribute. "UT Dallas was incredibly lucky when the powers that be and David Daniel mutually agreed that he would become our president ten years ago. It would have been impossible for us to do better. I already miss him. Tomorrow, I am going to miss him infinitely more."⁵⁸⁰ Could UT Dallas sustain into the future the progress it had enjoyed under David Daniel?

UTD's momentum seemed unabated as President ad interim Wildenthal delivered the annual "State of the University" address to the campus community in November 2015. He noted the rise of total enrollment to 24,532 students and once again the "largest ever" freshman class of 2,691 with its largest ever number (102) of National Merit Scholars and its national scope of 42 different states. He also highlighted the latest group of young faculty members earning career awards and the growth of research funding. In comparing the achievements of UT Dallas to those of peer institutions of the University of California System, he noted the relative superiority of UTD students and the clear inferiority of UTD funding, a combination



UTD's presidency formally passed from David Daniel to President (interim) Hobson Wildenthal on June 30, 2015. Wildenthal spoke for all when he said, "UT Dallas was incredibly lucky when the powers that be and David Daniel mutually agreed that he would become our president ten years ago. It would have been impossible for us to do better."

of tuition and fees and state support, relative to those schools. He also mentioned the geographic limitations to UTD's further expansion. "We have 440 acres of core campus land given to us by our founders," he observed, "and it's an island with some pretty steep cliffs." As a result, future growth was likely to be "up" in the form of multistory buildings rather than simply "out." Nevertheless, construction continued apace with the rise in enrollment and the hiring of full-time tenured and tenure track faculty, now numbering 552.⁵⁸¹

More Growth in Facilities and Capabilities

A new, 108,000-square-foot extension of the Jindal School of Management opened in time to celebrate the School's 40th anniversary in 2015, and to accommodate its burgeoning population of 8,000 students, 270 faculty members, and 77 programs.⁵⁸² SOM was expanding not only in size but in purpose. Since 2009, UTD students, mostly from SOM, had volunteered in a nationwide program to help low-income



Like its neighboring facility, the NSERL, the Bioengineering and Sciences Building was designed to encourage collaboration across disciplinary lines by housing scientists from various disciplines under the same roof.

taxpayers prepare their returns. In 2013, for instance, they helped more than 2,200 taxpayers in the Dallas area realize \$5.5 million in refunds, at a savings of \$475,000 in tax preparation fees.⁵⁸³ But the broadened perspective and "real world" understanding gained by the student volunteers was something Dean Pirkul thought desirable for all SOM undergraduates. In 2014, then, SOM introduced an internship requirement, and in fall 2018 a 100-hour community service requirement. "I see our role as producing not accountants—yes, they will have jobs—but citizens," Pirkul explained.⁵⁸⁴

The critical institutional need for facilities for experimental research in science and engineering was addressed during the 2015-16 winter break with the completion of the Bioengineering and Sciences Building (BSB), now UTD's largest academic structure. BSB was designed to provide homes for faculty and student researchers in chemistry, biology, neuroscience and bioengineering. It connected on multiple levels with the NSERL building, thus providing functional access to the unique assets of NSERL–the "clean room" and the vivarium–as well as to a much larger population of researchers.

Meanwhile, Phase II of the Campus Landscape Enhancement Project, dealing with the northern portion of the campus, continued to block walkways and impose detours on pedestrians who reminded themselves with a sigh that it would all be worth it someday. Asking for patience during the "ceaseless construction process," Vice President of Administration Calvin Jamison struck the dominant chord. "The perpetual excitement that is so much of the part of the UT Dallas story continues to transform this campus and culture."⁵⁸⁵

The growth in campus facilities continued to surge as UTD entered the second half of the 2010 decade. Behavioral and Brain Sciences Dean Bert Moore and Callier Center Director Tom Campbell oversaw a \$22 million expansion that added 50,000



The ECS West Building, opened in 2018, is the home of the Jonsson School administration and the Department of Mechanical Engineering. The glass structure is almost entirely transparent, revealing the workings of elevators, pipes, wiring, and I-beam supports.

square feet to the Richardson clinic as well as more research space for BBS. A second, fee-funded Student Service Building, linked to the first, was opened in early 2017, providing an additional 68,000 square feet for student activities.

In 2016, the demolition of the Conference Center building, which dated back to 1978, to make way for another engineering building, offered further recognition that campus land had to be carefully conserved. This third element of the Jonsson School complex was designated, for the time being, Engineering West. This complex 200,000-squarefoot, \$100-million facility was designed to house the teaching and research activities of the mechanical engineering program as well as the Jonsson School administration. It featured a 300-seat auditorium named for Dr. Alexander Clark, former vice president for academic affairs. Under new UT Regents guidelines, Vice Provost Inga Musselman oversaw its design and construction. A year later, work began on a new Science Building, slated to open in 2020. The 180,000-square-foot building was designed to provide a permanent home for the university's patiently peripatetic Physics Department and to address the university's ongoing need for modern classrooms.⁵⁸⁶ Its location on campus, just north of the Science Learning Center, occupied the site of the fabled "Art Barn" (aka the Visual Arts Building of 1978) beloved by generations of Arts and Humanities students. The costs of bringing the Art Barn up to modern safety standards and the need to build "up" on valuable land in the heart of the campus made its demolition an inevitable, if painful, decision.

The Dallas branch of the Callier Center, adjacent to the campus of UT Southwestern Medical Center, had always facilitated collaborative work such as the transformative introduction of cochlear transplants, which involved not only surgery and



The Davidson-Gundy Alumni Center, a gift of UTD alumni Charles "Chuck" Davidson and Nancy Gundy Davidson, opened in fall 2017 and heralded a new era of alumni engagement for UTD.

speech therapy but also engineering subtleties of signal processing and miniaturization. Such synergistic potential continued to motivate efforts to provide UT Dallas faculty with physical facilities in or very close to UT Southwestern, such as the Center for BrainHealth's Goad Building. Dr. Sandra Bond Chapman led a successful campaign to raise \$30 million of private support to build a second building next to the Goad Building on Mockingbird Lane. The Brain Performance Institute opened there in summer 2017 and now houses two new, brain-scanning MRI machines made possible by donations from the Meadows Foundation. UTD also leased laboratory space in the heart of the UTSW campus, as well as space nearby, for the Center for Vital Longevity.

In September 2017, university officials, including a visiting David Daniel, dedicated the new Davidson-Gundy Alumni Center and thanked the guests of honor, stellar SOM alumni Chuck and Nancy Gundy Davidson, whose \$15-million gift funded the facility. The ceremony, and the building itself, expressed the university's commitment to increasing the role of UTD's growing alumni network in shaping the institution's future.⁵⁸⁷

As UTD's enrollment continued to surge, providing housing for students remained a high priority. In the past, the University had taken two different approaches—apartments and residence halls. When the last of the 65, two- and three-story apartment buildings was completed in 2008, a total of 2,200 students were living in what was called University Village. Then, in 2009, UTD took a very different tack, building a succession of five, multistory residence halls aimed at accommodating freshmen. But in 2015, UTD undertook two other housing initiatives. In the first, the university designed two large apartment buildings to be located on the southwest corner of campus, on the site of the informal pitch used intensively over the years by the UT Dallas champion cricket team. The Canyon Creek Apartments were intended for graduate students, with a potential capacity for 780 residents. In recognition of the importance UTD places on international inclusion, the University proceeded, in cooperation with team members, to design and construct a formal cricket pitch for future use by the team.

The second initiative was quite different. UTD engaged a private developer who specialized in campus housing and entered into a long-term lease of University land immediately north of Synergy Boulevard, across from NSERL and the Richardson Callier Center. The resulting Northside complex consisted of apartments, townhouses, and commercial shops. The first phase of apartments filled up with nearly 600 students for the fall 2016 semester, a success that led quickly to the construction of more apartments with the capacity to accommodate 900 additional students, who moved in for the fall semester 2018.⁵⁸⁸ Plans are currently underway for a significant expansion of the commercial amenities as well as apartment accommodations for up to 1,000 more students by fall 2021.

This last development will take Northside all the way to the boundary fixed by the old "Cotton Belt" railroad line. Plans have now been approved to utilize this track for a new Dallas Area Rapid Transit (DART) link called the Silver Line. The Silver Line will run between Plano, Texas and the Dallas-Fort Worth International Airport, with ties into the larger DART transportation network. A new DART station will be built on University land on the north side of the rail line across from Northside, with consequences presently difficult to predict.

Alumnus Wins Nobel Prize

UTD had not had to wait for the stars to align in order to reach academic excellence. Still, a special star, long incubated, shined a brilliant light on the University in the hour before dawn on October 7, 2015. A call from Stockholm to Chapel Hill, North Carolina awakened UTD alumnus Aziz Sancar to tell him that he had been awarded the Nobel Prize in chemistry. Aziz and his wife, Gwen, had both earned Ph.D.s in molecular and cell biology at UTD in 1977. They married the following year, completed postdoctoral research at separate medical schools, and then accepted positions in the Medical School at the University of North Carolina at Chapel Hill, where they were still working when the Nobel announcement arrived.

Aziz had practiced in rural Turkey after completing medical school in Istanbul, but in the early 1970s his interests turned to researching physiological processes. He visited Johns Hopkins University in Baltimore, where he learned that biophysicist Claude Stanley Rupert, an expert in the mechanisms of DNA repair after damage by agents such as ultraviolet radiation, had departed for Dallas nine years earlier. DNA repair fascinated Sancar, so he wrote Rupert and asked if he could work with him at UTD. Rupert sent back a noncommittal reply in order to buy time to check with his former colleagues at Hopkins about this eager young doctor. Instead of waiting, Sankar flew to DFW International Airport and hailed a cab. The driver mistakenly took him to the University of Dallas, then to UT Southwestern Medical School, and finally to UTD in Richardson, where Sancar found Rupert in his office. "That was Aziz," Rupert recalled. "When he wanted to do something, nothing ever got in his way. We gave him a brief examination just to see what he'd learned. He knew cold everything we asked him."589

Sancar's subsequent contributions led to recognition from Stockholm, a scientist's ultimate acclamation. Two years before the Nobel award, Rupert had opined that Sancar was "the best student I ever had."⁵⁹⁰ That judgment had just received the highest confirmation. Said Rupert, "I feel like my own career is crowned by this," adding too modestly, "If I've done any good science at all, it's getting Aziz his Ph.D. and getting him on his way."⁵⁹¹ "Having an alumnus named as a Nobel laureate shows that UT Dallas has come of age as an institution," Hobson Wildenthal noted. "For many years we have known we have outstanding faculty and students, but this recognition clearly validates our quality to a broader national and international audience."⁵⁹²

The Nobel Prize: Winner and Mentor

n March 23, Aziz Sancar returned to campus to deliver the 2018 Anson L. Clark Memorial Lecture on his Nobel Prizewinning research and to receive UTD's inaugural Lifetime Achievement Award. Back in 1977, when Sancar had finished his doctoral work under Stan Rupert's direction, the University had barely gotten underway. Walking across campus, Sancar encountered only a few physical reminders of those days, but he still felt at home.

The University's core—its home—was, and always had been, a community of scholars united not by interests but by being interested, not in discoveries per se but by the drive to discover. "UT Dallas was created with the right DNA, that of high scholarly standards," Hobson Wildenthal observed. Those standards had remained constant through half a century of unceasing change, creating a sense of homecoming for a former student. Sancar's mentor, Stan Rupert, was not in the lecture hall to welcome him, for he had died the previous year at the age of 97, having just spoken with Sancar on the phone. "He was like a father to me," said Sancar at the time, "and I will miss him very much."

In retirement, Rupert and his wife, Clara, had volunteered in a neonatal intensive care unit, holding babies to encourage vital links between their vulnerable worlds and the wide future outside. From the beginning of life to its flowering and finale, Rupert expressed the compelling absorptions that drove science, nurtured scholarship, and responsibly husbanded their best fruits. As a community of scholars, the University of Texas at Dallas likewise sought to marshal those energies, amplify them across an expanding spectrum of disciplines, and enrich the world beyond its borders.



Aziz Sancar stands next to a column of phosphocellulose in a UT Dallas lab in 1977.



Stan Rupert (L) and Aziz Sancar, October 29, 2015, three weeks after Sancar was awarded the Nobel Prize in Chemistry.



On July 15, 2016, Richard Benson began his tenure as president of UTD. Benson was dean of the College of Engineering at Virginia Tech University before joining UTD.

President Benson takes office

In February 2016, Richard C. Benson observed, "UT Dallas is on a stunning upward trajectory, something that is commented on frequently in academic circles." His remarks came as he accepted appointment from The University of Texas System Board of Regents as UTD's next president. As Dean of the College of Engineering at Virginia Tech from 2005 through 2016, Benson had presided over a similar rise in stature at Virginia Tech, where the college's increased enrollment, rankings, and research expenditures had drawn national attention.

Educated at Princeton (B.S.), the University of Virginia (M.S.), and Berkeley (Ph.D.), Benson had chaired the Department of Mechanical Engineering at the University of Rochester and headed Pennsylvania State University's Department of Mechanical and Nuclear Engineering before taking the deanship at Virginia Tech.⁵⁹³ Benson's official start date was July 15, and on October 27 he was formally inaugurated, with a jazz band recalling Benson's experiences in high school and college as a trumpet player. The new president affirmed his ongoing interest in music and the arts, his commitment to a well-rounded education for all students, and his intention of seeing UTD over the finish line in its sprint toward Tier One status.⁵⁹⁴

The University had approached the tape early in 2016 when it was included in the top, "R1" ranks (doctoral universities-highest research activity) of the Carnegie Classification of Institutions of Higher Education, along with the larger Texas schools Texas Tech, the University of North Texas, and UT Arlington. Then, Interim President Wildenthal, in contrast to some of the trumpet blares of sister universities, had referred to this recognition as merely a milestone on the road to UTD's goal of true national excellence. Those four Texas schools had joined UT Austin, Texas A&M, Rice University, and the University of Houston in the Carnegie R1 rank, comprised of 115 universities nationwide. That was good news, but UTD still needed to fulfill five of seven state criteria two years in a row to qualify for Texas's National Research University Funds (NRUF).595

As UTD neared that goal in 2016, President Benson had declared December 21 "Tier One

Day."596 However, extensive reporting and auditing during 2017 was required before the state would actually part with its funds. Finally, in the summer of 2018, the formal announcement came. Effective September 1, UT Dallas was certified as an Emerging (Emerged) National Research University and would begin to receive the approximate annual NRUF funding of \$7.5 million. The new infusion of funds was timely, for in 2018 state support for UTD declined \$4.3 million from the previous year, despite an enrollment increase of 3,700 students. In March 2018 the Regents approved a 4.5 percent increase in tuition and fee increases. With the state now providing only 18 percent of the University's funding, tuition and fee hikes were a permanent feature of the university's fiscal landscape, and in that of every other public university in the country.⁵⁹⁷

With Richard Benson's assumption of the UTD presidency, Hobson Wildenthal had resumed his duties as executive vice president and provost, but now, completing his 25th year at UTD, he decided it was time to pass the baton that he had held since 1992. The length of his tenure was perhaps atypical for American universities, in keeping with UTD's atypical history, but it was not unusual at UTD. Alex Clark and Wildenthal had served in this role for a combined 42 years of the University's then 47 years of existence. Other UTD academic administrators also served for extended terms, including Bert Moore, Dean of the School of Behavioral and Brain Sciences (1989 to 2017), Dennis Kratz, Dean successively of Undergraduate Education and then of the School of Arts and Humanities (1994 to 2019), George Fair, Dean of the School of Interdisciplinary Studies (1994 into the future), and Hasan Pirkul, Dean of the Naveen Jindal School of Management (1996 into the future). No UTD administrator, however, could match the record of John Wiorkowski, Professor of Statistics, who served as a key officer in the Office of Provost and Vice President for Academic Affairs from 1980 until 2019, when he retired as vice provost.

In response to Wildenthal's decision, President Benson ordered the commencement of a national



Long-serving deans Dennis Kratz (L) and Bert Moore on the Commencement stage.



George Fair with a participant in his "Children's University" held in the summer for children in homeless shelters.



John Wiorkowski was a stalwart member of the Provost's Office for 39 years.

search for a new provost in the spring of 2017. A search committee combed through more than 100 applications and then interviewed the leading candidates in private at an off-campus site. In autumn, four chosen finalists were interviewed by representatives of the UTD community on campus. Finally, in November, President Benson announced that he had selected Inga Musselman to become UTD's next provost effective December 1, 2017.

Musselman, an analytical chemist, received her Ph.D. from the University of North Carolina at Chapel Hill and joined UTD's chemistry department in 1992, following postdoctoral work in materials science and engineering at North Carolina State University. Her research interests centered on applying scanning probe and electron microscopies to a variety of materials structure problems in fields such as bio-nanotechnology, gas separation, and fuel cells. Musselman was also active in professional organizations such as the American Chemical Society, the North American Membrane Society, and the Microbeam Analysis Society (MAS), where she served as president in 2004. As only the second female faculty member in the School of Natural Sciences & Mathematics, she drew the attention of many female students-and a Mercury reporter-who sought her perspective on encouraging women in STEM subjects. In response, Musselman stressed the importance of role models and encouragement such as she had experienced from a pediatrician neighbor during her junior high school years, and which had continued at Gettysburg College in Pennsylvania.598

Musselman had progressed through the faculty ranks at UTD from assistant to full professor. In 2008, Musselman had been appointed as associate provost, and in 2014 as senior vice provost. And while Hobson Wildenthal had assumed the responsibilities as president *ad interim*, she had served as acting provost. Upon hearing of her appointment as his successor, Wildenthal referred to Musselman as "the perfect choice to lead the continuing advancement of UT Dallas's learning and discovery missions during the years ahead."⁵⁹⁹



Chemistry professor and Senior Vice Provost Inga Musselman was appointed acting provost when Hobson Wildenthal became UTD's interim president. After a nationwide search, President Benson named Musselman the University's new provost on December 1, 2017.

Student Achievements Take Many Paths

UTD was airborne and en route to greater heights, but as its leaders had always understood, Tier One was a milestone, not a destination. External validations such as Carnegie R1, Tier One, and other rankings were significant and welcome; but in the end, as in the beginning, it was individuals' pursuit of excellence in their various fields that yielded meaningful achievement. Providing optimal support and encouragement for such efforts was the University's challenge, and in UTD's case, a frequent cause for celebration.

Graduations presented many such opportunities. President Benson presided at a ceremony in December 2016 when George "Sam" Eicke, an assistant director in the University's facilities management department, received his bachelor's degree in Interdisciplinary Studies at the age of 55, after taking classes part-time for seven years. Eicke had come to UTD in 1987 as a groundskeeper, and then became a certified arborist and supervisor of landscape work on campus, a job that grew in scope and complexity under the Campus Enhancement plan. He also oversaw a variety of contracted jobs, such as sidewalk construction, making sure everything was up to UTD standards. Perhaps Senate Speaker Murray Leaf had Eicke in mind when he described UTD as a "community of scholars" in October 2017, underscoring that "in our case, staff are a part of the community."⁶⁰⁰ Eicke's endeavors demonstrated that well-roundedness was not only a balance of arts and sciences but a quality realized in different ways by students with diverse skills and experiences.⁶⁰¹

Accounting major Kyle Schleigh graduated in 2014 as the American Southwest Conference Men's Athlete of the Year, capping an award-winning career as the most decorated student athlete in UTD history.⁶⁰² The following year, senior mathematics major Tommy Trompeter earned the title of best allaround national champion in collegiate club sports gymnastics at a competition in Philadelphia, placing first in the high bar and rings and second in parallel bars.⁶⁰³ And in spring 2017, seniors Sam Konstanty, a two-time Academic All-America soccer player, and Michelle Toro, an Academic All-America volleyball standout, became UTD's first student athletes to earn the NCAA Postgraduate Scholarship, awarded to only 174 scholars nationally in recognition of their accomplishments in sports, academics, and community service. Konstanty and Toro were both mechanical engineering majors who planned to continue at UTD for their master's degrees, in computer science and business administration respectively.604



Basketball star and accounting major Kyle Schleigh was the American Southwest Conference Men's Athlete of the Year in 2014. Schleigh (L) graduated that year as the most decorated student athlete in UTD history. In 2017 soccer and volleyball standouts Sam Konstanty (Center) and Michelle Toro (R), both mechanical engineering majors, became UTD's first student athletes to earn the NCAA Postgraduate Scholarship, awarded to only 174 scholars nationwide. Both continued at UTD as graduate students.

That same spring, student competitors in the University's annual Undergraduate Research Poster Contest continued to demonstrate the range of UTD's scholarship and awards programs, with judges culling numerous submissions for the top entries. McDermott Scholar Matt Carpenter, a sophomore, won first place for designing a protein engineered to deactivate specific immunoglobin antibodies. Freshman Sanjana Ravi placed second with a cancer research project aimed at creating a nanoparticle for localized drug delivery. Carpenter's and Ravi's posters then headed for a statewide competition in Austin. Their research work, and the research and creative work of all UTD undergraduates, was welcomed for publication in a new journal, The Exley, named after benefactor Elizabeth Exley, a research grant writer in NSM's Biology department and in the Office of Sponsored Projects, who had joined SCAS in 1967 and helped it through its transition two years later to UTD's School of Natural Sciences & Mathematics. Exley retired in 1986 but The Exley carried forward her decades of service supporting the University's research mission.⁶⁰⁵

Honors continued to shower on UTD students as the university's 50th anniversary approached. Political science major and McDermott Scholar Nancy Fairbank became the second UTD student to receive the Marshall Scholarship, which she spent attending graduate school in the U.K. Fairbank was also the third UTD student to earn the Phi Kappa Phi's Marcus L. Urann Fellowship award. She had already authored a book on homeless teens and is enrolled in Harvard Law School after completion of graduate work at the University of Birmingham and Oxford University.⁶⁰⁶ Another McDermott Scholar, math major Matt Salm, earned a Truman Scholarship, the second awarded to a UTD student, as well as a Udall Scholarship to further his interests in public service, sustainability, and the environment.⁶⁰⁷ After graduation, Salm added to his (and UTD's) list of honors as he became the university's first Schwartzman Scholar at Tsinghua University in Beijing.

Phi Kappa Phi Fellow and SOM alumnus Blair Flicker (M.B.A. '12) undertook doctoral research in SOM as a Eugene McDermott Graduate Fellow on the human factors involved in daily economic decision-making, earning National Science Foundation as well as PKP support for his efforts. And former McDermott Scholar and National Merit Scholar Hans Ajieren (B.S. '18) also received a Phi Kappa Phi fellowship to support his doctoral work in electrical and computer engineering at Purdue University. Topping out student honors for UTD's 49th year, Sydney Sherman, biomedical engineering major, finished her senior year as a McDermott Scholar by being named the first "1897 Fellow of the Honor Society of Phi Kappa Phi" awardee. Following her earlier award of a Barry Goldwater scholarship, she then won an NSF Graduate Research Fellowship to support her doctoral studies in the Harvard-MIT Program in Health Sciences and Technology.

Taking Stock and Looking Ahead

As UTD's 50th birthday neared, its leadership pondered the tensions between growth and stability as President Benson and many collaborators worked on an updated strategic plan. The new plan anticipated still further growth over the following five years: total enrollment to 35,000; tenured and tenure-track faculty to 710; annual doctorates awarded to 300; endowment funds to \$750 million; and annual federal research expenditures to \$60 million. At some point, however, it was expected that the University's historic growth curve would level off. Would the institution just let the forces of growth play out to some "natural" end, or would it attempt to impose its own limits and decide, ahead of time, how big it wished to become? Historically, size had always driven funding, which had driven quality, which in turn had redounded to increased size, and so on. UTD was not yet ready to interrupt that felicitous cycle, but with so many milestones now passed it seemed wise to consider where, and how, it might be heading.

President's Benson 2018 Strategic Plan benchmarked UTD against seven universities, all members of the American Association of Universities (AAU). Founded in 1900 to promote doctoral-level education, AAU numbered only 62 members in 2018–36



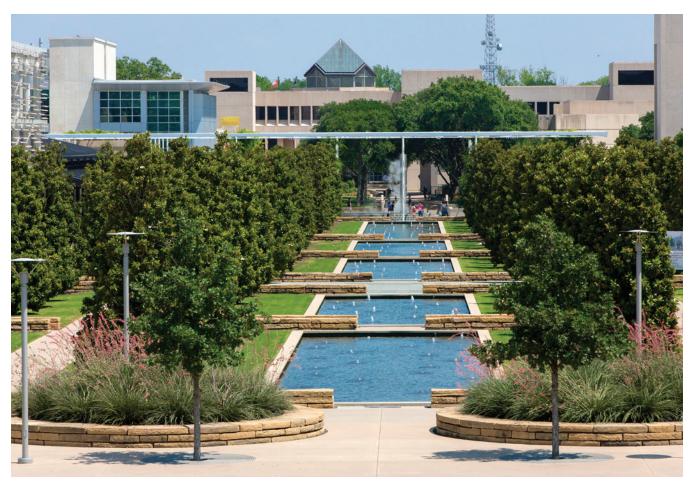
As UTD neared its 50th anniversary, its outstanding students continued to win prestigious national awards. (top row L to R) Nancy Fairbank, Matt Salm, Blair Flicker, (bottom row L to R) Hans Ajieren, and Sydney Sherman.

public universities, including UT Austin and Texas A&M, and 26 private institutions, including Texas's Rice University.⁶⁰⁸ The most recent private addition had been Boston University, in 2012; the most recent public addition was the Georgia Institute of Technology, in 2010. AAU was a small club, comprised of very large, well-established, well-known schools. Would membership be a destination for UTD, or a guiding aspiration?

Upon reflection, the physical state of UT Dallas in 2019 amazed almost everyone who had known

the campus as it had been 20, or even five, years ago. It took but a few seconds to remember how much and how fast the university had changed: the major new buildings north, south, east and west, the Peter Walker Landscape stretching from Campbell Road to Synergy Boulevard, and the overall campus dynamism. Returning alumni found themselves disoriented by these massive changes. They could hardly believe it was the same place.

Less visible developments were equally profound. In fall 2013, David Daniel had celebrated



By fall 2016 the Campus Enhancement Project was complete, from the south end of the campus mall to the peaked Administration Building at the north. The university's transformation was remarkable. President Daniel had wanted UTD to be "a place with looks that measure up to its brains." Now they did. "The landscaping idea was a good idea that turned out to be a great idea," noted Hobson Wildenthal.

a total enrollment of more than 21,000. Five years later, Richard Benson in his third State of the University address noted a total enrollment approaching 29,000–a 36 percent increase over 2013. Nearly 3,900 freshmen enrolling for fall 2018 amounted to a 75 percent increase over that same period and included 172 National Merit Scholars, a number placing UT Dallas an impressive eighth among all U.S. universities. Benson also celebrated \$39 million of annual expenditures of federal research funds and an endowment of more than \$500 million.⁶⁰⁹

The larger educational community took note of what was emerging as a new center of gravity in greater Dallas. The president could note a ranking of UT Dallas in 2018 by *Times Higher Education* as the best U.S. university established within the past 50 years (This last accolade, of course, was a rapidly vanishing distinction as the 50th birthday approached). Concurrently, rankings by *U.S. News & World Report* placed the Jindal School of Management at number 38 in the country and the Jonsson School at number 69. Finally, *Forbes* rated UT Dallas as the Best Value in Higher Education in Texas and judged it 31st in the nation.

Past, Present, and Future

As the University's 50th anniversary year commenced, continued progress was recorded on some of UTD's key performance indices, as fall 2019 freshman enrollment increased again, to 4,087, including 195 National Merit Scholars, and federal research expenditures for FY 2019 increased to \$51 million. But this time of transition had also been presaged by four events that signaled the end of one epoch and the beginning of another. One event harked back to the SCAS days and the birth of UT Dallas, the second rang down the curtain on the entire 1963-2019 saga. The last two heralded surprising new directions for the University.

Francis "Frank" Johnson had founded UTD's space science program in 1963 and later served as acting president and vice president for academic affairs. In 2010, Johnson's wife, Maurine, pledged a major part of her estate to fund endowed professorships in the School of Natural Sciences and Mathematics. When Mrs. Johnson's estate passed to UT Dallas nearly a decade later, the total amount of the gift had grown to \$5.5 million. It established eight endowed faculty chairs, a vital contribution that President Benson confirmed in describing endowed professorships as "the lifeblood of every great university."⁶¹⁰

On May 3, 2018, Margaret McDermott died at the age of 106. If her husband and his partners had founded UT Dallas, during the second 25 years of the university's history she had, in Hobson Wildenthal's estimation, "single-mindedly surmounted all obstacles and made their dreams for their creation come true. Rarely have so many individuals and so many institutions owed so much to one inspired and inspiring leader".

If the deaths of Maurine Johnson and Margaret McDermott marked the completion of the first arc of UT Dallas history, the following two events offered a vision of the next half century, a vision as brilliant as it was unanticipated. President Benson's Strategic Plan had called for enhancing the role of the arts at UT Dallas but did not specify how this would be accomplished. Then, fate stepped in. In the few months between November 2018 and January 2019, UT Dallas was able to announce that it had been given two major art collections to be displayed in museums to be constructed on campus.

The Barrett Collection of more than 400 works by Swiss artists from the late $14^{\rm th}$ to mid-20^{\rm th}

century and the collections of the Crow Museum of Asian Art, each already significant elements of the Dallas cultural world, were both coming to UTD. Their acquisition, which Executive Vice President Hobson Wildenthal judged "profoundly significant" for the University's future, and the two destination museums in which the art would be presented, would alter much more than UTD's physical plant. They also would expand and enrich the University's sense of itself as it approached more closely-and rapidly-the renaissance ideals that had always informed its scholarly mission. Said Wildenthal, "This will be emblematic of our intent and our ambitions, so in one stroke, it should begin to change the community's perception of what we're all about. And what we're all about, really, is becoming a fully-fledged, great research university that touches on every element of culture and knowledge."611

During UTD's first 50 years, generous supporters had helped the University become a highly respected, major research institution known mostly for its science, technology, and management offerings. Its next 50 years, however, were beginning with a complementary emphasis on the arts, which President Benson deemed "an essential facet of any great university."⁶¹² The major gifts by Margaret McDermott and Edith & Peter O'Donnell had, in their own ways, moved UTD in that direction in recent years. These new gifts by Richard and Luba Barrett and by the family of Trammell and Margaret Crow dramatically accelerated such developments.

For all their vision and imagination, UTD's founders could not have foreseen fully the "endless forms most beautiful and wonderful," in Darwin's phrasing, that had evolved from the "entangled bank" of their original plans.⁶¹³ Today, as the University's leaders, scholars, and supporters chart the next half-century's course, the school's core as a community of scholars will remain constant, inviting the curious as well as the committed to abide there awhile, immersed in its largest and most incalculable endowment—the learning of the ages—and encouraged by its most enduring lesson, the agelessness of learning.

Margaret McDermott, A Full Life

n October 29, 2014, President David Daniel unveiled in Founders Hall bronze busts of Erik Jonsson, Eugene McDermott, and Cecil Green. With Margaret McDermott in attendance, he could not help commenting, "Sometimes I feel that our university should be named the University of Texas at Dallas Made Possible by Texas Instruments and Margaret McDermott." When Mrs. McDermott passed away on May 3, 2018, at age 106, the UTD community joined the larger world of medicine, education, and the arts in noting her lifetime of achievements in Texas and the wider world.

Margaret McDermott knew that world well. Before marrying Eugene in 1952 she had been a journalist in Dallas in the 1930s. During World War II, she travelled to India, Europe and Asia as a correspondent for the Red Cross, witnessing first-hand the war's human costs. Afterwards, she committed herself through philanthropy to engaging others in the furtherance of health, education, and the arts, calling on her journalism experience to explain her preference for modesty over notoriety and headlines.

UTD was but one of her many endeavors, but none surpassed the University in appreciation. To Mrs. McDermott it owed its groundbreaking McDermott Scholars and McDermott Graduate Fellows programs; the Library and its many improvements; a wholly transformed appearance, understated as a "landscaping" project; and numerous endowments, gifts, and awards at every turn of the University's first half-century. No recipient failed to note her determination to know and to understand them at a personal level, the keen interest she took in their progress, and her sustaining desire to broaden their horizons. One hundred current and former McDermott Scholars acknowledged that special relationship by serving as an informal honor guard at her memorial service in Dallas on May 8. It is often said of centenarians that they "had a full life." Surely Margaret McDermott lived such a life. Just as surely, she helped many thousands of others to do the same.



Mary McDermott Cook, Grace Cook, and Margaret McDermott



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