## THE HUMAN DIMENSION OF TECHNOLOGICAL EXCELLENCE

## INAUGURAL SPEECH DR. G. WAYNE CLOUGH, PRESIDENT May 12, 1995

Good morning! Governor Miller; Mayor Campbell; Chairman of the Board of Regents Don Leebern, Chancellor Portch; fellow presidents and delegates; distinguished guests, faculty, staff, students, friends, relatives, my wife and best friend, Anne; my son Matthew; and my daughter, Eliza; thank you for your presence. It has been heartwarming to receive greetings from so many groups important to Georgia Tech. Thank you all. Let me also express my deep appreciation to the members of the Inauguration Committee and its subcommittees, particularly its chairman, Tom Galloway, for all the hard work expended in putting the events of this memorable week together.

I was born in the southeastern part of this state in Douglas, county seat of Coffee County. Although my career has led me to many different parts of the world, my small-town childhood left me with indelible memories that shaped me. I remember it as if it were yesterday - boyhood adventures under the hot summer sun on slow-flowing swamp rivers and the feel of bare feet on cool beds of pine needles beneath graceful long-leaf pines. At heart I have always been - and remain - a Georgian and it is gratifying to return to my home state.

My life has been blessed by devoted and caring parents and a supportive family. My parents have passed away, but the debt I owe them has not. The conditions in rural Georgia just prior to the Great Depression did not allow them to go to a university, but they worked hard and sacrificed so their children could. Where others might have seen only the discouragements of the past and the limitations of the present, they were determined to help us realize opportunities they never could. Their example helped me resolve to do no less.

While I owe much to my upbringing, I also could not be here without the efforts of my former teachers who stimulated my intellectual curiosity, provided me with knowledge and understanding, and inspired me to achieve beyond levels I thought possible. All these remarkable individuals, some of whom are with us today, have my lasting gratitude.

Upon coming to Georgia Tech as a freshman, I had my sights set on becoming a civil engineer and a builder of our society's infrastructure. At one of my first assemblies, my fellow freshmen and I were sternly instructed by a dean to "look to your left and look to your right; only one of the three of you will graduate." It was not particularly encouraging to learn before I took my first course that the odds were 2 to 1 against my graduation. Though there were some precarious times for me—particularly in Coach Lanoue's drownproofing course, I did graduate; I did receive the topnotch education that I had hoped to obtain; and I did realize my dream of becoming a civil engineer.

It is a particularly proud moment in my life to return to Georgia Tech as the first alumnus to be named its president. I can just hear the assembly dean speaking to me now. "Clough, look around. There are 96,000 alumni of Georgia Tech; only one can become the first alumni president of the Institute."

Having beaten such odds, I continue to hold out hope that Ed McMahon might one day deliver a \$10 million check from Publisher's Clearinghouse to my front door.

I feel most fortunate to have been given this opportunity, particularly as we prepare for the 1996 Centennial Olympic Games. We prepare knowing that our campus will be transformed into a global village—as well as a global fishtank for all the world to view.

The commitment and expertise that allowed Georgia Tech to help Atlanta secure the Olympic bid is now being employed to help this great city stage the most efficient and technologically sophisticated games in Olympic history. Credit is due to my predecessor, Dr. John Patrick Crecine, for his foresight in helping make this a reality.

Through the Olympics, we will be able to help future generations of students realize opportunities that we alumni never could. That legacy will take the form of new athletic and residential facilities that will be the envy of most universities. Neighborhoods around us will be rebuilt and new, positive development will surround us. And, while other states are dismantling their higher education systems, thereby denying their citizens access to a better way of life, Georgia is moving forward, providing its citizens with hope and improved educational benefits. We inherit these treasures at a time when society, more than ever before, looks to technology to solve its problems and to multiply its economic opportunities. These circumstances uniquely converge to offer Georgia Tech a historic opportunity—but success will only come if we are responsive to the changing environment facing higher education in general, and research universities in particular.

As we work towards our future, it is easy to become overly enamored of the lure of technology, but we must not lose sight that technology is but the means—improving the quality of life is the end. As Samuel Florman says in his book, *The Civilized Engineer*, "... our most pressing objective is to use the world's resources so as to best meet the needs and aspirations of the global population."

Georgia Tech owes its very existence to people who held the long view of what technology could mean to our state and the nation. The great editor of the Atlanta Constitution, Henry Grady, was one of our most vigorous—and vocal supporters. Recognizing that Reconstruction had left the south behind other regions of the country, Grady pressed the legislature to authorize funding for a school of technology. In a key editorial, he predicted the school would produce "great mechanics, great chemists, great scientists, and great businessmen who will make Georgia the glorious empire she should be." Mr. Grady, I stand here today to thank you for your inspiration and to report that we have, and will continue, to live up to the promise that you so eloquently expressed for us. We are even so bold as to believe we can expand on your vision.

Back in the climate of the 1880s, Henry Grady's optimism about the benefit of a school of technology was not universally shared. In fact, one state representative saw in the idea of a technological school "a hydra-headed monster that should be strangled at birth." History does not record whether that gentleman was a particularly rabid alumnus of the University of Georgia.

The Institute survived and matured by remaining true to Henry Grady's vision, the dreams of Tech's foresighted founders, and by the careful planning and sacrifice of many. Each president left the Institute better than he found it and each generation of alumni helped provide greater opportunities for the next generation of students than those they had been given. In the process, Tech faculty, staff, students, and administrators employed Tech's technological means to improve quality of life for the citizens of Georgia.

When I matriculated in 1959, there was an air of excitement and challenge on the Tech campus. The Soviets had just launched Sputnik and the need for an increased emphasis on science and technology was on America's mind. John F. Kennedy had been elected president and my fellow students and I were stirred by his call to "Ask not what your country can do for you, but what you

can do for your country." Dr. Martin Luther King, Jr., was achieving historic distinction for Atlanta as the cradle of the civil rights movement and advancing a vision of peace and equality for those who had been denied the American dream. A Georgia Tech graduate, Ivan Allen, served as mayor and helped Atlanta achieve national stature through his wisdom and understanding of what was right for all. Through the leadership of President Edwin Harrison, Georgia Tech became the first public institution in the south to achieve integration without a court order.

In the intervening 35 years, Georgia Tech has changed dramatically, becoming a full member of those select institutions called national research universities. The dedicated efforts of our academic and research faculty and energetic staff led to national recognition for the excellence of our programs, with recent surveys showing 13 of our schools and colleges ranked in the top 20 of the country. But Georgia Tech is almost unique in the country among other research universities in its attention to the meaning of its scholarship. Tech's research results are not the type to simply take up space in dusty archives. Instead, a network of collaborative relationships between industry and government and the faculty of our academic departments and the Georgia Tech Research Institute assures relevance. Through our innovative Economic Development Institute and its 18 industrial extension offices, we see to it that Georgia's businesses have access to the information that increases their competitiveness and delivers jobs to our citizens.

Along with our program development, enrollment at Georgia Tech from the 1960s to the present almost doubled—from 7,000 to 13,000—and our students became more diverse and more representative of America's multicultural population. Today, women represent 30 percent of Georgia Tech's entering class while minorities constitute over 25 percent of our enrollment, and we are proud to lead the country in the number of engineering degrees earned by African Americans and women.

Emblematic of the progress we have made is the selection this year of two Georgia Tech students as Truman Scholars, a competition so rigorous that one scholarship for any institution would be considered a substantial accomplishment. Let me introduce you to the recipients. Their grade point averages are at the top of the scale, coming in at 3.8 and 4.0, both achieved while they served as energetic leaders in student organizations. Monyette Childs is a native of Madison, Georgia majoring in biology, who plans to go on from Georgia Tech to obtain a medical degree as well as a master's degree in public health. Ayodele (I-Yo-Deli) Embry is an electrical engineering major from Lexington, Kentucky, who plans to work towards a Ph.D after she graduates from Georgia Tech. Monyette is with us today and I would like to ask her to stand as we offer her our congratulations (Ayodele is attending her brother's graduation).

While celebrating their achievement let us reflect on the fact that neither of these students could have attended the Georgia Tech of yesteryear because of misplaced policies about gender and race.

Today, they are leaders of their classes; they are on the way to the top of their professions, and I am proud that this Institute provides the pathway for them to succeed.

Monyette and Ayodele are following in the footsteps of many alumni who have repaid the debt owed to the state of Georgia for providing them a top flight education. Their ranks include the legendary golfer and humanitarian Bobby Jones, civic leader Mayor Ivan Allen, former president Jimmy Carter, Senator Sam Nunn, Nobel Prize Winner Kary Mullis, and renowned architect John Portman. Six Tech men and two Tech women have blazed trails in space as astronauts. Their accomplishments include a moonwalk by John Young and command of the first two Shuttle missions by John Young and Dick Truly. After conquering space, Dick has returned to Georgia Tech and now directs our Georgia Tech Research Institute.

Men and women from Georgia Tech have led, and continue to lead, many of the state's and nation's most successful businesses. Inventive alumni have developed everything from slippery WD-40 to sticky Elmer's glue. Perhaps because they had to pray a lot to survive Tech's tough curriculum, more than 100 of our alumni have been called to the ministry.

Indeed, everywhere you look, you will find Georgia Tech graduates working to make our society more humane, more efficient, and more prosperous.

Looking to the future our preeminent challenge will be to enhance our technological excellence while demonstrating a careful regard for the human dimension of our work. This charge is far greater than that of simply supporting our nation's highly developed technological culture.

In a recent speech, former President Jimmy Carter said, "While we in the U.S. spend our time worrying about guaranteeing access to cyberspace, the most pressing task for millions of people in underdeveloped countries is finding firewood to cook their food." At Georgia Tech, we must make sure that technology serves humanity's larger purposes—especially if we expect our students to be educated citizens of the world and fully participating members of our society.

The essence of our challenge has been captured in the vision statement developed this year by a team of our faculty, staff, students, and alumni. It reads:

Georgia Tech will be a leader among the few technological universities whose faculty, students, staff, and alumni create, expand, and communicate the frontiers of innovation to provide an enriched and prosperous society for the citizens of Georgia, the nation, and the world.

How, then, do we fulfill this vision especially in light of the rare window of opportunity now opening to us? Several imperatives come to mind. We must:

- Recognize that the effects of changes in our society and altered expectations for higher
  education require us to respond if we are to remain as relevant for the next 20 years as we
  have been during the past 20 years.
- Design our curricula to insure we are developing the full range of human talents in our engineers, scientists, architects, business students, computer scientists and other majors to allow them to become leaders in society.
- Insure that the teaching of all students, from freshman to Ph.D. candidates, achieves its deserved high priority at Georgia Tech.
- Continue to expand our national and international reputation by attracting and supporting faculty who will lay the foundations of new knowledge through first-rate applied and basic research.
- Vigorously encourage motivated and capable students, faculty, and staff from groups that are underrepresented at Tech today to become an integral part of our campus community.
- Strengthen opportunities for community service for our students by working with our neighbors and the City of Atlanta to aid and inspire the children who grow up in the shadows cast by our buildings to aspire to graduate from Georgia Tech.
- Use the new Olympic housing and advances in technology to establish Georgia Tech as a model community for promoting learning and scholarship.

- Assist the state of Georgia in support of revitalization of traditional industries and in the development of a diversified economy that will stand up to national and international competition.
- Seek the resources we need to meet our substantial aspirations but never be satisfied that we
  are doing all we can with our present resources or fail to ask ourselves if we are keeping
  faith with the public trust.
- And, finally, although we will be called upon to adapt to new realities, chart a course that does not cause us to lose sight of our core values and traditions.

For those who question if we can do all this, I would point to our record and show all that we have done. Look at what generations of hard work have made possible for this institution and for this grateful president. To those who have preceded me, let me say that I will never forget your sacrifices and dedication and your willingness to seek a brighter future for this Institute. As I gratefully and humbly accept this presidency, I resolve to do no less for those who will follow me and for all those who invest their hopes in Georgia Tech.

Thank you for this great opportunity.