Georgia Institute of Technology
2010 Institute Address
G.P. “Bud” Peterson, President
Monday, August 30, 2010

Part 1: Welcome/Update

Good morning, I want to give a special welcome to the 70 new faculty, 2,668 new students, and the many new staff joining us this fall. I also want to welcome those viewing live by webcast from Savannah and to note that this is being videotaped for the folks in France, Ireland, Shanghai, Singapore, and other locations around the world where Georgia Tech has a presence.

Before I start, I want to introduce members of the senior leadership team:

- Dr. Rafael Bras is the newest member of our senior leadership team. He is our new Executive Vice President for Academic Affairs and Provost.
- Also with us are
- Mr. Steve Swant, executive VP for Finance and Administration
- Dr. Steve Cross, executive VP for Research
- Dr. William Schaefer, VP for Student Affairs
- Mr. Barrett Carson, VP for Development
- Mr. Dene Sheheane, director of Government and Community Relations, and
- Ms. Amelia Gambino, interim associate VP for Communications and Marketing.
- I would like to recognize three individuals who are very important to the success of the Georgia Tech enterprise:
- Mr. John Carter, president of the Foundation,
- Mr. Joe Irwin, president of the Alumni Association, and
- Mr. Dan Radakovich, director of Athletics.
- There are three people who could not join us today that I would like to publicly thank for their service:
- Dr. Mark Allen, vice provost for Research
- Dr. Ken Knoespel, interim dean of the Ivan Allen College of Liberal Arts, and
- Dr. Jim Foley, interim dean of the College of Computing.
- We welcome two new deans, Dr. Jackie Royster, dean of the Ivan Allen College, and Dr. Zvi Galil, dean of the College of Computing.

And finally, a special thanks to Dr. Gary Schuster. Dr. Schuster has served in numerous leadership roles at Georgia Tech, including interim president before I arrived. He has served as our Institute’s provost and EVP for Academic Affairs since September 2006. Dr. Schuster is a nationally known scholar and researcher, and this fall, he will be returning to the School of Chemistry and Biochemistry to continue his important DNA research and teach. Please join me in thanking Dr. Schuster.

This is an exciting time to be at Georgia Tech. This fall we welcomed one of the largest and the best qualified and most diverse freshman class in the Institute's history. Our new freshman class has an average SAT score of 1376 and an average high school GPA of 3.9. More than 35 percent of the incoming class members are women, the largest female population for a freshman class in Georgia Tech's history. This year's freshman class has 55 percent more African American students and 65 percent more Hispanic students than last year.

Tech continues to receive national recognition. Georgia Tech ranks seventh among public universities in the 2011 edition of America's Best Colleges by *U.S. News & World Report*. Georgia Tech has ranked in the top ten of public universities for more than a decade. Last month the Atlanta Business Chronicle printed results of payscale.com's annual college salary report. Georgia Tech is the best in the state, and among the best in the nation, for giving its graduates top earning potential. Earlier this month, we were named to the top 20 in *Sierra* magazine's cover feature, "Cool Schools," in their annual national ranking of America's greenest schools.

There are some exciting things going on in the facilities area. The projects are numerous, but I'll mention a few. We're changing the North Avenue streetscape, including new dining facilities that will be open to the public at the ground level of the dorms that were originally built for the 1996 Olympics. We're building a new gate at Bobby Dodd Stadium that will help with logistics and flow on game days. Construction is well under way for the G. Wayne Clough Undergraduate Learning Commons. The center is slated to open in fall 2011.

From a budgetary perspective, we continue to be challenged, particularly this next year which may well be the most difficult. The chancellor has asked for budget scenarios that comprise 4, 6, and 8 percent budget reductions from the FY11 state appropriation. This is between $9.2 and $18.5 million and is in addition to the permanent cut of $46.4 million we absorbed in FY10, and $20.8 million in FY09. Together this represents a $67.2 million, or 24 percent reduction, from the FY09 base budget. This year we received $36.8 million in federal stimulus funds to help mitigate cuts. However, we believe that these funds may go away in FY11.

At the same time, the Institute anticipates some upside in our economic future with the continued growth in sponsored research. Sponsored awards grew to approximately $558 million in FY10, which is a 15.4 percent increase over the previous fiscal year. And sponsored revenue increased by 9.1 percent to approximately $565 million. The Institute expects continued growth in sponsored research programs in future fiscal years, and we must ensure that funding is available for related facilities and administrative support.

As part of Georgia Tech's move to an undergraduate market tuition rate, the Board of Regents approved a $500 per semester increase in tuition. And we will see additional increases in tuition revenue as the "fixed for four tuition" is phased out. We now have juniors and seniors participating.

All in all, we will continue to be challenged from a budgetary perspective in the next several years, but we remain optimistic and feel as though we have a path forward that can ensure our success.

Part 2: Strategic Planning Process

At this point, I would like to shift gears and talk about the strategic planning process and where we are in the development of a plan that will outline our vision for the years to come. This may seem a little contrary in light of the economic challenges we are facing, and in fact, I have been asked why we would embark on a strategic plan now. The reality is that it is even more important now than it is in good times.

The Strategic Plan is a culmination of a comprehensive and inclusive process that brought together hundreds of members of the Tech community.

- 700 people participated in the breakout sessions at the kickoff last September 3, just 363 days ago.
- We held more than 70 town hall-type meetings with students, faculty, staff, alumni, and friends from the Tech community.
- Last January faculty and students participated in the Days of Engagement, where students and faculty devoted class time to provide input.
- We utilized an open solicitation of ideas on the Strategic Vision website, where more than 1,200 ideas were submitted.
- Finally, we have had numerous focus groups and presentations to students, faculty, staff, alumni, and other members of our community.

Before I start the presentation on the Plan, I want to recognize some of those who provided leadership and helped with the development. Would the co-chairs, core contributors, and members of the various teams and task forces that assisted with the development of the plan please stand and be recognized? Thank you.

Part 3: Tech's New Strategic Plan
Overview

Georgia Tech has grown and thrived as an institution by continuously reinventing itself over its 125 year history, striving, through a process of constant and sustained improvement, to better serve its students, the State of Georgia, and today’s global community.

Over the years the vision of leadership; ingenuity of its faculty, staff, and students; and partnering with community and government organizations and friends and supporters of the Institute have transformed a primarily undergraduate engineering school with a regional reputation into what is now one of the world's best technological research universities.

A mission focused primarily on undergraduate education has evolved to one where excellence in research, education, and service defines our culture.

The transformation of Georgia Tech in the past 40 years is especially remarkable. In 1972, Tech had just $12 million in annual expenditures for academic research and development, ranking 70th in the nation in an early version of NSF’s annual survey of academic R&D expenditures. Today Tech has annual research expenditures of $565 million and is near the top for public institutions without a medical school.

The role of faculty has expanded from teaching to teaching, research, and service and, more recently, to innovation and entrepreneurship. Research is increasingly being done by teams from various disciplines as more complex problems are addressed and funded by federal and other sources.

Our students will live and work in an increasingly complex information age where critical thinking, creativity, and team-based problem solving are essential skills for success in a diverse and globally integrated workplace. A Tech education offers undergraduate and graduate students opportunities to participate in research, innovation, and study abroad programs that give them a competitive advantage upon graduation. Staff are challenged to creatively realign support systems that facilitate these rapidly evolving functions and trends.

A Foundation for Global Leadership

Georgia Tech has benefited from the wisdom and thinking of its leaders, the hard work and enterprise of its faculty, the dedication of its staff, and the success of its alumni in the workplace. In short, the Georgia Tech story is very much a story about people: attracting excellence, and encouraging and rewarding it.

Because of the hard work and diligence of the people of Tech, we are considered to be among the best public universities in the nation, but I think we would all agree that we can't rest on our laurels. We must continue to press forward, both taking advantage of opportunities that come our way and creating new opportunities for growth and success.

Today, all universities educate students, and most pursue research. Great universities also lead.

They lead in education—by defining what and how we teach, and by understanding how our students learn. They lead in research—by creating new knowledge and by identifying new solutions, new directions for research, and new ways in which we perceive the world around us.

It is imperative that we recognize that a great university must not merely respond to changes after the fact, but must anticipate change and shape the future.

The Challenge

Our challenge was to create a shared vision that can help ensure success. We believe that our new Strategic Plan provides greater agility in a rapidly changing environment. It enables us to make investments today to better prepare for tomorrow. The plan states: "*We will recruit, develop, and retain, and engage a diverse cadre of students, faculty, and staff with a wide variety of backgrounds, perspectives, interests, and talents, creating a campus community that exemplifies the best in all of us—in our intellectual pursuits, our diversity of thought, our personal integrity, and our inclusive excellence.*"

It positions Tech for greater prominence and will help us better serve the state, the region, and the nation through our education, research, innovation, and global reach.

And it creates a compelling rationale for continued support and partnership by individuals, philanthropic organizations, business and industry, and government.

Strengths to Build On

Part of the planning process involved assessing our strengths and then designing ways to build upon them. The Georgia Tech community is bound together by a culture that nurtures innovation, by a shared commitment to excellence, by a commitment to collaborative and interdisciplinary pursuits, and by a commitment to both challenge students and enrich their education. We have a tradition of developing leaders.

It is imperative that Georgia Tech remain a top engineering and technology institution focused on both education and research. For it is this that is the cornerstone of our reputation, and any plan must continue to build upon our strengths, especially in the integration of science, engineering, and technology, as we seek to leverage this excellence across all areas of intellectual pursuit and in a wide variety of academic fields and disciplines related to science and technology. We will also pursue new fields that are emerging at the intersection of traditional disciplines, and pursue ways to provide opportunities for lifelong learning.

Georgia Tech's culture of innovation and economic impact is being recognized on a national level. This summer we had the privilege of hosting one of the four Innovation Forums held by the U.S.

Department of Commerce across the country. Commercialization is deeply ingrained in our mission. Commerce Secretary Gary Locke spoke well of Georgia Tech when he talked about the role of research universities in the innovation agenda and noted that here at Tech, we are attracting industries, helping to create new businesses, and preparing students to be entrepreneurs and leaders.

Secretary Locke also commented that Georgia Tech is quickly turning Atlanta into a magnet for innovators and entrepreneurs, taking innovative and creative ideas to the marketplace in order to create jobs, develop new businesses, and drive economic growth—and our expertise in this arena is needed now, more than ever.

The Commerce Department has established a new National Advisory Council on Innovation and Entrepreneurship, and tomorrow in Washington D.C., I will be participating in the first meeting of this group.

Vision

The Strategic Plan includes an updated vision for Georgia Tech. When I arrived not quite a year and a half ago, just about everyone could recite our vision: "Georgia Tech will define the technological research university of the 21st century." But it was not clear how. The new Strategic Plan provides us with a roadmap to achieve that goal. But in addition, we have taken that vision a step further, adding some additional language to define what success will look like:

"*As a result, we will be leaders in influencing major technological, social, and policy decisions that address critical global challenges. 'What does Georgia Tech think?' will be a common question in research, business, the media, and government.*"

We already see that in pockets, but our goal is to establish our Institute as the go-to place, to increase our visibility, and become an institution of preeminence.

Mission

With this Strategic Plan we are introducing Georgia Tech's updated mission. Progress and service have been ingrained in the Institute since its founding. Now, we will continue to embrace those principles as we become leaders in improving the human condition in Georgia, the U.S., and around the globe.

Strategic Goals

While some strategic plans consist of massive lists of specific actions, ours is designed to be strategic rather than tactical. To help us accomplish our mission, our new Strategic Plan includes five overarching goals coupled with both short-term and long-term strategies. It is designed to be a living document, providing a big picture roadmap for where we're going as an Institute, but flexible enough so that we can be responsive to change and open to new opportunities.

The plan should be thought of as request for proposals, a solicitation for ideas, through which the tactics and metrics can and will be developed.

Goal 1: Be Among the Most Highly Respected Technology-Focused Learning Institutions in the World

We are known for innovation in research. As part of the plan we have established the goal "*To Be Among the Most Highly Respected Technology-Focused Learning Institutions in the*

World." Through the strategic planning process, faculty and students have identified the need for enriched interaction and relationships between faculty and students; more problem-oriented courses and curricula; the implementation of electronic learning technologies to enhance faculty-student synergy; continued efforts in globalizing the Tech experience; and increasing flexibility in the Georgia Tech curriculum.

A theme to develop the campus and its neighborhood as a vibrant live-work-learn-play environment emerged from several of the teams during the strategic planning process, and was met with much enthusiasm. Both the university and the city of Atlanta have benefited from Tech Square and Technology Enterprise Park. We want to explore the possibility of creating a revitalized Midtown development zone that will surround the campus and include quality housing, strong schools, world-class informal learning centers, cultural venues, and retail amenities.

Goal 2: Sustain and Enhance Excellence in Scholarship and Research

We will Sustain and Enhance Excellence in Scholarship and Research by establishing a pervasive culture of academic excellence and building on that which already exists. We must work together so that the Institute is viewed as a leader in ideas and innovation—not only in engineering and science, but in all of its programs.

We are committed to ensuring our future success by investing in our people and our physical resources. We will strive to be the best in teaching, research, and application; we will lead in targeted reputational areas of research; we will support faculty-led initiatives for transformative interdisciplinary research; and we will demonstrate relevance and vitality by investing in faculty and infrastructure.

This will include establishing incentives to attract, develop, and retain the best faculty; increase research and classroom space; and focus on issues of global significance and importance.

Goal 3: Ensure That Innovation, Entrepreneurship, and Public Service are Fundamental Characteristics of Our Graduates

Universities are investing in futures: they have a special role in training the next generation of innovators and entrepreneurs. At Georgia Tech, we pay particular attention to equipping our students with the tools they need to make discoveries and the skills necessary to turn those discoveries into products—helping students to realize that an idea is not an invention, an invention is not a product, and a product is not a business.

I would say that Tech students become leaders and entrepreneurs when they graduate, but the truth is they’re doing it while they're still in school.

It is interesting to note that a little more than 40 percent of the individuals filing invention disclosures here at Tech are either graduate or undergraduate students.

Georgia Tech is a leader in innovation, but we must do more. As a part of our goal to ensure that innovation, entrepreneurship, and public service are fundamental characteristics of our graduates, we will establish world-class initiatives to serve Georgia Tech, the state, and other strategic national and international partners; innovate in how we incentivize and support commercialization; and serve in leadership positions at the state, national, and global levels.

Goal 4: Expand Our Global Footprint and Influence to Ensure That We Are Graduating Good Global Citizens

Georgia Tech has an increasingly global presence, and we have a leadership role in providing international opportunities for our students. Today, one in every three undergraduate students participates in some meaningful international program, including study abroad and internships, compared to 1 to 2 percent of undergraduates nationwide and less than 1 percent of engineering students nationwide.

As part of our Strategic Plan, we will implement focused strategies to expand our global footprint and influence to ensure that we are graduating good global citizens. Our strategies are to expand the world's footprint at Georgia Tech, extend and leverage Georgia Tech's impact around the globe; and embrace and support globally engaged students.

Goal 5: Relentlessly Pursue Institutional Effectiveness

Tech's continued quest for sustained excellence rests on the efforts of its almost 7,000 faculty and staff. Our future success depends on all of us working together to relentlessly pursue institutional effectiveness. To do this, we've outlined three main strategies: to continuously improve all support functions and processes; implement a performance-based management system, and develop an entrepreneurial financial model reflecting best practices of both public and private institutions.

Bringing the Plan to Life

These five goals are designed to provide an overarching framework for action plans. It will be up to all of us to bring the plan to life. The goals are of a high enough level that everyone can be included. And to be successful, the entire community must be engaged. The goals are inspirational but achievable, because we will break them down into specific strategies with well-defined outcomes and metrics by which to measure success.

During the planning process, a list of ten Institute-wide ideas emerged that were compelling enough that we didn't want to lose any time during this process in exploring them. I want to introduce those ideas to you and provide a few details about a couple of them. Bear in mind that these aren't the only initiatives. We anticipate that there will be dozens, if not hundreds, more of them as we develop specific plans to implement our goals throughout the Institute. As you leave today, you will have an opportunity to pick up a brochure that outlines some of the details of these ten initiatives.

10 Institute-wide Initiatives

Here are the 10 Institute-wide initiatives:

- Prepare our students for global leadership
- Be the Innovation Institute
- Create an experimental college, the "X" College
- Pursue globally significant grand challenges using our campus and region as a test bed for research and application
- Explore the role that technology could or should play as it relates to law
- Expand and enhance programs dealing with technology and policy
- Create a virtual Georgia Tech campus
- Explore collaborative partnerships
- Provide an educational guarantee
- Establish best business and administrative practices, including a new institutional approach to intellectual property

All of the institutional initiatives are linked to the implementation of one or more of our five institutional goals. Let's explore a couple of them further.

Prepare Our Students for Global Leadership

A key focus of the Strategic Plan is for the Institute to be seen as a global leader and to prepare students for leadership in their careers and communities. Tech already has a number of strong leadership initiatives throughout the Institute. As a first step in maximizing our effectiveness and creating a transdisciplinary, Institute-wide focus, a team will explore existing and possible new leadership programs and make recommendations.

Part of this initiative could be to establish the Ivan Allen Jr. Institute for Leadership, with leading scholars and practitioners of the art and science of leadership. In addition to the more traditional classroom experience, the team will explore the possibility of enabling faculty and student interaction in venues such as short courses and workshops where a culture of innovation and leadership can take root.

To facilitate this process, we have established a Leadership Development Work Group to recommend leadership development initiatives dealing with faculty, students, and staff. People from all across the Institute who are coming together to assess existing programs and develop new ones. Other goals include an interdisciplinary minor in Leadership Studies that would be available to all students and would include multiple tracks creating a living/learning community dealing with leadership development for incoming freshmen, and creating a Leadership Portfolio Project.

Be the Innovation Institute

While Tech is already known for its innovation, we want to position Georgia Tech as the institution known for innovation worldwide, preparing students to be innovation leaders whether their leadership role occurs in university, government, or corporate labs; management; law; or public policy. Initial steps are to explore existing strengths at Tech.

Innovation—as distinct from invention—is central to what we do and is the process that moves ideas from their identification to their use for the betterment of humanity.

Invention transforms the world of ideas, but innovation transforms society by fundamentally changing established norms.

We want to create an institutional culture that values the "innovation/impact or quotient" of Georgia Tech research and serves as an economic engine for the region.

We will explore the possibility of developing a cross-cutting, one-stop, customer-oriented office for Tech faculty and researchers to help map and reduce risks with new technology and increase its value. This office will in one physical location serve all entrepreneurship-related activities including technology transfer, commercialization, and conflict management to ensure success and streamline operations.

We will create, nurture, and sustain an "innovation culture" for Tech students through a formal "Creativity and Innovation Curriculum" and real-world entrepreneurial experiences. This could include a global InVenture Prize; an innovation, creativity, and entrepreneurship minor; an Innovation Foundry/Burdell Center; and formal educational partnerships with other institutions.

We will catalyze entrepreneurial Tech faculty/student interaction with investors, alumni, and the business community and be the intellectual home for the "market" to interact with the best and brightest innovators at Georgia Tech. The Innovation Institute could house Innovation Fellows on

one-year-long innovation sabbaticals where faculty could work on their start-ups, write business plans, conduct market research, or raise capital for their ventures.

Some sample metrics include a tenfold increase in the number of students participating in the innovation curriculum, including expansion to Tech's global campuses and programs within four years.

"X" College

Another proposal that emerged from the strategic planning process was an "X-College" option—where "X" stands for "experimental," as well as "unknown" or "variable." We believe that most of the really important discoveries are going to occur at the interfaces of traditional disciplines, and this would allow students some flexibility and freedom in establishing their undergraduate degree programs. As one option, we could start with honor students and give them the freedom to design programs that will become the bio-informatics or nano/bioengineering degrees of the future.

This would not replace existing colleges, but would serve as a venue in which students could self-select to customize their degrees with faculty guidance and receive a nontraditional certification of their competencies rather than traditional grades and degrees. The X-College would be a test bed of new techniques for balancing core instruction with problem-based approaches, and would be a laboratory for developing alternatives to regular courses taught in semester-length blocks involving custom-designed learning technologies appropriate to different students.

Next Steps

These are just a few examples of the strategies that we will explore to bring these institutional initiatives to life. It may be that upon careful analysis we will not implement all of them, or we may, and probably will, discover other opportunities to improve them. These ten Institute-wide initiatives are giving us a head start on what will prove to be an exciting journey toward implementing our new Strategic Plan.

Academic and administrative units, students, and affiliated organizations will be asked to identify ways they as individuals and their units can help achieve the goals outlined in the plan. This process should not necessarily be thought of as a request for funding, but rather a request for ideas that will help us to shape the Georgia Tech of the future. This does not mean that we will not provide resources to ensure success—we will, but the solution to every problem cannot be more resources. We must also redirect, reallocate, and rethink the way we allocate our resources today.

As in the past, we anticipate that friends of Georgia Tech will want to help us on our path to preeminence. We're looking forward to sharing opportunities with the entire Tech community next month when we launch the public phase of our capital campaign.

The Opportunity Before Us

Today, there is some amazing work being done at Georgia Tech. Teams are already working on solutions for making solar energy economical, improving environmental and economic sustainability, providing access to clean water, improving the urban infrastructure, advancing health informatics, curing diseases, and securing cyberspace, to name just a few. In many ways, we're already designing the future.

As part of our strategic planning effort, we are working to improve our processes to free up resources to do other things. When times are tough is when you really have a chance to make

some changes and set a course for the future. While many institutions are pulling back and retrenching, we think this is a time to be aggressive.

The shared vision outlined in this plan will help us figure out how to continue to improve on what already exists.

Now it's our time. It's our vision, and it's up to us make it happen. Not just for Georgia Tech, but for our state, our nation, and our world. Working together, we can do anything. This is, after all, Georgia Tech.