Kiwanis Club of Atlanta 9/28/10

Dr. G.P. “Bud” Peterson

President, Georgia Institute of Technology

(As written; not necessarily as delivered)

Thank you Nancy (Bedford, club president). I’m honored to be here, and to give you an update on Georgia Tech.

These are exciting times, and in fact, for Tech it is a year of celebrations. We’re celebrating Tech’s 125th anniversary. It’s the 50th anniversary of the Rambling Wreck. It’s the 50th anniversary of the integration of Black students at Tech. In addition, there is some amazing work being done at Georgia Tech that is impacting not only our state, but our nation and our world. In fact, in many ways, we’re designing the future.

Teams at Georgia Tech 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 a few. We are partnering with other institutions and with industry to develop transdisciplinary solutions to some of the world’s most pressing problems.

Tech is considered to be among the best public universities in the nation, ranked 7th by U.S. News and World Report. Last week the Times Higher Education World University Rankings listed Tech 5th among public U.S. universities.

We have 20,000 students, and this year’s freshman class is the best qualified, most diverse and one of the largest in Tech’s history. Sixty percent of them are from Georgia, and almost all are on the HOPE scholarship.

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.

There are some things about Tech that may surprise you. The fastest growing college at Georgia Tech is the Ivan Allen college of Liberal Arts. While music is not required, each year almost 2,000 students participate in music courses or activities. Forty percent of our students study a foreign language as an elective. Today, one-third of Tech students are women, and they lead 42% of our 400 student groups.

What you won’t be surprised about is our strength in engineering. Both graduate and undergraduate engineering programs rank among the nation’s top five. Tech is the Number One producer of female engineering graduates in the country.

Georgia Tech is committed to remaining a top engineering and technology research and education institution as we develop new perspectives on the relationship between engineering, science, and technology, and other human enterprises such as business, government, policy, law, and the arts.
When Tech students graduate, they are highly sought after.

Earlier this month the Wall Street Journal printed the results of a survey of top corporate recruiters whose companies last year hired 43,000 new graduates across 29 industries. They ranked Georgia Tech 7th in the nation including choosing Tech as the number one preference for recruiting engineering graduates, number three for management information systems and number four for computer sciences.

A Georgia Tech education is one of the best investments students can make in their future. This summer 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.

At Tech we attract the best and the brightest, and we feel part of our service to the people of Georgia is to provide a way for every Georgia resident who qualifies to get in Tech a way to do it, regardless of income. We’ve already changed more than 300 lives through the G. Wayne Clough Tech Promise Program. Just this spring one of our Tech Promise scholars graduated in just three years. Before he came to Tech, he lived for a short time in a car with his mother and sister. Now, he has accepted a job, and has been accepted into Law School. What a difference a Georgia Tech education has made for him and his family, and it will continue to provide dividends for generations to come.

Through our research and partnership with business and industry, Georgia Tech is an economic engine for Georgia and the Southeast, with an annual impact of more than $2 billion, conservatively.

In 2008 alone, Georgia Tech programs helped Georgia companies save or create 20,000 jobs.

Georgia Tech is attracting industries, helping to create new businesses, and preparing students to be entrepreneurs and leaders.

The world is looking to us to provide leadership, creativity and innovation for the future. That’s why for the past year, the entire Tech community has been focused on the development of a 25-year strategic vision to position Georgia Tech as the defining technological research university of the 21st century. The process was comprehensive and inclusive, involving faculty, staff, students, advisory groups and business and community leaders. We just launched our new plan on August 31.

**Five Major Goals**

Georgia Tech’s new plan outlines five major goals, and strategies within those goals.

To be among the most highly respected, technology-focused learning institutions in the world

To sustain and enhance excellence in scholarship and research,

To ensure that innovation, entrepreneurship, and public service are fundamental characteristics of our graduates,

To expand our global footprint and influence to ensure that we are graduating good global citizens,
And to relentlessly pursue institutional effectiveness.

Implementing the Plan

Our new Strategic Plan is designed to be a living document—with both short and long-term goals, flexible, changing over time to accommodate changing circumstances and anticipate and respond to the future. We have already taken steps to begin to implement the plan in a number of areas. Let me share a couple of examples.

One of our strategies is to enrich the student experience. As part of that, last week we announced a partnership between Tech and the Woodruff Arts Center giving students unlimited access to the arts in Atlanta at a deeply discounted rate. For just $20, students will be able to have access to all exhibitions at the High Museum of Art and all performances of the Alliance Theatre and Atlanta Symphony through May 2011.

One-third of Georgia Tech students are already enriching their Georgia Tech education with an international experience. Students who study abroad graduate with a distinct competitive advantage and are better prepared to become good global citizens. What if we were to provide a way to help make it possible for all Tech students to study abroad?

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, but we want to maximize our effectiveness and create a transdisciplinary, Institute-wide focus. To facilitate this process, we have established a Leadership Development Work Group to recommend initiatives for faculty, students, and staff.

Innovation is part of the DNA of Tech alumni, faculty, and students. In fact, in the past year, 41 percent of Georgia Tech inventors were either undergraduate or graduate students.

Here’s an everyday example of student innovation. How many of you carry an iPhone?

This month we launched a Georgia Tech iPhone application that was designed by a Tech student. They can use the app to make healthy dining choices on campus, get Tech Trolley information in real-time to let them know where the next campus bus is, find out game schedules of all Georgia Tech athletic events, and reserve a library book (which I know they’re really excited about!).

Building on our reputation for innovation, we want to position Georgia Tech as the institution known for innovation worldwide, preparing students to be innovation leaders. Initiatives could include a formal creativity and innovation curriculum, and catalyzing entrepreneurial Tech faculty and student interactions with investors, alumni, and the business community. We will build on existing strengths. For example, we’re looking to expand our InVenture Prize competition for undergraduate students — a sort of American Idol for those who “invent” rather than “sing.” Not only do the winners receive cash awards; the two finalists receive a free U.S. patent filing from the Georgia Tech Office of Technology Licensing, each valued at approximately $20,000. We also have a very successful program called TI:GER, a unique collaboration between Tech and Emory University Law School that puts together teams of MBA, law, and PhD students to focus on the commercialization of student research. It is nationally recognized for its success in developing entrepreneurs.
In closing, I want to share a powerful example of a faculty member and students working together to make a real difference. Dr. David Ku is our Lawrence P. Huang Chair in Engineering Entrepreneurship and a Regents Professor. Dr. Ku is an MD-PHD with dual roles in both Mechanical Engineering and Management. He was challenged by the head of virology at the U.S. Centers for Disease Control to develop a quick, economical way to diagnose pneumonia, the leading cause of death among children around the world. Pneumonia is a super infection that is often associated with other diseases such as tuberculosis and HIV, and a quick and accurate diagnosis is often critical. Dr. Ku challenged a team of ten Mechanical Engineering and Biomedical Engineering graduate students. They developed devices with valves, actuators, and computers, but he sent them back to the drawing board because each unit would cost around $200. He told them that they needed to design something that would help the poorest child in India, and be a “point of care” device that wouldn’t require a trip to a hospital or clinic. They did it. The new device is patent pending, so we can’t describe it in detail. I can tell you that it will provide a diagnosis within 30 minutes of testing at a fraction of the cost of their original design. It can be done anywhere, all over the world. Now, Georgia Tech MBA students are using it as a test case to develop a triple bottom line company for social entrepreneurship, factoring in profitability, and social and environmental good. Because we had support to establish the chair for engineering entrepreneurship, we were able to have Dr. Ku as part of Tech’s faculty. Because we have Dr. Ku and people like him, we are able to attract the best and the brightest students. Because we have the best and the brightest students, working together, they have created a device that has the potential to help save more lives than any other medical device in the world.

Those are just some of the possibilities before us. At Georgia Tech, we’re in the business of investing in futures. In addition, we’re designing the future. It’s part of fulfilling our mission to be leaders in improving the human condition in Georgia, the U.S., and around the globe.

Thank you for inviting me to share about Georgia Tech with you today. I believe we have time for a few questions.