Legacy of excellence

Interim President
Gary Schuster gives State of the Institute

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From Institute faculty and student accolades to future challenges, Interim President and Provost Gary B. Schuster delivered the 2008 State of the Institute address in the Fertz Center for the Arts to faculty and staff last week.

Titled “A Legacy of Strategic Growth,” the annual address touched on the highlights of the last year, punctuated by 14-year Institute President G. Wayne Clough’s leaving in July to head up The Smithsonian Institution. The interim president focused on Tech’s ascendency in recognition—the seventh-ranked public university for two consecutive years—as well as its growth, in the areas of enrollment, research and square footage.

Expanding borders

New facilities in the past few years have given rise to increased prominence. Both the Biotechnology Complex and the Klaus Advanced Computing Building have taken the Institute in new directions, both in medicine and high-powered computing. And, Schuster said, the Marcus Nanotechnology Building will add another dimension to Tech’s research capabilities.

In addition, the campus will continue to grow while keeping sustainable practices at the fore.

Schuster pointed to Technology Square, the Student Center Commons and the Campus Recreation Center as enhancements to both the academic and recreational aspects of student life.

Tech’s global footprint has grown as well, with Georgia Tech Lorraine offering graduate and undergraduate programs, the Georgia Tech Research Institute’s alliance with Athlone, Ireland, and new partnerships with Shanghai Jiao Tong University. And in the past month, the European Union Commission renewed Tech’s EU Center of Excellence.

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Legacy of excellence

Tech Charitable Campaign spotlight

During the Georgia Tech Charitable Campaign, The Whistle will highlight different organizations to show the broad range of groups eligible for donations. To donate to the organization of your choice, speak with your departmental campaign coordinator and visit TechWorks or the Charitable Campaign Web site.

Beginning 19 years ago by the downtown business leaders association, Trees Atlanta works to preserve and improve the urban environment through planting and conserving trees. More than 1,500 volunteers participate on weekend projects throughout the city, educating and adding more hardwood trees to the urban landscape.

“Contributions from the Charitable Campaign are received as unrestricted funds by Trees Atlanta,” said Cheryl Rottemeier, director of Communications and Administration. “The Trees Atlanta staff is lean and efficient, and we put every dollar to work planting and caring for trees and educating about the importance of trees. For example, $25 per year allows our volunteers to plant one small shade tree in a barren spot where it is needed most; $50 affords us the ability to educate a classroom of 20 children about the importance of trees and to send each of them home with a young seedling to plant; $100 per year allows us to plant a shade tree (and care for it) for one year; $2,500 per year allows us to remove concrete in an urban sidewalk, refill the space with organic soil and plant and care for a shade tree there.”

For more information, visit www.treesatlanta.org.

TRS board voting on COLA change

Proposed changes by the Teachers Retirement System of Georgia (TRS) Board of Trustees would remove the automatic 3 percent annual cost of living adjustment (COLA) to retirement benefits.

Under current policy, a 1.5 percent increase in benefits for retirees is automatically granted twice a year—January 1 and July 1—without board action or approval. The amendment proposes that the board vote to approve the COLA in July and January, up to a maximum of 1.5 percent.

Each July 1 and January 1, the average of the Consumer Price Index (CPI) will be determined, serving as the base index for all employees retiring during either 6-month period. The CPI average will again be determined each subsequent July or January, then compared to the previous six months. If the ratio is equal to or greater than 1.00, benefits may be adjusted, up to a maximum of 1.5 percent.

Conversely, if the CPI experiences a reduction during the same period, then the retirement benefit may be reduced to no greater than 1.5 percent of the full
"With those simulation tools we’re opening up the whole design process so that the systems designer of a product has at his or her disposal the capability to tailor the material. It adds the ability to change its structure, deliver more applica-
tion specific properties and to optimize performance."

—David L. McDowell, Regents’ Professor and director of the Mechanical Properties Research Laboratory, referring to how engineers will eventually design both the product and materials instead of just designing the product, as a result of advanced computational simulation tools. (Industry Week)

Faculty recognition

In the same vein of Clough, Schuster was quick to point out Tech’s strength in the realm of education. He recited the various awards and recognition received by faculty from national organizations over the past few years, including recent National Medal of Science winner Mostafa El-Sayed. And while Tech’s engineering faculty members continue to win prestigious honors, Schuster pointed out that faculty awards are cutting across a wider variety of disciplines. “Tech ranks second in the nation in the number of faculty who have won CAREER Awards through the years, and we are increasingly making our presence known among Sloan Fellows and the membership of the American Association for the Advancement of Science,” he said.

Contributing to Tech’s global impact, several faculty members, such as Bill Koros and Arthur Ragauskas, have obtained prestigious roles at major universities abroad. In the last year, researchers at Tech received more than $445 million, more than ever before, Schuster said Tech’s ability to “smooth the path from research labs to the marketplace” enabled the Institute to spin off nearly twice as many new companies as a similar-sized research university.

Student recognition

Extolling Tech’s expanded undergraduate experience and the opportuni-
ties it affords students, from studying abroad to research opportunities, Schuster said, “Two-thirds of our undergraduates are now engaged in special programs like the Research Option, the International Plan, the Leadership Plan or the Co-op Program that enhance the value of their degree. And we expect that number to continue to grow.”

In both athletics and academics, students’ accomplish-
ments were touted by the interim president. In addition to many teams’ competition in post-season tournaments, five teams were recognized for earning perfect scores on the NCAA Academic Progress Rate.

This academic year’s freshman class, in addition to setting a record for Institute enrollment, was also rec-
ognized for being “the smartest” ever to have enrolled at Tech.

“Most universities either increase their enrollment or they increase the caliber of their students. It is rare to do both at the same time.”

Challenges ahead

In light of a state budget cut, Schuster reiterated the Institute’s commitment to academic excellence, while relating the challenge to Tech’s entrepreneurial strengths, and posi-
tioning the Institute for maximum ben-
efit when the economy starts to grow.

“Times of financial austerity provide an incentive to cast a critical eye on how we are spending our money,” he said. “They offer an opportunity to find new ways to streamline our operations and make them more effi-
cient. Georgia Tech has always been nimble, practical and entrepreneurial, and has often found innovative ways to do more with less than wealthier competitor institutions. It is not a bad thing to also reconsider how we can best utilize our resources to further our goals.”

In addition, Schuster updated the process of the presidential search, stat-
ing that follow-
ing the campus information sessions held last month, the search will become “confi-
dential” for the time being, as the committee has now begun identifying and evaluating candidates. He reiterated the hope that a “short list” of candidates would be identified by spring. “We are hoping that person will arrive on campus next summer in enough time to get oriented before the new academic year begins.”

Advanced planning

In preparation for a new president and a new Strategic Plan, Schuster said the Institute will undergo a peri-

od of planning, as well, making sure “our own house is in order.”

Processes and individual units are under-
going their own review, to ensure integrity and each unit’s function in the current Strategic Plan.

It has now been six years since we adopt-
ed a five-year Strategic Plan, so it is time to assess how well we have done in achieving the goals we set for ourselves,” he said. “We also need to gauge how the changing context in which we operate has influenced those goals and reshaped our aspira-
tions. These timely and carefully considered evaluations will lay the groundwork for developing a new strategic plan under the leadership of the next president.”

And with record enrollment comes another issue: capacity. According to Schuster, the Atlanta campus is mov-
ing close to its capacity. Choices and strategies must be considered in the coming years to ensure both student enrollment and Tech’s research enter-
prise is connected, he says, at least on the graduate level—continue to grow.

Positioned for the future

While challenges facing the Institute provide a certain level of opportunity, Schuster points out that challenges facing our world can be even greater opportunities for Tech to lead the way in research. The Institute’s interdisciplinary attitude serves as a perfect stage for multiple approaches and viable solutions.

From nanotechnology and envi-
ronmental sustainability, to the economic policies and the health care system, Tech’s ability to “smooth the path” enabled the Institute to spin off more than ever before. Schuster said Tech’s work in carbon capture and alternative fuels to clean-
er combustion techniques, for instance, as well as Tech faculty test-
ifying before Congress on environmen-
tal regulations, all point to examples of

Institute expertise.

Georgia Tech’s historic partnership with Emory University has led the way in nanomedicine. “Our research initia-
tives are intersecting with medicine in many places, from helping hospi-
tals to streamline their operations to speeding up the process of translat-
ating research discoveries into patient diagnosis and care,” Schuster said. Engineering, medicine, nanoscale and computing have all converged, offering a unique look into the medi-
cal field.

Schuster also touted Tech’s experience with high-powered computer modeling, which he called the “test-
tubes of the 21st century.” The College of Computing—ranked ninth in the nation—was credited, along with the Institute’s new degree pro-
grams in computational science and engineering.

From nanoscale and astrophys-
ics to community planning and social policies, computer models are able to give researchers a more intimate look than previously available.

“Supercomputers can model the behavior of anything that is too big, too tiny, too far away, or too danger-
ous to deal with in person,” he said.

For his conclusion, Schuster looked back to Oct. 5, 1888, when Georgia Tech first opened its doors.

“Today, we are the beneficiaries of the outstanding efforts of the many gen-
erations of students, faculty and staff who have gone before us,” he said.

“Each of us is here today because we share that same commitment to excellence, and that is what will prop-
el Georgia Tech to levels of promi-

nence in the years ahead.”

For more information...
WIE holds campus conference for high school students

Robert Nesmith
Communications & Marketing

Last week, Georgia Tech hosted nearly 160 high school girls attending the Engineering and Computing Career Conference (ECC), sponsored by the Institute’s Women in Engineering (WIE) program. Held at the Student Success Center, the two-day event provided an opportunity for the students to investigate the 12 engineering majors Tech offers.

“To register for the events, students are required to submit their transcripts and write essays, so it’s somewhat like applying for school,” said WIE Associate Director Sandra Song Hayes.

Conference attendees meet with faculty and students from each of the engineering schools, learning what specific programs and career opportunities are available. Students share some of their experiences at Tech and with other WIE programs. In addition, students attended a luncheon panel of professional engineers.

Two panel members at this year’s luncheon are not only Tech alumni, but also participated in a WIE conference before attending the Institute. Amanda Collard earned her degree in 2007 and now works as a consultant with Alvarez and Marsal Business Consulting. Panelist Lori Reinitz, with GE Energy, graduated in 2008, “I didn’t always know I wanted to be an engineer,” Reinitz said.

“[Women] need to understand what an engineer is, or just how diverse the opportunities were for such a profession,” said Philobos. “We want to help students to consider engineering as a career path.”

Philobos, a senior academic professional with the School of Civil and Environmental Engineering, came to Tech in 1994. Starting as the WIE director in 1997, she began the conference in 1998. “We realized that women didn’t pursue engineering because there was a lack of knowledge about it as a career,” she said.

Of those that attend the conference, we have found that between 55 and 65 percent of them enroll at Tech. It means more when students can hear about engineering from faculty members, students and women who are currently working as engineers.

“This year, the conference welcomed several students from out of state, such as Texas and Virginia. One teacher brought 30 students from a Kentucky high school to attend the event. The WIE program’s two-pronged approach of recruitment and retention has worked to interest women in engineering education, and subsequently moved them forward into careers. Besides ECC, WIE coordinates annual events to recruit middle school students, from ‘Introduce a Girl to Engineering’ in the winter, to the summer’s First Lego League competition and the Technology, Engineering and Computing (TEC) Camp.

For current Tech students, the WIE Excellence Awards Banquet—started in 1999—recognizes those students in the College of Engineering who exhibit excellence and leadership qualities, as well as those who have maintained at least a 3.55 GPA. More than 576 students—representing 37 percent of the students who qualified—attended the conference last year. During this event, current students are able to meet with alumni, faculty and corporate partners. In 2004, corporate sponsors provided nearly $40,000 in scholarships. At last year’s banquet, students’ scholarships totaled $100,000.

Awards for faculty members, scholarships, peer mentoring and professional mentoring opportunities round out programs offered or managed by WIE.

And it appears WIE is serving its purpose of not only recruiting but also retaining female students in engineering at Tech. According to Philobos, the retention rate of female students in the College of Engineering approaches nearly 89 percent, as opposed to 75 percent retention for male students.

“We hope all 160 (attending the conference) will come to Tech and major in engineering,” Philobos said. “I tell them, ‘I just want this to be an option for you. You have all the tools to be successful.’”

IN BRIEF:

Legislative Network meets

The Alumni Association Legislative Network holds its fall briefing on Nov. 1, two hours prior to kickoff of the Georgia Tech/Florida State University football game.

Trey Childress, director of the state’s Office of Planning and Budget, will speak on the current budget situation and the upcoming legislative session. The meeting will be held in the Clary Theater of the Student Success Center. For more information, visit www.gtaalumni.org.

Rosser commended in article

Ivan Allen College of Liberal Arts Dean Sue V. Rosser is one of 14 women in academia who was recognized in an Atlanta Women’s online article, “Women Soar in Higher Education.”

The article highlights the growing number of women who hold leadership positions in University System of Georgia institutions. For more information, visit www.isc.gatech.edu.

16th Street closure on tap

Effective Oct. 27, the Georgia DOT will close the westbound lane of 16th Street from Spring to Williams streets for roughly a year. This closure, which will allow the construction of the new northbound 17th Street ramp, will prevent access to Interstate 75 via 16th Street. Also, the removal of old power line poles and installation of new poles on 14th Street will require lane closures throughout the month of October. For specific information and lane closures, visit www.14thsstreetbridge.com.