Building on a culture of entrepreneurship

Elizabeth Campbell
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Lake Pinkerton came to Georgia Tech for his MBA from the University of Michigan with a patent in his suitcase. In April as team leader of Torex International, Pinkerton and his fellow MBA students with a strong mix of engineering and non-engineering backgrounds won $250,000 and placed third at the Carrot Capital Competition in New York. The venture capital firm organizes the competition, which seeks viable business plans in which to invest.

Torex licensed the technology that Pinkerton helped to develop while at Michigan, and Pinkerton is named on the patent. The technology is a reinforcement fiber for concrete. Beams constructed with the Torex fiber exhibit up to five times the strength of beams constructed with existing reinforcement materials. Not only does the technology have immediate market relevance, but it is also environmentally friendly, made of scrap material from the tire industry. These two features were key to the Carrot Capital competition judges deciding to invest in this business.

"We learned something each time we competed," said Pinkerton. "We ended up revising the plan based on each competition's judges feedback. Some of the best feedback we got, however, was the negative feedback. This information really helped us refine the plan and hone in on the best strategy."

At the Georgia Tech Business Plan competition, Torex placed third and received $2,500 in funding. Because the judges felt the venture had such strong investment potential, they also awarded them a $45,000 package of legal, financial accounting, and graphic design services, which allowed Torex to improve its plan in time for the Carrot Capital competition. The extra investment clearly paid off.

Increasing entrepreneurial activity

The Darsee College of Management is building a culture of entrepreneurship not only for its MBA and undergraduates, but also for the entire Georgia Tech campus and the Atlanta community. For years the College’s faculty has specialized in entrepreneurship, but about three years ago, students in the Georgia Tech Entrepreneur Club launched the first Georgia Tech Business Plan Competition and invited entrepreneurs from across the campus to participate.

Each year the entrants to the Georgia Tech Business Plan Competition have gotten stronger, and more teams are invited to participate in national competitions. This year two teams — Advanced Audio and Torex International — won at major national business plan competitions with substantial cash awards. Many of the most competitive teams start in the New Venture Creation course taught in the fall by Professor Pat Dickson, who coaches several teams as well. In the course composed of half MBA and half-non management graduate students, Dickson encourages the students to form teams with a mix of majors. "I tell my students that cross-disciplinary teams tend to do better," said Dickson. "It’s important to have that mix of perspectives and strengths."

Expanding competition

Taking a different path, Advanced Audio, a team composed of all MBA students, two of which have master's degrees in engineering from Georgia Tech, excelled at the national academic-based Venture Challenge, hosted annually by San Diego State College. Advanced Audio won the grand prize of $15,000 and an additional $1,000 for the Golden Phone Award for the best sales pitch over the phone. The technology is the first all digital microphone for hearing aids, providing enhanced sensitivity and improved power consumption over today’s microphones.

"Many of the teams at these competitions are driven by a single visionary individual," says Trace Hawkins, vice president of marketing, Advanced Audio and Georgia Tech MBA student. "Our team is driven by a single vision, but four distinct and equally competent individuals.

In addition to winning Venture Challenge, the Advanced Audio team

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Board of Regents approves tuition increase

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Reflecting the state’s substantial budgetary shortfalls, the Board of Regents of the University System of Georgia voted last month to increase tuition rates at each of the 34 institutions it oversees.

But representatives from the administrative and academic bodies emphasized the relative cost of these degrees were still well below peer institutions, both within the region as well as across the country.

Students who attend the System’s four research universities — Georgia Tech, the University of Georgia, Georgia State University and the Medical College of Georgia — will see the greatest increase. For in-state residents, this amounts to an additional $209 per semester, beginning in the fall. Out-of-state residents will pay an additional $987 per semester.

More than one-third of the University System’s students are enrolled in the research universities. For eligible students, the increase will be covered by the HOPE scholarship.

In a letter sent to both students and parents, President Wayne Clough pointed to Tech’s reputation for both its academic rigor and its price in the educational market.

"Georgia Tech not only continues to be ranked as one of the best public universities in the nation," he said, "but also one of the best educational values to be found in higher education."

"Maintaining such high quality, however, is not without cost,

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Saluting a hero

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From spring through fall, warm weather and rain provide ideal conditions for mosquitoes. Rain keeps water in places where mosquitoes like to breed. An increasing number of mosquitoes in the United States have been found to carry the West Nile virus, which they contract by biting infected birds. The disease can cause illness and, in some cases, death.

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especially during times of serious budget cuts.”

Clough went on to explain Tech’s methodology for benchmarking. Three years ago, the Board of Regents approved a list of 20 peer institutions — seven private institutions and 13 public universities — for the Institute to compare its tuition against. In the most recent study, the average in-state tuition among Tech’s peer institutions is $14,992; the average out-of-state tuition is $18,663. At Tech, those costs will be $4,076 and $16,002, respectively.

“Georgia Tech currently ranks 20th among our 21 peer institutions in terms of annual tuition for our undergraduate in-state students and 17th for out-of-state students.” Clough said. “Even if our peers chose to raise tuition, our tuition rates would still be significantly below the average for both groups of students.”

University System of Georgia Chancellor Thomas Meredith echoed this sentiment. “The tuition rates approved by the Board will help us maintain quality educational programs in the face of high demand for our services. But despite these necessary increases, in-state undergraduate tuition in Georgia’s public colleges and universities still remains low when compared against our regional and national peers.”

Georgia Tech ranks 12th among the 15 states of the Southern Regional Education Board in tuition and fees at four-year colleges and universities. “The situation facing Georgia is not unlike that facing public higher education across the country,” Meredith said. “As state budgets have been squeezed, public colleges and universities have seen their state appropriations reduced as other needs compete for limited dollars.”

Meredith also said he wants to continue increasing academic quality in the System, evidenced by its position as only one of three state systems with two or more universities ranked in U.S. News & World Report’s annual listing of the nation’s top 20 public universities. Currently, Georgia Tech ranks ninth, and the University of Georgia is ranked 18th.

A plan to control campus mosquito population

Michael Hagearty
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In Georgia Tech’s Department of Facilities, the Office of Environmental Health and Safety has contracted an outside company to help control the insect’s population on campus. The program started in April and concludes in November. The process calls for a dual application: sprays for adult mosquitoes will occur twice a month, while a separate treatment for larvae will be applied once a month. The company will also place traps around campus as a means of monitoring effectiveness of the plan, adjusting the schedule as necessary.

Relatively speaking, the West Nile virus affects few people, and the chance that any one person is going to become ill from a mosquito bite is low. Most people who become infected with West Nile virus will have either no symptoms or only mild ones.

In 2002, the U.S. Centers for Disease Control and Prevention (CDC) said the state of Georgia confirmed 44 cases of the illness, resulting in seven deaths.

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placed fourth at the New Venture Championship hosted by the University of Oregon and second in the Georgia Tech competition.

Next year, Dickson anticipates expanding the business plan competition by hosting two major competitions at DuPree’s new home in Technology Square. Next year the Georgia Bowl, usually held at the University of Georgia, will take place at Georgia Tech, and Dickson is finalizing plans to host one of the regional semi-finals of a competition organized by the University of North Carolina at Chapel Hill.
Study examines Georgia's shrinking high-tech sector

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According to a new Georgia Tech study, the economic downturn has cost Georgia its national lead in high-tech job growth. Analysis of federal and state employment data shows that over the past two years, Georgia has lost high-tech employment more rapidly than the national average—a total of 21,000 jobs between the end of 2000 and the end of 2002.

High-tech jobs are important economically because of their generally high wages. As recently as 2001, a study by the industry organization American Electronics Association (AEA) had ranked Georgia ahead of all other states in growth of this industry sector.

"Georgia did well in adding high-tech jobs in the boom years of the 1990s," says researcher Philip Shapira, a professor in Tech's School of Public Policy. "But, following a peak at the end of 2000, Georgia's high-tech jobs total has declined in every subsequent quarter."

Still, despite losing high-tech jobs overall at a rate faster than the nation, several sectors within the technology industry saw employment gains. Jobs in engineering and architectural services (5 percent), research and testing services (12 percent) and drug manufacturing (8 percent) grew in Georgia between 2000 and 2002.

"Georgia has special capabilities in these areas," notes Jan Youle, a researcher in Tech's Economic Development Institute who co-authored the study with Shapira and Public Policy Doctoral Student Jue Wang. The study indicates that Georgia's competitive advantage lies in research- and service-related technology sectors. In particular, three service industries make up more than 70 percent of Georgia's high-tech sector: telecommunications services, computer and data processing services and engineering services.

Georgia's specialty is in knowledge-intensive high-tech services rather than manufacturing, according to Youle. "High-tech services in Georgia are often overlooked despite outperforming high-tech manufacturing in employment scale and average wages."

Overall, Georgia's high-tech industries paid very well compared to the average private sector firm. Average weekly wages for employees in Georgia high-tech establishments in 2001 were $1,192, compared to $684 for all private-sector employees. That has magnified the economic impact of the job losses, Shapira notes. "These are much higher wage jobs, so it's nice when they go up. But when they go down it takes a disproportionately greater amount of money out of local economies," he says.

Unlike past employment losses where jobs moved overseas, the recent high-tech losses in Georgia appear mostly unrelated to low-wage foreign competition, says Shapira.

Working out at Georgia State: an FAQ

With the Campus Recreation Center out of commission for the summer, alternate workout facilities are available at Georgia State University for Tech students and registered members. The following is a list of frequently asked questions for those who might use the GSU facilities.

What is the dress code in the exercise room and free weights area?
- Shirt with sleeves, no cutoffs or tank tops.
- No jeans, shorts or pants with zippers or rivets.
- Athletic shoes required; no dress shoes or open toe.

How can I listen to the television and/or radio in front of the cardio equipment?
You must bring your own headphones or you can rent some at the equipment issue desk.

Where can I put my stuff?
- Put your stuff in one of the cubby holes in front of the televisions.
- Rent a free day locker in the exercise room by trading your BuzzCard for a key.
- Bring a lock and use a daily locker for free in the locker room.

Can I sign up for fitness classes or sport clinics?
- Fitness classes are free of charge and are first-come, first-serve. GSU student prices apply to Tech students, and GSU member prices apply to Tech faculty and staff for sport clinics.

Can I bring a guest?
Yes. You can bring up to three guests. The fee is $5 per guest per visit. The guests must remain with you in the building.

Anything else I need to know?
- Just remember to rack your weights when you are done. Also, no food is allowed inside the turnstiles. To see a complete list of policies and a summer schedule, visit www.gsu.edu/recreation.
- GSU shuttle information is posted at www.sac.gatech.edu/ShuttleSchedule.pdf.
- Pick-up/drop-off locations are at the Student Center and the Coliseum Parking Lot.

For membership questions, visit the Membership Office, temporarily located in room 160 of the new Health Services Building, or call 894-1616.

IN BRIEF:

Professor named to Johns Hopkins Society of Scholars
Appiah Amirtharajah, a professor in the School of Civil and Environmental Engineering, is one of the newest electees to The Johns Hopkins University Society of Scholars. Amirtharajah and 14 other esteemed scientists, clinicians and social scientists were honored during the society's 54th induction ceremony on May 21 and again at the University's commencement ceremony on May 22. This year's inductees will bring the total number of society members to 450.

The Society of Scholars was created on the recommendation of then-university president Milton S. Eisenhower and approved by the university board of trustees in 1967. The first of its kind in the nation, the society inducts former postdoctoral fellows and junior or visiting faculty at Johns Hopkins who have gained marked distinction in their fields of physical, biological, medical, social or engineering sciences or in the humanities.

Amirtharajah is among a small group of environmental engineers and practitioners in the field of potable water treatment and supply. Using innovative physical and chemical technologies, his work has improved the health of people throughout the world to provide safe, reliable, and affordable water supplies.

Newest Regent has Tech ties
Last month, Governor Sonny Perdue made two appointments to the Board of Regents of the University System of Georgia, one of whom has strong ties to Georgia Tech. William Mansfield Jennings Jr., a 1956 industrial engineering graduate and emeritus member of the Georgia Tech Advisory Board, will be the new representative for the First Congressional District.

A native of Hawkinsville, Ga., Jennings is chairman and CEO of ComSouth Corporation, president and CEO of ComSouth Telecommunications and chairman of SunMark Community Bank.

The governor also named Patrick Pittard of Lakemont, Ga., to represent the Ninth Congressional District. "I want to thank these two distinguished individuals for their willingness to serve the students enrolled in Georgia’s public universities and colleges," said Perdue. "The Board of Regents is a unified and devoted organization that has contributed to the momentum of higher education in this state. I am confident that Mansfield Jennings and Pat Pittard will bring valuable insight, ideas and dedication to this board.

The governor appoints members to the Board, who each serve seven years. The Board is comprised of 18 members; one from each of the state’s congressional districts and five appointed at large. The Board oversees 34 educational institutions: four research universities, two regional universities, 15 state universities, two state colleges, and 12 two-year colleges.