Despite multiple brain injuries, ‘stubborn’ student graduates

David Terraso
Institute Communications and Public Affairs

A s hundreds of proud parents cheered on their graduates at Georgia Tech’s 215th Commencement last Saturday, few had more pride than the family of industrial engineering graduate William Palmer.

Palmer, who enrolled at Tech in fall quarter 1994, was a fifth-year co-op student in the spring of 1999 just finishing his degree when he was involved in an auto accident that left him in a coma with severe brain injuries.

After one month, doctors told his parents he had only a 5 percent chance of surviving. One week later, Palmer woke up.

Recovery wasn’t easy. Palmer had to learn to walk again after spending so much time in the coma and had lost much of his short-term memory. But that fall, he had re-enrolled at Tech, however, Palmer developed a severe headache. Having overcome one serious brain injury, Palmer knew the headache could be a sign of something serious. He began driving to Piedmont Hospital.

“I remember driving there and then everything cut out, like nothing,” said Palmer. “I hit a pole and a building. I remember walking out of the car and sitting on the curb.”

Palmer had suffered a brain hemorrhage and was taken to Grady Hospital. While at Grady, a drainage tube ripped a hole in his stomach, which was found after he was transferred to a hospital near his hometown in Dayton, Ohio. There, doctors also discovered Palmer had been exposed to Methicillin Resistant Staphylococcus aureus (MRSA), a bacterial infection resistant to antibiotics. He spent the day with his heart rate above 170 beats per minute and a fever of 105.9 degrees Fahrenheit.

According to estimates, he was about one hour away from death when the doctors found and treated the infection.

As a result of his two brain injuries, Palmer’s left side is slightly paralyzed and he has to use a motorized wheelchair to get around. While Palmer continued, page 2

Tech research helping middle Georgia avoid poor air quality

Sean Selman
Institute Communications and Public Affairs

A s in Atlanta, poor air quality is on the rise across middle Georgia. But by next year, Georgia Tech Senior Research Scientist Michael Chang will help Georgians south of the city get a handle on their problems.

As smog season develops in the skies above Atlanta, Chang and his colleagues from the schools of Earth and Atmospheric Sciences and Civil and Environmental Engineering are pouring a variety of data collected from the skies above Augusta, Columbus and Macon into sophisticated computer models representing the individual regions and their air quality.

“I think this study has helped our team be more aware of how our work — and even how air quality here — impacts others,” Chang said. “This is science in the real world, not in the ivory tower. We’ve had to be more involved with the community and be more responsive to their needs as we’ve worked on this study. I hope it’s helped us and them.”

Beginning in 2004, the data on ozone levels, particulate matter and other factors affecting air quality will be used by these three metropolitan areas — plus state officials — to develop a wide-ranging strategy that could help the cities avoid poor air quality in the future. The models also might allow them to mitigate damage to their economic development plans at the same time.

Chang is the project director on the four-year, $2.25 million Fall Line Air Quality Study (FAQS), due to end in December. It represents a tremendous effort linking scientific research with the health and economic needs of cities and towns across the state.

The research could come in the nick of time, as Augusta, Columbus and Macon hope to avoid joining the counties of metro Atlanta as areas “out of attainment” with federal air quality standards. The cities don’t

Air quality continued, page 3

OIE names new director

David Terraso
Institute Communications and Public Affairs

O n May 15, Howard Rollins will become the new director of the Office of International Education (OIE). He will also join the faculty as a professor of psychology, a position he’s held at Emory University for the past 25 years.

In 1996, Rollins became the first director of the study abroad office in Emory’s School of Arts and Sciences and the founding director of the Institute for Comparative and International Studies. After six years in those positions, he returned to psychology full time, but something was missing.

“I realized I still had this passion for things international. I missed the opportunity to administer the study abroad programs,” Rollins said.

Providing students with an international experience is crucial to educating students beyond the classroom, said Rollins.

“Students become different people as a function of having lived abroad. They develop a sense of independence, the ability to cope with difficult circumstances, respect for other cultures and gain a fresh perspective of their own culture,” he explained.

When it comes time to enter the job market, students may find their international experience gives them added value.

Rollins continued, page 2
Shift in state government leads to intense fiscal wrangling

Lynn Durham
Government Relations

The 2003 Georgia General Assembly session was bound to be different than any that had come before it. Having had Democratic governors and legislative majorities for over a century, it was all but certain that sparks were going to fly between newly-elected Republican Gov. Sonny Perdue, the Republican-controlled Senate and House Democrats.

Added to an already tense situation were declining state revenues and the task of supporting the state’s vital programs without debilitating budget cuts or new taxes. Though each department and agency had its share of budget reductions, the University System was spared disablilng cuts because of an intense effort by University System officials to remind legislators of the investment they have made in the state’s higher education system and the successes that investment has produced.

University System Chancellor Thomas Meredith and many institution presidents, including President Wayne Clough, visited with key legislators and committees throughout the session. While testifying before a higher education subcommittee of the House Appropriations Committee, Clough noted that making additional cuts would jeopardize Tech’s ability to serve students, hosting more international students than any other university in Georgia and second only to Emory in the percentage of students in study abroad programs. Rollins said he wants to improve on that record, getting more students into the semester and yearlong study abroad programs, as opposed to the summer sessions.

“Tech received good news late in the session with a $1.4 million appropriation for the Georgia Tech Regional Engineering Program (GTREP),” said Meredith.

Andrew Harris, Tech’s director of government relations, said of GTREP, “Legislators understand that this unique academic partnership between Georgia Tech, Georgia Southern University, Savannah State University and Armstrong Atlantic State University is very important to the economic development of southeast Georgia, and the addition of these funds is a strong signal of support for its mission.”

Rollins, cont’d from page 1

“ ’I’ve been surprised by how well we can make a poor singer sound. I mean, we can take a poor singer like me, for example, and make certain sounds sound much more pleasant.’ —Matthew Lee, a graduate student in the School of Electrical and Computer Engineering, on his research team’s presentation to the Acoustical Society of America, which uses computer programs to break down and reconstruct a voice to improve singing. (United Press International)

‘It’s the kind of motion that could weaken structures or cause further damage. It’s not something to be overlooked. This could be a precursor, it could be a one-time release of energy, it could be an indication of things to come for several weeks.” —Barr Goodno, a professor in the School of Civil and Environmental Engineering, on last week’s earthquake, a seismic event that registered 4.9 on the Richter scale, centered about 115 miles northeast of Atlanta. (Atlanta Journal-Constitution)

We’re in a global economy where most major corporations have international operations. Having study abroad experience and knowing how to interact with people from all over the world, that’s going to be the icing on the cake between a potential employer hiring you over another candidate,” he added.

“Rollins takes his own advice when it comes to traveling around the globe. He’s been to every continent except Antarctica and has lived in London for two occasions. Although he considers London his second home, he said India and China were two of the most interesting and surprising places he’s been.”

“Those two cultures are so vastly different from our own that I felt challenged, even uncomfortable about the differences, but that’s the value of study abroad. You learn something about yourself when you have to deal with difficult situations,” Rollins said.

Gov. Perdue has not signed either the Fiscal Year 2003 Amended Budget or the FY’04 General Budget yet, and a full veto or line item veto is still possible. It may be several months before these budgets are final.

Other legislation that passed both houses and of interest to the higher education community includes the following.

• A Senate Resolution to establish the “Improvement of the HOPE Scholarship Study Committee.” The 20-member committee will assess the HOPE scholarship program and recommend changes. Concerns have been raised about the number of students eligible and the program’s cost as it is currently structured.

• House Bill 521 requires colleges and universities to provide information about meningitis to incoming freshmen who will reside in residence halls and either collect documentation of vaccination or a signed waiver.

• The so-called “rogue booster” bill provides criminal penalties for boosters who violate NCAA rules and regulations. Universities would be entitled to recover damages and attorneys fees from the violator.

Place and a new culture, speaking a new language, on top of meeting the academic demands that come with being a student,” he said. He wants to develop more programs to help international students meet these challenges.

For more information...
Office of Government Relations:
894-1238

For more information...
Office of International Education:
www.oie.gatech.edu

By the end of the longest General Assembly session in 114 years, legislators demonstrated their continued support of the University System by enhancing formula funds of $88.2 million — $81.5 million to cover increases in credit hour enrollment and $6.7 million to operate, said Meredith.

Palmer, cont’d from page 1

His physical therapist doesn’t think he will ever walk again, Palmer isn’t giving up. He’s doing his own brand of physical therapy in the gym. He points out both after accidents his doctors didn’t think he would live. Once he survived, they told him he would never graduate after suffering two severe brain injuries. Now that he’s proven them wrong three times, he aims to prove them wrong again. He may seem stubborn, but that’s alright with him.

“My ex-girlfriend told me ‘I know you’ll walk again because you’re so stubborn.’ I said, ‘You mean determined.’ And she said, ‘No, I mean you’re stubborn.’ But that’s okay. Not only am I going to walk again, I’m going to run again.”
Campus portal ‘BuzzPort’ opens for inspection

The power to customize, prioritize information

Amelia Gambino
Institute Communications and Public Affairs

After a year of testing, it’s time to bring the Buzz to campus. As BuzzPort, Tech’s new portal system, makes a limited debut this summer, faculty, staff and students have an opportunity to familiarize themselves with the capabilities and uses of a Tech-customized portal. BuzzPort will begin operating during the summer months, so that the campus community can have time to experiment with it prior to the fall semester.

Marie Mons, Portal Project co-director, said the summer rollout was selected because it gives the campus time to become familiar with and learn how to use the features BuzzPort will provide. “We expect that by the beginning of fall semester current students, faculty and staff will be using BuzzPort to easily and quickly link to Institute information and many services,” said Mons.

One of the primary benefits of a portal is the improved ability to access customized information and communicate with people with common interests. That commonality may be based upon enrollment in the same course, or it may revolve around membership in the same club or other organization.

Using the Banner System as a backbone, BuzzPort will automatically create e-mail lists, message boards, chat rooms and other communications features for all courses offered at Georgia Tech. Such a system, for instance, allows faculty one-click access to sending e-mails to students registered for that course. BuzzPort also integrates WebCT components for course management options. It will provide academic and administrative units with the tools to create their own communication channels to which people may subscribe for news and updates on such things as street closures, cultural activities, sporting events or academic functions.

In keeping with Tech’s independent culture, the portal is open and accessible to everyone at Tech with an interest in creating content for small or large groups. In many ways, BuzzPort is what everyone collectively makes it. On-line training will be available through http://info.buzzport.gatech.edu in mid-May. A series of town hall-style sessions and instructor-led classes are planned for later this summer.

Training Team Leader Julie-Anne Williamson says that some topics such as a general introduction to BuzzPort, how to use the calendar within the portal, and how to use the course management functionality will be covered in the upcoming classroom sessions. These topics will also have online tutorials for those who prefer a more self-paced learning approach.

Members of the Implementation Team have made presentations on BuzzPort’s capabilities to administrative and academic units during the spring semester.

Portals Sponsor Committee Member and Associate Vice President for Information Technology John Mullin said about the upcoming months, “The joint faculty, student and administration team has brought us to the point where we are ready to use the summer months to begin refining and enhancing BuzzPort’s ability to provide a unified entry point for access to campus systems and also to serve as a medium for student-faculty and student-student communications. The lessons we learn during this period will set the stage for a valuable new service to be offered to the campus during the fall.”

Air quality, cont’d from page 1

want the penalties that come with a non-attainment area, which can include losing federal transportation funds, enacting tougher auto and industrial emissions standards and using costlier, cleaner-burning fuels.

Avoiding Atlanta’s mistake

The problem started in Atlanta, when the metropolitan area failed to attain state and federal air quality standards beginning in 1979. A year effort to improve air quality in the metro area has not been successful. As the problem approached critical proportions, state officials were granted broad powers to effect change in the state’s “non-attainment” areas.

Rather than wait for a non-attainment designation before acting to improve quality, these proactive metropolitan areas sought solutions to their problems before the onset of crises or costly federal regulations. At the time, they didn’t have enough information regarding the composition of their air, the source of their air pollutants and pollutant precursors, and the feasibility, efficiency, and effectiveness of any potential controls.

Enter a chance encounter with Chang at a planning meeting, three exhaustive years of data collection and, now, advanced computer modeling.

“With the models, you can try out almost everything if scenarios that you can think up to address the issue of poor air quality in Georgia,” Chang said.

For example, if the models show that a particular source — and see if that might change the situation. Communities and regulators take the next step, and decide what must be done with that data.

“You can play all the games on the computer, and give the user a menu of improvements associated with their cost to the community,” Chang said. “Each individual community will be able to struggle with that data and determine what’s best for them.”

Chang said the data does present a few surprises. For instance, it appears that Columbus and Augusta will meet their proper air quality standards after all. “Macon probably won’t, though, because it and Atlanta share a common ‘air shed’.”

The same factors that affect poor air quality within the capital travel downwind and down Interstate 75 to affect Macon and its surrounding areas, Chang said.

IN BRIEF:

Bookstore distributes discount cards for faculty and staff

It isn’t set to open until July, but Georgia Tech’s new bookstore — whose full title is Barnes & Noble @ Georgia Tech — and Auxiliary Services are in the process of sending a discount card — known as its Readers’ Advantage program — via interoffice mail to all faculty and staff.

The bookstore and Auxiliary Services wanted to thank the faculty and staff for their support and welcome them to the new store in Technology Square,” said Rosalind Meyers, associate vice president of Auxiliary Services.

Faculty and staff may begin using the card online at barnesandnoble.com and at participating stores. The Georgia Tech bookstore will begin to accept it once it moves to its new location on July 12.

The card provides 5 percent discounts on discounted prices at barnesandnoble.com and 10 percent off many in-store items, including tradebooks and non-licensed gifts. Because it is a corporate program, textbooks, computer software and hardware and Georgia Tech licensed items are excluded.

A $25 value, the Readers’ Advantage card is accepted at almost 900 stores, including Barnes & Noble, B. Dalton Bookellers, Bookstop, Bookstar, Scribe’s Doubleday, Ink Pensland and Charlesbank.

For a full review of the program, visit www.barnesandnoble.com.

New spring break dates set

As a result of a request on behalf of the student government, Georgia Tech’s spring break will be moved one week later each of the next two years.

During last month’s student government elections, a referendum was held to determine the future of the annual rite. The students voted to have it moved.

According to Registrar Jo McIver, the week-long break will be March 8-12 in 2004, and March 21-25 in 2005. The reason for the discrepancy, she noted, was because certain planned activities could not be rescheduled.

“This was a situation the students were very interested in changing, and we’re pleased we were able to accommodate them,” she said.

Retirement planners

For those not able to attend the pre-retirement information sessions in March, videos are now available for viewing/check out from the Georgia Tech Library.

Divided into segments, the videos cover four general areas: social security benefits, Georgia Tech benefits, the Teachers Retirement System of Georgia, and optional or supplemental benefits.

Anyone interested in purchasing an individual copy should contact Becky Bardwell, Video Productions Manager, Georgia Tech Cable Network, at 894-0309. The cost is $10 per DVD or $5 per VHS tape.