When Technology Square opened one year ago, it was hailed as landmark of urban design: a pedestrian-friendly extension of the Tech campus where education and research conjoined with the commercial and residential interests of Midtown.

Nonetheless, a perception persists. Despite the success of Tech Square, the river of asphalt bisecting the city still creates a gulf between Tech Square and the rest of campus. The problem, city planners believe, lies in the utilitarian span that connects the main campus with Midtown coupled with the din of hundreds of thousands of commuter cars below.

That perception is likely to change when the state Department of Transportation completes its latest project, which will widen the bridge on Fifth Street and create a fully landscaped area unlike any in the city.

According to Frank Lamia, the project manager in Facilities assigned to do the liaison between Georgia Tech and the DOT, the idea is to bring a measure of collegiate tranquility to the area. To do that, the Fifth Street Bridge will be completely remade over the next 24 months.

“The goal is to create a park-like setting as you walk across the bridge,” he said. The project will widen the sidewalks and add roughly 125 feet of elevated green space to block views and dampen the noise of the super slab below.

Beginning September 21, pedestrian and vehicle traffic will be diverted to the northern half of the bridge so that the contractor may prepare for demolition of the southern end. Once completed, traffic will be rerouted to the south side, and work will commence to the north. The bridge will always remain open to traffic.

Though it could result in minor delays, Lamia said he is confident the plan will not impede traffic. Similar measures were taken when Tech rebuilt the sidewalk streetscape between Techwood Drive and the Fifth Street bridge last year.

Some of the work will require lane closures on the interstate, but it should cause a minimal effect on interstate traffic due to a Federal Highway Administration mandate that all such work be done at night.

As an unusual project with unique engineering challenges, Lamia said he is looking forward to monitoring its progress.

“It will be very interesting to watch, but this is familiar territory for the DOT,” he said.

A view from the Global Learning Center shows the Fifth Street bridge and north side of the interstate. Under the DOT’s plan, the extended bridge will cover approximately 100 additional feet at the north end and 75 feet at the south end.

Ovarian Cancer Institute targets early detection, treatment of disease

David Terraso
Institute Communications and Public Affairs

Last week, Georgia Tech celebrated the opening of the new Ovarian Cancer Institute (OCI) laboratory. John McDonald, the new chair of the School of Biology and OCI’s chief research scientist, relocated the lab to Tech from the University of Georgia.

OCI is part of a virtual research institute founded five years ago by Atlanta gynecologic oncologist Benedict Benigno of the Southeastern Gynecologic Oncology Group. This partnership between a major research university and a large medical practice provides scientists and researchers with access to a significant number of high-quality tissue samples, complete with medical histories.

Every year more than 27,000 women are diagnosed with ovarian cancer. Approximately one-third of them will live more than five years. There is no diagnostic test for ovarian cancer and no obvious symptoms. Currently, about 75 percent of ovarian cancers are detected at the earliest stages, when it has spread throughout a woman’s abdomen. Extensive surgery and chemotherapy are required as a result, with little assurance of lasting success.

However, if ovarian cancer is detected early, survival rates increase dramatically.

New joint degree blends media and computing

Elizabeth Campell
Institute Communications and Public Affairs

In a unique joint effort, the College of Computing and the School of Literature, Communication and Culture (LCC) have created a new degree designed to attract undergraduates with an interest in both the computational and creative side of new media such as film, Web, television and games.

The new Bachelor of Science in Computational Media, approved by the Board of Regents in June, is designed to provide solid computing and programming skills with a strong understanding of media design. The program combines hands-on and theoretical knowledge of computing with an understanding of visual design and the history of media.

“Interactive media is to the 21st century as film was to the 20th century,” said Janet Murray, professor and director of graduate programs in digital media in LCC. “Innovation in technology and design is making the computer into a medium of communication that is reshaping print, television, film, games, and even live performances. The computational media degree will prepare students to lead these changes rather than merely following them.”

Students majoring in computational media will be jointly enrolled in the College of Computing and LCC. Both schools have added some new courses for this new degree, but the bulk of the required courses for the degree are already in the curriculum. The required courses in each school ensure that students will have competence in computational principles, digital media, software design, visual and interactive design, information design, digital arts, and media theory and history.

“By taking many of the core computer science courses required for the computer science degree, computational media students will gain a strong foundation in computing principles, software design and manipulation of digital media such as graphics and sound,” said Blair MacIntyre, an
Governor leads town hall discussion on homeland security

Sean Selman
Institute Communications and Public Affairs

Georgia Gov. Sonny Perdue was among the panelists who addressed a town hall meeting on homeland security Sept. 7 at Georgia Tech’s Hotel and Conference Center.

He and other attendees stressed that, since terrorists struck the United States three years ago, first-responder agencies and government officials have dramatically improved their communication efforts.

“The network of information sharing—that’s the real benefit we’ve seen develop over the past two or three years,” Perdue said.

The meeting, sponsored by Georgia Tech and WGST-AM 640, was free and open to the public.

Paul Mann, news director at NewsRadio 640 and the Georgia News Network, said “Our goal was to address critical questions, such as how has Atlanta prepared for an emergency? Is there anything else we can do? How do the different agencies work together on homeland security?”

NewsRadio 640 morning show host Tom Hughes moderated the meeting, asking a panel of experts various questions on Atlanta’s efforts to improve safety and communication since 2001.

In addition to Perdue, panelists included Terry Hilderbrand, a senior research engineer at the Georgia Tech Research Institute; Georgia Homeland Security Director Bill Hitchens; Atlanta Police Department Chief Richard Pennington; Georgia State Health Director Kathleen Toomey; and Michael “Leo” Desrosiers, director of the Georgia Business Force for the metro Atlanta chapter of Business Executives for National Security.

Hughes asked panelists how concerned they were about preserving the freedoms and privacy traditionally enjoyed by Americans while still enhancing and strengthening homeland security.

Pennington, who is responsible for the overall operation of the largest municipal law enforcement agency in Georgia, said that he’s confident that security measures taken here will not intrude inordinately on the lives of American citizens.

For comparison, he described a 16-day trip he took through Israel this past year, where he was struck by the omnipresence of security—on public transportation, on the streets and in restaurants.

“We take things (such as public safety) so much for granted in this country,” Pennington said. “But I think it’s going to take a lot for Americans to ever live like that.”

Hilderbrand said that Tech’s role in homeland security is to make sure institute researchers and others help integrate the latest in technology with efforts to assist in security and safety.

“There’s quite a lot of new technology out there that’s become available in the past two or three years that will help,” he said. “Most of that is in the area of inoperability of command,” or software and communications systems that improve information sharing and response planning during emergencies.

Pennington and other panelists stressed that the biggest homeland security achievements of the past three years involve round around improved communication and partnerships among first responders and government agencies.

Another strength is that first responders and safety officials have had many chances to work and train together, further honing their skills, Hitchens said.

“During our experience at the G-8 Summit, I think we learned that we were a little bit more prepared than we thought,” he said. “I think it was the best homeland security exercise we could ever have. Everyone was involved and it worked very well. (The planning effort) was very portable, and many areas of the country have contacted us about our experience.”

Governor leads town hall discussion on homeland security

For more information...

Ovarian Cancer Institute
www.ovariancancerinstitute.org
School of Biology
www.biology.gatech.edu

Georgia Office of Homeland Security
www.gahomelandsecurity.com
Georgia Tech Office of Homeland Security
www.police.gatech.edu/homeland

Lab, cont’d from page 1

diagnosed and treated when it is confined to the ovaries, the survival rate increases to more than 85 percent. This statistic is one of the factors driving the doctors and researchers of the OCI to develop a simple, diagnostic test for detecting ovarian cancer in its earliest stages, as well as develop more effective therapies to treat the cancer and diminish its rate of recurrence.

“On average, our practice performs at least one surgery each day for ovarian cancer,” said Benigno. “The result is a continual stream of high quality and documented tissue samples for our broad research agenda. We are searching for markers that will lead to an affordable diagnostic test, as well as developing much more refined chemotherapy approaches based on new molecular profiles of ovarian cancer subtypes that may respond differently to treatment.”

Armed with these well-documented samples, the OCI Laboratory draws on the combined expertise of scientists and bioinformaticists from major Georgia universities and colleges. This multidisciplinary approach means that researchers with different backgrounds and approaches can apply their expertise to the same sample and compare results to gain new insights and understanding.

OCI researchers are from Georgia Tech, the University of Georgia, Georgia State University, Emory University, the Medical College of Georgia in Augusta and Clark Atlanta University. The team includes members from the disciplines of bio- and medical chemistry; molecular biology; medicine; genetics; food and nutrition; statistics, mathematics; bioinformatics and computer science; and veterinary medicine.

“By weaving together a variety of disciplines into a tight network of world-class researchers, we have the opportunity to rapidly advance the science associated with ovarian cancer,” said McDonald. “Our laboratory-based insights will be further clarified by statistically correlating our experimental results with detailed patient histories to identify the potential impacts of a variety of factors including heredity, age and lifestyle.”

Among related research efforts, OCI scientists are learning more about the origins of various types of ovarian cancer. This knowledge will lead to a greater understanding of why some tumors become resistant to chemotherapy, new insights into what causes a cancer to spread, and, ultimately, to the development of innovative and much more effective therapies.
Human body scan database available to Tech community

Barbara Christopher
College of Architecture

Ever wonder how designers decide how wide to make furniture or how designers know how to size clothing? CAESAR (Civilian American and European Surface Anthropometry Resource), a 3-D anthropometric research project, has collected data on the size and shape of the modern human body that gives designers valuable information for applying these human body measurements to industry.

Using the most up-to-date body measurements, clothing, airline seats, cars and furniture can be designed to more accurately reflect the modern population. Through the effort of the College of Architecture’s Center for Accessible Technology and Environmental Access (CATeA), this data is now being made available to all Georgia Tech researchers, developers and students.

“This type of information has many applications to Georgia Tech researchers and developers,” said Stephen Sprigle, director of CATeA. “The use of anthropometry and morphology is useful to industrial designers and engineers who constantly tackle the human-device interface. Georgia Tech also does a lot of human modeling in biomechanics, computer graphics and rendering — all these projects can now access this information and use it as they please.”

In 1998, Georgia Tech became one of 52 partners — and the only institution of higher education — in the CAESAR project. Faculty and staff at CATeA played a role, assisting to recruit, interview, measure and capture 3-D body scans of project participants.

Recently CATeA technical manager Elise White and industrial design graduate student Jason Quick collaborated with College of Computing Professor Robert Waters and his students to develop a user-friendly interface to access the data.

“Data is only useful if it is accessible to those who need it,” said Sprigle. “The amount of data within the CAESAR set hinders access unless presented well. This interface offers a huge amount of data in an accessible format.”

Users can create searches based on age, head circumference and shoe size as well as 1,589 other query fields. Measurements and search reports can then be downloaded directly from the database.

“We’re excited to have a clean, well-structured database to build on,” adds Quick. “The future of CAESAR is already moving toward 3-D marker-based searches, body scan morphing, and integration with digital mannequins and motion capture. There is an opportunity for Tech students and researchers to develop a powerful anthropometric design tool.”

Authorized users will have access to detailed anthropometrics and demographic information for each CAESAR participant. They also will have the capability to view images of the subjects in three different poses — one standing and two sitting — and download 3-D body scans of each participant for further visualization.

The CAESAR data is available to students and researchers at Georgia Tech upon request. E-mail elise.white@catea.org for a username, password and site access.

Degree, cont’d from page 1

assistant professor in the College of Computing. “The courses in LCC will provide these students with an understanding of visual and interactive design, digital art and media theory and history.” Specialty areas combine courses from both schools and can be tailored to meet the student’s needs. Examples of specialization areas include animation and digital special effects, games and entertainment, interactive systems, and culturally informed program design.

“When I heard about this new degree program, I loved the way it sounded because it perfectly fit my personality, my interests and everything I’m looking to do in a job,” said Cooper Welch, a sophomore who recently changed his major from computer science to computational media. “I enjoy computer programming, but I don’t want programming to be the focus of my career. I am more visually design oriented — I like to draw and do things with Photoshop and graphic design.”

A student demonstrates an interactive television project that combines both programming and new media design skills.

For more information...
Computational Media
www.cm.gatech.edu

IN BRIEF:

Faculty meeting to discuss state budget concerns

In light of the evolving state budget allocations for this fiscal year, a new item has been added to the agenda for this week’s combined meeting of the General Faculty Assembly and Academic Senate to address “State Allocations to Higher Education — Prospects and Possible Model Changes.” Both President Wayne Clough and Provost Jean-Lou Chameau will be present to discuss recent developments in state budget allocations. The meeting will be September 14 at 3 p.m. in the Student Center Theater. For more information, visit www.facultysenate.gatech.edu or e-mail saidelshalkh@me.gatech.edu.

Athletics Department reports NCAA violations

Earlier this month, Director of Athletics Dave Braine announced Georgia Tech self-reported what it believes to be a secondary violation to the NCAA involving the misapplication of NCAA rules regarding progress toward degree requirements.

Seventeen student-athletes from four different sports over a five-year period were erroneously certified as eligible to compete due to the misapplication of Bylaw 14.4.3.1.5. Federal privacy laws prevent Georgia Tech from releasing the names or other identifying information of the student-athletes.

Georgia Tech uncovered and reported the 17 discrepancies following an extensive audit of the transcripts and academic records of 864 student-athletes (1.9 percent) from 2000-04.

With only one exception, the student-athletes in question earned the required 24 credit hours for the academic year with an acceptable grade point average.

“Certainly there was no deliberate intent to incorrectly certify student-athletes,” said Braine. “At the time, we believed that these athletes had met all the necessary criteria. We are committed to doing things right, so when it was brought to our attention that there might be some discrepancies, we performed a very exhaustive review of all the records. All of the cases can be characterized as errors of omission, not commission. Still, we accept responsibility for the mistakes that were made, and we have new procedures in place to prevent future errors.

“I think it’s important to note that six of these student-athletes earned their degrees in timely fashion and two more are on track to graduate this year,” continued Braine. “The remainder have made significant progress toward their degrees.”

Georgia Tech has proposed self-imposed penalties to the NCAA.

Departmental mailing forms now online

Postal Services recently announced that the Department Mailing Re-order Form has been replaced by the online Department Mailing Form. This document can be found at its Web site, www.studentcenter.gatech.edu.

Click into Departmental Mailing Cards under the Forms heading to go to the document, and follow the instructions to complete it. Adobe Acrobat Version is required to print the document. For more information, call 894-4560.
Arts & Culture
Sept. 17
Nerd Comedy Jam 1, a show to benefit T-Book, will be at 7:30 p.m. at Under the Couch. For more information, visit www.drudicrous.com.
Sept. 28
Ivan Allen College’s Poetry at Tech series welcomes British poets Naomi Jaffa, Dean Parkin and Neil Rollinson at 4:20 p.m. in the Clary Theater. For more information, visit www.iac.gatech.edu/poetry.html.
Brown Bags/Conferences/Lectures
Sept. 22
The College of Management’s IMPACT Speaker Series welcomes Toney Means, president and CEO of Imiren Pharmaceuticals, at 4:50 p.m. in the LeCraw Auditorium.
Sept. 23
The School of International Affairs and the Center for International Strategy, Technology and Policy host three panel discussions on “India-China Relations: Prospects for Expanded Cooperation,” in the MARC Auditorium. For more information, visit www.cispt.gatech.edu or call 894-3199.
Sept. 23
The Office of Sponsored Programs sponsors a brown bag workshop on “Equipment Management,” in the Research Administration Building. Call 894-6944 to reserve a seat.
Sept. 24
The School of Earth and Atmospheric Sciences hosts a seminar on “The Hydrological Cycle and Climate Change: A Perspective Drawn From Global Satellite Observations,” by Colorado State University Professor Graeme Stephens, at 3 p.m. in L1205, ES&T Building.
Faculty/Staff Development
Sept. 21
The Office of Organizational Development hosts a brown bag workshop on “IT Certification,” an overview of Microsoft, Cisco, Novell, Lotus, Wireless, Security, CompTIA and CIW, at 11:30 a.m. in room 308, Savant Building. To register, visit www.trainswb.gatech.edu/mastcal.asp.
Sept. 23
The Center for the Enhancement of Teaching and Learning’s Fall 2004 Faculty Development Seminars welcomes Professor Kurt Gramoll, University of Oklahoma, on “Web Portals for Engineering Education Courses,” and Professor Thomas Reeves, University of Georgia, on “The National Science Digital Library (NSDL): The Importance of Educational Contextualization,” from noon - 2 p.m. in the Library’s Wilby Conference Room. For more information, visit www.ceti.gatech.edu.
Sept. 30
The Office of Sponsored Programs offers a computer training class on “Find Funding,” from 9:30 a.m. - noon. Call 894-6944 to reserve a seat.

Miscellaneous
Sept. 15
The Center for the Study of Women, Science, and Technology (WST) and the Women’s Resource Center invite the campus community to their annual reception, 3:30 - 5 p.m. in the Student Services Atrium. For more information, call 385-0230 or visit www.womenscenter.gatech.edu.
Sept. 21
TIAA-CREF representatives will be on campus for one-on-one financial counseling sessions. To schedule an appointment, visit www.tiaa-cref.org/moc or call 800-842-2003.
Sept. 22
The Georgia Tech Women’s Forum presents a demonstration of vegetable carving by Sumitra Narain at noon in room 319, Student Center. To reserve lunch, e-mail suwanna.murchison@gti.gatech.edu.
Sept. 29
The entire campus is invited to attend the grand opening of the Campus Recreation Center, at 2 p.m. in the CRC lobby. Speeches, events, tours, refreshments and commemorative gifts will be available. See www.ccr.gatech.edu for more information.
Sept. 30
A Fidelity Investments representative will be on campus. To schedule a consultation with a retirement counselor, call 404-259-7203.

Classifieds
Autobrokes
1989 Honda Accord LX. Teal green. 131K miles, 4-door, sunroof, 4-speed, good condition. $1,500. Call 404-653-1769.
1994 Lexus ES 300, excellent condition, extremely reliable, power everything, sun roof, leather seats, all records, 1066 miles, $6,000. Call 404-3814.
1995 F150 XL. Auto, 6-cylinder, 8-foot bed w/top, new Michelin tires, class 3 hitch, excellent condition, $3,788-232-3475.
1995 F150 XL. Auto, 6-cylinder, 8-foot bed w/top, new Michelin tires, class 3 hitch, excellent condition, $3,788-232-3475.
AUTOMOBILES
COMPUTERS
FURNITURE
Oak dining room table w/leaf section and 3 chairs in very good condition. $75, will send photos. E-mail david.gilfoyle@gti.gatech.edu or call 678-232-3475.

Due to the volume of submissions, it may take several weeks for ads to appear in print.