

# FOCUS

Technique • Friday, September 19, 2003

## Do you hear the people sing?

Randal Keith shines as Jean Valjean in Broadway classic *Les Miserables*, which plays at the Fox this week and ends its run Sunday. **Page 17**

## Handle with care

Many students aren't aware of the library's collection of rare books, which includes a first edition copy of Newton's *Principia*. **Page 13**



# Budget cuts already taking toll on schools

*With new cuts being proposed and previous cuts already putting a strain on Tech's academic resources, the Technique takes a college-by-college look at how the administration is coping.*

By Joshua Cuneo and Zen Mehra  
Staff Writers

Budget cuts have impacted Tech's separate colleges in different ways; we have interviewed numerous directors and associate deans belonging to various colleges as to the extent of the problem and how they were planning to handle it. The powers-that-be were quizzed on issues ranging from the impact of the cuts on their respective colleges and areas being affected to their outlook for the future. What emerged was an analysis of the issues being faced by each college and its own ways of dealing with it.

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### Ivan Allen College

The Ivan Allen College has already started making visible changes in response to the cuts. According to Dean Sue Rosser, the college has had to restrict access to some of its summer and special academic year courses taught by part-time faculty.

"For example, in Modern Languages, we have had to turn away some 250 students per semester who sought entry into our courses," she said.

Furthermore, while the cuts have not forced the college to begin terminating full-time faculty and staff, they have scaled back on new hires.

This includes part-time and visiting faculty as well as replacements for faculty who are on sabbatical or have left the institution.

Rosser and company chose this route to minimize the impact on the college. "We have made every attempt to preserve our core mission of courses for our undergraduate majors and graduate students, as well as general education courses such as English composition, technical writing, history, government and politics required for all Tech students," she said. "Decisions such as hiring fewer part-time faculty have the least impact on our core mission."

### College of Sciences

The College of Sciences, unlike the Ivan Allen College, is trying to avoid restricting classes. "Most freshmen and sophomores... take a large number of College of Science courses during their first two years here," said Dean Gary Schuster. "If we were to limit access to the first-years... then probably we would delay student graduation."

At the same time, the college is attempting to avoid employee ter-

minations, a reality which may come true if the budget worsens.

"We have no choice," Schuster said. "Almost all of our budget is people."

To that end, the college has scaled back on new hires and is



looking at combining sections of some of their more popular courses to reduce the number of instructors necessary.

Luckily, faculty and students conducting research under the

college are feeling less of the financial pinch, since their funding comes largely from external sponsors.

"Faculty members in the college have been very successful in... securing funds to keep the research effort going," said Schuster, "so that's not as affected directly by the state budget situation."

### College of Engineering

Though a majority of the research projects in the College of Engineering are funded by government agencies such as the Department of Defense and the Department of Energy, it is surprising to note that the cuts have not had a large impact on research funding. This, Dr. Narl Davidson, Associate Dean of Operations and Budgets at the COE, said proudly, "is a tribute to our fine faculty, researchers and graduate students."

However, with a host of its programs consistently ranked in the nation's top ten and home to one of the finest research and development programs, the COE serves as a barometer for economic fluctuations. Davidson admitted that things were difficult for the college at the mo-

ment.

"As a large portion of our funding comes from state revenues, a struggling state would imply a struggling college," he said.

The college has its own "shock absorbers," however, and student tuition, research programs and other sources of funding cushion the impact of the cuts.

However, the COE has responded to cuts by cutting down on the hiring of faculty support staff as well as curbing the recruitment of new faculty.

Davidson firmly states that "our clear goal is to make sure that the core functions of the college, such as teaching and research, are not affected."

### College of Architecture

Eric Trevena, Director of Administration at the College of Architecture, predicts a budget cut of about 2.5 percent for the college over the current financial year, although this hasn't yet been officially confirmed.

Other sources of funding, such as endowments, should lessen the impact of this cut, though the state remains the primary source of funding in this case.

For the Colleges of Computing and Management, see *Budget*, page 15

## Committee plans reunion with hopes of solving sophomore slump

By Jay Reinebold  
Contributing Writer

Georgia Tech can be a rough place. Freshmen year brings registration, meeting new people and trying to fit in on campus; students have to leave the life they knew as a high school senior and become a college student. Senior year causes students to fret over what they are going to do after they graduate.

However, which is the most difficult year of all? According to some students, the answer may surprise you—sophomore year.

A group of students have formed a Sophomore Committee, an outgrowth of this past March's Sophomore Summit. While previous summits have focused on leadership, this year's focused on class identity. The committee is not made up of

exclusively sophomores, however, and includes several students from other years as well.

According to Dan Porter, a member of the committee, "second year students tend to have a loss of numbers." Some students do not return to Tech at all, choosing to drop out of college altogether or transfer.

For students who remain at Tech, numbers show that they often have lower grades their sophomore year when compared to freshmen year.

In addition, without Freshman Experience, students lose a lot of the close friends they made during freshman year. Also, although students have established themselves at Georgia Tech, sophomores begin to get further

See *Slump*, page 12

"[The sophomore reunion will be] a place to... run into people that you knew freshmen year but... haven't had a chance to run into yet."

**Dan Porter**  
Sophomore Project committee member

# ..... Faces at Georgia Tech ..... West Campus bagpiper toots his horn

By Sid Parmar  
Contributing Writer

Students who live on West Campus may have heard the strains of a bagpipe floating—or, perhaps more appropriately—blasting its way through the air on occasional nights. Many have wondered, "Who is makes that sound?"

Most know him only as the bagpiper, but to his friends he is known as Ross Marklein.

A resident of Folk Hall, he often plays his bagpipe (or bagpipes; both the singular and plural form are acceptable, he clarified) on the steps in front of the dorm.

He's traveled to many places—but as it turns out, he is not Scottish. Or Irish, for that matter.

"Bagpipes are a Scottish instrument, not Irish," he said. "I don't know why, but people always think they are Irish."

No, Marklein's very much American, though he has lived in several different states: Vermont, Michigan, California and now Georgia. He has moved numerous times, but was able to finish his high school in one state.

So if he's not Scottish, how did

See *Bagpipe*, page 12



Ross Marklein, a freshman living in Folk hall, plays the bagpipes outside his dorm, clad in jacket and kilt, though he is not Scottish himself. He is part of the Atlanta Pipe Band, which performs regularly around Atlanta.

By Andrew Saulters / STUDENT PUBLICATIONS

## Bagpipe

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he decide to pick up the instrument? Well, like most things in life, it was all for the sake of a girl. "I hate telling this story, [but] there was this girl," he said. "She wanted to join [a bagpipe band], and asked me if I wanted to do it, and of course I said yes."

However, Marklein ended up with the instrument instead of the girl. "After two months she ended up quitting, but I stuck with it," he said.

And for him, bagpiping isn't just a quirky hobby. He also plays in the Atlanta Pipe Band, an ensemble which includes thirty pipers, drummers and dancers.

The group performs often, and in the past has played in the Fourth of July Parade, as well as at the Roswell Cultural Arts Center and the Clayton County Performing Arts Center.

So despite the fact that Marklein isn't Scottish, he does own the required bagpipe accessories, which, of course, include a kilt.

The band will also be competing at the Highland Games in South Carolina in the near future, which is one of the reasons why Marklein chooses to play

outside: to get used to playing in the hot weather.

In full Scottish garb, it gets very hot underneath the jacket, and he needs to get prepared for the hot weather at the Highland Games.

It typically takes seven years to become an accomplished bagpiper,

but Marklein's only been playing for less than half that time.

"It will soon be three years since I started," he said proudly, though he added jokingly, "I don't know if I am behind or ahead."

His musical repertoire includes traditional as well as contemporary pieces. He can even play "annoying

**"There was this girl... She wanted to join [a bagpipe band], and asked me if I wanted to do it, and of course I said yes."**

**Ross Marklein**  
AE freshman and bagpiper

theme songs of TV shows," but refrains from that because "it's insulting," he said.

The bagpipes aren't an easy instrument to play. It takes a great amount of precision and skill to play them. First and foremost, an enormous lung capacity is required to continuously fill the bag of the pipes.

"You'd be lucky if you can make sound the first time you play," said Marklein. Also, the piper must continuously squeeze the bag in order to force air through the pipes, while also playing the music with his fingers.

During parades and other group performances, Marklein must also memorize entire pieces of music,

since there is no place to put it in front of him, and much like marching band, he has to know how to keep in step. "I can do the first three without even thinking now, but I still have to work on the last two," said Ross.

Though he's been singled out because of his bagpiping abilities, he is much like any other incoming freshman. He hasn't quite figured out his major yet, which puts him in the same boat as most incoming Tech students. He is currently in aerospace engineering, but Marklein is quick to add that it might change to biomedical engineering, or something else.

As most people don't usually hear the bagpipe in their daily life, Marklein attracts a fair share of attention.

"I mean, really, who does that?" commented Cameron Davis, a PL in Folk. "I think it's kind of funny."

But so far, with the exception of a few, people have enjoyed his tunes. "It helps make allies," said Marklein.

When he played for me during the interview, he attracted quite a crowd. Numerous people approached us to commend him.

Also, while playing outdoors, Marklein has found that he is not the only bagpiper on campus—another bagpiper approached him while he was playing. He hopes that his outdoor playing will help publicize the instrument.

However, if you're one of the few who happen to be studying when Marklein decides to bring out his pipes, or if you just don't happen to appreciate bagpipe music, you may be out of luck.

"The cops are on my side," said Marklein with a smile.

## Slump

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in their curriculum and must begin the difficult process of deciding on a major and what career options are available to that major.

The Sophomore Committee, however, hopes to change all that, or at least make the transition easier on returning students.

The committee presented a proposal for a Sophomore Project at last week's SGA meeting.

Their first event is to have a "reunion" for returning freshmen at Tech. It will occur Sept. 25 and feature a hot air balloon and a short address by President Clough.

The reunion, however, is more than just a carnival-style event.

According to Porter, "It's a place to hang out and get some free food and run into people that you

knew freshmen year but that you haven't had a chance to run back into yet."

While the notion of free things may entice many college students to show up, Sophomore Committee plans to provide other events as well, including barbecues at a professor's house and academic help.

Despite a few planned events, much of what the Sophomore Committee does will vary from year to year. Members present ideas, much like in Freshmen Experience or Hall Council, to the committee, and if their idea is accepted then it is carried out.

"It's a good place to find people with similar interests to help put a program together," says Porter. Events such as these are expected to help rejuvenate friendships made during freshmen year which may have cooled during the course of the summer.

These events could not only help keep past friendships alive, but make new ones as well. For instance, many sophomores may meet students in their same grade that they had never talked to before, additionally promoting class identity.

Sophomore Committee strives to be an all-inclusive organization, rather than just focusing on one group, such as Greeks or SGA representatives.

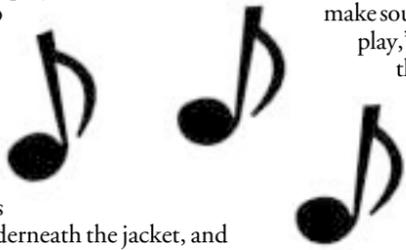
The goal of inclusiveness is perhaps ironic, though, because by its very nature the Sophomore Committee is exclusive to sophomores.

The division between freshmen and sophomores, and sophomores and juniors will perhaps grow more distinct because of this organization. Whether or not this is a good thing remains to be seen.

However, the group maintains that the second year on campus is where help is needed most. Members of the committee are also looking into similar initiatives for juniors and seniors.

Until then, Sophomore Committee looks to improve the campus life of at least one group on campus, and make "sophomore slump" disappear.

**"Despite a few planned events, much of what the... Committee plans will vary from year to year."**



# Library plans to move rare book archives to new gallery

*Students may not be aware of the Tech library's rare book archives, which include a first edition of Newton's Principia Mathematica and has now grown to include several thousand books.*

By Kristin Noell  
Contributing Writer

In some respects, the Georgia Tech Library is better known for its brand-new technology than for its book collection. However, the library actually houses quite a bit of interesting literature, including a unique collection of rare books.

The books in the collection are occasionally shown to students as special lectures or used for research, but the library soon plans to make this collection more visible by moving it to a new gallery.

This collection contains several thousand books. A book is considered "rare" by its age, the importance of the writer, an association

with someone important, the copy's provenance or ownership history, or particularly fine printing or special binding.

The library acquired some 20th-century scientific and technological works before the authors became accepted authorities in their fields, and now these books and periodicals are protected because of the great importance of the authors' work.

Although the library owns reading editions of many of the

rare books, the rare copies "add depth to the collection," said Rare Books Librarian Marilyn Williamson.

"We think it's important to have these major primary works," she said.

Longtime library director Dorothy Crosland started the collection in the 1950s when she purchased the first edition of Sir Isaac Newton's *Principia Mathematica*, published in 1687.

In the 1957/58 Director of Libraries' annual report, Crosland wrote, "The acquisitions policy of the Director of Libraries has never been to purchase rare books. So much material has been needed for the instruction program, graduate work and research that it seemed much more important to try and supply these needs.

"However," she wrote, "the time has come when a few rare items would be valuable for display purposes and also for use of the faculty who teach the literature of chemistry, mathematics or physics."

In keeping with this statement, the collection has grown slowly over the years through gifts and occasional purchases, and today includes many beautiful and important works.

However, none exceed the

importance of Newton's *Principia*, the collection's cornerstone. The library's copy includes a printed tract by Newton's contemporary Edmund Halley, the noted mathematician and astronomer.

In addition to the first edition of the *Principia*, the Newtoniana collection also includes the second and third editions.

The third edition, which was published in 1726 when Newton was 82, was the last edition published during his lifetime.

Tech's copy was donated to the library in 1984 by Dr. Henry C. Bourne Jr. This volume once belonged to Dr. Bourne's grandfather, Henry Toole Clark, former governor of North Carolina.

In addition to these and other works by Newton, including the first edition of his *Opticks* (1704) the library also owns several volumes by his contemporaries about his work and his life.

"It's really great to see the expressions on the students' faces when they see these books."

Marilyn Williamson  
Rare Books Librarian



By Charles Frey / STUDENT PUBLICATIONS

Rare Books Librarians Marilyn Williamson and Jody Thompson handle an early copy of Dante's *Inferno* with cotton gloves. The library plans to move the books to a new gallery to publicize the collection to students.

The library also owns a first edition of Joan Blaeu's *Grand Atlas of the World* (1664-1665). The nine-volume atlas is in Dutch and has hundreds of beautiful maps and extensive descriptions of the world as

it was known in the 17th century.

Another beautifully detailed book in the collection is Carl Schramm's *Historischer Schauplatz*, which con-

See *Books*, page 14



# TechUpClose

Winner gets a free *Technique* T-shirt



By Lauren Griffin / STUDENT PUBLICATIONS



Last week's Tech Up Close:  
A bench

Last week's winner:  
Stephan Turano

email: [focus@technique.gatech.edu](mailto:focus@technique.gatech.edu)

## Books

from page 13

tains a description of German bridges in 1735, including foldout plates up to six feet long.

A notable early book on engineering is *Il Teatro de' Instrumenti & Machine* (*Theater of Instruments and Machines*) by Jacques Besson, published in Italian in 1582.

Also, around the time of Georgia Tech's centennial in 1985, the library purchased its two millionth book, Charles Babbage's *On the Economy of Machinery and Manufactures*, which was published in 1832.

Understandably, the collection, which includes works in probability dated as early as 1619, is tightly focused on the history of science and technology because of the focus of the curriculum at the Institute.

However, Georgia Tech also owns an extensive collection of science fiction and early architecture books, and there are several subject collections named for their donors in the archives.

Occasionally, library staff finds surprises in the collection. For example, they recently rediscovered an overlooked and almost forgotten group of unique 19th-century literary works with highly detailed fore-edge paintings, which are only visible when the edges are fanned.

Clearly, the collection is very valuable and must be well cared for. Currently all of the rare books are stored in a locked room away from public view and under proper humidity and temperature conditions. They are only removed when the

need arises and must be handled with cotton gloves. Some of the books, such as the *Principia Mathematica*, are occasionally displayed for classes.

"It's really great to see the expressions on the students' faces when they see these books," Williamson said.

To make these books more visible to the students, the library staff will soon move the collection to a new secure rare book room called the Neely Gallery, which will have

special glass-fronted bookshelves so that visitors can view the books.

"We're excited about getting them into a place where people can see them more readily because they've been invisible for a long time," said Williamson.

In addition to preparing to open the new

Neely Gallery, the library is also planning to digitize many of the volumes in the collection to make them universally available outside of the library.

To access the first digitized book from the collection, follow the links on the library web page ([www.library.gatech.edu](http://www.library.gatech.edu)) through Archives to Collections to Rare Books.

The book, entitled "An Illustration of Mensuration of Solid Geometry," is a text by the 18th-century mathematician John Lodge Cowley.

*For more information on the digitized books or the rest of the collection, contact Jody Lloyd Thompson or Marilyn Williamson in the Archives and Records Management Department in the Library.*

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**Marilyn Williamson**  
Rare Books Librarian

## Budget from page 11

In its efforts to combat this, the COA has been forced to eliminate new initiatives that were planned, as well as defer end-of-year maintenance of equipment and computer upgrades.

In addition, program marketing and promotions have been reduced, as well as travel budget for faculty. As a last resort, the College might even consider the elimination of certain elective courses and limiting enrollment, though that remains the last, drastic option.

Trevena sums it up by saying that "we are trying to work through the reductions, at the same time, maintain the College's momentum. We are keeping our basic goals of teaching and research in mind and are taking steps to ensure these areas aren't hit."

### College of Computing

The College of Computing has taken a slightly different approach to dealing with the cuts. Faith Diehl, Director of Administration at the College of Computing, said that while the administration is still examining the numbers, few programs or employees have as yet been affected. The college plans to make a percentage cut across the board and let each department reprioritize as it best deems appropriate.

"This approach, we think, puts the decision in the hands of the people closest to the activities being impacted," she said. Each department head better understands which cuts will minimize the economic impact in its area.

The administration has been eyeing the various programs and services offered by the college with talks about cutting the lowest-priority options first.

But the college has reaped benefits from the cuts as well: an increase in graduate student applications. "If students don't have a job, they go back to school, and what that's done is increase the quality of graduate students," said Diehl. "We have a larger pool to choose from."

In addition, the college's TA pool has had to compensate for the smaller budget. For example, this semester the CS2130 course declared its recitations optional and reduced TA office hours to one per week.

"What we're hearing from other colleges and from the provost [is that] we have a larger TA budget than is common," said Diehl. "It's important to take a look at that: Why is it larger? How can we provide their services in different ways?"

This, however, is simply an aspect of the scrutiny the administration is placing on the entire college. "[We're] looking at everything. It's really... more broadly looking at how do we provide instructional services and what's the cost structure," said Diehl.

### College of Management

At the College of Management, the impact of budget cuts doesn't seem to be clear as yet. Dean Terry Blum said, "The amount of the cuts and their impact is not yet clear." She added, "We are continuously looking at possibilities for efficiencies and increased effectiveness with

the funds we have available to us." As with the other colleges, DuPree too seeks to augment its funding through other sources. External grants and other such sources of funding step in here. Essential functions such as teaching and research remain the first priority, reflecting the fine traditions of the university.

According to Munchak, "We believe that there will be effects, but we are doing our best to minimize them and preserve the teaching and research excellence of the DuPree College of Management."

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Having seen the trends in all the colleges, one proceeds to the next logical question, "How long will this last?"

"This is very difficult to estimate," said Rosser, "since unanticipated

changes brought on by world events directly impact both the national and state economy, which in turn, directly impacts cuts passed on to GT."

"We're not in a recession, we're in a recovery state of the recession," reminded Schuster. "The rate at which that recover occurs will determine how long the current budget problems persist."

"In the end," he said, "If we do things right, we'll be in a position to be even stronger when the economy turns around."

Both Davidson and Trevena see the possibility of future cuts. While Davidson agrees that the recession seems to be ending, he also points out that fact that growth isn't as strong as it should be. Trevena sees "the state of Georgia getting better, but still some tough times [are] ahead

for the COA."

Diehl is predicting a two-year turnaround on the budget cuts, since the state budget often falls roughly two years behind the federal budget, and the federal budget is already showing signs of recovery.

"Our direction from the provost is that these budget cuts are for this year," said Diehl, but the news from the state is that the budget cuts may last through "this year and next year."

Diehl also brought the interesting point that budget cuts may actually be beneficial, in that they provide "an opportunity for colleges to examine how we do business."

In the end, Schuster posited a question for the Tech community. "So how are the students going to help?" he asked. "That's an interesting question. They're part of the community, [too]."



By Scott Meuleners / STUDENT PUBLICATIONS

CS2130 students Derrick Johnson, Axel Abellard and Ifiok Udowana study for a test in the CoC. In response to the budget cuts, the College of Computing has reduced their pool of TAs, making 2130 recitations optional.

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