

## FOCUS

Technique • Friday, January 21, 2005

## BREAKING DOWN BARRIERS

The *Nique* revisits the '60s to see how the Institute's first black students ushered in a relatively peaceful integration. Page 12

## BETTER THAN THE REAL THING?

The Fox Theatre hosted a stage version of Disney's *Beauty and the Beast* this week. See how the non-animated version measured up. Page 17



## TSUNAMI STORIES

Members of the Tech community who witnessed the disaster firsthand share their experiences



Photos courtesy Nickolas Faust

On visits to Phuket and Phi Phi island—both popular tourist destinations in Thailand—GTRI researcher Nickolas Faust saw many areas completely devastated by the tsunami (above), as well as sobering reminders of the death toll, such as the stuffed animal he found washed ashore (top right).

## GTRI researcher travels to Thailand to establish ties, address mapping needs

By Jennifer Lee  
Focus Editor

Nickolas Faust is still a little jetlagged.

After arriving back in Atlanta this week from a nine-day mission to Thailand, Faust is just now getting a chance to sit down, analyze and reflect on his trip—as well as get over the 12-hour time difference.

Faust, a research scientist with the Georgia Tech Research Institute, is also the vice president of the International Center for Remote Sensing Education (ICRSE), a non-profit organization that works to deliver geographic information to the professional workforce and society at large.

Faust and ICRSE's president, Tim Foresman, visited Thailand from January 8-17 in an spur-of-the-moment volunteer effort.

Their goal was to provide mapping resources that would help aid in the disaster relief and also in longer-term planning.

"It was just something we thought we had to do," Faust said.

"We essentially bought airline tickets in about two to three days and...flew over to Bangkok," he said. "I basically paid for my airfare myself."

The two visited various parts of Thailand, including Phuket and Phi Phi island, which are both heavy tourist areas.

"This is a perfect case where before-and-after imagery can help you do an assessment of what's going on over there."

**Nickolas Faust**  
GTRI research scientist



In the short time they were there, they worked to assess the needs of the region in terms of geographic information, and more importantly, establish relationships with organizations working in the area.

"We weren't really making maps while we were over there," Faust said. "What we're trying to do is really a coordination role—do what we can to get people to talk to each other, trade data and set up."

Faust, who is the associate director of the Geographic Information Systems (GIS) Center at Tech, specializes in using satellite imagery to update maps. Using new imaging technology, maps can now be made with a resolution of one meter, allowing for incredibly detailed maps that allow the viewer to see individual buildings—and the damage they may have sustained.

This, Faust said, is exactly what is needed in the tsunami-devastated region.

"This is a perfect case where

before-and-after imagery can help you do an assessment of what's going on over there," he said.

He added that mapping is a tool that can be used in many other applications, including city planning and environmental assessment.

In Thailand's case, for example, "Most of the need [was for] good, accurate maps to plan for reconstruction...and to look ahead into the future [so as] not to make the same mistakes," he said.

Their work also tied into a United Nations effort to establish a network for tsunami warnings, such as the warning system that currently exists in Hawaii and allows residents hours notice in the case of a tsunami. "Nothing like that exists in the Indian Ocean area," Faust said.

Much of the nine-day trip was spent meeting with organizations to coordinate future relief efforts. Their main partnership was with

See **Tsunami**, page 16

## Architecture prof returns from Sri Lanka with his, others' stories

By Swathy Prithivi  
Contributing Writer

Ronald Lewcock, a professor in the College of Architecture, was in Colombo, Sri Lanka at the time of the tsunami. Luckily, Lewcock was staying in an area that was not severely affected. Nevertheless, he still had many stories to tell—some of which he shared with the Technique.

**Technique:**  
How did you happen to be in Sri Lanka at that time?

**Lewcock:**  
My wife is Sri Lankan, and we were having Christmas with our family.

**How much of the crisis did you experience?**

[The location] where we were staying has rather deep waters and was not that affected. We saw the damage on the roads and we saw the people running, very upset.

That was all we saw, really. The damage was done where there were surfing [or] fishing beaches, because they were long shallow beaches.

to the U.S.?

I did not find that the airports were seriously affected and there was no real problem with flying out.

**Were any of your acquaintances, friends or family affected?**

A cousin of mine and her husband were resting in their rooms on the beach when the door broke down and the water came in. They [were carried] up to the ceiling with half an inch of air left...they were going to drown.

At the last minute, the water went out...it went out very fast, [so] they fell onto the floor and hurt themselves quite badly.

What really shook her was that they were the only people in that row of buildings to survive. So she is very badly traumatized by this experience.

I heard a similar experience from another person who was in a room and the door broke down, but the wave brought people in

"What really shook her was that they were the only people in that row of buildings to survive. So she is very badly traumatized by the experience."

**Ronald Lewcock**  
Architecture professor

Was it easy for you to get back

See **Q&A**, page 14



Photo courtesy Nickolas Faust

On his nine-day trip to Thailand, Faust encountered many different relief organizations—including Buddhist monks, who were in many places offering comfort and spiritual guidance to tsunami victims.



# For Tech's first black students, a quiet integration

By Joshua Cuneo  
Senior Staff Writer

In September 1961, Ford Greene, Ralph Long, Jr. and Lawrence Williams made history when they strolled onto campus as the first black students to enroll at Tech.

It was an era when the Civil Rights movement was gaining strength and deep streaks of racism still ran through the southeastern United States. As a result, the level of outcry and violent op-

position from the students and staff was...well, nonexistent.

Following the Supreme Court's decision in *Brown vs. Board of Education*, then-President Edwin Davies Harrison had watched as violence erupted at the University of Georgia two days after it had been integrated at the direction of a federal judge in Macon.

This had followed the now-infamous Sugar Bowl crisis of 1956, when the campus erupted in protest over

Tech's decision not to play in the Sugar Bowl because the opposing team—the University of Pittsburgh—had a black fullback.

Harrison embarked on a massive undertaking to avoid a similar upheaval, making Tech the first university in the Southeast to integrate peacefully and without a court order.

"Dr. Harrison had done an amazing job of engineering the whole project in that he was extremely cautious about preparing the faculty [and] the staff [and] the student body," said Marilyn Somers, Director of Tech's Living History Program.

Standing before an assembly of the student body, Harrison said that any student caught resisting or protesting the arrival of Tech's first black students would be expelled immediately.

He also hosted a series of dinners between the families of the new students and the student leaders to allow them to become acquainted with one another.

And in an unusual twist, he asked the Atlanta police to keep the media off the premises to avoid fanfare.

"Surprisingly, there

wasn't a lot of...interest on the part of the student community. Everybody at Tech apparently was so busy with projects... [that] nobody paid a lot of attention to it," Somers said.

"There was no disruption at all. Everything went on as normal, and [the new students] quickly got into the scholastic life," she said.

Long and Williams stayed at Tech only a short time before they left to pursue other interests, but Greene excelled academically thanks to years of preparation from his own family. Greene's parents were educators with dreams of their son becoming the first to integrate Tech, so they raised him with a rich cultural and academic background and encouraged him to excel in sports.

"He felt his parents were grooming him to come and be part of the integration," Somers said. "No one knew when it

was going to actually take place, but there were many outstanding young students in the black community that were being told, 'Do the best you can, and you could be the one to integrate.' It just happened that it fell on the shoulders of Ford Greene."

Greene eventually left as well when the administration refused to let him play on the Institute's football team, but he paved the way for many other notable figures in the following decade:

Ronald Yancy had applied before Greene in 1961 but wasn't accepted until the fall quarter of 1962, due to some hesitation on the administration's part. He was awarded a

degree in electrical engineering in 1965, marking this year as the 40th anniversary of the first black student to graduate from Tech.

Enoch Ward, a chemical engineering major, became the first black student to integrate campus housing in 1964. He was forced to change roommates when the parents of his original roommate protested the pairing of Ward with their son.

Eddie McAshen, Tech's first black athlete, enrolled in 1969 on a football scholarship.

Clemmie B. Whatley became the first black female student to graduate from Tech when she was awarded a masters degree in mathematics in 1973.

Somers, who has interviewed several of these people and others, said that their experience was marred only by a sense of social isolation, which would be expected at an institution that

was predominantly white.

"It's really amazing when you talk to these people," Somers said. "They have recollections of feeling isolated, but none of them felt any animosity from any professors that they ever expressed to me."

Their transition into student life went just as quietly. Students either ignored them or welcomed them with open arms.

"All the organizations on campus were receptive to them," Somers said.

"They could come to the Y, they could go to the Baptist Student Union. They joined band [and the]

**"Dr. Harrison had done an amazing job of engineering the whole project... there was no disruption at all."**

**Marilyn Somers**  
Director, Living History Program



Photo courtesy  
Alumni Association

Ford Greene, Ralph Long, Jr. and Lawrence Williams were the first three black students to enroll at Tech in 1961.

See History, page 14

**sliver**  
www.nique.net/sliver

We don't print that stuff.  
FIRE CHAN GAILEY!!  
First time writing a sliver!! so exciting!! :=  
Second time writing a sliver!! starts to get borin' though..  
This is the third time and I am already bored.. :(  
Everything Rules, Gokhan sucks!!  
my fingers are too stiff from Halo 2 to hold the stylus on my new Gameboy DS  
true love can only be found by creating a time machine and going 200 yrs in the future  
dammit ppl, I WANNAREAD THE TWO-BIT MAN Warning: Sablotron error on line 221: cannot open file '/var/www/nique.net/htdocs/issues/nov17.xml' in /var/www/nique.net/htdocs/xmltransform.php on line 14  
The pipe began to rust while new.  
Add the product to the sum of these three.  
DSP - I'm DONE WITH YOU BABY!  
so what IS an innovative learning center?  
party in room 327 - Chris is DJ'ing  
is that a fact?  
yes!  
I'm sitting in the library at 4:50AM while someone the person I'm here with is harassing me. What's wrong with me?  
Georgia Tech Owns Us All!  
Two bits man: you have failed us! The Physics Pimps are against us! The no-see answer is back. Help us! They claim it's because other people are cheating.... should I have to be barred from using a cr  
define "Physics II" := "Evil, Devil, Mass Rape"  
The girls always complain about the boys here being terrible.  
See page 21 for more  
slivers



# High honors bestowed upon two Tech students

*Jeremy Farris named 2005 Rhodes winner; Ambika Bumb receives Marshall scholarship*

By Usha Kantheti  
Contributing Writer

A passion for math and science is what led both Ambika Bumb, a senior in Biomedical Engineering, and Jeremy Farris, a senior in International Affairs, to Tech.

Though their undergraduate education took them down different paths, both Farris and Bumb have ended up at a similar juncture: both are the recipients of prestigious scholarships for 2005.

Bumb, a senior in Biomedical Engineering, won the 2005 Marshall Scholarship, while Farris, a senior in International Affairs, became one of the 32 Rhodes Scholars of 2005.

With these scholarships, both will have the opportunity to continue their education at the University of Oxford in England.

The intellectual undertaking of these two Scholars began long before they arrived at Tech.

"In high school, I was really interested in math and science, like any Tech student," said Farris, a native of Warner Robbins, Georgia.

His interest led him to participate in several science fairs and competitions. For one such project, Farris developed a new pathogen against the prolific and invasive plant kudzu.

His project earned him the best of category award in microbiology at the Intel International Science and Engineering Fair in 1999.

This success also opened other doors for him: he was chosen to serve as an American delegate for the

Asia-Pacific Economic Cooperation in Singapore a year later.

"[My trip to] Singapore was my first out-of-country experience," Farris said.

Though he entered Tech as a Biology major, the trip to Singapore served as a catalyst to explore other interests, such as studying abroad.

With the encouragement of a faculty member, International Affairs Professor Kirk Bowman, Farris took opportunities to travel to other countries as well.

"I was interested in the philosophy of science—in epistemology, or how science gives us knowledge," Farris explained. Realizing this was something beyond science and research, he switched his major to International Affairs.

Bumb's decision to enter the field of biomedical engineering was based on a similar combination of interest, influence and experience.

Born in India, Bumb grew up in Greenville, South Carolina, and was surrounded by a family of doctors and engineers.

"[I like] engineering because math and science were my areas of strength,

and medicine because I really felt like you're benefiting somebody by doing the job every day. You'll feel that satisfaction every day," Bumb said. "Biomed seemed like the perfect match of the two."

But Farris's and Bumb's experiences at Tech have not been strictly academic. Both have devoted a considerable amount of their time to several campus organizations.

"All the organizations that I've been in have been influential

because you not only learn to work with different types of people but to attack problems from different views—because everyone comes with a different view of how to fix the problem," said Bumb, who, as a treasurer for the Joint Finance Committee, helps SGA apportion its financial resources.

Also a member of the service fraternity, Alpha Phi Omega, Bumb still has the time to pursue her favorite pastime: dancing.

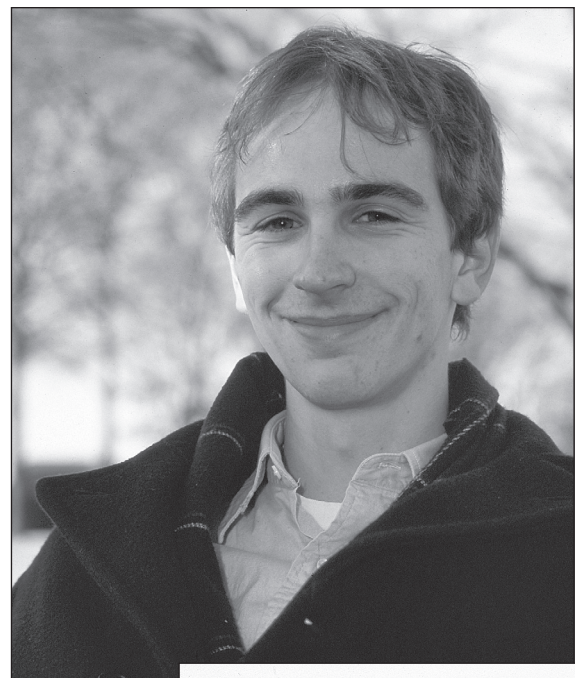
She is trained in Indian classical and folk dance and has learned salsa and tinikling, a Filipino dance.

"It's a way of knowing another ethnicity or society," said Bumb, who has been dancing since she was five and is now a member of Nazaaqat, an Indian dance team that performs on campus.

Farris, too, developed a hobby

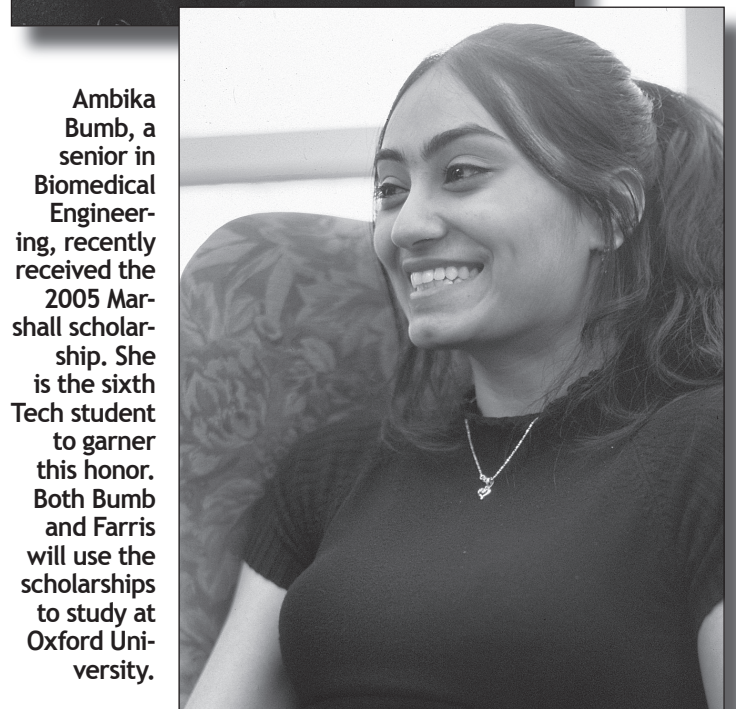
**"[The Chess Club] has been rewarding...I'd like to think that I am teaching at-risk children to think before they move, not just in chess but in real life."**

**Jeremy Farris**  
2005 Rhodes scholar



Jeremy Farris, a senior in International Affairs, was named a 2005 Rhodes finalist in December. He is the third Tech student to win the Rhodes scholarship.

Photos by  
Andrew Saulters/  
STUDENT PUBLICATIONS



Ambika Bumb, a senior in Biomedical Engineering, recently received the 2005 Marshall scholarship. She is the sixth Tech student to garner this honor. Both Bumb and Farris will use the scholarships to study at Oxford University.

See **Scholars**, page 16

**We'd like to hear from you.**

**Write us a letter.**

**opinions@technique.gatech.edu**



## History from page 12

Glee Club...All of them were very, very active students."

Many of Tech's early black graduates went on to pursue successful careers in a variety of fields. When they look back, Somers said, they regard their experience at Tech as invaluable.

"If you look at their careers after they graduated from Tech, they all have brilliant careers," Somers said. "Well, obviously...this was right place

for them to be, and they did well."

Even the early pioneers who did not graduate from Tech helped establish a sense of community between themselves and the rest of the student body, which encouraged an increasingly larger number of black students to enroll.

"They formed close relationships. Everybody knew everybody. They encouraged each other. They supported each other," Somers said. "They were definitely role models for the black community. Everybody was rooting from them. Everybody

wanted them to succeed, and most of them did."

The era since the days of Greene and others has seen remarkable improvements in opportunities for black students on campus, including the creation of the Office of Minority Educational Development, the introduction of black fraternities and sororities, and the birth of the African-American Student Union.

The Technique will have more about the history of African Americans at Tech during Black History Month.

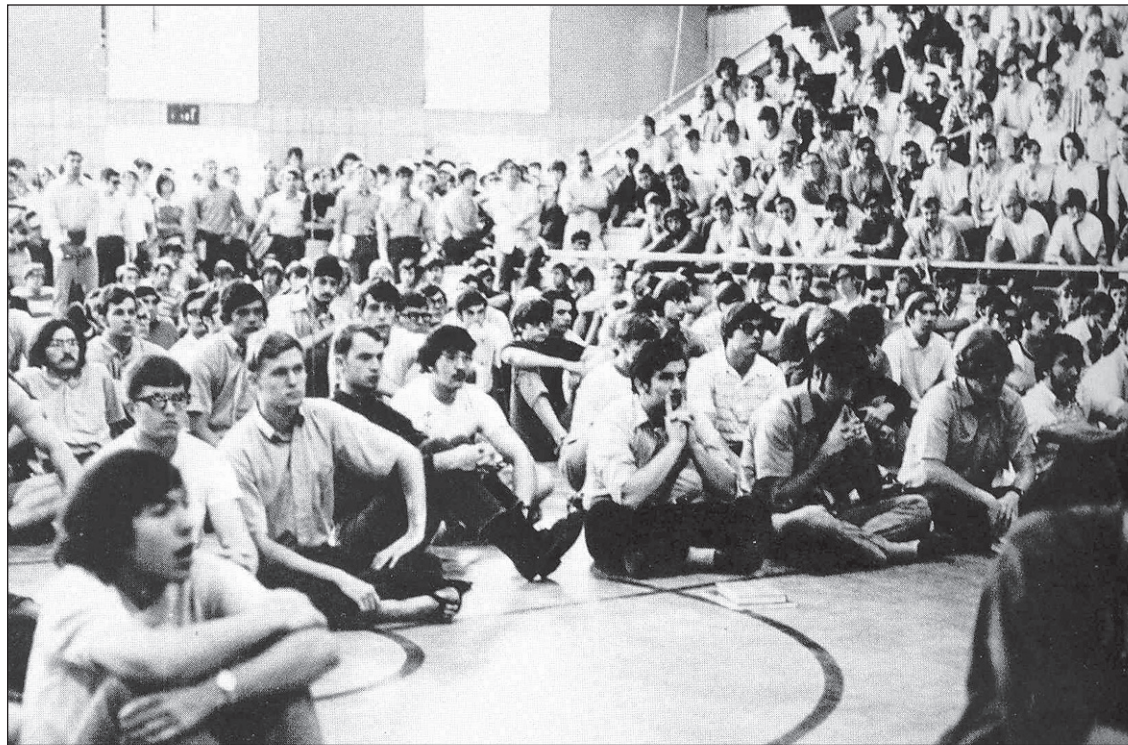


Photo courtesy Alumni Association

In an assembly of the entire student body, Edwin Davies Harrison, Tech's president in 1961, made it clear that any student resisting the arrival of Tech's first black students would be expelled immediately.

## Q&A from page 14

with it. They all floated up to the ceiling, and they dropped down... when the wave had gone they went out to see who was left on the beach and there was nobody. It was absolutely deserted...and it had been a crowded beach before. I heard many stories like that.

**How do you feel about the relief operations and the infrastructure supporting it?**

The roads run along the coast for scenic reasons, and they were all damaged. There was actually no communication possible for a while between Colombo, the capital city of Sri Lanka, and the main city

in the south, as the main road was damaged very badly and unusable for a long period of time.

They got the road open after...12 to 24 hours, and this was the main link between the two cities.

There is a serious concern about long-term aid. I think on the whole, people are finding it hard to cope with the enormity of the problem. People are worried that due to lack of central organization that there may be too many people [from relief organizations] going to some places

and not enough to other places.

The scale of the disaster is hard to comprehend. In Sri Lanka, it means a half a million people have not only lost everything, but are also traumatized and actually mentally disturbed by all of it.

**We know of the relief efforts going on around campus. How is the Architecture Department helping in particular?**

I am hoping to put the Architectural department in touch with an architect in Sri Lanka who is in the process of organizing both emergency housing (lasting a few months) and temporary housing (lasting up to five years but no more).

**"I am hoping to put the Architecture department in touch with an architect in Sri Lanka who is...organizing... emergency housing."**

**Ronald Lewcock**  
Architecture professor

**What is your perspective on the entire crisis?**

One concern is providing shelter to people living without any covering at all. Another concern is human waste; the ground is waterlogged and so the normal way of just digging a hole doesn't work any more. This might cause rampant spread of disease. Also, the lack of organization in the government is a real problem. If anyone out there is interested in volunteering to help the victims of this crisis, please visit [www.volunteersrilanka.org](http://www.volunteersrilanka.org).



# Tech Up Close

CAN YOU FIGURE OUT WHERE ON CAMPUS  
THIS PICTURE WAS TAKEN?

THIS WEEK'S PHOTO:

Email [focus@technique.gatech.edu](mailto:focus@technique.gatech.edu) if you think you know the answer—and check to see if you won in next week's issue!



Last week's Tech Up  
Close:  
Sculpture at Tech Hotel  
and Conference Center

Last week's winner:  
no winner



By Jennifer Lee / STUDENT PUBLICATIONS

## *Technique*

Subscribe to the 'Nique  
for just \$35 per year.  
Mail checks to:

Technique  
ATTN: Subscriptions  
Georgia Tech  
353 Ferst Drive, Room 137  
Atlanta, GA 30332-0290

# Faust hopes to bring mapping technology to disaster area

**Tsunami**  
Continued from page 11

the Asian Institute of Technology (AIT), with whom the group already had contacts.

“We decided...that the best way to try to get mapping help for the relief agencies and the other people who were trying to assess damage was to... foster AIT to be a central resource for people who needed maps over the effective area,” Faust said.

He and Foresman worked to establish relationships with AIT officials, install mapping software at AIT, and assess IT infrastructure. They also met with various aid agencies, such as the United Nations Environment Programme (UNEP).

Many of these meetings were arranged “on the fly,” and much of their effort in Thailand depended on a network of personal connections.

For example, Foresman used to work with UNEP, and already had many contacts there. One of the people they worked with at AIT was a Sri Lankan, and had many connections in that nation. In addition, many AIT graduates moved on to work in aid agencies, and the university was already serving as a base for many of the immediate relief organizations that were in

Thailand.

According to Faust, many organizations they spoke to were very receptive to working with them. “Some agencies had people in the field and had no maps at all,” Faust said.

There was also collaboration back home in the U.S. For example, Leica Geosystems, an Atlanta-based company, provided free mapping software for Faust and Foresman to take to Thailand.

And though Faust’s volunteer work is through his nonprofit organization rather than GTRI, he acknowledged the support from the Tech community.

“We found things on the beach like baby shoes and teddy bears that were just...hard to imagine.”

**Nickolas Faust**  
GTRI research scientist

“There are a lot of people around Georgia Tech—especially in the GIS Center—that are calling me up or sending emails saying, ‘How can I help?’” Faust said.

However, Faust said ICRSE’s efforts will take place over the next year or so, during the rebuilding stage of the disaster relief.

Therefore, though he is seeking funding, he acknowledges that much of money being poured into relief, such as the Tech Tsunami Relief effort, need to go to immediate aid such as food and housing.

This was evident in their travels around Thailand. Many areas Faust visited were nearing the end of the cleanup stage, much of the debris having been bulldozed clear.

In other areas, though, the devastation was still great.

Faust showed me a brochure he had brought back with him. On the front was a picture that looked like something out of a travel magazine: a quaint island resort, set to a backdrop of sand, palm trees and blue sky.

Then he showed me a photograph that he had taken of the same location. This time, there were two women in the foreground, and sand, palm trees and debris in the background. There was no resort to be seen.

“We talked to [the] lady who owned the resort,” Faust said, pointing to one of the women. “Her father was killed, and a number of people who worked with her.”

He also witnessed a memorial service for Australians who had been killed.

“The last day we were in Phuket... I was out running on the beach and just happened to come across it,” he said. “It was really a moving ceremony.”

Faust also has photos of shrines set up along the beaches.

“Buddhist monks were in a lot of different places trying to help people come to grips with what was going on,” he said.

And he also has more sobering photos: one of a stuffed animal, another of a lone tennis shoe, both washed up on the sand.

“It was amazing, especially since a third of the people [who died] were children,” Faust said. “We found things on the beach like baby shoes and teddy bears that were really just...hard to imagine.”

# Scholars from page 13

of his own at the age of five: playing chess. He has now turned that hobby into a philanthropic mission by founding the Chess Club, through which he gives young children not just lessons in chess, but lessons in life.

“[The Chess Club] has been rewarding,” Farris said. “I’d like to think that I am teaching at-risk children to think before they move—not just in chess but in real life.”

In addition to the Chess Club, Farris is also a member of the Philosophical Society and has been involved in the McEver Program for Engineering and the Liberal Arts, under LCC Professor Ken Knoespel, who Farris said is one of three Tech professors who had an enormous influence on him.

The other two are Bowman, who encouraged Farris to travel abroad, and Public Policy Professor Jon Johnston, who Farris describes as a “Socrates figure” who introduced him to philosophy.

“These men have changed my life in ways that I have never imagined,” Farris said.

According to Farris, his trips abroad were an integral part of his education at Tech. He feels study abroad should be part of every undergraduate curriculum.

“I believe university education is not reducible to what people think it is,” Farris said. “It is not a job training. Education is something that is far more complex and should be transformative.”

For Bumb, the inspiration towards academic excellence came in the form of Barbara Boyan, a Biomedical Engineering professor.

“Whenever I had questions, she was always there as my mentor: she helped guide me, she gave me resources, and she was just a good person to bounce off ideas and academic questions,” Bumb said. “She just excites you about whatever you’re working on.”

In addition to the support received from faculty, both Farris and Bumb agreed that the encouragement from their family has been crucial.

“I want to thank my family for giving me unconditional support,” Farris said.

“Family is always the biggest motivating factor,” Bumb said. Her sister, Shalini, a freshman at Tech, seems to be following in her sister’s footsteps, majoring in Biomedical Engineering as well.

“My parents definitely pushed me to do as much I could in whatever it was—whether it’s academic or extracurricular,” Bumb said.

Next fall at Oxford, Farris will pursue a doctorate in political theory, while Bumb plans to pursue a doctorate in medical engineering.

“Whenever I had questions, [Boyan] was always there as my mentor...she just excites you about whatever you’re working on.”

**Ambika Bumb**  
2005 Marshall scholar